

Document Reference: NCC/EX/45

# The Norfolk County Council (Norwich Northern Distributor Road (A1067 to A47(T))) Order

## Applicant's comments on points raised at Open Floor Hearings

Planning Act 2008

Infrastructure Planning

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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### **Table of Contents**

Ref	Topic / Summary	Page
1	Introduction	4
2	Air Quality	5
3	Consultation	14
4	Design	34
5	Environment	56
6	Joint Core Strategy (JCS)	61
7	Land	67
8	Norwich Area Transport Strategy (NATS)	76
9	Traffic	79
10	Administration	88



#### 1. Introduction

- 1.1. At the Northern Distributor Road (NDR) Development Consent Order (DCO) Open Floor Hearing on the 22<sup>nd</sup> July 2014, the Examining Authority (ExA) invited the applicant to respond to any of the points raised in that hearing in writing if the applicant considered that a response was required.
- 1.2. The ExA highlighted that they would be particularly interested in responses to issues raised concerning:
  - A1067/A47 links
  - Future funding for Norwich Area Transportation Schemes (NATS) in particular the city centre measures
- 1.3. The applicant suggested that it would respond in writing to points raised by 4<sup>th</sup> August 2014 (Deadline 5). This document provides those responses.
- 1.4. At the Issue Specific Hearing on the 24<sup>th</sup> July 2014 the ExA invited the applicant to consider variant wordings for the DCO to cover different permutations for the NDR as suggested in some representations. The applicant will submit its response to this invitation on 8<sup>th</sup> September 2014 as part of its response to the issues raised on the drafting of the DCO (Deadline 6). That matter is therefore not addressed in the responses set out in this document.



#### 2. Air Quality

#### 2.1. Submit report around new DEFRA guidance (carbon)

#### Applicant's Response

#### 2.1.1. NDR Carbon Note – New Defra Data

#### 2.1.2. Introduction

This Note summarises the changes to the assessment of carbon presented in the Environmental Statement (Document Reference. 6.2) as a result of new data being published since submission. A description of the new data is provided along with revised calculations of the potential effects of the Scheme on emissions of carbon.

#### 2.1.3. New Data

On July 2<sup>nd</sup> 2014 Defra released an updated version (v6.0.1) of the Emission Factor Toolkit (EFT) which was used for calculating Greenhouse Gas (GHG) emissions associated with the proposed Scheme. With specific regard to calculated GHG emissions the latest update takes into account updated fleet compositions in the UK and the increase use of biodiesel and bioethanol in commercial petrol and diesel. Version 6.0.1 of the EFT has therefore been used for the revised assessment.

Sections 5.5 of Volume 1 Environmental Statement (Document Reference. 6.1) sets out baseline emissions of GHG from some local authorities in the study area. In June 2014, the Department for Energy and Climate Change (DECC) published new data on GHG emissions at national and local authority level for the year 2012. It also finalised data



for 2011. This new data is presented in Table 1 below (in summarised form).

Table 1 – Summary of total GHG emissions at Local Authority Level (ktCO<sub>2</sub>)

		Environmental Statement (2011 provisional emissions)	Revised value (2011 final emissions)	Revised value (2012 emissions)		
National		571,600	563,200	581,100		
	Norwich	675.4	685.7	745.5		
Local	Broadland	890.4	948.1	929.1		
Authority	South Norfolk	907.4	961.4	1003.7		

Source: DECC 2014

#### 2.1.4. Revised Assessment

Following the same methodology set out in the Environmental Statement section 5.3 ,GHG emissions have been calculated for

- The Base Year (2012), replacing the data in Table 4.5 of Volume
   1 Environmental Statement (Document Reference. 6.1)
- the Opening Year 2017 With and Without Scheme, replacing the data in Table 4.11 of Volume 1 Environmental Statement (Document Reference. 6.1)
- 2032 With and Without Scheme, replacing the data in Table 4.11
   of Volume 1 Environmental Statement (Document Reference. 6.1)
- for the period of 2017-77, replacing the data in Table 4.12 of Volume 1 Environmental Statement (Document Reference. 6.1)

The revised results are presented in the following Table 2 to Table 4. In each case the results presented in the Environmental Statement are presented alongside the revised results.



Table 2 presents a revised calculation of GHG emissions for the base year 2012.

Table 2: Total Emissions from Road Network, 2012 (ktCO<sub>2</sub>)

	Environmental Statement	Revised Value
Fully Modelled Area	345.1	344.6
Wider Network	1,092	1,093

Table 3 presents a revised assessment of carbon emissions for the Scheme in 2017 and 2032. Compared to the Environmental Statement, the change in carbon emissions from the road network within the Fully Modelled Area is 13.0 ktCO<sub>2</sub> in the opening year (2017), which is less than the change presented in the Environmental Statement. This represents a 3.77% increase in emissions from traffic within the Fully Modelled Area (3.82% in the Environmental Statement). The change across the Wider Network is similar, at 12.8 ktCO<sub>2</sub>, representing a 1.18% increase across this area both less than the change presented in the Environmental Statement. This is similar for the 2032 assessment year. The total carbon emissions in 2017 and 2032 are lower than in the Environmental Statement (e.g. 1,153 ktCO<sub>2</sub> for the Wider Network compared with 1,264 ktCO<sub>2</sub> previously)



Table 3: Total carbon emissions (ktCO<sub>2</sub>) from With Scheme road network and change compared to Without Scheme network

2017	Environment	tal Statement	Revised A	ssessment		
	2017 (with scheme)	2017 Change compared to without scheme	2017 (with scheme)	2017 Change compared to without scheme		
Fully Modelled Area	364.8	+13.4	357.2	+13.0		
Wider Network	1,117	+13.2	1,099	+12.8		
2032	Environment	tal Statement	Revised Assessment			
	2032 (with scheme)	2032 Change compared to without scheme	2032 (with scheme)	2032 Change compared to without scheme		
Fully Modelled Area	397.1	+18.0	349.7	+15.4		
Wider Network	1,264	+18.0	1,153	+15.3		

An assessment of the change in emissions over a 60 year period is presented in Table 4. The change in carbon as a result of the Scheme is 904 ktCO<sub>2</sub> within the Fully Modelled Area and 895 ktCO<sub>2</sub> across the Wider Network over the period of 2017 to 2077. These changes are less than those reported in the Environmental Statement.

Table 4: Change in carbon emissions (ktCO2) compared to the Without Scheme road network, over the period 2017-77

	Environmental	Statement	Revised Assessment			
	Change in emission 2017-77 (With Scheme)	% change compared to Without Scheme	Change in emission 2017-77 (With Scheme)	% change compared to Without Scheme		
Fully Modelled Area	+1,104	4.7	+904	4.5		
Wider Network	+1,104	1.4	+895	1.3		



The changes in emissions were also compared with the total GHG emissions from the Norfolk area in paragraph 5.7.11 of Volume 1 Environmental Statement (Document Reference. 6.1). This paragraph is reproduced below with the revised numbers.

The total emissions from the Broadland, Norwich, and South Norfolk Local Authority areas were 2,595 ktCO<sub>2</sub> in 2011 (summed from Table 1 above). By 2017, this would become 2,197 ktCO2 if national projections of reductions apply to this area, and by 2032, 1,736 ktCO2. The increases due to the Scheme across the Wider Network in 2017 and 2032 are 12.8 and 15.3 ktCO<sub>2</sub> respectively, representing 0.58% and 0.88% of the totals in these two years.'

The changes due to the Scheme are lower than those reported in the Environmental Statement.

#### 2.1.5. Summary

Revised calculations of the changes in carbon emissions as a result of the Scheme have been presented. These changes are due to new data becoming available since the original assessment presented in Chapter 5 of Volume 1 Environmental Statement (Document Reference 6.1).

The revised calculations show that the total emissions both with and without the Scheme in future years are lower than those presented in the Environmental Statement.

The revised calculations also show that the change in carbon due to the Scheme itself in the assessment years is less than that presented in the Environmental Statement.

On this basis, the conclusions of the Environmental Statement, as set out in Section 5.8, remain unchanged.



#### 2.2. Submit report around new DEFRA guidance (Air Quality)

#### Applicant's Response

#### 2.2.1. <u>Introduction</u>

This Note summarises the changes to the assessment of air quality presented in the Environmental Statement (Document Ref. 6.2) as a result of new data being published since submission. A description of the new assessment data and tools is provided along with revised calculations of the potential effects of the Scheme on air quality.

#### 2.2.2. New Data

The following assessment tools have been updated and published by Defra:

- Emission Factor Toolkit (EFT) v6.0.1 released July 2<sup>nd</sup> 2014
- 2011 based background maps for years 2011-2030 released
   19<sup>th</sup> June 2014
- Updated NO<sub>2</sub> adjustment tool for NO<sub>x</sub> sector removal tool
- Updated NO<sub>x</sub> to NO<sub>2</sub> calculator

The updated version of the EFT incorporates changes to NO<sub>x</sub> and PM emissions based on the European Environment Agency (EEA) COPERT 4 v10 emission calculation tool. In addition it takes into account updated fleet compositions in the UK and the increase use of biodiesel and bioethanol in commercial petrol and diesel.

The new 2011 background maps are based on 2011 ambient air quality monitoring and replace those previously based on 2010 data which were used in the Environmental Statement assessment. Data for the future



projection years has also been based on new NO<sub>x</sub> emission factor assumptions for Euro V and VI diesel cars and Light Goods Vehicles (LGVs) which are based on COPERT 4 v10.0. New Department for Transport Road Traffic Forecasts (January 2013 Department for Transport (DfT) traffic projections (RS2013)), have also been accounted for within the latest set of background pollutant maps.

#### 2.2.3. <u>Environmental Statement Assessment</u>

Section 4 of Volume 1 Environmental Statement (Document Reference 6.1) set out the methodology, numerical results and significance of air quality effects on modelled discrete sensitive receptors within the study area. In total, 85 discrete receptors were modelled within the assessment as they represent locations where changes in ambient concentrations as a result of the Scheme are likely to be greatest or where the existing concentrations are highest. A summary of the significance of predicted impacts at these receptors is presented in Table 1 below (note that this is a summary of the information presented in the Environmental Statement).



Table 1: Summary of Significance of Impacts at Modelled Discrete Receptors

Significance	Pollutant							
Descriptor	Nitrogen Dioxide (NO <sub>2</sub> )	Particulate Matter (PM <sub>10</sub> )	Particulate Matter (PM <sub>2.5</sub> )					
Substantial Beneficial	None	None	None					
Moderate Beneficial	None	None	None					
Slight Beneficial	2 Receptors	None	None					
Negligible	81 Receptors	85 Receptors	85 Receptors					
Slight Adverse	2 Receptors	None	None					
Moderate Adverse	None	None	None					
Substantial Adverse	None	None	None					

#### 2.2.4. Revised Assessment

Table 2 below presents a summary of the significance of predicted impacts at the 85 modelled discrete receptors within the revised assessment which uses the updated data and tools issued by Defra. These results show that the significance descriptors will remain the same as presented within the original assessment at all but one modelled discrete receptor.

Within the updated assessment the significance descriptor at receptor 16 located along the A1042 close to the Junction with the Cromer Road changes from 'negligible' to 'slight beneficial'.



Changes in the latest assessment tools issued by Defra will not change the significance of impacts at any of the modelled discrete receptors for  $PM_{10}$  and  $PM_{2.5}$ .

Table 2: Summary of Significance of Impacts at Modelled Discrete Receptors

Significance	Pollutant							
Descriptor	Nitrogen Dioxide (NO <sub>2</sub> )	Particulate Matter (PM <sub>10</sub> )	Particulate Matter (PM <sub>2.5</sub> )					
Substantial Beneficial	None	None	None					
Moderate Beneficial	None	None	None					
Slight Beneficial	3 Receptors	None	None					
Negligible	80 Receptors	85 Receptors	85 Receptors					
Slight Adverse	2 Receptors	None	None					
Moderate Adverse	None	None	None					
Substantial Adverse	None	None	None					

#### 2.2.5. Conclusions

The assessment of air quality presented in Section 4 of Volume 1 Environmental Statement (Document Reference 6.1) has been revised to take account of the latest data and tools issued by Defra.

The revised modelled results show that the significance of air quality effects at identified receptors will remain the same as those presented within the original air quality assessment except at receptor 16 which will change from 'negligible' to 'slight beneficial'.



Changes in the latest assessment tools issued by Defra will not change the significance of impacts at any of the modelled discrete receptors for PM<sub>10</sub> and PM<sub>2.5</sub>.

The overall conclusion of the air quality assessment presented in Section 4 of Volume 1 Environmental Statement (Document Reference 6.1) therefore remains unchanged.

#### 3. Consultation

3.1. Were Breckland District Council involved in the development of the SoCG and can NCC provide evidence that they did not want to be involved or their consultation response?

#### Applicant's Response

- 3.1.1. The following text outlines the more recent consultations regarding the NDR proposals that were undertaken with Breckland District Council. It has been produced in response to suggestions made at the Open Floor Hearings, that the council had not been consulted.
- 3.1.2. April/May/June 2012 Consultations

Norfolk County Council's letter of 12 April 2012 informed Breckland District Council of this consultation and the dates of public exhibitions.

- 3.1.3. February/March 2013 Consultations
  - Norfolk County Council's letter 9 January 2013 informed Breckland District Council of this consultation and the dates of public exhibitions.
- 3.1.4. <u>Development of Statement of Community Consultation</u>

Norfolk County Council undertook consultations on the Statement of Community Consultation (SOCC) with the local authorities identified by Section 43(1) of the Planning Act 2008. The local authorities consulted were:



- Norfolk County Council (Category "C" authority)
- Broadland District Council (Category "B" authority)
- Norwich City Council (Category "B" authority)
- Broads Authority (Category Other than "A-D")

A category "B" authority is one where the application land is in the authority's area and the authority is either a unitary authority or a lower tier district council. A category "C" authority is one where the application land is in the authority's area and the authority is an upper-tier county council. The Broads Authority is not a "B" or "C" authority but the NDR does fall partly within the Broads Authority's area.

South Norfolk Council was also consulted on the SOCC because previous consultations had highlighted significant comments regarding the effects of the NDR on the 3 routes crossing the River Wensum between the A1067 at Taverham/ Costessey and A47 at Costessey. These routes are:

- Beech Avenue Ringland Road Costessey Lane Ringland Road
- Sandy Lane Taverham Lane West End Longwater Lane
- Costessey Lane The Street West End Longwater Lane

A significant proportion of these routes (i.e. the majority of the lengths south of the River Wensum) are in the authority of South Norfolk Council and the SOCC also proposed public exhibitions within its area.

#### 3.1.5. July/August/September 2013 Pre-application Consultations 2013

Breckland District Council were identified as a Category A authority (i.e. being adjacent to an authority whose area the application is situated) under Section 43 of the Planning Act 2008. It was therefore consulted as a Section 42 consultee during the pre-application consultations.



A summary of Breckland District Council's response to the consultation is detailed in Page 2 of Appendix T of the Pre-application Consultation report (Document Reference 5.1). The response itself stated:

"The joining point of DNR [sic] and Fakenham Road is approximately 5 miles away from the Breckland boundary. River Wensum Breckland section is in the upper stream therefore I do not felt it will be particularly affected directly by the NDR, although EA or NE may raise specific issues in more detail. I therefore do not feel there are major concerns from Breckland's point of view."

3.2. At the Open Floor Hearings on 22 July 2014 references were made by CPRE Norfolk and SNUB (and others) to the 3 missing representations and to the extent to which the issues raised in them were considered as part of the Pre-Application Consultation and it was suggested by some parties that deficiencies at that stage undermined the present Examination of the NDR.

#### Applicant's Response

- 3.2.1. The purpose of the Examination is to examine the substantive merits of the NDR rather than to test whether the Secretary of State making a direction under section 35 of the Planning Act 2008 that the NDR was a project of national significance undermined the Pre-Application consultation or whether the NDR application should have been accepted for examination having regard to other claimed shortcomings in the Pre-Application consultation.
- 3.2.2. In addition and in any event, the Applicant does not accept that the consequences of the section 35 direction or the omission of consideration of 3 representations by the Applicant during the Pre-Application consultation amount to a substantive deficiency in that process or that there has been any substantial prejudice by reason of the NDR application being accepted for examination.



- 3.2.3. As a preliminary point, the Applicant notes that CPRE Norfolk, SNUB, and Norwich Green Party are all Interested Parties, have made Relevant Representations and Written Representations which set out their concerns, and they are all participating in the Examination. As with all other Interested Parties they are entitled in the Examination to raise any relevant matter in relation to the substantive merits of the NDR, whether in their written representations or in their oral comments at the hearings sessions. This will include relevant matters raised in their Pre-Application representations as well as additional matters. They therefore all have a fair chance to put their cases and to bring all relevant matters to the attention of the Examining Authority.
- 3.2.4. The Applicant has addressed the issue of the missing representations in material already submitted to the Examination, in particular in NCC/EX/4 (Applicant's Comments on Relevant Representations), in NCC/EX/15 (Applicant's Comments on Written Representations from CPRE Norfolk, Norwich Green Party, NNTAG, SNUB, and Hockering Parish Council), and in NCC/EX/35 (Applicant's Comments on Written Representations from CPRE Norfolk). Those responses are not therefore repeated.
- 3.2.5. At the Open Floor Hearing on 22 July 2014 (at Oaklands Hotel, Thorpe St Andrew), Mr S Heard on behalf of SNUB questioned whether there was evidence that all of the points raised by SNUB had been covered by the representations from other consultees when no breakdown had been provided to show that this was the case.
- 3.2.6. The following table (and the following supporting information) identifies the main issues raised by CPRE Norfolk, SNUB and Norwich Green Party in their Pre-Application consultation responses, where those main issues were taken into account by the Applicant in the Pre-Application Consultation, and identifies where those same matters are repeated in the respective subsequent relevant/written representations from CPRE Norfolk, SNUB, and Norwich Green Party.



No	Issue		CPRI Norfo		,	SNUE	3		lorwic een P			nt CF iP, SN	
		Corrsunation Response	nelevant Rep	Written Rep	Response	nerevarit Rep	Written Rep	Response	nelevant Rep	Written Rep	Response	nelevant Rep	Written Rep
1	Purpose of NDR has changed	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	Х	X	X	Х	Х	X	X
2	Effect on landscape and countryside	<b>✓</b>	✓	✓	✓	Х	Х	Х	Х	Х	Х	Х	X
3	Loss of agricultural Land	<b>✓</b>	<b>√</b>	X	<b>√</b>	<b>√</b>	Х	Х	<b>√</b>	X	Х	X	X
4	NDR as an NSIP	<b>✓</b>	<b>√</b>	✓	✓	<b>√</b>	X	Х	X	Х	Х	X	<b>√</b>
5	Consultations	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	X	Х	<b>√</b>	<b>√</b>	X	Х	X	<b>✓</b>
6	Issues relating the JCS and associated developed	<b>✓</b>	✓	<b>✓</b>	✓	<b>✓</b>	Х	Х	Х	Х	Х	Х	Х
7	NDR will increase traffic movements	<b>✓</b>	✓	<b>✓</b>	✓	✓	Х	Х	Х	Х	Х	Х	Х
8	Comments on funding	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	X	<b>√</b>	X	X	Х	X	X
9	NDR is not needed	<b>✓</b>	X	<b>√</b>	<b>√</b>	<b>√</b>	X	X	Х	Х	Х	X	X
10	Alternatives to NDR	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	X	<b>√</b>	<b>√</b>	X	Х	X	X
11	Economic disbenefits	Х	X	<b>√</b>	<b>√</b>	Х	X	X	<b>√</b>	X	Х	X	X
12	A1067 to A47(w) link	Х	X	<b>√</b>	<b>√</b>	X	X	<b>√</b>	<b>√</b>	Х	Х	X	X
13	Postwick Hub Junction	Х	X	X	<b>√</b>	X	Х	Х	X	Х	Х	X	X
14	Effects to specific areas	Х	X	<b>√</b>	<b>√</b>	X	X	X	Х	Х	Х	X	X
15	NDR will increase emissions	Х	X	X	<b>√</b>	X	Х	<b>√</b>	<b>√</b>	<b>√</b>	Х	X	X
16	Specific elements of the NDR	Х	Х	<b>√</b>	<b>√</b>	<b>√</b>	X	X	Х	Х	Х	Х	X
17	Traffic effects of specific areas	Х	Х	X	<b>√</b>	<b>√</b>	X	X	<b>√</b>	X	Х	X	X
18	Off line elements of the NDR	Х	Х	X	<b>√</b>	Х	Х	Х	Х	Х	Х	X	X



19	NATS	Х	Χ	Χ	Х	Χ	Χ	✓	✓	Χ	Χ	Χ	Χ
20	NMUs	Х	X	X	✓	X	X	✓	✓	X	X	X	Χ

#### 3.2.7. <u>Detailed breakdown to support the above Table:</u>

#### 3.2.8. **Issue 1: Purpose of NDR has changed**

Original consultation presented NDR as local distributor road that would ease congestion and support development. Now it is being promoted as a major road with large scale development.

	Consultation Response	Relevant Representations	Written Representations		
CPRE Norfolk	1	1	1		
SNUB	1	1	Nothing		
Green Party	Nothing	Nothing	Nothing		

Where is this covered in the consultation report:

**Issue 1:** Covered by "NDR will only benefit developers" on Page 7 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

#### 3.2.9. <u>Issue 2: Effect on landscape and countryside</u>

NDR would affect the landscape and countryside.

	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	2	2	2
SNUB	2	Nothing	Nothing
Green Party	Nothing	Nothing	Nothing



**Issue 2:** Covered by "NDR will affect Landscape" on Page 75 of Appendix S of the Pre-application Consultation Report (Document Reference 5.1).

#### 3.2.10. **Issue 3: Loss of agricultural Land**

NDR will result in the loss of productive agricultural land.

	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	3	3	Nothing
SNUB	3	3	Nothing
Green Party	Nothing	3	Nothing

Where is this covered in the consultation report:

**Issue 3:** Covered by "Loss of agricultural land" on Page 102 of Appendix S of the Pre-application Consultation Report (Document Reference 5.1).

#### 3.2.11. **Issue 4: NDR as an NSIP**

Status of NDR project as an NSIP changed during consultation, belief that the NDR is not an NSIP or suggestion that it is only NSIP between A47 and A140.

	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	4	4	4
SNUB	4	4	Nothing
Green Party	Nothing	Nothing	Nothing

Where is this covered in the consultation report:

**Issue 4:** Covered "Not an NSIP" Page 123 of Appendix S of the Preapplication Consultation Report (Document Reference 5.1).

#### 3.2.12. **Issue 5: Consultations**

Comments on consultation, including:



- the necessary information on benefits or adverse effects were not provided, so wider community could not make an informed decision,
- **5b** it fails to interrogate alternatives (covered under Issue 11),
- it omits to show the size of developments and the projected traffic volumes as a result,
- the feasibility study to link the A1067 and A47 has been introduced as a new element,
- **5e** the project was no longer an NSIP during the consultation,
- the exhibitions had commenced before residents of Rackheath had received details of these,
- **5g** public opinion is being ignored,
- 5h the consultation area was to small and limited to northern area of Norwich,
- 5i councillors were not involved in development of SOCC,

	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	5, 5a, 5c, 5d, 5e, 5f, 5g	5, 5a, 5c, 5d, 5e, ,	5d,
SNUB	5, 5e, 5f, 5g	Nothing	Nothing
Green Party	5, 5a, 5d, 5e, 5h, 5i	5, 5e	Nothing

**Issue 5:** Covered by Section 2.7.1 to 2.7.12 of main body of Consultation Report.

Specific Issue 5 responses covered by:

- Sections 4.2 to 4.15 of the consultation report details the compliance with the PA2008,
- **5b** "Alternatives to NDR" on Page 10 of Appendix S,



- 5c "No A47 to A1067 traffic flow data at exhibitions" on Page 113 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- "General comment on need for A1067 to A47 link" on Page 13 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- 5e "Not an NSIP" on Page 123 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- Se Covered by "Consultation was inadequate" Pages 108 to 111 and Page 123 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1), and Section 2.7.10 to 2.7.12 of main body of Consultation Report,
- "Some letters delivered late" starting on Page 113 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- "Comments will be ignored" on page 114 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- **5h** Section 2.7.10 to 2.7.12 of main body of Consultation Report,
- **5i** Covered by Section 4.4 main body of Consultation Report,

#### 3.2.13. Issue 6: Issues relating the JCS and associated developed

Issues relating to the JCS and associated development, including:

- believe that the NDR is primarily a facilitator for housing development,
- the JCS is there simply to generate revenue for the NDR through CIL,
- **6c** the NDR will only benefit developers,
- 6d comment that the JCS, Postwick Hub and NDR are linked,
- **6e** developments are not dependant on the NDR.



	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	6a, 6b, 6c	6a	6a, 6d
SNUB	6a, 6c, 6d, 6e	6a, 6b	Nothing
Green Party	Nothing	Nothing	Nothing

#### Issue 6: Covered by:

- 6a "Development should be elsewhere" on Page 7 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- **6b** "NDR will only benefit developers" on Page 7 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- 6c "Developments not dependant of NDR" Page 9 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).
- 6d "Developments not dependant of NDR" and "NDR will create associated development comments" Page 9 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- 6e "Development should be elsewhere" on Page 7 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

#### 3.2.14. **Issue 7: NDR will increase traffic movements**

The NDR will increase traffic movements in general and around the city of Norwich, resulting increased noise, light and exhaust gas.

	Consultation	Relevant	Written
	Response	Representations	Representations
CPRE Norfolk	7	7	7
SNUB	7	7	Nothing
Green Party	Nothing	Nothing	Nothing



**Issue 7:** Covered by "NDR will increase car usage" on Page 4 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

#### 3.2.15. **Issue 8: Comments on funding**

Comments on funding of the NDR and that there could be a better use of tax payer's money, when local councils are already facing reduced budgets. Examples include:

**8a** tax payer's money could be put to better use,

**8b** improve the A47,

	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	8a	8a	8a
SNUB	8a, 8b	8a	Nothing
Green Party	8a	Nothing	Nothing

#### Where is this covered in the consultation report:

#### **Issue 8:** Covered by:

- 8a "Money could be spent elsewhere" on Page 3 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- **8b** "Improve A47/A17" on Page 10 of Appendix S of the Preapplication Consultation Report (Document Ref 5.1),

#### 3.2.16. Issue 9: NDR is not needed

The NDR is not needed, including:

- **9a** the road is not needed,
- **9b** it does not distribute traffic but allows access,
- **9c** don't need road to facilitate east-west movements has there is the southern bypass.



	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	9c	Nothing	9a
SNUB	9a, 9b	9b	Nothing
Green Party	Nothing	Nothing	Nothing

#### **Issue 9:** Covered by:

- "General comment the NDR is not needed" on Page 3 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- "General comment the NDR is not needed" on Page 3 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- **9c** "A47 is adequate" Page 5 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

#### 3.2.17. **Issue 10: Alternatives to NDR**

Alternatives to the NDR have not been properly examined. These include:

10a invest in light rails rail,

**10b** improve outer ring road,

**10c** invest in rail transport,

**10d** invest in sustainable transport,

**10e** a inner orbital link road.

	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	10, 10a, 10e	10a, 10e	10e
SNUB	10, 10a, 10b, 10c,	10a, 10e	Nothing
Green Party	10d	10	Nothing



**Issue 10:** Covered by "Alternatives to NDR" on Pages 10 to 12 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),

Specific comments on Issue 10 covered by:

- 10a Issue of light rail covered by response to Gt and Lt Plumstead Parish Council on Page 29 of Appendix T,
- "Improve Outer Ring Road" to Page 10 of Appendix S of the Preapplication Consultation Report (Document Ref 5.1),
- "Invest in rail transport" on Page 12 of Appendix S on Page 10 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- 10d "Invest in sustainable transport" on Page 12of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- **10e** "Route should be inner orbital link" on Page 26 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

#### 3.2.18. **Issue 11: Economic disbenefits**

Claims of economic benefits of the NDR are incorrect, including that the NDR will have dis-benefits to Norwich, and other market towns.

	Consultation	Relevant	Written
	Response	Representations	Representations
CPRE Norfolk	Nothing	Nothing	11
SNUB	11	Nothing	Nothing
Green Party	Nothing	11	Nothing

Where is this covered in the consultation report:

**Issue 11:** "NDR will not benefit city centre business" on page 8 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1), and in response to the comments from Rackheath Parish Council on Pages 36 to 37 of Appendix T of the Pre- Application Consultation Report.



#### 3.2.19. **Issue 12: A1067 to A47(w) link**

Comments on A1067 to A47(w) link, including:

- in 2003 consultations the NDR received considerable support because it went all the way to the A47(w),
- the NDR will increase traffic on local routes between the A1067 and A47 to the west of Norwich,
- the EIA should consider the impact of the proposed A1067 to A47 link,
- the new link would require a hugely costly viaduct scheme, which would be difficult to fund.

	Consultation	Relevant	Written
	Response	Representations	Representations
CPRE Norfolk	Nothing	Nothing	12a, 12b
SNUB	12, 12a, 12c	Nothing	Nothing
Green Party	12a, 12b, 12c, 12d	12a, 12b	Nothing

Where is this covered in the consultation report:

**Issue 12:** Covered by "General comment on need for A1067 to A47 link" on Page 13 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

#### Specific Issues 12 comments covered by:

- "Never consulted on ¾ route" on Page 17 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- "NDR affects on routes between Taverham/Drayton and Costessey/East" on Page 89 of Appendix S of the Preapplication Consultation Report (Document Ref 5.1),
- "Increase traffic on route between Hockering and Lenwade" on Page 101 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- "General comment on need for A1067 to A47 link" on Page 13 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),



"General comment on need for A1067 to A47 link" on Page 13 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

#### 3.2.20. **Issue 13: Postwick Hub Junction**

Comments on the Postwick Hub Junction, including:

**13a** a preference for Option 4 – keeping the current slip roads open,

**13b** the junction is poorly design.

	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	Nothing	Nothing	Nothing
SNUB	13a, 13b	Nothing	Nothing
Green Party	Nothing	Nothing	Nothing

Where is this covered in the consultation report:

#### **Issue 13:** Covered by:

- "Suggest Option 4" starting on Page 36 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- "Postwick Hub junction over complicated" starting on Page 33 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

#### 3.2.21. **Issue 14: Effects to specific areas**

Comments on particular effects on specific areas including:

- **14a** effects of Dobbs Beck and the Springs,
- **14b** effects on Beeston St Andrew and Rackheath Park.



	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	Nothing	Nothing	14
SNUB	14a, 14b	Nothing	Nothing
Green Party	Nothing	Nothing	Nothing

#### **Issue 14:** Covered by:

- 14a Dobb's Beck and The Springs covered in response to Environment Agency and Salhouse Parish Council on Pages 39 to 40 in Appendix T of the Pre-application Consultation Report (Document Ref 5.1),
- 14b Beeston St Andrew and Rackheath Park covered in response to Broadland District Council on Page 3 in Appendix T of the Preapplication Consultation Report (Document Ref 5.1).

#### 3.2.22. **Issue 15: NDR will increase emissions**

Comments that the NDR will increase emissions and contribute to climate change, including:

- **15a** the NDR will increase CO2 emissions,
- **15b** the impacts of the NDR on climate change has not been considered,
- **15c** NDR would be a risk to health.

	Consultation	Relevant	Written
	Response	Representations	Representations
CPRE Norfolk	Nothing	Nothing	Nothing
SNUB	15a, 15b, 15c	Nothing	Nothing
Green Party	15a, 15b, 15c	15a, 15c, 15	15a, 15



#### Issue 15: Covered by:

- 15a "NDR will increase CO2 emissions" on Page 84 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- 15b Covered by response to Natural England that "the NDR will need to demonstrate how climate change over the longer term has been taken into account" in Appendix T,
- "Health risk to those near NDR" starting on Page 84 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

#### 3.2.23. <u>Issue 16: Specific elements of the NDR</u>

Issues with specific design elements of the NDR, including:

- the elevated section of the NDR over the Norwich to Sheringham railway line and Plumstead Road,
- **16b** comments about the risk of flooding.

	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	Nothing	Nothing	16
SNUB	16a, 16b	16a	Nothing
Green Party	Nothing	Nothing	Nothing

#### Where is this covered in the consultation report:

#### **Issue 16:** Covered by:

- 16a "NDR should go under Plumstead Road/railway line" on Page 45 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- "Drainage provision needs to be adequate" starting on Page 6 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).



#### 3.2.24. **Issue 17: Traffic effects of specific areas**

Specific effects of the NDR or certain roads and villages, including:

- 17a NDR will take HGV traffic away from the B1140 through Salhouse and restrictions should be put in place preventing this,
- **17b** NDR will increase traffic on Plumstead Road through Thorpe End,
- 17c NDR will increase traffic on Wroxham Road and Salhouse Road,
- **17d** NDR will increase traffic on Holt Road and North Walsham Road,
- 17e NDR will impact on all travellers in and out of the city,
- 17f Coltishall and Wroxham.

	Consultation	Relevant	Written
	Response	Representations	Representations
CPRE Norfolk	Nothing	Nothing	Nothing
SNUB	17a,17b, 17c, 17d, 17e, 17f	Nothing	Nothing
Green Party	Nothing	17e	Nothing

Where is this covered in the consultation report:

#### **Issue 17:** Covered by:

- 17a Issue of B1140 covered in response to Salhouse Parish Council in Appendix T of the Pre-application Consultation Report (Document Ref 5.1),
- "Increased traffic through Thorpe End" starting on Page 91 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- "Increased traffic on Wroxham Road" and "Increase traffic on Salhouse Road" on Page 93 and 95 of Appendix S of the Preapplication Consultation Report (Document Ref 5.1),



- "Increase traffic through Horsford" and "Increase traffic on North Walsham Road" on Page 92 of Appendix S of the Preapplication Consultation Report (Document Ref 5.1),
- 17e "NDR affects on other radial routes" starting on Page 95 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1),
- 17f "NDR affects on Wroxham Road" on Page 94 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

#### 3.2.25. **Issue 18: Off line elements of the NDR**

Issues relating to off-line proposals including:

**18a** the closure of local roads, forcing traffic onto the NDR to be avoided.

	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	Nothing	Nothing	Nothing
SNUB	18a	Nothing	Nothing
Green Party	Nothing	Nothing	Nothing

Where is this covered in the consultation report:

**Issue 18:** Covered by:

18a "Too many road closures" on Page 55 of Appendix S of the Preapplication Consultation Report (Document Ref 5.1),

#### 3.2.26. **Issue 19: NATS**

The NDR is delaying to BRT proposals and NATS

	Consultation	Relevant	Written
	Response	Representations	Representations
CPRE Norfolk	Nothing	Nothing	Nothing
SNUB	Nothing	Nothing	Nothing
Green Party	19	19	Nothing



**Issue 19:** Covered by response to Norwich City Council that the NDR should include a demonstration of its place in the overall NATS strategy on Page 4 in Appendix T of the Pre-application Consultation Report (Document Ref 5.1),

#### 3.2.27. **Issue 20: NMUs**

NDR adversely affects NMU routes

	Consultation Response	Relevant Representations	Written Representations
CPRE Norfolk	Nothing	Nothing	Nothing
SNUB	20	Nothing	Nothing
Green Party	20	20	Nothing

Where is this covered in the consultation report:

**Issue 20:** Covered by "General comment NDR represents barrier to NMUs" on page 65 of Appendix S of the Pre-application Consultation Report (Document Ref 5.1).

3.2.28. There has been reference that the number of responses to the section 47 consultation as documented in the consultation report were incorrect. Norfolk County Council can confirm that the numbers of consultation responses received, as documented on page 81 of the Pre application Consultation Report (Document 5.1), were correct. A small number of these were section 42 consultees and were therefore moved from the Section 47 analysis and included in the analysis of Section 42 responses.



#### 4. Design

4.1. Postwick SoS report & Inspectors report to be submitted by deadline 5 (4th August)

#### Applicant's Response

4.1.1. It was noted that the Examining Authority requested copies of both A47 Postwick Interchange Inspectors report and A47 Postwick Interchange decision letter. These reports can be found in Appendix A of this report.

#### 4.2. Clarification on Postwick NMU issues raised by CTC

#### Applicant's Response

- 4.2.1. The following draft orders were published in connection with the improvement of the A47/A1042 Postwick Hub junction by the Secretary of State for Transport ("the Secretary of State") on 13 November 2009 under the Highways Act 1980:
  - The A47 Trunk Road (Postwick Interchange Slip Roads) Order 20.
  - The A47 Trunk Road (Postwick Interchange Side Roads) Order 20
- 4.2.2. The Highways Agency and Norfolk County Council proposed the following measures to accommodate the needs of cyclists affected by changes to the highway network as a result of the Slip Roads Order and Side Roads Order.
  - The new Postwick Bridge will be modified to accommodate a 3m wide footway on the east side of the bridge.
  - Cyclists travelling west on A1042 will be signposted to use the proposed Park and Ride access road which would join the proposed cycling facility at the signalised junction. The access road will be subject to a 10mph speed limit enforced by speed cushions.



- Part of the existing A47 eastbound diverge slip road which is proposed to be closed as part of the Scheme is to be partially retained to provide a dedicated shared use cycling facility linking the A47 carriageway with the Postwick North West roundabout.
- 4.2.3. These changes were included within a Statement of Common Ground prepared between the Highways Agency, Norfolk County Council and Tony Clarke on behalf of Cyclist Touring Club (CTC).
- 4.2.4. The third change required a modification to the published draft Side Roads Order and this was put forward by the Highways Agency and Norfolk County Council for the Inspector to consider as part of the Public Inquiry in 2013 to ensure that cyclists were not disadvantaged by the proposed stopping up of the eastbound diverge slip road pursuant to the (draft) Side Roads Order.
- 4.2.5. The Inspector's Report (Appendix A) following the Public Inquiry (Report to the Secretaries of State for Transport and for Communities and Local Government by David Wildsmith BSc(Hons) MSc CEng MICE FCIHT MRTPI; 29 October 2013) included the following:-

(Paragraph 8.189) "The exception is Modification 7 which is proposed to address a specific matter raised by objectors."

(Paragraph 8.190) "Under this modification the existing eastbound diverge slip road would remain open to cyclists and pedestrians through the creation of a shared-use path along its length. Cyclists and pedestrians currently use the service path over the A47 Viaduct and this proposed shared-use facility would enable cyclists to continue to use the existing A47 eastbound diverge slip road to connect with the existing and proposed cycle network at the Postwick North-West roundabout. "End of cycle route" and "cyclists dismount" signs would be provided to inform cyclists travelling westbound down the slip road that the facility does not continue across the A47 Viaduct."



The Inspector recommended that the draft Side Roads Order should be modified to include the above change and this was accepted by the Secretaries of State in the decision letter dated 8 January 2014 (Appendix A)

4.3. Claim that historic plans on NCC website showed cycle crossings being signal controlled.

#### Applicant's Response

- 4.3.1. NCC has reviewed historic records of both exhibition material and material published on its website.
- 4.3.2. The key dates for publication of material were:
  - Exhibition material April 2007
  - Plans for website July 2007
  - Exhibition material April 2008
  - Exhibition material October 2009
  - Exhibition material April June 2012
  - Exhibition material February- March 2013
  - Pre-application consultation July 2013
- 4.3.3. None of the published material reviewed showed that proposed cycle crossing points at roundabouts would be signal controlled.



4.4. It is claimed to be no longer safe to cycle to Norwich FarmShare because of the bypass and the Postwick hub roundabout. This affects a number of people who visit FarmShare, a Community Supported Agriculture scheme next to said hub. Raised by Cllr Lesley Grahame – Thorpe Hamlet Ward Councillor

#### Applicant's Response

- 4.4.1. Norwich FarmShare is located south of both the A47 and the Norwich to Great Yarmouth railway line at Postwick. It is accessed via a track and bridge over the railway line next to the Postwick Park and Ride site. The FarmShare project post-dates the construction of the A47 Norwich Southern Bypass.
- 4.4.2. The A1042 Yarmouth Road as it crosses the A47 on a bridge between the two roundabouts is currently a single carriageway comprising one 3.7m wide lane and one 1.3m wide on-carriageway cycle lane in each direction. There is no footway connectivity between the two roundabouts.
- 4.4.3. The current pedestrian and cycle facilities across the existing Postwick Bridge would be altered as part of the Postwick Hub junction improvement, removing both the existing northbound and southbound on-carriageway facility for cyclists. The Scheme would provide a shared use facility along the western side of the bridge, linking the current shared use facility on the A1042 Yarmouth Road north of the A47 to a 3.0m wide off-carriageway shared use link from the Park and Ride signalised junction to Oaks Lane which is currently under construction as part of the Park and Ride extension.
- 4.4.4. The Park and Ride signalised junction would include a signal controlled crossing with on-demand phases for pedestrians and cyclists.
- 4.4.5. Safe cycle access to Norwich FarmShare will be possible from the cycle network described above.
- 4.4.6. The proposed Postwick Hub junction layout is shown on Sheet 12 of the General Arrangement Plans (Document Reference 2.6).



4.5. Middle Road Bridge time line, evidence of meetings and correspondance including breakdown of £5m

## Applicant's Response

#### 4.5.1. Introduction

Mr Brown raised the issue of traffic on Middle Road at the Open Floor Hearing on Tuesday 22 July 2014. He said that traffic would be encouraged through Middle Road, Great Plumstead and Church Road, Great Plumstead and that this should use the NDR and A47 or Plumstead Road. In addition Councillor Townly responded that an inner orbital alternative would mitigate these issues.

The following information explains the development process, including consultation, correspondence and meetings, that helped inform the decision to provide an all user bridge over the NDR at Middle Road.

# 4.5.2. <u>23 February 2012 Meeting between Norfolk County Council Officers and</u> Representatives of Great and Little Plumstead Parish Council

At this stage the NDR proposals in this location were for an agricultural vehicles and NMU Bridge over the NDR at Low Road and closures at Middle Road and Smee Lane. Discussions at this meeting included examining the request to keep Middle Road open and the impact of this. Norfolk County Council agreed to examine this request.



## 4.5.3. <u>April/May/June 2012 Consultations</u>

Norfolk County Council's scheme proposals presented at the exhibitions for these consultations showed an agricultural vehicles and NMU Bridge over NDR at Low Road and closures at Middle Road and Smee Lane. However, the exhibition plans also showed:

"Possible crossing for Middle Road over NDR as an alternative to bridge at Low Road".

4.5.4. <u>14 September 2012 Meeting between Norfolk County Council Officers</u> and Representatives of Great and Little Plumstead Parish Council

> Discussions at this meeting included the proposal to have an all vehicle bridge over the NDR at Middle Road together with closures of Low Road and Smee Lane.

4.5.5. 2 November 2012 Letter from Great and Little Plumstead Parish Council

Together with a number of other requests the Great and Little Plumstead Parish Council correspondence stated that should the NDR be forced upon them, then Middle Road should remain open.

## 4.5.6. <u>3 December 2012 Cabinet</u>

Results of the April/May/June 2012 consultations were presented in Appendix A of the report to Norfolk County Council's Cabinet at its meeting of 3 December 2013. This stated:

"There was a mixed response to the closure of Middle Road or Low Road. 9 respondents were in favour of the closure of Middle Road and 10 respondents were against the closure of Middle Road. 5 were in favour of the closure of Low Road and 3 respondents were against the closure of Low Road."



## Appendix A recommend the:

"Removal of pedestrian/cycle/agricultural vehicle bridge at Low Road, Great Plumstead and provide all vehicle bridge at Middle Road instead."

The main reasons for this decision were:

- It would provide better access to Great Plumstead,
- Responses from the April/May/June 2012 public consultations showed a slight majority against closure of Middle Road (9 for, 10 against) and there was a slight majority in favour of the closure of Low Road (5 for, 3 against),
- The local parish council had expressed an opinion in favour of keeping Middle Road open.

In addition to the Middle Road Bridge, the cabinet report recommended a number of other modifications to the NDR following the 2012 consultations. The total additional cost of these modifications was estimated as £5m. The report did not include a breakdown of these costs, but at that time they were estimated to be:

Modifications – On line changes	Additional Cost
Relocation of Fir Covert Roundabout to end of NDR – close to A1067	£0
Provision of an additional length of dual carriageway between Fir	+£1.5m



Covert Road and A1067	
Removal of Church Street closure and monitor situation	£0
Relocation of the closure on Broad Lane/Green Lane East from the railway crossing to the junction with Plumstead Road	£0
Removal of the agricultural vehicles and NMU bridge at Low Road and provision of an all user bridge at Middle Road instead	+£1.0m
Modifications – Walking/cycling links	
Additional NMU routes and improvements to existing NMU routes	+£0.4m
Modifications – Off line schemes associated with NDR application	
Off line improvements at A1151/Green Lane West Junction, Crostwick Lane/ North Walsham Road Junction and on Plumstead Road, Thorpe End	+£1.75m
Modifications – Off line schemes to be progressed irrespective of the NDR application	
Review Costessey West End traffic calming, and provide signing for and enforcement of HGV restrictions between Costessey and Taverham/Drayton. Investigate ways to enforce weight restrictions	£0.35m



on river bridges.	

At the 3 December 2013 meeting Norfolk County Council's Cabinet resolved to accept these recommended modifications.

## 4.5.7. <u>February/March 2013 Consultations</u>

Norfolk County Council's scheme proposals presented at the exhibitions for these consultations showed an all user bridge over the NDR at Middle Road and closures of Low Road and Smee Lane.

Results of this consultation were as follows:

Provision of all user bridge at Middle Road	All Responses	Just Lt and Gt Plumstead Parish
In Favour	63	18
Not In Favour	52	22
No Opinion	170	8
Null Fields	6	2
Total	291	50



## 4.5.8. <u>July/August/September 2013 Pre-application Consultations 2013</u>

Norfolk County Council's scheme proposals presented for these consultations showed an all user bridge over the NDR at Middle Road and closures of Low Road and Smee Lane. Pages 44 and 45 in Appendix S of the Pre-application Consultation Report (Document Reference 5.1) identify the comments made regarding Middle Road Bridge. Page 29 to 33 of Appendix T of the Pre-application Consultation Report (Document Reference 5.1) contains a summary of the response from Great and Little\_Plumstead Parish Council. In this the parish council raised concerns that the NDR cuts the parish in two with plans to close off Low Load and Smee Lane, together with a bridge crossing the C874 Plumstead Road.

Norfolk County Council's response to this identified that one of the reasons for introducing a bridge over the NDR at Middle Road was to improve access options to Great and Little Plumstead and help mitigate concerns that the NDR cut the parish in two. The bridge was located here, rather than at Low Road or Smee Lane, because Middle Road was considered the better standard road.

Middle Road has a wider carriageway than both Low Road and Smee Lane. In addition the route via Middle Road also has a better standard junction with Plumstead Road than the alternative via Broad Lane/Hare Road. Broad Lane at its junction with Plumstead Road has limited side road visibility.

## 4.5.9. <u>Post Application Acceptance</u>

Norfolk County Council developed a Statement of Common Ground with Great and Little Plumstead Parish Council. This was contained in 'Volume 4 Statements of Common Ground between Norfolk County Council and Parish Councils' (Document Ref NCC/Ex/6). This stated:



"Great and Little Plumstead Parish Council consider that all local roads should be kept open. As a result it is in favour of the provision of Middle Road Bridge because it removes one of these road closures. However, it considers the most preferable solution is keeping Middle Road, Low Road and Smee Lane open."

## 4.5.10. Modelled Traffic Flow Information

The tables below show the traffic forecasts on Middle Road and Church Road comparing without the NDR (Do Minimum), with NDR and with Alternative 5, a version of an inner orbital alternative. The figures are two-way Annual Average Daily Traffic flows in vehicles. For Church Road the figures for Do Minimum and with NDR are also contained in the Traffic Forecasting Report (Document Reference 5.6) in Figure I.2 and the figures for Alternative 5 are contained in the report Traffic and Economic Appraisal of NDR Alternatives (Document Reference 5.12) in Figure 10.17.

#### Middle Road

AADT (veh)	2012	2017	2032
Existing / Do Min	1500	2100	4100
With NDR	-	1900	2400
With Alt 5	-	4000	4600

4.5.11. The traffic model does not include every minor road in the network around Norwich. In this location Middle Road is included in the model but not Low Road and Smee Lane. The traffic flow on Middle Road therefore also represents the small traffic flows on these minor roads. Traffic counts have shown that approximate 60% of the base traffic is located on Middle Road.



#### **Church Road**

AADT (veh)	2012	2017	2032
Existing / Do Min	4300	6800	10500
With NDR	-	3000	3500
With Alt 5	-	7900	11200

4.5.12. The forecasts account for the planned Joint Core Strategy Development which includes the 600 dwellings at Brook Farm. The tables show that Alternative 5 would increase forecast traffic on these roads.

4.6. Future development of rail including stations in the NATS area

## Applicant's Response

#### 4.6.1. <u>Introduction</u>

The NATS strategy and Implementation Plan sets out how the potential of rail in the Norwich area will be realised. NATS and the JCS recognise that a step-change in public transport provision is required to serve the Norwich area, with a bus-based system offering the most potential for serving existing and new jobs, services and facilities. The rail network is vital to serve the Norwich area, but its strengths lie in offering longer-distance trips to the major centres and commuting, leisure and business trips into the city.

NATSIP 2013 sets out in more detail how the rail network will be developed:

Our main focus is on promoting and securing the improvement of strategic connections and upgrades to the commuter services into Norwich. We will continue to work with the rail industry and contribute to,



or fund, smaller projects on the rail network where funding allows. We also remain committed to the Community Rail Partnerships in the county.

Our current focus is to influence the major decisions being taken about renewal of the franchises for train services, and agreement about the 2014-19 capital spending programme for Network Rail. The priorities are:

- Faster journey times, more capacity and better quality travel experience Norwich-London
- Completely refurbished, or new, trains on other routes
- 1/2 hourly frequencies between Norwich and Cambridge, with an extension of the service to Stansted Airport and perhaps in the medium to longer term 1/2 hourly frequencies between Norwich and Sheringham
- Improvements at stations: priorities include accessibility improvements at Wymondham to ensure all passengers can get to both platforms

NATS and NATSIP therefore set out that improvements to the existing rail infrastructure and services will be the focus rather than new rail routes or new rail infrastructure. However, two potential new stations are included within the strategy: at Broadland Business Park on the Norwich to Sheringham (Bittern) Line, and at Postwick on the Norwich to Great Yarmouth and Lowestoft (Wherry) Lines. The appendix, figure 1 shows potential locations.

#### 4.6.2. New Rail Halts

NATS Policy 22 New Rail Halts states: The feasibility of new rail halts will be kept under review. The supporting text states: A new rail station at Broadland Business Park or Dussindale has been a long-standing



aspiration. A station in that location could serve the business park and nearby residential development, act as a 'Parkway' type station into Norwich and provide additional station capacity on the rail lines to either Great Yarmouth or Sheringham. However, its feasibility as a station for heavy rail is likely to depend on development proposals. Without further development there is unlikely to be sufficient demand for a station.

NATSIP, adopted in April 2010, states: Opportunities for new stations to serve Postwick, Broadland Business Park and the eco-town at Rackheath will be subject to further feasibility. Delivery would be closely dependent on availability of funding from development and programmes within the rail industry.

NATSIP was refreshed in 2013 and states that, for rail, delivery over the next two years (April 2013-15) would include: *Feasibility study into new stations at Broadland Business Park and Postwick*.

#### 4.6.3. Postwick

Figure 2 in the Appendix shows the potential site of a new station at the Postwick Park and Ride site, included in NATSIP.

Discussions with the rail industry during 2013 indicated that current demand for a rail station at Postwick (at the Park and Ride site) is likely to be low, and so this measure will not be brought forward in the short term.

Therefore no work is being done currently to progress bringing this station forward.



## 4.6.4. <u>Broadland Business Park / Dussindale Station</u>

Figures 3 and 4 in the Appendix show potential sites for a new station at Broadland Business Park included in NATSIP.

Figure 2 shows land previously set aside for a station as articulated in (Broadland District) local plans (2006 Local Plan Policy TSA3 (requirement f)).

Outline planning consent was given (28 June 2013) for 600 dwellings, 14.6 Ha employment land and a local centre as part of the Brook Farm proposal. The consent includes land for a new rail halt for the business park (Fig 3), subject to meeting the clauses in the Section 106 Agreement. A notable clause is the transfer of the land for the rail halt to Broadland Council within 10 years of the Brook Farm scheme commencing.

## 4.6.5. Rackheath

Developers promoting the Rackheath Eco-community featured the option to build a new rail station and upgrade the Bittern Line to a half-hourly or quarter-hourly service potentially through a tram-train operation. It was suggested that the new halt at Rackheath could replace the existing Salhouse station, which is not well-located for either existing or new communities.

Current position on Bittern Line Stations

Broadland District Council and Norfolk County Council discussed the potential stations with the rail industry during 2013. The discussions acknowledged the potential of a new station; the potential benefits of relocating the halt at Salhouse to the new development at Rackheath; and reiterated some of the possible constraints including whether



existing trains would have time in the schedules to stop at an additional halt given the tight turnaround times at either end.

A brief was prepared for study work, to assess the likely passenger demand for new and relocated stations. The work will take into account the current service pattern of trains together with the aspiration of regular half hourly services. The work will also assess the technical feasibility of potential station sites in these locations and recommend preferred sites If this stage of the work indicates sufficient forecast additional revenue arising from technically feasible station sites to justify more detailed operational investigation, further appraisal work will be completed. This will include considering the operational/ timetabling issues and the scope for innovative approaches such as tram train.

The timetable for putting this work underway is under discussion.

## 4.6.6. Rail Delivery

The county council has a strong record of engagement with government and the rail industry on rail development, and a strong record of local delivery.

Over recent years, delivery has included:

#### 2014

- Large vinyl to promote PLUSBUS (a rail ticket option that allows onward travel by bus)
- Production of leaflet to promote PLUSBUS and working with Abellio Greater Anglia to promote sale of PLUSBUS tickets
- New internal station signage showing locations of onward travel facilities (bus stops, cycle hire, etc)



- Vinyls on station exit showing locations of onwards travel facilities (bus stops)
- New electronic display at rail station forecourt bus stop
   (replacement of existing LED display with high quality display
   using thin-film transistor (TFT) technology to improve image
   qualities)
- New printed information at key locations across Norwich
   (University of East Anglia, Hospital, bus station, city centre)
   providing specific information on how to travel to the rail station
- Upgraded bus shelters at key stops serving the rail station

#### 2013

- Large vinyl at bus stop to promote rail station forecourt bus stop from a distance (raise awareness)
- Complete overhaul of all printed travel information shown at rail station forecourt bus stop (project shortlisted for National Transport Awards 2014)
- Complete overhaul of all printed travel information shown at all surrounding rail station bus stops
- Provision of new travel information posterboards at the rail station forecourt bus stop

Other notable projects include a contribution to the provision of wi fi on Great Eastern Main Line (GEML: Norwich to London) Inter City services and development of a new bus/rail interchange (which included additional cycle parking).



As well as delivery, the county council has also been active in engaging with partners to support investment in rail improvements in the area, including:

- Working with New Anglia Local Enterprise Partnership and other local authorities in the east of England on the Rail Prospectus for East Anglia July 2012. We are currently working with partners on an update to this prospectus
- Publishing a more detailed Norfolk Rail Prospectus for the county
- Working with New Anglia Local Enterprise Partnership and other local authorities on the Norwich to London rail route to provide evidence for, and secure funding for improvements on this line.
   As a result, government has set up a Task Force to identify how the required improvements can be delivered. This is due to report by the end of the year and is expected to lead to improvements to journey times, reliability and quality included as part of the franchise requirements when this is renewed in 2016
- Advocacy and engagement with government, Network Rail and train operators to secure rail investment and improvements through franchise awards and infrastructure spending programmes. Examples include: securing upgrades to the interior of Inter City rolling stock and service improvements on rural routes as part of Greater Anglia franchise extension 2014; inclusion of infrastructure upgrades on the Great Eastern Main Line (Norwich to London) at Bow junction, and at Ely to allow improved services to Cambridge and Peterborough from Norwich as part of Network Rail's delivery programme 2014-19; additional Cambridge to Stansted services providing greater frequencies from Norwich to Stansted Airport



- The county council has either funded and commissioned or contributed to – a number of studies. Examples over the last two years include: Wider Economic Benefits of Rail Frequencies July 2012 (looking at a range of services including Norwich to Cambridge); and GEML (Great Eastern Main Line: Norwich to London) Capacity Study October 2012
- The county council is represented on Community Rail Norfolk, overseeing the Community Rail Partnerships on the Norwich to Sheringham, Lowestoft and Great Yarmouth lines and has contributed financially to Community Rail Norfolk projects including the line guide
- The county council is a member of the East West Rail
  Consortium, which is promoting a new rail route that would
  connect Norwich and Ipswich in the east, via Cambridge to
  Oxford and the south west.

The county council will continue to engage with government and the rail industry to try to influence the best outcomes for the county. The major opportunities are through franchise replacements and Network Rail longer-term planning:

- Working with partners on a refresh of the Rail Prospectus for East Anglia and on the Great Eastern Rail Campaign; both led by New Anglia Local Enterprise Partnership
- Responding to government consultation on TransPennine
   Express and Northern Rail Franchises to provide support and evidence against splitting the current Norwich to Liverpool service at Nottingham



- Engagement in the Greater Anglia franchise replacement 2016 and Network Rail's longer-term planning processes to secure (amongst other things)
  - Additional capacity on the Norwich to London line at the southern end of the route to overcome crowding problems. This requires major new track infrastructure to provide the capacity for additional trains, probably a four-track stretch in the vicinity of Chelmsford. It is expected that this will be developed by Network Rail for inclusion in their 2019-24 spending plan period
  - Regular half hourly services between Norwich and Cambridge. This is expected to be specified in the new Greater Anglia franchise.
  - Improved services on Norwich to Sheringham,
     Lowestoft and Great Yarmouth lines. Particularly
     pressing is to overcome crowding problems on the
     service from Sheringham, which is often full at peak
     periods.

The county council will continue to direct investment towards improving the rail offer, particularly through interchange and information.

4.7. Request to change junction strategy at Hall Lane/ Drayton Lane, Drayton. The independence of the safety team was questioned.

## Applicant's Response

4.7.1. The background to this matter is included within Section 4 of the Proposed Minor Change to the Application for Development Consent:

Drayton Lane (south) report (Document Ref. 5.13) and the Statement of



- Common Ground jointly agreed between NCC, Mr L Gray (on behalf of himself and his immediate neighbours), residents of Drayton Hall Park and Drayton Parish Council (Document Reference. NCC/EX/6).
- 4.7.2. During 2012 NCC engaged with a number of Parish Councils to discuss the detailed aspects of the NDR scheme as part of on-going scheme development prior to making a planning application under the Town and Country Planning Act 1990. The decision to submit an application for development consent under the Planning Act 2008 was not made until late 2012. Drayton Parish Council was at the time concerned about traffic flow through the centre of the village and a solution was developed which mitigated this impact. This solution included the closure of Drayton Lane (south) at its junction with Reepham Road and formed part of the Scheme submitted for development consent in January 2014.
- 4.7.3. As a result of on-going discussions with the Parish Council and the local community over many months an amendment to the DCO Scheme has been promoted to keep Drayton Lane (south) open. The details of the change are described in Section 3 of Document Reference 5.13.
- 4.7.4. The matter is further discussed in Section 1.1 of the Applicant's comment on Written Representations by Mr L Gray (Document Reference NCC/EX/19) in particular paragraphs 1.1.12 and 1.1.13.
- 4.7.5. NCC's main concern with the request to provide a roundabout at the junction of Drayton Lane (south) and Reepham Road is that this modification would result in a forecast increase in traffic through the centre of Drayton based on the strategic traffic model.
- 4.7.6. It is clear from the Written Representation made by Drayton Parish
  Council and the oral presentation from Mr Everett at the open floor
  hearing on the 23 July 2014 that over recent months there has been a
  change in the position of Drayton Parish Council regarding this matter.
- 4.7.7. Further to the representations made by Mr Everett (representing Drayton Parish Council), Mr Gray, Mr Broome and Mrs Bushnell (representing



Drayton Hall Park Residents Association) at the open floor hearing, NCC will continue to consider the issues raised and will report further findings to the Examination Authority by the 8<sup>th</sup> September 2014 (Deadline 6). NCC will also continue to engage with Drayton Parish Council and the represented parties to ensure that the right solution for the local community is found.

## 4.7.8. The independence of the Safety Team was questioned

- 4.7.9. Within the Highways and Transport Group the NDR designers within the Highways and Major Projects team and the Safety Auditors within Network Safety team are in 2 separate sections and report to different section managers. The Network Safety team does not have a dedicated design function for the NDR.
- 4.7.10. This enables Safety Audits to be carried out by a team independent from the scheme design process. The audit team comprises a minimum of 2 persons with appropriate expertise in road safety engineering / accident investigation and prevention (AIP) supported by specialist advisors as required.
- 4.7.11. General safety advice will have been provided to NDR designers by Safety Auditors and this does not compromise their independence. However, if any member of the Network Safety team has provided detailed advice or reviewed specific design elements of the scheme, they have not been included in the Safety Audit team for the same scheme element.



## 5. Environment

5.1. EiP Responses – general issues related to noise, landscape, water and the loss of agricultural land.

Applicant's Response

#### 5.1.1. **Noise**

Section 11.4.7 to 11.4.18 of Volume 1 Chapter 11 Environmental Statement (Document Reference 6.1) puts the Noise Policy Statement for England(NPSE) into the context of the National Planning Policy Framework (NPPF) in which NPSE is referenced.

It is uncertain as to what has prompted this observation. One possibility is that the noise contours are restricted to the study area within 600m of the scheme, whereas the impact tables contain results from outside that area - see Section 11.2.5 to 11.2.6 of Volume 1 Chapter 11 Environmental Statement (Document Reference 6.1).

Noise calculations have been undertaken using proprietary software. The highway alignments and associated earthworks have been directly imported in to the noise model, therefore taking into account all gradients in the scheme.

The assessment has been undertaken in accordance with appropriate methodology. Section 11.3.36 to 11.3.37 of Volume 1 Chapter 11 Environmental Statement (Document Reference 6.1) explains the methodology used to assess night-time noise. This is in accordance with DMRB HD213/11 where properties are identified for assessment as follows: Where the introduction of a project results in a sensitive receptor being exposed to night time noise levels in excess of 55dB Light, outside where it is currently below this level; and where a receptor is exposed to pre-existing Light, outside in excess of 55dB and this is predicted to increase (the threshold criterion is a 3dB increase). The overwhelming



majority of receptors are predicted to experience lower night-time noise levels as a result of the Scheme than the threshold criteria above.

The Plumstead Road Bridge is an integral bridge structure, so there are no joints in the deck. The Rackheath Railway bridge is semi-integral so does not have a mechanical joint but will have a plug joint cut into the top of the surfacing, this allows the surfacing to flex. Neither of these bridges will have joints that make noise. "Rolling blocks" will be added as part of the design at the ballast walls of each abutment – these will deal with settlement, and help reduce any effects arising from differential settlement between the bridge structure and the embankment which can result in wheel noise as the tyre hits the bump in the road. There is a bund approximately 2m high along the edge of the carriageway on the embankments and the interconnecting parcel of land between the two bridge parapets. There will also be 1.5m high parapets with a solid infill. Further design development during the detailed design stage will ensure that no gap exists between the bund and the end of the parapets to let noise through.

Traffic flows used in the assessment incorporate traffic from future development; therefore the assessment does consider flows arising from future development. The full assumptions are given in the Transport Assessment DCO document 5.5.

It is correct to say that there is no requirement for long term monitoring. However it is likely that there will be a pre- and post-scheme noise monitoring regime associated with claims under the Land Compensation Act (Section 11.4.19 of Volume 1 Chapter 11 Environmental Statement (Document Reference 6.1)).

The noise contours are restricted to the study area within 600m of the Scheme - beyond this distance predicted noise levels from the Scheme become less reliable and the assessment becomes based upon a



property count within 50m of roads where a predicted change in traffic gives rise to a change of 1dB - see Section 11.2.5 to 11.2.6 of Volume 1 Chapter 11 Environmental Statement (Document Reference 6.1). Within Little Plumstead, traffic flows indicate changes of +1.6dB on Scheme opening. This increase corresponds to a minor adverse impact, which in turn corresponds to a slight or moderate effect.

Traffic flows used in the assessment incorporate traffic from future development; therefore the assessment does consider flows arising from future development. The full assumptions are given in the Transport Assessment DCO document 5.5.

## 5.1.2. Landscape

The location of Photomontage 7: Broad Lane is shown on Photomontage Location Drawing 2 contained in Appendix J of Volume 2 Environmental Statement (Document Reference 6.2). The existing view from this location and those in both Year 1 and Year 15 looking towards the Scheme are shown in Appendix K of the same document. The methodology for the production of the photomontage is provided in Appendix H, with further information provided in NCC's response to the ExA Question 9.4. The photomontage for Year 1 and Year 15 shows the full visible extent of the proposed embankments either side of the proposed bridge structures over the existing railway line and the Plumstead Road, as viewed from Broad Lane. The image for Year 15 also shows the screening effect of proposed mitigation tree and shrub planting on the embankments. This planting will help to integrate the Scheme into the surrounding landscape and, coupled with the bunding either side of the carriageway and the solid nature of the parapets over both structures, will help to screen the headlights of vehicles at night. It should be noted that Photomontage 7: Broad Lane shows a bund height of 1m on the embankments leading up to the proposed structures over both the Plumstead Road and the railway line. The height of these bunds



would actually be 2m, providing additional screening of vehicles on the Scheme when viewed from Broad Lane and the surrounds.

The visual impact of the Scheme within the vicinity of the railway crossing is assessed in Volume 1 Chapter 7 Environmental Statement (Document Reference 6.1), with supporting information contained in Section A Visual Intrusion Schedules and Section B Visual Effects Drawings contained in Volume 2 Chapter 7 Environmental Statement (Document Reference 6.2). The embankments leading up to the railway crossing and the bridge over Plumstead Road would result in significant impacts upon visual receptors within certain residential properties with views towards the Scheme. These effects are described in sections 7.7.25 to 7.7.31 of Volume 1 Chapter 7 Environmental Statement (Document Reference 6.1). Views from 6 residential properties located along Green Lane East (reference 10/17, 10/19 & 10/20) and from Broad Lane (reference 10/23 & 10/24) would experience a moderate adverse, and therefore significant, residual visual impact in Year 15 (Design Year) despite the screening effect of mitigation planting along the embankments. The property "Railway Crossing" (reference 11/5) located on Plumstead Road would experience a large adverse visual effect in Year 15 due to its close proximity to the proposed railway crossing. A further 11 properties located on Broadmead Green in Thorpe End (reference 11/7) would experience a moderate adverse residual visual effect in Year 15, with views available from upper storey windows towards the proposed embankment and railway crossing to the west of Plumstead Road. The potential effects of vehicle headlights have also been assessed along the length of the Scheme, with the results summarised in Tables 7.9 and 7.10 of Volume 1 Chapter 7 Environmental Statement (Document Reference 6.1) for landscape and visual receptors (residential) respectively, with no significant effects predicted.



#### 5.1.3. **Water**

On existing roads road runoff from the edge of the carriageway generally drains into ditches or infiltrates into the soil. In some areas, kerbs exist with some drainage, for example on the Wroxham Road (A1151) which discharges into the watercourse at Rackheath. The Flood Risk Assessment (FRA) and the Addendum to the Flood Risk Assessment (Document Reference: 6.2) shows the Scheme is located in Flood Zone 1 where there is little or no likelihood of fluvial or tidal flooding. However, the road alignment will cross the catchment of Dobb's Beck near Rackheath where available surface water mapping indicates some flood risk from rainfall runoff (over- land flow). The depth, extent and duration of any flooding in this area is currently minimal, and the road will be built above the maximum flood levels and therefore removed from flood risk. In compliance with best practice, the highway drainage for the Scheme has been designed in line with SuDS principles to restrict runoff to greenfield discharge rates. Therefore flood risk due to surface water runoff will be mitigated to acceptable levels.

## 5.1.4. **Agricultural Land**

The route of the Scheme was selected to avoid all grade 1 agricultural land, but it was not possible to avoid lands of the lesser "best and most versatile" grades. Therefore, within the Scheme footprint (i.e. the DCO boundary) there are 168.30 ha of grade 2 and 114.20 ha of grade 3a agricultural land, and there are no areas of grade 1 agricultural land. As described in the Volume 2 Chapter 13 Table 13.4 of the Environmental Statement (Document Reference 6.2), 142.53 ha of grade 2 and 99.95 ha of grade 3a agricultural land will be permanently lost to the Scheme. This was recognised as a major adverse and significant impact on agricultural land as a national resource, but was considered unavoidable. Land temporarily acquired for the Scheme (for construction compounds, for example) will not be lost permanently, but instead will be restored to



their original "best and most versatile" grade by the Contractor. This restoration will be secured through a Soil Management Plan secured through the Construction Environmental Management Plan (CEMP).

#### 5.1.5. **General**

Park Cottages are approximately 1km from the proposed scheme. This falls just on the outer edge of the study area. However noise contours in Figure MMD-233906-DT-0922 of Vol. 2 Chapter 11 Environmental Statement (Document Ref. 6.2) shows that in the year of opening, noise levels will reduce by at least 1dB in the year of opening due to traffic decreases on the Wroxham Road. Figure MMD-233906-DT-0928 shows that by the design year there would be no change in noise compared to the year of opening without the scheme, owing to a gradual increase in traffic using the Wroxham Road

# 6. Strategic planning issues

6.1. Locking in benefits from the southern by-pass with the Newmarket Road and Dereham Road bus lanes and Acle straight – Acle as an alternative option for large scale growth and the NDR

## Applicant's Response

- 6.1.1. Mr Innes representing the Norfolk Association of Architects suggests that growth at Acle and associated rail infrastructure provides an alternative to the NDR.
- 6.1.2. Mr Innes made written representations on this subject at various stages of the JCS process. In his representation to the NDR examination Mr Innes refers to a lack of "conversation" and it appears that neither Mr Innes nor any other development interest sought to meet with the partnership developing the JCS to promote this major scheme. The 2010



- Inspectors' report, which considered the JCS as a whole, makes no mention of the option having been put forward to the examination.
- 6.1.3. The attached extract from the 2013 Summary of Representation on the JCS (Appendix C) explains why Acle was not considered a suitable alternative for large scale growth. In addition to the village being outside the Broadland part of the Norwich Policy Area the response also identifies a number of other constraints. In addition to those identified in the Summary of Representations, it can also be noted that:
  - Acle abuts the Broads Authority boundary to the north, east and south, with the area to the south east (south of the A47) being designated as part of the Broads SAC (map attached Appendix O);
  - Acle is about 18km from the city centre and 13km from Great Yarmouth town centre (both via the A47 trunk road). It is not convenient for cycle or pedestrian access to the services provided by these centres or the choice of employment areas in and around Norwich or Great Yarmouth;
  - Any major growth could be expected to require significant improvement to the A47 and its junctions. Currently east bound traffic from Acle only has access to the A47via the atgrade roundabout on the eastern side of the village. The Acle to Great Yarmouth (the "Acle Straight"), and Blofield to North Burlingham, sections of the A47 are both single carriageway.



## 6.2. Role of the A47 Southern Bypass

## Applicant's Response

## 6.2.1. <u>Introduction</u>

At the open floor hearing on 22 July at the Assembly House, several objectors cited the role of the A47 Norwich southern bypass as an example of a road promoting out of town development and as a failure in respect of "locking in" benefits. This section of the response provides contextual evidence of the growth that has taken place in the intervening period and demonstrates that the strategic development that has taken place adjacent to the southern bypass has been part of a plan-led response to growth rather than adventitious development.

## 6.2.2. <u>Population growth</u>

The Southern Bypass opened in 1992. In the 20 years between 1991 and 2011 the population of the Norwich Policy Area (NPA, which is the same as the NATS area) has expanded by 38,000 people. The population of the Norwich urban area (NUA, the core of the NPA, defined in JCS paragraph 6.2) has increased by over 27,000. In both areas population growth has accelerated in each decade since 1981.

	1981	1991	2001	2011
Norwich Policy Area	234,447	242,978	257,600	280,955
10 year increase		8,531	14,622	23,355
Norwich Urban Area	183,493	186,027	194,354	210,794
10 year increase		2,534	8,327	16,440

Source: Census



## 6.2.3. <u>Jobs growth</u>

Statistics on jobs are less accurate than demographics as they are survey based. They are also more volatile as they reflect the peaks and troughs of the wider economy. The East of England Forecasting Model is the principal forecasting tool used locally and includes past information. While data is not available for the NPA or NUA most of the growth across the 3 districts of Broadland, Norwich and South Norfolk can be expected to have taken place within the NPA as this area includes all the existing key centres of employment and growth locations. The number of jobs across this Greater Norwich area is indicated to have risen by 19,000 from around 185,000 in 1991 to 204,000 in 2011 (see attached EEFM extract – the row Total employment (Jobs) (Appendix D)). Just prior to the recession in 2006 the total number of jobs had reached 219,000 an increase of 34,000 since 1991.

## 6.2.4. Retail growth

Since the opening of the Southern Bypass over  $111,000 \text{ m}^2$  (nearly 1.2million ft2) of new retail floor space has opened on three brown field sites in or on the edge of the city centre (attached extract Norwich Sub Region: Retail and town centres study: October 2007 GVA Grimley (Appendix E)):

- Castle Mall. 38,500m<sup>2</sup> gross retail. Multiplex cinema. Opened 1993.
- Riverside redevelopment. 23,400m² gross retail. Plus leisure complex including multiplex cinema, bowling alley, fitness centre, restaurants, and bars. Opened in phases 1999-2001
- Chapelfield mall. 49,200m² gross retail. Opened 2005

Overall retail floorspace has increased in the city centre by nearly 50% since 1989 and the national retail ranking has improved from 45<sup>th</sup> to the top 10 (attached extract Retail & Leisure Development Topic Paper, Norwich City Council, April 2013 paragraphs 7-13 (Appendix E)).



#### 6.2.5. Out of town development

At the Hearing, the Southern Bypass was cited as an example of a scheme that stimulated damaging out of town development, labelled by Mr Reid "induced development". Three key development locations associated with the A47 Southern Bypass were raised by various objectors, namely from east to west the business parks at Thorpe St Andrew, the Norfolk and Norwich University Hospital (NNUH), and the Longwater employment area.

While the Southern Bypass has played a role in the development of all three locations cited, it should be noted that

- The business parks at Thorpe St Andrew and Longwater are largely plan-led development and took advantage of redevelopment opportunities;
- The NNUH is co-located with the pre-existing university and research institutions; and
- These developments provide the opportunity for business expansion and changing needs to be accommodated and retained in the area and have coincided with a period of jobs growth.

The complex of three contiguous business parks at the eastern end of Thorpe St Andrew (St Andrew's Business Park, Broadland Business Park and Meridian Business Park) emerged as Local Plan allocations beginning with the Broadland Draft Norwich Area Local Plan of March 1990 and adopted in December 1994 as the Broadland District Local Plan (Inner Area)(extracts attached (Appendix F)). The western part of the development, including St Andrews Business Park, is a redevelopment of land released by the closure of the St Andrew's Hospital.

Longwater Industrial Estate was the subject of a study in 1979 that identified that the site was already an allocation in an informal Local Plan and that 15 ha of industrial development had already taken place. The



Norfolk Structure Plan approved in 1979 identified the Longwater Pits as an area for further employment development, subject to the resolution of access constraints (extracts of the study and Structure Plan attached (Appendix G)). The employment location was carried forward in subsequent alterations of the Structure Plan. The specific allocation was covered by a development brief published in 1983, revised in 1986 and confirmed in the South Norfolk (Norwich Area) Local Plan adopted in 1994 at which point a retail park was included. Although not specified in the Local Plan, the retail use was part of a strategy to provide for this type of development identified in studies supporting a Structure Plan review (adopted in 1993) and was included at Longwater as enabling development to bring forward this long standing commitment. The Longwater employment and retail area is a redevelopment of a previous mineral working with no restoration conditions.

In April 2014 a planning permission was granted for a 6,663 m<sup>2</sup> gross A1 retail store for Next at Longwater. While within the defined development limit, and on previously developed land, this site was not allocated for retail use in a local plan.

It was suggested at the Hearing that there is no bus service to Longwater. There are a number of services serving the location with the most significant being Service 24/24a which runs from Thorpe St Andrew via the city centre. Between approximately 08.00 and 18.30 this arrives on a 15 minute frequency. Konnectbus Service 5 provides a 30 minute frequency from the city centre between similar times. Consequently there are at least 6 buses an hour to and from the city centre through the main part of the day (information on these services attached (Appendix H).

The NNUH site was identified in the late 1980s for a second district general hospital rather than a complete relocation and was accepted by the Government in 1990. The site was promoted over alternatives to forge better links with the university and strengthen medical education in Norwich. Subsequently, the Health Authority chose to close the existing



Norfolk and Norwich Hospital (N&N) and concentrate acute services on the single site at Colney. The NNUH was opened in 2001. The site is adjacent to the Norwich Research Park and the University of East Anglia. Both the latter began in the 1960s prior to the Southern Bypass and have expanded since. The relocation of the hospital released the N&N brownfield site for around 650 dwellings adjacent to the city centre.

The strategic development associated with the NDR is also largely planled and responds to the economic needs of the area assessed through the adopted JCS. The exception is the planning permission for the 40ha Aeropark which is targeted at uses, such as aircraft maintenance, which are directly related to an airport location and could not have been located anywhere else in the area.

#### Locking in the benefits

The following section on NATS identifies several of the schemes that have been implemented following the construction of the southern bypass. In particular, significant amounts of roadspace have been reallocated to provide the Dereham Road and Newmarket Road bus lanes, Four of the six Park and Ride Sites have been developed adjacent to the Southern bypass, at Costessey, Cringleford, Harford and Postwick.

# 7. Norwich Area Transport Strategy (NATS)

#### 7.1. Funding and delivery of NATS

## Applicant's Response

- 7.1.1. At the open floor hearings on 22 and 23 July 2014 a number of comments raised related to the funding of the delivery of NATS measures. This section is provided to clarify some of the points raised.
- 7.1.2. Funding of NATS Schemes (see also response to ExA First Questions 10.7)



- 7.1.3. Norfolk County Council (NCC) has a proven history of delivery of sustainable transport within Greater Norwich. In the last ten years from 2003 there has been approximately £66 million invested in the delivery of NATS, with around two thirds of this investment in bus, cycling and walking projects. This has included a new bus station and one of the largest bus based park and ride systems in the country.
- 7.1.4. The NATS Implemenation Plan was adopted in 2009 and sets out the proposals to deliver the plan up to 2025., As a whole, the total package of investment from 2003 to 2025 is calculated to be £316m with 50% of this cost attributed to the implementation of Postwick and the NDR.
- 7.1.5. The Norwich Area Transport Strategy (NATS) is already in place, it details the plan for delivery of improvements in Greater Norwich (Broadland, Norwich and South Norfolk districts). It includes plans for developing sustainable transport, reducing congestion and making improvements to air quality within the Norwich area. The strategy has already delivered a number of key improvements such as the award winning Norwich Bus Station, St Augustine's Gyratory, the Norwich Cycle Network and the network of Park and Ride facilities.
- 7.1.6. The implementation plan for the Norwich Area Transportation Strategy (NATSIP) was agreed by NCC's Cabinet in April 2010 and updated in November 2013. The plan sets out the range of transport measures, together with their general intended phasing, for delivery over the short to medium term. The same approach will be taken for the areas outside of NATS.
- 7.1.7. NCC has highlighted funding as part of its capital programme for the next two years to carry out initial design work to enable the Council to develop the necessary details to submit bids for central government or European funding to help the implementation of NATS. NCC has recently been successful in bids for the Cycle City Ambition grant which has enabled £5.5 million of cycle improvements on its cycle network, adopted as part of NATS in 2012. Also, early in 2013, NCC was successful in its bid for



£3.8m Better Bus Area funding which saw, amongst other things, better travel information and bus stops infrastructure improvements. Without a robust Implementation Plan NCC would not have been in a position to have made these successful bids. In addition, funding has also been allocated by NCC and Norwich City Council to enable the delivery of a significant city centre bus access improvement scheme along Chapel Field North, which directly connects buses from the new Grapes Hill bus lane (part of the Better Bus funding) and other improvements to the Dereham Road BRT corridor to the city centre.

- 7.1.8. Additionally the Norfolk and Suffolk Local Transport Body (LTB) identified NATS as one of its priorities and allocated £7m towards delivery of NATS out of the £26m devolved major scheme funding for Norfolk and Suffolk over the 4 years from 2015/16 to 2018/19.
- 7.1.9. Following the New Anglia Growth Deal announcement on 7<sup>th</sup> July 2014 the LTB will need to re-consider the way that it prioritised the funding a year ago and assess whether there is merit in redistributing the allocations, including potentially prioritising further funding out of the £26m for NATS. Further, the Growth Deal announcement was focussed on 2015/16 and, nationally, not all of the Local Growth Fund has been allocated for the full six years of the programme (2015/16-2020/21). This means that there are likely to be further rounds of the Growth Deal which will provide an opportunity to draw down further funding for NATS in future years, as NATS remains a priority for NCC.
- 7.1.10. Both Norwich City Council and NCC have developed and implemented schemes using developer funds such as S106 monies. NCC would look to continue to use funding such as the Community Infrastructure Levy (CIL) to progress further key transport infrastructure as and when the developments are delivered.
- 7.1.11. In 2009 NCC consulted the entire Norwich Policy Area (over 160,000 properties) on an Implementation Plan to set out what further proposals were being considered for the next 15+ years to deliver further



improvements to transport infrastucture in Norwich – the proposals received 78% support. The feedback from businesses also highlighted that in their opinion the NDR was the most important element of the NATS Implementation Plan.

- 7.1.12. A copy of the 'Transport for Norwich' Tracker is published on the NCC website which sets out a programme of delivery both in the past and in the future. A copy of this plan has been appended to this report and can be found in Appendix I
- 7.1.13. As can be seen from the NATS Tracker a large investment has been made on delivering BRT on the Dereham Road and Newmarket Road corridors including infrastructure upgrades and improved facilities for the passenger.
- 7.1.14. It was raised by Ms Carlo that improvements on other corridors could be implemented by installing double yellow lines and, as an example, suggested requesting residents to use parking in nearby churches. NCC's approach to the delivery of NATS measures is that there needs to be a broader view to the reallocation of road space so that it does not adversely affect existing businesses and residential amenities whilst delivering effective sustainable improvements that benefit all highway users.
- 7.1.15. Norwich City Council manages both on street parking (on behalf of NCC through a highways agency agreement) and off-street parking, including residential permit parking in the Norwich City area.
- 7.1.16. Both Mr Townly and Ms Carlo raised a concern over the removal of general traffic from Gurney Road. These concerns relate to a section of the Salhouse Road BRT corridor which currently has not been progressed past the outline feasibility stage. It would however realise significant time savings for bus users and will be investigated further when the scheme moves to consulation in the future. The scheme, contrary to Ms Carlo's assertions, will make this corridor better for bus



- users and NMU's, and will improve the local environment for those visiting Mousehold Heath by removing/minimising through traffic.
- 7.1.17. Mr Townly also raised comments about widening the carriageway in St Stephens and Westlegate in order to accommodate all of the current traffic. The St Stephens scheme is one of the key city centre measures which is due to be implemented in Autumn 2014 and will remove general traffic from St Stephens and provide a dedicated corridor for buses, taxi's and cycles, which will also provide significant benefits for pedestrians. This scheme is being delivered alongside the Chaplefield North bus improvements which will also improve bus, walking and cycling access to the main shopping areas within the city centre. Access to car parking will also be maintained as a result of the delivery of these schemes.
- 7.1.18. Cllr Bearman raised the issue of lack of funding for maintenance and schemes in the Norwich area in particular only £10,000 available for carriageway lining. Attached under appendix J are the schedule of budgets sent to Norwich City Council for the delivery of routine maintenance (including carriageway markings), structural maintenance and improvement schemes over the past four years. As can be seen lining is significantly higher than the £10,000Astated and the total budgets are in addition the projects set out in paragraph 8.3.7
- 7.1.19. St Augustines.

Conflicting comments were also raised about the success of the St Augustines Gyratory project (STAG). St Augustines was designated a Air Quality Management Area (AQMA) by Norwich City and has a large area of land for redevelopment including the vacant Her Magiestys Stationary Office (HMSO) building.

7.1.20. The STAG traffic improvements, which began on 4 January 2010, were implemented to contribute to the regeneration of the northern city centre, facilitate the redevelopment of Anglia Square and to address air quality issues.



- 7.1.21. The £3.3m cost of the improvements was met largely through the Greater Norwich Growth Point and Local Transport Plan, Norwich City Council, Norfolk County Council and the owner of Anglia Square. All parties provided land to enable the scheme to be built.
- 7.1.22. Ms Carlo indicated how successful it has been and cited it as justification for doing something similar for her proposals for a BRT corridor for Wroxham Road. However Mr Townly was critical of the scheme, suggesting it has not worked as it causes traffic to travel further and therefore has negative impacts. In general, feedback to NCC has related to how successful the scheme has been, in spite of comments by objectors prior to its delivery that the modelling was wrong and that it wouldn't work.
- 7.1.23. Ms Carlo did however also set out criticism that the STAG scheme had not managed to realise the local regeneration of the area (ie to improve the existing Anglia Square development). This development is subject to private developer contributions and the STAG was delivered whilst such funding and developer interest was in place. However, the developers have since withdrawn due, in part, to the economic downturn. It is worthy of note however that the STAG scheme has removed a significant local transport congestion issue and this does improve the potential to unlock future development in this area, possibly linked to future growth, particularly in the northern suburbs.

## 7.2. European funding for cycling

#### Applicant's Response

- 7.2.1. The County Council recognises the importance of cycling and will continue to identify, and make use of, all sources of funding to bring forward delivery. This includes where appropriate and applicable European funding sources.
- 7.2.2. The County Council was recently successful in drawing down together with other partners principally Norwich City Council £3.7m from the



Department for Transport from the Cycle City Ambition grant. Together with £1.8m of local transport and health money and a further £218,000 from local Section 106 developer contributions and the city council's Housing Revenue Account budget, this is allowing £5.7m of cycle infrastructure projects to be delivered over the next two years. Norfolk County Council is not aware of having overlooked any sources of European funding for which identified schemes would be eligible.

7.3. Response to issue over bus ticket cost from areas of deprivation to Broadland Business Park

## Applicant's Response

- 7.3.1. Bus fares and the range of tickets sold are set by individual bus operators and covers the majority of bus services serving Norwich. The Norwich Park and Ride service is fully managed and subsidised by Norfolk County Council (NCC) so the fares are set by NCC.
- 7.3.2. Journeys from Old Catton and Hellesdon to Broadland Business Park (BBP) would be most conveniently undertaken using bus services operated by First. Whilst several bus operators operate from the city centre to BBP, First also provide the services from Old Catton and Hellesdon to the city centre. There are no direct bus services from these areas to BBP, so a single change in Norwich City Centre is required.
- 7.3.3. For travel on multiple bus operators between Old Catton/Hellesdon and BBP, a 'Fusion' multi-operator day ticket can be purchased for £6.00, providing unlimited travel during a single day. However, for regular travel to BBP from these areas, the most convenient option in terms of cost would be travel on a single operator, First in this instance.
- 7.3.4. There are a range of fares available from First to cover this journey, ranging from individual journeys to those that cover unlimited travel for a full year. For travel on a regular basis to BBP, the most cost effective fares are those that avoid paying for individual journeys and allow



unlimited travel. An adult day ticket would be £4.80, with an adult weekly ticket being £19.00 (£3.80 per day based on 5 days travel). An adult monthly ticket would be £66.00 (£3.30 per day based on 20 days travel), with a three monthly and annual ticket being £190.00 (£3.17 per day based on 60 days travel) and £660.00 (£2.75 per day based on 240 days travel) respectively. Day, week and month tickets can be bought from the driver, with the tickets being bought by credit/debit card online or over the phone.

- 7.3.5. Employers can benefit from further reduced annual fares on First bus services through the 'Corporate Travel Club'. Several businesses on Broadland Business Park are already signed up to this. Fares work out at an average of £49.50 per month compared to the standard rate of £66.00 per month. Through the Corporate Travel Club, fares are fixed for a year. Further details on the Corporate Travel Club can be found by contacting First directly.
- 7.3.6. Other bus operators, Anglianbus and Konectbus, offer discounted annual season tickets to businesses for staff travel in Norwich and Norfolk, as well as a range of day and season tickets.
- 7.3.7. A substantial part of Norwich Area Transportation Strategy (NATS) is the delivery of travel planning, working with operators and enabling the public to use buses as a travel option. Below is work hat has been carried out as part of NATS.
- 7.3.8. NCC launched a 'Business Travel Pack' in 2013/14, which is available to download free of charge to all businesses in Norwich and Norfolk. This aims to provide information that will make it easier for employees to make informed choices for getting to and from work, promoting time savings and improving health and wellbeing. It will also help boost staff productivity and can be used to help staff and visitors access workplaces, as well as reduce business mileage. The Business Travel Pack provides information on the reduced bus fares available to staff and



companies as well as the best ways to access bus timetable and route information.

- 7.3.9. NCC, in partnership with Norwich City Council and bus operators, launched in April 2014 the Norwich Bus Charter. The Charter draws together a number of pledges to passengers, which cover the following:
  - Reliability and punctuality, including a fare refund if the bus is more than 15 minutes late
  - Notification of any fare changes, and discounted fares for regular travellers
  - Cleanliness and maintenance of vehicles, shelters and interchanges
  - Accessibility for wheelchair and mobility scooter users
  - Quality of printed and electronic travel information and consultation on major changes to service
- 7.3.10. NCC, as part of delivering the Better Bus Area project in Norwich, has launched a local promotion of the PLUSBUS ticketing scheme available in Norwich. PLUSBUS is a bus pass that you buy with your train ticket at any National Rail station ticket office or online and gives unlimited bus travel (on participating operators services) to and from Norwich rail station and around the Norwich urban area. For people wishing to travel to BBP from Norwich rail station, bus travel can be added for £3 per day (£2.83 per day if a 3 month PLUSBUS ticket is bought; £2.55 per day if an annual PLUSBUS ticket is bought). NCC launched the local promotion to raise awareness of the scheme as feedback from customers indicated that multi-modal tickets were desired.
- 7.3.11. NCC has recently launched the holdall smartcard on Park and Ride services in Norwich as part of a central government funded trial. The card has a chip which stores ticket information and cash electronically, making it quicker than cash transactions on the bus and storing your



season tickets securely. In the future, a greater variety of tickets will be available and boarding times will be reduced with fewer cash transactions. Making public transport more efficient could persuade fewer people to use cars, having an impact on congestion and the environment. We have applied to be part of this pilot to allow Norfolk residents to be among the first to experience the benefits of these technology advances, and to ensure that transport services meet the needs of local people, businesses and visitors now and in the future.

## 8. Land

8.1. (Thorpe St Andrew) Clarification of Land already purchased for the scheme. Statements made by Jonathan Adams that understood all the land for the NDR had already been acquired and so the feeling is the road is going ahead and the Inquiry is a "fait accompli".

#### Applicant's Response

- 8.1.1. The Applicant has acquired some land for the Scheme but certainly not all. All land acquisitions to date have been by agreement (albeit that some have been in response to the service of a Blight Notice).
- 8.1.2. Entry onto the land required for the Postwick Hub improvement has been secured under agreements with various landowners and the Secretary of State for Transport to enable these works to commence. Formal transfer of the land will, in most cases, not take place until the works are completed. There is no Compulsory Purchase Order for the Postwick Hub Improvement.
- 8.1.3. Land has been acquired by the Applicant several years ago at Rackheath (Plots 10/4, 10/20, 10/21, 10/22 and 10/26) following the receipt of Blight Notices. The Scheme contractor has acquired Gazebo Bungalow (Plots 10/6, 10/7 and 10/8) which they are currently using as their pre scheme site office. An option agreement between the contractor



- and the Applicant covers the transfer of the land required for the Scheme.
- 8.1.4. The Applicant has also previously acquired land at Drayton (Plots 3/12, 3/13, 3/14, 3/15 and 3/17).
- 8.1.5. A Blight Notice has been accepted in respect of the house at the railway crossing on Plumstead Road (Plot 10/53). Discussions are ongoing with the current owner to agree the compensation payable. No claim has yet been received or formal offer made. The Council accepts that it will be paying a price which reflects the non scheme value of the property in accordance with established compensation principles, not a 75% figure alluded to at the hearing.
- 8.1.6. Discussions have been taking place with other affected landowners for many years seeking to agree issues such as fencing and access location requirements.
- 8.1.7. The above issue of land acquisition is also covered in Paragraphs 21, 66 and 80 of Appendix 2 to the Statement of Reasons (Document Ref 4.1) as updated by the relevant plot entries within the Compulsory Purchase Report (Document Ref NCC/Ex/1).
- 8.1.8. The Applicant has had no involvement with the mentioned "Compulsory Purchase" acquisition by Persimmon Homes for residential development but is not aware of any Compulsory Purchase Orders having been made in that regard.



8.2. (Drayton) Clive Marshall – Hill Farm Lodge, Wroxham Road, Rackheath.

Unable to sell his property due to proximity of NDR and Council not prepared to acquire it under their Discretionary Purchase Powers. Failing health and Estate Agents are not prepared to take on instructions to try and sell.

## Applicant's Response

- 8.2.1. Hill Farm Lodge is located adjacent to the proposed Wroxham Road roundabout. It is owned by Mr & Mrs Marshall, who operate it as a bed and breakfast business. No land is required from the property for the Scheme.
- 8.2.2. The Applicant met Mr & Mrs Marshall at one of the consultation events in summer 2013 where the Marshalls explained the difficulties they were experiencing in trying to sell their property. The Marshalls were advised that they might wish to consider submitting a Discretionary Purchase Application to the Applicant, which could then be considered against the Applicant's adopted guidelines. The Marshalls were informed that the decision to acquire was discretionary and if not all the criteria were met then it was unlikely that the Applicant would agree to purchase the property.
- 8.2.3. The guidelines and application form were sent to the Marshalls and on 1 October 2013 a Discretionary Purchase of Property application with supporting statements was submitted to the Applicant's solicitors by Mr and Mrs Marshall.
- 8.2.4. Some clarification and additional information was sought before a report covering the application and an assessment against the adopted guidelines criteria was taken to elected members at the Applicant's Cabinet meeting on 14 April 2014. Cabinet decided not to exercise its discretion to acquire the property since not all of the guidelines requirements were met. This decision was relayed to the Marshalls by the Applicant's solicitors on 28 April 2014.



- 8.2.5. There has been subsequent correspondence from the Marshalls seeking an appeal and requesting a reconsideration of their application. The Applicant has responded stating that it has not been made aware of any material changes against the guideline criteria since the Cabinet decision to warrant a further formal reconsideration of their application.
- 8.2.6. Notwithstanding the above, following Mr Marshall's statement at the Open floor hearing at Drayton on 23 July 2014 that estate agents are now refusing to accept instructions to try to sell the property, the Applicant will reconsider if there are any avenues available to it to try to assist with the Marshall's sale of their property and will discuss these with the Marshalls during the course of the Examination.

## 9. Traffic

9.1. Investigate ambulance service route missing out Earlham Road to the Hospital.

#### Applicant's Response

- 9.1.1. There are no specific designated Ambulance routes serving the Norfolk and Norwich University Hospital. The B1108 Earlham Road is classified as a main distributor road into and out of the city centre, as such it is used by Ambulances accessing the Hospital and the city centre.
  - 9.2. Mr Rhughani stated that traffic would increase on Wroxham Road by Park Cottage. Mr Heard said that he did not believe the traffic effect through Wroxham and Hoveton on the A1151 where it crosses the River Bure.

#### Applicant's Response

9.2.1. Traffic is forecast to reduce on A1151 Wroxham Road past park Cottage with NDR compared with the Do Minimum. This is shown at site A60 in Figure I.2 of the Traffic Forecasting Report (Document Reference 5.6).



9.2.2. North of the NDR traffic is forecast to increase on A1151 Wroxham Road with NDR (site A59) due to reassignment from Salhouse Road and B1140 Bell Lane. Traffic crossing the River Bure on the A1151 between Wroxham and Hoveton is forecast to be similar with and without NDR. This location is north of where the B1140 joins the A1151 and thus beyond the area of reassignment, which explains why traffic forecasts do not change with NDR.

9.3. Without a continuation of the NDR from the A1067 to the A47, the NDR will impose unacceptable traffic impacts on the communities to the west of Norwich (raised by various parties during the Open Floor Hearings on 22 and 23 July 2014).

## Applicant's Response

- 9.3.1. The communities most likely to be affected by a variation in traffic flows as a result of the NDR not crossing the River Wensum are Weston Longville, Hockering, Ringland, Taverham, Drayton and Costessey.
- 9.3.2. An explanation of the traffic impacts covering these communities is provided in the report Traffic Management in the Lenwade to Hockering Corridor (Document Ref. K) This shows that with the existing and proposed traffic management measures in place, there are not expected to be significant effects on the communities as a result of the NDR.
- 9.3.3. <u>History of traffic management measures introduced in the Weston Longville and Hockering area</u>
- 9.3.4. During the early 1990's the accepted route for all vehicles was via the C173 Weston Hall Road and Heath Road. The then route hierarchy review considered classifying this a B road but this was subject to objections including from Hockering Parish Council. The route was designated a Main Distributor Route but remained a C Road.



- 9.3.5. To provide relief to Hockering an experimental scheme was introduced in 1996 that routed south bound HGV's via Weston Green Road, Sandy Lane, Walnut Tree Lane and Wood Lane. This HGV one-way system was created because roads to east were not considered wide enough to accommodate more frequent two way HGV movements.
- 9.3.6. In 1997 the experimental scheme was modified to route south bound HGVs accessing the A47(w) via Stone Road and Lyng Road. This included a section of one way on Stone Road near its junction with Lyng Road because Stone Road was not considered wide enough to accommodate more frequent two way vehicle movements. The scheme was made permanent in 1998.

## 9.3.7. A1067 to A47 HGV route

- 9.3.8. Between 2003 and 2005 a number of route options were investigated for the NDR with consultations on alternative routes carried out in 2003, 2004 and 2005.
- 9.3.9. On 19 September 2005 NCC Cabinet resolved to have no NDR link between the A47 and A1067 where it was recognised that removal of the section between the A1067 and A47 west of Norwich would mean that the existing traffic issues between Hockering and Lenwade would remain unaddressed. It was therefore agreed that consultation with the local community would take place to identify a local road scheme that would address the long-standing local issues in the area.
- 9.3.10. A working group was set up including local parish councils which helped develop route improvement options taken forward for consultation. Consultations were undertaken in July/August 2007 and included public exhibitions in Lyng, Hockering, Weston Longville and Honingham. An explanatory leaflet was distributed to local residents/businesses. The



consultation included suggested junction improvements where the route met the A1067 and A47.

- 9.3.11. A paper on the A47 to A1067 Link Road was considered by NCC Cabinet on the 28 January 2008. Cabinet endorsed the report's recommendation that further investigation into two short-listed options, option 1 and a combination of option 1 and 3 be progressed.
- 9.3.12. Option 1 would combine sections of existing road alignment with sections of new road construction between Wood Lane and Sandy Lane, and between Weston Green Road and Heath Road. Whereas the combined option 1 and 3 route would primarily utilise existing roads with localised widening. The two options are shown on the plan in Appendix L).
- 9.3.13. Technical and environmental feasibility work into option 1 and combined option 1 and 3 was undertaken and the results of this work were presented to NCC Cabinet on the 9 November 2009. At this meeting, it was agreed that the combined option 1 and 3, balancing functionality, cost, safety and environmental impact was the preferred way forward as this avoided new road construction to make the scheme as deliverable and affordable as possible. A technical and environmental analysis of the two options was appended as Appendix B to the 9 November 2009 report. The agreed route would be designed to accommodate two way HGV traffic. Paragraph 2.1.2 of Appendix B attached to the 9 November 2009 Cabinet report states:

"The recommended option is to undertake carriageway recycling and widening to achieve a 6.0m minimum width. It is considered that this is sufficient to enable two HGV to pass and although this is lower than the 6.5m Main Distributor standard, it is better than the Local Access Road standard of 5.5m and is the current HGV access road standard. At 6.0m width, the road would be of a higher standard than many parts of the existing B road network. In



addition, vehicle speeds are unlikely to be high as the alignment will not be significantly improved, as evidenced by the low casualty record on the existing route. Where possible, a desirable 1m verge width will be provided. However, in some areas this will not be possible due to the environmental consequences (i.e. loss of mature trees, established hedges etc). Although this is below standard, it is felt appropriate given the environmentally sensitive location. The solution for each section also takes account of the effect on existing properties, buildings and utilities, and where possible minimises this."

- 9.3.14. At the meeting on the 9 November 2009 NCC Cabinet resolved to:
  - Implement phased year on year improvements to an existing route,
  - Reclassify the route a B road on completion of the works,
  - Introduce HGV restriction through Hockering.
- 9.3.15. The route improvement works have now been completed, with reclassification of the road to a B road, amendment of signing, and an accompanying HGV ban to be implemented in Hockering in 2014.
- 9.3.16. Given the forecast flows presented in the report Traffic Management in the Lenwade to Hockering Corridor (Appendix K) it is NCC's view that the standard of road now provided is appropriate to accommodate these flows.
- 9.3.17. <u>History of traffic management measures introduced in Taverham,</u>

  <u>Drayton and Costessey</u>
- 9.3.18. As part of the Cabinet resolution in September 2005, Cabinet resolved to pursue a separate scheme to address the existing local problems between Hockering and Lenwade and, although not part of the



resolution, also agreed that officers should look at ways of relieving the pressure on existing roads across the Wensum in the Taverham/Costessey area through traffic management measures when the NDR is built.

9.3.19. A North West Sector Study (NWSS) was progressed with the terms of reference of the working group agreed as:

"To review and identify current and future transport related problems in the north west sector of Norwich with a view to agreeing a package of measures that can be put in place alongside and, if appropriate, ahead of the NDR"

- 9.3.20. The following schemes were progressed as a result of the study:
  - Taverham Area North West Sector Study- 20mph speed limit and associated measures carried out between 2008-11
  - Taverham Taverham Road / The Street / Sandy Lane Mini Roundabout - Junction Improvement / Traffic Calming Scheme carried out between 2008-09
- 9.3.21. A NATS feasibility study completed in September 2009 looked at Costessey as a whole, highlighting problems and recommending improvements. It was recommended to carry out the following:
  - Costessey West End / The Street Traffic Calming (including footway) carried out between 2010-12
- 9.3.22. Improvement works were carried out in 4 phases due to affordability issues of each phase. The 4 phases were selected in order of their priorities with pedestrian accessibility having a higher benefit than physical traffic calming measures. The first phase had highest priority due to its proximity to the school.



- Phase 1: Longwater Lane pedestrian crossing table (to enhance access to the primary school) and the new section of footway between the Hart Pub and the Bush Pub;
- Phase 2: construction of the remaining section of footway between The Bush Pub and Folgate Lane;
- Phase 3: install round top humps between the pinch points on The Street;
- Phase 4: replace the existing cushions through West End with full width humps.
- 9.3.23. Phases 1-3 have been progressed and were completed in February2011, however due to funding constraints Phase 4 was not progressed or taken further than what was highlighted in the feasibility study.

## 9.3.24. Strategy going forward

- 9.3.25. NCC has already undertaken considerable work over the years to address local concerns raised about traffic following the decision made by NCC Cabinet in September 2005.
- 9.3.26. In addition to this work NCC has already committed to:
  - Reclassify the HGV route to a B road during 2014 and introduce a HGV restriction through Hockering;
  - To monitor the junctions of the HGV route with the A47 and A1067 and consider improvements to the junctions with the A47 and A1067 if required and when funding permits;
  - To review the enhancement of the existing traffic calming measures on West End, Costessey. Subject to a feasibility study and seeking views of key stakeholders, including the Norfolk Safety Camera Partnership, the use of average speed cameras may be possible;



- To investigate ways to better enforce the existing weight restrictions on roads over the River Wensum between Costessey and Taverham / Drayton – i.e. on Ringland Road, Taverham Lane, Costessey Lane. NCC will examine the technical feasibility and stakeholder views, including the Norfolk Safety Camera Partnership, of using camera enforcement of the weight restrictions;
- To undertake a speed limit assessment on Ringland Road through Ringland with a view to implementing a 30mph speed limit if found to be appropriate.

## 9.3.27. Should the NDR proceed NCC would also:

- monitor traffic flows through the villages of Weston Longville and Hockering once the HGV route is reclassified. Should there be an increase in traffic that could be directly associated with the NDR then NCC would commit to undertake further measures to mitigate this impact to maintain traffic levels at or below the Do-minimum traffic levels without an NDR.
- 9.3.28. Any necessary mitigation could take the form of one or a combination of the following:
  - Consider routing all south bound vehicles for A47(w) via Stone Road.
  - Consider a Banned Right Turn from Wood Lane onto A47.
  - Consider closure of Berries Lane Junction with A47.
  - Consider improvement to the A1067/Weston Hall Road Junction.



- 9.3.29. A roundabout solution at this location would have an impact on the Wensum Special Area of Conservation. Traffic signal control to the junction was assessed and this showed that the junction would operate acceptably well. A scheme to introduce traffic signals at the junction at Weston Hall Road junction could be introduced within the limits of the existing highway. A preliminary plan for a signalled junction is contained in in report Traffic Management in the Lenwade to Hockering Corridor (Appendix K)
- 9.3.30. Consider the introduction of positive signing to direct vehicles currently using Marl Hill Road via Weston Hall Road.
- 9.3.31. No destinations are currently signed down Marl Hill Road from the A1067 but NCC could positively sign vehicles to stay on A1067 and then use Weston Hall Road.
- 9.3.32. Consider the introduction of Traffic Calming and 20mph Zone in Weston Longville.
- 9.3.33. NCC has also committed to monitor the A47/Wood Lane junction following reclassification of the improved route to a B road.
  - 9.4. Mr Fitt of Spixworth PC supports NDR in principle. However Mr Fitt is concerned that there is a flaw in base data on Crostwick Lane and concerned about traffic through the village.

## Applicant's Response

9.4.1. NCC has already responded to this matter in its response to the written representations (Document Reference NCC/EX/32) but is giving further consideration to the issues raised taking account of the NCC traffic counts completed in April 2013 and the results presented by Spixworth



Parish Council. NCC will report further findings to the Examining Authority in advance of the Issue Specific Hearings.

## 10. Administration

10.1. 2003 Consultation report - printed and passed to ExA by deadline 5 (4th August)"

## Applicant's Response

- 10.1.1. At the open hearing on Tuesday 22<sup>nd</sup> July at the Assembly House, it was noted that Rupert Read from Eastern Region Green Party would be supplying the ExA a copy of the 2003 consultation report. We thought, to aid the ExA, we would also supply a copy, which can be found at Appendix M.
- 10.1.2. The 2003 Norwich Area Transport consultation document and questionnaire attached in Appendix M was distributed to residents and stakeholders around Norwich, highlighting the preferred strategy for the Norwich Area Transportation Strategy (NATS) and consulting upon route options for the NDR.
- 10.1.3. Analysis of the public consultation results are detailed in the Norwich
   Area Transportation Strategy Public Consultation Analysis Report, May
   2004 also attached in Appendix N



## Appendix A



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Government
National Planning Casework unit
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B3 2PW



Strategic Roads Directorate Department for Transport Great Minster House 33 Horseferry Road London SW1P 4DR

8 January 2014

Addressee as on envelope

Dear Sir or Madam

#### **HIGHWAYS ACT 1980**

#### A47 TRUNK ROAD, POSTWICK INTERCHANGE IMPROVEMENT

1. We are directed by the Secretary of State for Transport and the Secretary of State for Communities and Local Government ("the Secretaries of State") to refer to the concurrent public inquiries ("the Inquiry") that sat for a total of 14 days between 3 July 2013 and 26 July 2013 before David Wildsmith, BSc(Hons), MSc, CEng, MICE, FCIHT, MRTPI, an independent Inspector appointed by the Secretaries of State, to hear objections to, and representations about, the following draft orders:

# THE A47 TRUNK ROAD (POSTWICK INTERCHANGE SLIP ROADS) ORDER 201 ("the Slip RO").

# THE A47 TRUNK ROAD (POSTWICK INTERCHANGE SIDE ROADS) ORDER 201 ("the SRO").

- 2. This letter conveys the decision of the Secretaries of State on whether the above draft orders should be made following their consideration of the Inspectors report.
- 3. The purpose of the draft orders, if made as published, is to provide an improved interchange between the existing A47 trunk road at Postwick, on the eastern side of Norwich, and the existing A1042 Yarmouth Road (referred to hereafter as the 'published scheme').

#### THE INSPECTOR'S REPORT

- 4. A copy of the inspector's report is enclosed. In this letter references to paragraph numbers in the Inspector's report are indicated by the abbreviation "IR".
- 5. The Inspector recorded at IR 1.7 that there were a total of 132 objections to the draft orders. Two of which were from statutory objectors and one of these was subsequently withdrawn. The main grounds of objection are briefly summarised at IR 1.8.

#### THE DECISION OF THE SECRETARIES OF STATE

- 6. The Secretaries of State have carefully considered the Inspector's report together with all the objections, alternative proposals, counter objections, representations and expressions of support made, both orally and in writing. In reaching their decision, they have also considered the requirements of local and national planning, including the requirements of agriculture, as required by section 10(2) in Part II of the Highways Act 1980.
- 7. The Secretaries of State are satisfied that the Inspector's conclusions cover all material considerations and propose to accept his recommendations, subject to the comments in the following paragraphs.

#### **Decision of the Environmental Statement**

8. The Secretary of State for Transport ("the SoSfT") is satisfied that the requirements of European Directive No. 85/337/EEC, as amended by Directive No. 97/11/EC and Directive No. 2003/35/EC, as consolidated in Directive 2011/92EU, implemented by sections 105A, 105B, 105C AND 105D of the Highways Act 1980, have been complied with fully in respect of the published scheme ("the project" for the purpose of the Directive). The SoSfT is also satisfied that the Environmental Impact Assessment undertaken for the project and the Environmental Statement, have properly identified, assessed and addressed all significant environmental effects, and considered and given reasons for dismissing the main alternatives, as well as assessing the proposed measures to minimise these impacts. The SoSfT is satisfied that members of the public and others concerned have been given reasonable opportunity to express their opinion before deciding whether to proceed with the project to which the assessment relates. Therefore, having considered the Statement and any opinions expressed on it by the public and others, and taking into account the Inspector's conclusion at IR 8.171 the SoSfT has decided to proceed with the project to which the assessment relates. For the purpose of section 105B(6) of the Highways Act 1980, publication of the SoSfT's decision to proceed with the scheme will be given by public notice as set out in 105B(7).

#### **Procedural Matters**

- 9. The Secretaries of State note the Inspector's handling of the various procedural matters that were the subject of submissions at the Inquiry and accept his overall conclusion in IR 8.54.
- 10. The Secretaries of State are satisfied with the way the Inspector dealt with all these matters and agree with his comments and handling on each of them as set out in his report. They are therefore satisfied, as a result, no one was prejudiced or prevented from putting forward their case at the time, and that the Inspector took into account all relevant evidence and came to a reasonable decision in all the circumstances.

#### **Decision on the Orders**

11. The Secretaries of State, in considering the Inspector's report, make the following comments on matters raised in the report:

## The Principle of the New Development in the Postwick Area

- 12. The Secretaries of State note objections concerning the principle of new development in the area. They have considered all the related matters concerning this area of objection and acknowledge that some areas concerning the remitted parts of the Joint Core Strategy at the time of the inquiry were yet to be resolved.
- 13. The Secretaries of State note however that the report on the examination into the Joint Core Strategy dated 13 November 2013 by David Vickery DipT&CP MRTPI concluded that the Joint Core Strategy with modifications has now been judged to meet the criteria for soundness in the National Planning Framework and also note the conclusions reached by the Inspector on this matter in IR 8.39 that, for the reasons he gives, and not withstanding the non-resolution of Joint Core Strategy matters at the time, the areas of objection indicated in IR 8.38 cannot be supported.

#### The Design and Layout of the Scheme

14. The Secretaries of State note that a number of objectors were concerned that the scheme is over-designed, too complex and complicated. The Secretaries of State in considering this matter note the Inspector's conclusions in IR 8.57 to IR 8.67. They particularly note the Inspector's acceptance of the Highways Agency's position that, once the many constraints indicated at IR 3.48 and IR 7.25 to IR 7.26 are taken into account in relation to the proposed layout; there is no significantly reduced scale of improvement that would be workable. They also note that the Inspector in IR 8.66 does not consider the layout would be unduly difficult or confusing to negotiate in practice. The Secretaries of State, after considering all the evidence, accept the Inspector's overall conclusion at IR 8.68.

- 15. The Secretaries of State note that a number of objectors were concerned about the safety of the published scheme. Particular concerns were that the greater complexity of the published scheme and the likelihood of higher traffic speeds would lead to more accidents and that the proposed signal-controlled Park and Ride junction would become an accident hotspot. The Secretaries of State in considering this matter note the Inspectors conclusions in IR 8.69 to IR 8.71. They particularly note his conclusion in IR 8.70 that the scheme has been designed in accordance with standards set out in the Department of Transports Design Manual for Roads and Bridges and road safety audits have been conducted. The Secretaries of State, after considering all the evidence, accept the Inspector's conclusions at IR 8.69 to IR 8.71.
- 16. The Secretaries of State note the concerns of Mr A R Williams at IR 5.98 and Mr E Newbery at IR 5.103 that there could be significant tailbacks if the proposed traffic signal-controlled Park and Ride junction were to fail. The Secretaries of State in considering this matter note the Inspectors comments in IR 8.73 to IR 8.75 and the comments from the Highways Agency at IR 7.120. They particularly note the Inspectors conclusion that there is no clear evidence of the likelihood of future traffic problem and that other signal-controlled junction in the area have not incurred any insurmountable problems. The Secretaries of State, after considering all the evidence, accept the Inspector's conclusion at IR 8.75, and agree with the reasoning and findings, that there is no clear evidence of the likelihood of future traffic problems and the objections should not be supported.
- 17. The Secretaries of State note that a number of objectors were concerned that the published scheme would take too much agricultural land with a detrimental effect on the countryside. The Secretaries of State in considering these concerns have decided, for the reasons the Inspector has given at IR 8.77, to agree with the Inspector's conclusion at IR 8.78 that the loss of agricultural land has little significance in the overall assessment of the published scheme. In relation to pedestrians and cyclists the Secretaries of State agree with the inspector's comments and conclusions in IR 8.83 that those objections on the grounds that the published scheme would not make proper provision for cyclists and pedestrians cannot be supported.
- 18. The Secretaries of State note that a number of objectors were concerned with aspects of the published scheme's relationship with the proposed Norwich Northern Distributor Road. The Secretaries of State in considering this matter note the Inspectors comments in IR 8.91 to IR 8.98 and the comments from the Highways Agency at IR 3.68 to IR 3.69 and at IR 7.105 to IR 7.108. They particularly note the Inspectors conclusion that the published scheme does not pre-empt or prejudice the planning process for the Norwich Northern Distributor Road but minimises the disruption to the A47 trunk road and the Postwick hub junction in the event that the Norwich Northern Distributor Road be approved. The Secretaries of State, after considering all the evidence, accept the Inspector's conclusion at IR 8.99, and agree with the reasoning and findings, that there is no clear evidence or

reason for its relationship to the proposed Norwich Northern Distributor Road to prevent the Orders from being made.

## The Operational Performance of the Scheme

- 19. The Secretaries of State note that a number of objectors were concerned that the closure of the eastbound diverge slip road would seriously inconvenience local businesses and residents with increased journey times and travel distances. The Secretaries of State in considering this matter note the Inspectors comments in IR 8.100 to IR 8.109 and the comments from the Highways Agency at IR 3.71 and IR 7.18 to IR 7.19. The Secretaries of State note that the Highways Agency indicates in IR 7.18 that the average commuting journey time into Norwich is 33 minutes and that this was not disputed by the objectors. The Secretaries of State accept that the maximum increase in journey time of just over two minutes in 2030 has been clearly demonstrated by the Highways Agency and agree with the Inspector that this increase should not be seen as significant. Nevertheless the Secretaries of State acknowledge that the published scheme, insofar as existing users are concerned, would lead to transport user dis-benefits. However the Secretaries of State note that the Inspector concludes that the published scheme benefits of releasing economic potential and the high national priority of promoting sustainable economic growth and jobs should be considered when assessing the published schemes value for money. The Secretaries of State, after considering all the evidence, accept the Inspector's conclusion at IR 8.110, and agree with the reasoning and findings, that the potential economic benefits should be taken into account when assessing value for money.
- 20. The Secretaries of State note that a number of objectors believe that the published scheme should not go ahead due to a negative benefit cost ratio and a belief that other economic benefits have been overstated. The Secretaries of State when considering this matter note the Inspector's comments in IR 8.111 to IR 8.128 and the comments from the Highways Agency at IR 3.16, IR 3.21, IR 3.31 to IR 3.34, IR 3.70, IR 3.75 to IR 3.77, IR 7.22, IR 7.37 to IR 7.40, IR 7.42 to IR 7.45 and IR 7.47. The Secretaries of State note that the Highways Agency acknowledges that the published scheme has a negative benefit cost ratio but also note that this is not unprecedented.
- 21. The Secretaries of State note that the Norfolk and Norwich Transport Action Group at IR 5.18 maintain that it would be setting a dangerous precedent to use the draft guidance in WebTAG Unit 3.16 to calculate Transport Externality Cost and Gross Value Added and use them against negative benefit cost ratio. The Secretaries of State note the Highways Agency's response to this matter in IR 7.42 and IR 7.45, and for the reasons given, agree with the Inspector's conclusion at IR 8.117 that the use of WebTAG Unit 16 is appropriate in this case.
- 22. The Secretaries of State note that the main queries regarding the Transport Externality Costs were from the Norfolk and Norwich Transport Action Group who raised points concerning the modelling process and were

keen to identify in which parts of the network the Transport Externality Costs were being generated. The Secretaries of State note that the Highways Agency provided information on this matter at IR 7.43 and agree with the Inspector's reasons and conclusion at IR 8.122 that there are no grounds to question the calculation of the Transport Externality Cost benefits.

- 23. The Secretaries of State note that Mr Radford on behalf of Lothbury Property Trust in IR 5.33 and IR 5.106 to IR 5.110 and the Norwich Green Party in IR 5.56 questioned the number of jobs in the Gross Value Added assessment and the growth assumptions used for the development of the Broadland Gate Business Park site and the viability of office development. The Secretaries of State also note that the Highways Agency have provided evidence to support the case that the timescale for delivery of economic benefits is realistic at IR 7.38 to IR 7.41 and supported the case that there are limited opportunities for large scale employment growth elsewhere in Norwich at IR 3.33 to IR 3.34. The Secretaries of State also note the point made by the Norwich Green Party at IR 5.19 and IR 5.55 that whereas the Gross Value Added calculation assumes that the jobs would not occur elsewhere in the area, the National Trip End Model constraints used in the calculation of the Transport Externality Costs means that they would. The Secretaries of State, after considering all the evidence, accept the Inspector's conclusion at IR 8.129, and agree with the reasoning and findings, that the calculation of Transport Externality Costs and Gross Value Added are acceptable and should be taken into account in the overall assessment of benefits.
- 24. The Secretaries of State note the concerns of Mr Cawdron recorded at IR 5.147 that the loss of crop production should be included in the economic assessment calculations. The Secretaries of State when considering this matter note the Inspector's comments at IR 8.130 and the comments from the Highways Agency at IR 3.82 to IR 3.84. They further note that the Inspector asserted that the figure of the loss of 95 ha of agricultural land used by Mr Cawdron is far in excess of the 9.8 ha agreed and recorded at IR 3.84 that the monetary loss suggested by Mr Cawdron should be significantly reduced. The Secretaries of State, after considering all the evidence, accept the Inspector's conclusion at IR 8.131, and agree with the reasoning and findings, that the cost details raised by Mr Cawdron are not significant enough to prevent the making of the Orders.

#### Alternative routes

25. The Secretaries of State note that there were 13 alternative routes proposed, nine of which were pursued at the inquiry – Alternatives 1, 2, 4, 5, 6, 6a, 9, 10 and 11, with a further two put forward at the inquiry 12 and 14. The case for those who supported these, either individually or generally, are recorded in inquiry document number HA/35. It is also noted that those who made counter-objections against these alternatives are reported in inquiry document number HA/35 and the Highways Agency response is at IR 7.49 to IR 7.89.

- 26. The Secretaries of State note that each of the 11 alternative routes was considered by the Inspector who reached conclusions on each of them in IR 8.151 to IR 8.160. The Inspector reached a conclusion in IR 8.153 that neither AR9 or AR11 would offer any advantages over the published scheme and in IR 8.151 that they do not propose any alterations to the existing Postwick junction and would therefore not fulfil the scheme objectives. With reference to the remaining alternatives the Inspector acknowledged that (with the exception of the second phases of AR6 and AR14) they would cost less than the published scheme but concluded that they would not be able to deliver under the published draft Orders and would give rise to operational problems and difficulties which would mean they would be unable to deliver the objectives of the scheme.
- 27. The Secretaries of State, after considering all the evidence, accept the Inspector's overall conclusion in IR 8.161 to IR 8.162, and agreeing with his reasoning and findings, that none of the alternative routes can be supported and that all alternative routes were properly considered.

#### **Other Matters**

28. The Secretaries of State note the other matters raised by Mr Bowell in IR 5.73 to IR 5.74, Mr Heard in IR 5.130, IR 5.133 and IR 5.135, and Norfolk and Norwich Transport Action Group (NNTAG) in IR 5.32 to IR 5.34 where these have not been addressed above. The Secretaries of State also note that some objectors argued that there was no sense in extending the Postwick Park and Ride site, there would be a negative impact of the published scheme on the economy of Great Yarmouth, and that the published scheme would be expensive and a waste of money. In considering these matters, the Secretaries of State further note that the Inspector considered each of them in IR 8.172 to IR 8.182 and, for reasons he gives, they accept his conclusions in IR 8.183 on each one of them.

#### **Modifications**

29. The Secretaries of State note the Inspector's conclusions in IR 8.184 and IR 8.189 to IR 8.192 on the modifications proposed by the Highways Agency to the published draft Orders described in inquiry document numbers HA/58, HA/59 and HA/60. They note the Inspector's findings that all but Modification 7 are simply to address minor drafting errors or to add clarity and ensure consistency between the Orders, the Schedule and the Plan. They also note the Inspector's findings that Modification 7 is necessary to ensure that cyclists would not be disadvantaged by the stopping up of the eastbound diverge slip road. The Secretaries of State therefore accept the Inspectors overall conclusions in IR 8.188 and IR 8.194 and agree, for the reasons he gives in IR 8.185 to IR 8.187 and IR 8.190 to IR 8.193, that they are justified and should be made.

#### The Secretaries of State Decision on the Draft Orders

## The Slip RO

30. The Secretaries of State agree with the Inspector's overall conclusions on the Slip RO at IR 8.184 to IR 8.188 and, for the reasons he has given, together with those of the Secretaries of State above, accept his recommendation in IR 9.1 that the Slip RO be modified as set out in Inquiry document HA/60 and that the order so modified be made. The Secretaries of State are satisfied that this modification does not, in their opinion, make a substantial change to the draft SSRO for the purposes of the provisions in paragraph 8(3) of schedule 1 to the Highways Act 1980.

## The SRO

31. The Secretaries of State agree with the Inspector's overall conclusions on the SRO at IR 8.189 to IR 8.194 and, for the reasons he has given, together with those of the Secretaries of State above, accept his recommendation in IR 9.2 that the SRO be modified as set out in Inquiry documents HA/58 and HA/59 and that the order so modified be made. The Secretaries of State are satisfied that this modification does not, in their opinion, make a substantial change to the draft SSRO for the purposes of the provisions in paragraph 8(3) of schedule 1 to the Highways Act 1980.

## ORDERS AND SCHEME TO BE MADE

- 32. In the light of the decision taken above, the Secretary of State for Transport will make shortly the published Orders listed in paragraph 1 above subject to the modifications, as recommended by the inspector.
- 33. Public notice will be given when the Orders referred to in this letter are made. Any person who wishes to question their validity, or any particular provision contained in them, on the grounds that the Secretary of State for Transport has exceeded his powers, or has not complied with the relevant statutory requirements may, under the provisions of schedule 2 of the Highways Act 1980 and section 23 of the Acquisition of Land Act 1981, do so by application to the High Court. Such application must be made within six weeks of publication of notice that the Orders have been made.

## Availability of the Inspector's Report

34. A copy of this letter and the Inspector's report has been sent to all statutory objectors and to any other person who, having appeared at the Inquiry, has asked to be notified of the decision of the Secretaries of State. Any person who is entitled to be supplied with a copy of the Inspector's report may apply to the Secretary of State for Transport within six weeks of receipt of this letter, to inspect any document appended to the report. Any such application should be made to David Tate (telephone number 0207 944 2797) at the Department for Transport. Applicants should indicate the date and time

(within normal office hours) when they propose to make the inspection. At least three days' notice should be given, if possible.

Yours faithfully



Jon Griffiths
On behalf of the Secretary of State for Transport



Ranuka Jagpal
On behalf of the Secretary of State for Communities and Local Government



## Appendix B



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## Report to the Secretaries of State for Transport and for Communities and Local Government

by David Wildsmith BSc(Hons) MSc CEng MICE FCIHT MRTPI

an Inspector appointed by the Secretaries of State for Transport and for Communities and Local Government

Date: 29 October 2013

### **HIGHWAYS ACT 1980**

THE A47 TRUNK ROAD (POSTWICK INTERCHANGE SLIP ROADS) ORDER 201.

THE A47 TRUNK ROAD (POSTWICK INTERCHANGE SIDE ROADS) ORDER 201.

Date of Inquiry: 3 to 26 July 2013

Ref: DPI/K2610/12/16

## **CONTENTS**

		Page
	Acronyms and Abbreviations used in the Report	2
	Case Details	4
1	Preamble	4
2	Description of the Site and its Surroundings	7
3	The Case for the Highways Agency	8
4	The Cases for the Supporters	28
5	The Cases for the Objectors	31
6	The Cases for the Counter-Objectors	57
7	The Response of the Highways Agency	57
8	Conclusions	81
9	Recommendations	110
	Appendix 1: Appearances	111
	Appendix 2: Inquiry Documents	112

#### **ACRONYMS AND ABBREVIATIONS USED IN THE REPORT**

AM peak morning peak period
AMR Annual Monitoring Report

AR Alternative Route

ARCADY Assessment of Roundabout Capacity and Delay Software

BAFB The Best and Final Funding Bid submitted by NCC to the DfT in 2011 for

the combined Postwick Hub and NDR schemes

BBP Broadland Business Park

BCR Benefit Cost Ratio

BDC Broadland District Council
BGBP Broadland Gate Business Park
BFLF Brook Farm/Laurel Farm
BLP Broadland District Local Plan

BRT Bus Rapid Transit

CIF Community Infrastructure Fund

COBA Cost Benefit Appraisal – software released by the Department for

Transport that has been used to undertake an accident appraisal

CPO Compulsory Purchase Order

CPRE Campaign for the Protection of Rural England

CSR Comprehensive Spending Review

CTC Cyclists' Touring Club

DCLG Department for Communities and Local Government

DD Deposit Documents

Defra Department for Environment, Food and Rural Affairs

DfT Department for Transport

DIADEM Dynamic Integrated Assignment and DEmand Modelling - software

released by the DfT

DM Do-Minimum

DMRB Design Manual for Roads and Bridges

Doc Document
DS Do-Something

EIA Environmental Impact Assessment

ES Environmental Statement

EU European Union

the Framework National Planning Policy Framework

GNDP Greater Norwich Development Partnership

GVA Gross Value Added
HGV Heavy Goods Vehicle
HA Highways Agency
IEL Ifield Estates Limited
JCS Joint Core Strategy

kt kilotonnes

LEP Local Enterprise Partnership
LINSIG Traffic signal analysis software

LTP Local Transport Plan

LTPIP Local Transport Plan Implementation Plan

MDL Menzies Distribution Limited

NATS Norwich Area Transportation Strategy

NCC Norfolk County Council

NDR Norwich Northern Distributor Road

NEGT North East Growth Triangle

NGP Norwich Green Party

NIP National Infrastructure Plan

NMU Non-motorised user

NNTAG Norwich & Norfolk Transport Action Group

NPA Norwich Policy Area

REPORT TO THE SECRETARIES OF STATE FOR TRANSPORT & COMMUNITIES AND LOCAL GOVERNMENT REF: DPI/K2610/12/16

NPV Net Present Value – given by subtracting the Present Value Costs (PVC)

from Present Value Benefits (PVB)

NSIP Nationally Significant Infrastructure Project

NTEM National Trip End Model – a database containing trip-end, journey

mileage, car ownership and population/workforce planning data

OE Other Externalities
PCU Passenger Car Unit
PG Planning Gain

PIA Personal Injury Accident

PM10 Small airborne particles, more specifically particulate matter less than 10

micrometres in aerodynamic diameter

PM2.5 Small airborne particles less than 2.5 micrometres in aerodynamic

diameter

PMA Private Means of Access
PIA Personal Injury Accident
PIM Pre-Inquiry Meeting
PM peak evening peak period
PPG Planning Policy Guidance
PPS Planning Policy Statement
PROW Public Rights of Way

PVB Present Value Benefits – the stream of benefits over the appraisal period

(60 years) that are converted to 2010 prices and discounted to 2010 to

give a 'present value'

PVC Present Value Costs – the costs of the scheme over the construction

period as well as maintenance and operational costs that are converted to

2010 prices and discounted to 2010 to give a 'present value'

P&R Park and Ride

RDA(s) The former Regional Development Agencies in England

SA Sustainability Appraisal

SATURN Simulation and Assignment of Traffic on Urban Road Networks software

SNUB Stop Norwich Urbanisation

SoC Statement of Case

SoCG Statement of Common Ground

SSCLG Secretary of State for Communities and Local Government

SST Secretary of State for Transport

SRN Strategic Road Network
Side RO Side Roads Order

Slip RO
Slip Roads Order
sqft square feet
sqm square metres

SSSI Site of Special Scientific Interest
TAG Transport Analysis Guidance
TEC Transport Externality Cost

TEN-T Routes Trans-European Network of Transport Routes

TFR Traffic Forecasting Report

TUBA Transport User Benefit Appraisal – software released by the DfT that is

used to assess transport user benefits of transport schemes

VfM Value for Money

VISUM Transport modelling software used (in this case) for public transport

modelling

WebTAG Web-based Transport Appraisal Guidance produced by the DfT

#### **CASE DETAILS**

#### **The Slip Roads Order**

- The draft Slip Roads Order would be made under Sections 10 and 41 of the Highways Act 1980, and is known as the A47 Trunk Road (Postwick Interchange Slip Roads) Order 201.
  - o The Slip Roads Order was published on 13 November 2009.
  - The Slip Roads Order would authorise the new slip roads to be constructed, connecting the eastbound carriageway of the A47 trunk road with the A1042 Yarmouth Road (as proposed to be improved by the Secretary of State for Transport) at Postwick Interchange.

Summary of Recommendation: that the Slip Roads Order be made with modifications.

#### **The Side Roads Order**

- The draft Side Roads Order would be made under Sections 12, 14 and 125 of the Highways Act 1980, and is known as the A47 Trunk Road (Postwick Interchange Side Roads) Order 201.
  - The Side Roads Order was published on 13 November 2009.
  - The Side Roads Order would provide for roads, accesses and Public Rights of Way (PRoWs) adjoining or crossing the trunk road to be altered or diverted as necessary. It would also authorise the Secretary of State for Transport to provide new means of access and alterations to existing highways, footpaths and Private Means of Access (PMA) to premises as necessary.

Summary of Recommendation: that the Side Roads Order be made with modifications.

#### 1. PREAMBLE

- 1.1 On 13 November 2009, the Secretary of State for Transport (SST) published a draft Slip Roads Order (Slip RO) (Deposit Document (DD) 01); and a draft Side Roads Order (Side RO) (DD02), for the provision of an improved interchange between the existing A47 trunk road at Postwick, on the eastern side of Norwich, and the existing A1042 Yarmouth Road. After a period of deferment, in connection with the Government's Comprehensive Spending Review (CSR) in October 2010, the draft Orders were re-advertised on 24 February 2012.
- 1.2 The highway proposals, referred to as the Postwick Hub junction ("the Scheme" or "the Postwick Hub Scheme"), received full planning permission in April 2010, as part of a joint proposal for a Broadland Gate Business Park (BGBP), for which outline planning permission was granted at the same time. Following a successful judicial review challenge, planning permission was re-granted in October 2011<sup>1</sup>. This planning application does not include all of the required highway works within the red line application site because the Highways Agency

<sup>&</sup>lt;sup>1</sup> see DD134 & DD135

- (HA), on behalf of the SST, has permitted development rights in relation to improvement works within the existing highway.
- 1.3 The Scheme is a Local Authority Major Project promoted by Norfolk County Council (NCC). NCC is the local highway authority for all highways within Norfolk with the exception of trunk roads, whilst the HA is an executive agency acting on behalf of the SST with regard to the operation, maintenance, and improvement of the Strategic Road Network (SRN) in England, including all trunk roads.
- 1.4 The planning application supporting material included an Environmental Statement (ES) in 2 Volumes which, amongst other things, set out the full scope of the highway works and so provided a full assessment of the effects of the Scheme<sup>2</sup>. I have taken account of this ES, and the revised ES of April 2013<sup>3</sup> in arriving at my recommendations. All other environmental information submitted in connection with the Scheme, including that arising from questioning at the Inquiry, has also been taken into account.
- 1.5 Following the postponement of the Inquiry into objections to the draft Orders, originally scheduled for September 2012, I held a pre-inquiry meeting (PIM) at the King's Centre, Norwich, on 8 May 2013 to consider the administrative and practical arrangements for the Inquiry. My notes of the PIM were distributed to all parties who took part in the discussion, and those who indicated they wished to give evidence at the Inquiry. They can be found at Document (Doc) INQ/01.
- 1.6 On 3 July 2013 I opened the Inquiry at the same venue as the PIM. It sat on 14 days and closed on 26 July 2013. I carried out unaccompanied site visits to the areas affected by the Scheme on 9 and 24 July 2013 and also undertook an inspection of the site of the Scheme and the surrounding area on 10 July 2013, accompanied by representatives of the HA, NCC and objectors to the Orders.

#### **Numbers of Objectors and Supporters**

1.7 A total of 132 objections have been lodged against these Orders, including some which were submitted whilst the inquiry was sitting<sup>4</sup>. Two of the objections came from statutory objectors but one of these, from occupiers of The Grange was subsequently withdrawn as agreement was reached with the HA on an alternative access arrangement (see later). This leaves the only statutory objector as Postwick with Witton Parish Council. In addition, 34 representations were submitted in support of the Orders. I have had regard to all of these representations, both opposing and supporting the Orders, in coming to my recommendations.

## **Main Grounds for Objection**

- 1.8 Objections raised by one or more party cover a wide range of topics, all of which are dealt with in this report. The main areas of objection relate to:
  - the closure of the eastbound diverge slip road and the consequent increases in the lengths of some journeys;
  - the scale and appropriateness of the Scheme design and the view that it would result in a less convenient and less safe arrangement;
  - the cost of the Scheme and whether a business case has been made;

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 $<sup>^{2}</sup>$  DD141 to DD148 and DD371

<sup>&</sup>lt;sup>3</sup> DD371

<sup>4</sup> see Doc HA/66

- the contention that the Scheme would result in increased carbon dioxide emissions:
- concerns about the traffic analysis, modelling and forecasting processes;
- that the Scheme was not being considered jointly with proposals for the Norwich Northern Distributor Road (NDR);
- that the Scheme would facilitate the first stage of the NDR;
- the contention that the Scheme had not been subject to proper public consultation;
- the contention that consideration of the Orders is premature, as consultations on the Joint Core Strategy (JCS) had not been concluded;
- the loss of greenfield/agricultural land;
- a perceived lack of facilities for pedestrians and cyclists;

## **Statutory Formalities**

1.9 The HA confirmed that all necessary statutory formalities in connection with the promotion of the Orders and the holding of the Inquiry have been complied with<sup>5</sup>.

## **Alternative Routes (ARs)**

- 1.10 In giving notice of the intention to hold a Public Inquiry, the SST directed that any person intending to submit alternative proposals to the Inquiry should provide details of those alternatives by a specified date. As the original date for the Inquiry was postponed, and the Orders were subsequently re-advertised, there have been several separate formally advertised periods during which alternatives to the Scheme could be put forward by objectors, with the last of these expiring on 3 May 2013.
- 1.11 In total, 13 ARs (Nos 1, 2, 3a, 3b, 4, 5, 6, 6a, 7, 8, 9, 10 and 11) were proposed prior to the start of the Inquiry. These were all publicised by the HA and some representations of support and in opposition were received. Three of these alternatives (Nos 3a, 3b and 8) were subsequently withdrawn, and whilst not formally withdrawn, No 7 was not pursued at the Inquiry by its promoter. Two further alternatives were put forward whilst the Inquiry was sitting (Nos 12 and 14) and were assessed by the HA but were received too late to be formally publicised. The lines of all the ARs and the HA's assessment of these routes are contained in Doc HA/35<sup>6</sup> and discussed later in this report.
- 1.12 A summary of the level of objection or support generated by the remaining alternative routes is shown in the table below.

Route No	1	2	4	5	6	6a	7	9	10	11	12	14
Supporters	2	2	3	3	2	2	4	1	4	1	Routes not	
Counter-objectors	4	4	4	4	2	3	4	7	2	3	publicised	

#### **Scope of this Report**

1.13 This report contains a brief description of the site and its surroundings, the gist of the evidence presented and my conclusions and recommendations. Lists of Inquiry appearances and documents are attached. These include details of the submitted proofs of evidence, which may have been added to or otherwise extended at the Inquiry, either during examination in chief or during cross-

<sup>&</sup>lt;sup>5</sup> See Doc HA/20 for full details

 $<sup>^{6}</sup>$  this includes Docs HA/OBJ28/ALT1 to HA/OBJ121/ALT14

examination. Where appropriate, references to DDs and other submitted documents are given in parentheses or footnotes.

## 2. DESCRIPTION OF THE SITE AND ITS SURROUNDINGS

- 2.1 The A47 trunk road, which is of varying dual and single-carriageway standard, provides a link between the ports of Great Yarmouth and Lowestoft on the East Coast and the A1(M) in the East Midlands, serving both strategic and local purposes<sup>7</sup>. It was identified by the HA as part of the core trunk road network of nationally important routes<sup>8</sup> and is part of the Trans-European Network (TEN-T)<sup>9</sup>.
- 2.2 Norwich, identified as a node on this TEN-T network, is one of the largest cities in the east of England and is a major regional centre for employment, tourism, culture, and retail activity<sup>10</sup>. It has been previously identified as a Growth Point<sup>11</sup> and, as Greater Norwich, has been invited to bid for City Deal status<sup>12</sup>.
- 2.3 The A47 trunk road passes to the immediate south of Norwich, with a series of junctions from west to east connecting the SRN with radial routes into the city. Postwick is the easternmost junction on the A47 serving Norwich and its slip roads, which would be affected by the Orders, enable traffic to leave or join the SRN at this point and to connect with the A1042 Yarmouth Road radial route. Access is also possible to the Broadland Business Park (BBP) on the north side of the junction and to the Postwick Park and Ride (P&R) site on the south side of the junction. Both of these facilities are identified for expansion.
- 2.4 The general layout of the existing Postwick junction can be seen in Appendix A, of the Statement of Case (SoC)<sup>13</sup> and a fuller description is given in Doc HA/03/1. It is a grade-separated 2-roundabout "dumb-bell" junction linking the A47 trunk road, which is a rural dual-carriageway at this point, to the A1042 Yarmouth Road. The Postwick North-West roundabout lies to the north of the A47 and is connected by a single-carriageway bridge over the A47 to Postwick P&R roundabout, which provides access to a 500 space P&R site.
- 2.5 The eastbound diverge slip road connects to the Postwick North-West roundabout and includes a segregated left turn lane to the A1042 Yarmouth Road (West). The eastbound merge slip road leaves this roundabout and includes a segregated left turn lane from Broadland Way. The westbound merge slip road leaves from the P&R roundabout, whilst the westbound diverge slip road leaves the A47 carriageway about 900 m east of the rest of the junction and joins the A1042 Yarmouth Road (East). NCC is responsible for the A1042 which commences after the A47 westbound diverge slip road, and crosses the A47 by means of the aforementioned overbridge.
- 2.6 To the west of the junction the A1042 comprises a short length of dual-carriageway until it meets the Meridian Way roundabout. From this point it reduces to a single-carriageway, continuing through the Northside Roundabout some 350 m or so, further to the west. It serves a number of housing areas

 $<sup>^{7}</sup>$  see paras 3.2-3.5 of Doc HA/01/1

<sup>&</sup>lt;sup>8</sup> see paras 2.3.2-2.3.3 of DD369

 $<sup>^{9}</sup>$  the "TEN-T" network – see DD340

 $<sup>^{10}</sup>$  see para 2.1 of DD330

 $<sup>^{11}</sup>$  see para 7.3.1 of Doc HA/02/1

<sup>&</sup>lt;sup>12</sup> see para 6.34 of Doc HA/04/1

<sup>&</sup>lt;sup>13</sup> DD370

- including St Andrews Park and the larger Dussindale Park, as well as the more established Thorpe St Andrew housing areas.
- 2.7 Broadland Way runs northwards from the Postwick North-West roundabout as a dual-carriageway until it meets with Peachman Way roundabout, where it provides access to BBP lying to the west. North of the Peachman Way roundabout, Broadland Way reduces to a single-carriageway and then to a narrow rural road known as Green Lane which provides a direct link to Plumstead Road and Thorpe End village.
- 2.8 A network of footways, cycle routes and PRoWs exist in the vicinity of the junction, including Postwick Footpath No 2 which crosses the A47 at grade, some 670 m east of the Postwick junction. These existing non-motorised user (NMU) facilities are also shown on the plan in Appendix A to Doc DD370.
- 2.9 Private means of access (PMA) serve The Grange, a private residential property sited to the north of the A47, some 200 m to the east of the Postwick junction. These include an "entry only" access track connecting directly to the A47 eastbound carriageway. A further PMA from Broadland Way serves a group of farm and other buildings, primarily now providing housing accommodation, known collectively as Heath Farm.
- 2.10 A number of public utilities exist within the vicinity of the junction, with the most significant being a 36" diameter high pressure gas main, located some 530 m to the east of the junction.

#### 3. THE CASE FOR THE HIGHWAYS AGENCY

The material points are:

#### Overview

- 3.1 Full details of the HA's case are set out in its SoC<sup>14</sup>, as amplified by the written and oral evidence of its witnesses. In light of the statutory tests contained in sections 10 and 14 of the Highways Act 1980, it is the HA's view that the changes which the Orders propose to the SRN would be expedient, taking into account the reasonable convenience of the alternative routes that would be provided, and having regard to the requirements of local and national planning. The Orders should therefore be made.
- 3.2 Although the majority of the objections to the Orders relate to the proposed changes to the eastbound diverge slip road, the performance of the junction cannot be assessed only by reference to movements on this slip road. The junction needs to cater adequately for all traffic movements through it, including journeys to and from the A47 (East) which involve passing through the P&R roundabout when either leaving or joining the SRN.
- 3.3 The test of "expediency" contained in section 10 of the Highways Act 1980 is not limited to a consideration of whether existing traffic movements would be made shorter, quicker or safer by the proposed changes. Rather, section 10 also brings into play the requirements of local and national planning, as well as the requirements of agriculture. Accordingly, whilst safety, speed, and ease of movement are important considerations, it is necessary to look at more than just those factors.

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<sup>&</sup>lt;sup>14</sup> DD369

- 3.4 The strategic and local highway network is part of the basic infrastructure of the country and its function is not only to serve the needs of existing travellers, but also to provide one of the key building blocks for economic growth. This is made clear in DfT Circular 02/2007<sup>15</sup>, and also in the Government's Response to the Cook Review<sup>16</sup>. It is therefore important to look not only at how the Scheme would change matters for existing users of the highway network, but also at the new journeys that would be facilitated by the changes, and at how the changes would enable the highway network to contribute to economic growth.
- 3.5 Due weight has to be given to the objectives of local and national planning, particularly as set out in national policy statements and development plan policies. These are detailed in the Policy section, below. It is also necessary to have regard to existing commitments and decisions of the relevant local planning authorities. The Order making process is not an opportunity to revisit or overturn planning decisions that have already been settled in another forum. Nor is it an opportunity to examine planning issues that are not relevant to the Orders which are the subject matter of this Inquiry.

## **Background**

- 3.6 The existing Postwick junction already displays some serious congestion problems at peak times<sup>17</sup>. The P&R roundabout suffers from substantial queuing and delays to traffic on the Yarmouth Road (East) approach. Although there are 2 approach lanes, the majority of traffic uses the right-hand lane heading to the Postwick Bridge to cross the A47 and this lane cannot provide the capacity for peak traffic demand. Surveys carried out in November 2012 showed maximum queue lengths of 133 passenger car units (PCUs), or a length of 650 m, in the AM peak and 61 PCUs (350 m) in the PM peak.
- 3.7 In addition the North-West roundabout is affected by queues occurring on Yarmouth Road (West), which extend back towards this roundabout and to the dedicated left turn from the A47 eastbound diverge slip road. Moreover, it should be noted that, to a certain extent, any problems on Yarmouth Road (West) are being limited by the constraining effect of the severe queuing at the P&R roundabout.
- 3.8 Other junctions in the locality also experience problems. The Meridian Way roundabout suffers from queues in the AM peak as the westbound exit from this roundabout merges into a single lane. Surveys in 2012 showed queues of up to 22 PCUs, or a length of 125 m, in the nearside lane extending back towards the Postwick North-West roundabout.
- 3.9 In the PM peak the westbound traffic flows are lower than in the morning, but traffic conflicts at the Northside roundabout cause long queues on Yarmouth Road (West) of around 102 PCUs (585 m). These queues extend back through the Meridian Way roundabout towards the Postwick North-West roundabout and the A47 eastbound diverge slip road<sup>18</sup>.
- 3.10 These problems are already constraining development in the area and can be expected to get worse in the future, as a result of general traffic growth. It is for

<sup>&</sup>lt;sup>15</sup> See para 4 of DfT Circular 02/2007: "Planning and the Strategic Network" (DD136)

<sup>&</sup>lt;sup>16</sup> See para 1.5 of "A Fresh Start for the Strategic Road Network: The Government Response" (DD248)

<sup>&</sup>lt;sup>17</sup> See paras 3.1.2-3.1.4 of Doc HA/05/1

<sup>&</sup>lt;sup>18</sup> See Doc HA/12 "Postwick Hub Scheme – Yarmouth Road Surveys and Northside Roundabout Assessment"

these reasons that an improvement to the existing Postwick junction has been part of the city's transport strategy for some years. Further details are given in the Policy section, which follows. Without intervention the junction is predicted to be significantly over-capacity in future years, as detailed in Doc  $HA/05/1^{19}$ , and summarised in the following section.

3.11 In terms of safety, personal injury accident (PIA) data for the 5 year period from 1 May 2007 to 30 April 2012 shows that a total of 9 accidents occurred on the Postwick junction during this period, resulting in 10 slight injuries, with no serious or fatal accidents recorded. With increasing traffic from the proposed developments in the locality it is important that a good safety record should be maintained, but this would be unlikely to be achieved if traffic queues formed that regularly extended back to approach the high speed A47 trunk road mainline. Further details of the accident record are set out in DD362<sup>20</sup>.

## **Transport Modelling and Forecast Traffic Conditions**

- 3.12 The Norwich Area Transportation Strategy (NATS) transport modelling framework has been used to assess the Scheme. This consists of 3 main elements<sup>21</sup>. The first is a Highway Traffic Model, developed using SATURN<sup>22</sup> software. This traffic assignment model comprises a representation of the highway network, and predicts the travel routes and costs for vehicles travelling on the network. Queues and delays at junctions are simulated and taken into account in the predictions of travel routes.
- 3.13 The second element is the Public Transport Model prepared using VISUM<sup>23</sup>. This is an assignment model for bus and rail passengers, covering the same area as the highway model, plus the key rail routes into Norwich. The final element is the Demand Model prepared using DIADEM<sup>24</sup>. This variable demand model links with the highway traffic and public transport models and is used to represent behavioural responses to changes in travel costs, such as changes in trip-end location or changes in travel mode.
- 3.14 The highway and public transport assignment models have been developed for 3 time periods: an AM peak hour (0800-0900hrs), a PM peak hour (1700-1800hrs) and an average inter-peak hour (1000-1600hrs). The overall modelling framework has been developed to be consistent with the DfT's web-based Transport Appraisal Guidance, WebTAG<sup>25</sup>.
- 3.15 For the traffic forecasts, full details of the assumptions used in creating the future year networks and matrices are given in the Traffic Forecasting Report (TFR)<sup>26</sup> and also in Section 5 of Doc HA/05/1. In summary, the forecasts have been prepared assuming that the (mainly) employment development proposals at BGBP and Laurel Farm would only be able to proceed with the construction of the Postwick Hub Scheme. These are therefore considered to be "dependent developments". The Do-Minimum (DM) scenario includes committed transport

 $<sup>^{19}</sup>$  paras 6.3.1-6.3.4 of Doc HA/05/1

<sup>&</sup>lt;sup>20</sup> DD362: Postwick Hub Scheme - Economic Appraisal Report

 $<sup>^{21}</sup>$  See section 4 of Doc HA/05/1

<sup>&</sup>lt;sup>22</sup> SATURN: Simulation and Assignment of Traffic to Urban Road Networks

<sup>&</sup>lt;sup>23</sup> VISUM: a software system that models all private and public transport types

<sup>&</sup>lt;sup>24</sup> DIADEM: DfT software - Dynamic Integrated Assignment and DEmand Modelling

 $<sup>^{25}</sup>$  See Docs HA/16, HA/17 and DD345

<sup>&</sup>lt;sup>26</sup> DD336

- improvements, but without the Scheme or dependent developments. Growth in demand is based on the National Trip End Model (NTEM) and Road Transport Forecasts, as well as variable demand modelling. The Do-Something (DS) scenario includes both the Scheme and the dependent developments.
- 3.16 Three separate forecast years have been used the year of Scheme opening (assumed to be 2015); 15 years after opening (2030); and an interim year (2020). Different levels of dependent development are assumed to occur in these 3 years with the Scheme 10% in 2015, rising to 50% in 2020 and 100% in 2030. It has further been assumed that the housing development proposed at Brook Farm, as well as other JCS proposed development, is not included explicitly, as the North East Growth Triangle (NEGT) proposals are subject to review (see later). However, the Brook Farm development has been included as part of a sensitivity test as it is subject to the same planning application as Laurel Farm. A sensitivity test has also been carried out with the proposed NDR connected to the Postwick Hub.
- 3.17 The forecasts indicate that if there was no improvement to the Postwick junction or occupation of the proposed dependent development, the P&R junction would be substantially over capacity in both the AM and PM peak hours in 2015, 2020 and 2030, resulting in long queues and delays. The junction would also be over capacity in the inter-peak period in future years, with long queues and delays predicted in 2030. As a result, in 2030 the junction would be over capacity throughout the whole of the working day with long queues and delays experienced on the Yarmouth Road (East) approach to this roundabout. The Postwick Bridge approach to this junction would also exceed capacity.
- 3.18 The Meridian Way roundabout would exceed capacity on the Yarmouth Road (West) approach in all forecast years in the AM peak, whilst the Northside roundabout would exceed capacity in both AM and PM peaks for westbound traffic as well as in the inter-peak in later forecast years. The longest queues would occur in the PM peak, when westbound traffic would be in conflict with traffic emerging from St Andrews Business Park via Northside.
- 3.19 Predictions of the operation of the Postwick junction if the dependent developments were allowed to proceed, but with no improvement to the junction, indicate that long queues would extend back onto the westbound and eastbound diverge slip roads of the A47<sup>27</sup>. There would also be a risk of the queues sometimes extending back onto the main A47 carriageway<sup>28</sup>.
- 3.20 It is to prevent such problems arising, and to allow permitted development to proceed, that the existing junction needs to be improved. The forecasts indicate that with the proposed improvement, all Scheme junctions would perform satisfactorily with acceptable levels of queuing on all arms. Forecast queues and delays can be seen in the TFR<sup>29</sup>. In addition, the revised layout would provide more capacity and protection for the trunk road. The junctions would also operate satisfactorily in the "high traffic" and "with NDR" scenarios.

 $<sup>^{27}</sup>$  see para 6.5 of Doc HA/05/01

 $<sup>^{28}</sup>$  see Tables 6.8-6.10 in Doc HA/05/02 and Tables G.14-G.18 and Figures G.14-G.19 in DD336

<sup>&</sup>lt;sup>29</sup> Figures G.8-G.13 of DD336

## **Policy considerations**

- 3.21 The objective of securing economic growth has the highest national priority and the overall context for the consideration of the Scheme is therefore provided in the "Planning for Growth" Ministerial Statement of 23 March 2011<sup>30</sup>. Amongst other matters this makes it clear that the Government's top priority in reforming the planning system is to promote sustainable economic growth and jobs. It further indicates that benefits to the economy, where relevant, are an important consideration when other development-related consents are being determined, including transport consents, and particular weight should therefore be placed on the potential economic benefits offered by an application.
- 3.22 The importance of providing the necessary infrastructure to deliver this economic growth is made clear in the Government's National Infrastructure Plan (NIP) Updates of 2012<sup>31</sup> and 2013<sup>32</sup>. In the NIP Update 2013, the Government reiterated its belief that "Infrastructure is vital to the success of any modern economy; it drives growth, creates jobs and generates the networks that allow businesses and organisations to thrive. Investing in and improving this country's infrastructure in order to make the UK globally competitive is a key part of the Government's economic strategy<sup>33</sup>". It is in this context that the Scheme is being brought forward.
- 3.23 Furthermore, the National Planning Policy Framework ("the Framework") defines the purpose of the planning system as being to contribute to the achievement of sustainable growth, with paragraph 14 containing a presumption in favour of sustainable development, which is described as "the golden thread running through both plan-making and decision-taking"<sup>34</sup>. In this regard the Scheme would enable new housing and employment growth in areas adjacent to each other, and also in areas adjacent to existing housing and employment sites. This should help to encourage trips by sustainable modes.
- 3.24 However, at the local level, planned future development which has been approved in the statutory development plan is being constrained by the present and predicted problems at the Postwick junction. Dealing first with the BBP, this was established in accordance with Policy TSA2<sup>35</sup> of the Broadland District Local Plan (BLP), but Policy TSA3 sets a floorspace threshold of 85,000 sqm for a first phase of development. Before a second phase of development can proceed Policy TSA3 requires a link road to Plumstead Road to be provided and an improvement of Postwick junction to be carried out.
- 3.25 For the BGBP development, the outline permission granted in October 2011<sup>36</sup> includes a variety of commercial, business and community uses, together with a hotel, a leisure facility and a car showroom. The permission is subject to a S106 agreement to implement an agreed Travel Plan which would provide a public transport contribution, likely to be in the range of £1.5 million to £2 million. Condition 1 of this permission requires all reserved matters to be submitted to

 $<sup>^{\</sup>rm 30}$  DD334 - Ministerial Statement by the Rt Hon Greg Clark MP

<sup>&</sup>lt;sup>31</sup> DD337

<sup>&</sup>lt;sup>32</sup> DD338

 $<sup>^{33}</sup>$  Para 1.1 of DD338

<sup>&</sup>lt;sup>34</sup> paras 4.2-4.12 of Doc HA/04/1

<sup>&</sup>lt;sup>35</sup> see DD235

<sup>&</sup>lt;sup>36</sup> DD135

- the Planning Authority within 10 years of the date of permission, but Condition 3 places a restriction on the occupation of the development until improvements at the Postwick junction are completed and available for public use<sup>37</sup>.
- 3.26 The Brook Farm/Laurel Farm (BFLF) outline planning permission, issued in June 2013, has also been conditioned such that the development cannot be occupied until the Scheme is completed<sup>38</sup>. This development, which would effectively extend the BBP northwards, entails the provision of 600 dwellings, with a local centre incorporating A1 retail uses and a community hall, on the Brook Farm side of the development<sup>39</sup>. It also includes some 57,480 sqm of office/industrial/ storage employment development on the Laurel Farm part of the site.
- 3.27 In accordance with BLP Policy TSA3 this development will provide a link road to connect Peachman Way with Plumstead Road East<sup>40</sup>, with the permission also conditioned to prevent occupation of any part of this development until this road is constructed and open for use<sup>41</sup>.
- 3.28 The existing problems at the Postwick junction are also preventing expansion of the Postwick P&R facility, thereby hampering its ability to encourage sustainable travel choices. Although planning permission for a further 500 parking spaces was granted in May 2010<sup>42</sup>, Condition 14 of this permission prevents the expanded area being brought into use until the Postwick junction has been upgraded through the completion of the Scheme<sup>43</sup>.
- 3.29 These developments are all consistent with the strategy for economic growth in the Norwich Policy Area (NPA) which is set out in the JCS<sup>44</sup>, being prepared by the Greater Norwich Development Partnership<sup>45</sup> (GNDP). Furthermore, the highway and P&R improvements referred to above are consistent with the NATS<sup>46</sup> and the aims of NCC's 3<sup>rd</sup> Local Travel Plan<sup>47</sup>, adopted in March 2011, and its associated Implementation Plan<sup>48</sup>.
- 3.30 Dealing first with planning matters, the JCS was adopted in March 2011, but following a legal challenge from the organisation Stop Norwich Urbanisation (SNUB), parts of the JCS dealing with aspects of growth in the Broadland part of the NPA, including the NEGT, were remitted for further consideration. However, the remainder of the JCS remains adopted, including the overall scale of housing and jobs growth; the requirement for a new allocation at BBP; and the identification of the need to improve Postwick junction.
- 3.31 Paragraph 47 of the Framework makes it clear that the Government aims to "boost significantly the supply of housing", and as the overall JCS housing targets were not remitted there remains a need to deliver large scale growth in the NPA.

 $<sup>^{37}</sup>$  see paras 8.6-8.7 of Doc HA/04/1

 $<sup>^{38}</sup>$  see Doc HA/18

<sup>&</sup>lt;sup>39</sup> see DD179

 $<sup>^{\</sup>rm 40}$  see paras 8.15-8.19 of Doc HA/04/1

<sup>&</sup>lt;sup>41</sup> See Doc HA/18

<sup>&</sup>lt;sup>42</sup> DD214

 $<sup>^{43}</sup>$  Para 6.2.13 of Doc HA/03/1; para 4.5.3 of Doc HA/02/1 and paras 8.10-8.12 of Doc HA/04/1

<sup>&</sup>lt;sup>44</sup> DD330

 $<sup>^{</sup>m 45}$  A grouping of the 3 Councils of Broadland, Norwich and South Norfolk

<sup>&</sup>lt;sup>46</sup> DD272 – Norwich Area Transportation Strategy

<sup>&</sup>lt;sup>47</sup> DD229 – Connecting Norfolk: Norfolk's Transport Plan for 2026

<sup>&</sup>lt;sup>48</sup> DD230 – Connecting Norfolk: Implementation Plan for 2011-2015

To this end, JCS Policy 4 requires allocations to be made to ensure delivery of at least 36,820 new homes between 2008 and 2026, of which about 33,000 will be in the NPA" $^{49}$ . However, the latest Annual Monitoring Report (AMR)  $^{50}$  demonstrates that currently there is not a 5-year supply of housing land and indicates that the biggest shortfall is in the Broadland part of the NPA.

- 3.32 Consequently, there is an imperative to overcome any constraints to the delivery of the 600 dwellings that benefit from planning permission at Brook Farm. As the JCS allows for at least 1,600 dwellings to be delivered following improvements to Postwick junction, a minimum of 1,000 further dwellings would be facilitated by the Scheme. New housing in this general area would be adjacent to the existing urban area, well located for strategic employment opportunities and served by proposed investment in sustainable transport. The Scheme would therefore overcome a constraint to growth for housing proposals that can come forward consistent with current strategic policy.
- 3.33 In addition, the expansion of employment opportunities in this area is critical to the success of the economic growth strategy which has been settled through the development plan process<sup>51</sup>. Policy 5 of the JCS contains a target of 27,000 jobs for the period 2008-2026 and Policy 9 requires employment development at strategic locations to include "an extension to BBP of around 25 ha for general employment uses"<sup>52</sup>. The committed land in and around BBP is seen as the key development opportunity in the near future that is close to Norwich and available for general employment development. Importantly, the identification of this BBP extension is not going to be revisited as part of the continuing debate about the merits of the NEGT in the remitted parts of the JCS.
- 3.34 Furthermore, the permitted developments at BGBP and BFLF would provide the opportunity for large scale development plots that are not available elsewhere. It is estimated that around 5,000 jobs could be provided on these sites, with this potential being confirmed by recent information on employment densities from Homes and Communities Agency guidance<sup>53</sup>.
- 3.35 Moreover, negotiations with Government to develop a "City Deal" are predicated on significantly exceeding job growth targets<sup>54</sup> and the expansion of BBP provides the best general employment opportunity for early growth. The inability to implement this expansion, through the committed BGBP and BFLF proposals, would further undermine the JCS's economic growth strategy<sup>55</sup>.
- 3.36 Turning to transport matters, the NATS was updated and agreed by NCC's Cabinet in 2010. As part of its overall Strategy it recognises the Norwich area as a centre where growth will be focussed and looks to provide the essential infrastructure needed to accommodate this growth, including a NDR. The Strategy seeks to support the Norwich area as a sustainable community, and seeks to promote travel choice and improve bus travel in the urban area.

 $<sup>^{\</sup>rm 49}$  Housing requirements in the JCS are addressed in more detail at paras 6.16-6.18 of Doc HA/04/1

<sup>50</sup> Appendix A to DD365

<sup>&</sup>lt;sup>51</sup> see paras 9.9-9.10 of Doc HA/04/1

 $<sup>^{52}</sup>$  Economic development and targets for jobs in the JCS are addressed in paras 6.19-6.25 of Doc HA/04/1

 $<sup>^{53}</sup>$  see Appendix F to Doc HA/04/2

<sup>&</sup>lt;sup>54</sup> see Appendix D to Doc HA/04/2

 $<sup>^{55}</sup>$  see para 9.8 of Doc HA/04/1

- 3.37 NATS forms part of the Local Transport Plan (LTP)<sup>56</sup>, the latest version of which was adopted in March 2011 and is called "Connecting Norfolk". It sets the longer term strategy for transport delivery up to 2026 and is supported by an LTP Implementation Plan (LTPIP)<sup>57</sup> which covers the period from 2011 to 2015. Chapter 4 of the LTP deals with sustainable growth and includes, within its short to medium term priorities, the requirement that the implementation plan for transport in the Norwich area, including a NDR, continues to be delivered as part of the JCS for enabling growth in the Greater Norwich area.
- 3.38 The LTP states that delivery of the Postwick Hub will alleviate current capacity issues, serve new development at Broadland Gate and form the junction between the NDR and the A47. It further states that these improvements will also free up capacity on the existing road network in the city centre, providing the scope to implement a package of complementary measures including bus priority, walking and cycling improvements. The Postwick Hub proposal and the NDR are both included in the capital programme in the LTPIP.
- 3.39 The concept of sustainable development is embedded in this LTP, for which a Sustainability Appraisal (SA)<sup>58</sup> was undertaken in 2011. This identified a number of sustainability objectives, the first of which was to reduce carbon dioxide emissions from transport. However, this was identified as having an adverse impact on the ability of the LTP to deliver 3 key objectives, namely delivering sustainable growth; enhancing strategic connections; and improving accessibility. As a result the SA identified that there is often a balance to be reached between reducing carbon dioxide from transport, and achieving other key objectives.
- 3.40 It comments that carbon dioxide reduction has been considered throughout the development of the LTP, influencing the final package of policies and measures to be delivered. It notes, however, that there remain some policies or measures that are predicted to have a negative impact, but that in these cases there is overwhelming evidence of their economic or social benefit to Norfolk<sup>59</sup>.
- 3.41 Policy 7 of the LTP, dealing with Strategic Connections, highlights the importance of the A47, as part of the European TEN-T network. It seeks to bring about an improvement in journey time reliability in and around Norfolk, and encourages local agencies to work together to enhance the SRN. It explains that enhancing the connections between Norfolk's 3 international gateways, namely Norwich International Airport and the ports at Great Yarmouth and King's Lynn, will help boost the contribution they make to Norfolk's economy.
- 3.42 Improvements to the Postwick junction and the protected corridor for the proposed NDR are both shown on the BLP Proposals Map<sup>60</sup> (as modified following adoption of the JCS in 2011). The Scheme is shown as located at the end of a proposed Bus Rapid Transit (BRT) corridor linking the BBP/BGBP area with the city centre. These schemes are also shown, diagrammatically in the proposed implementation plan for NATS, contained within the JCS<sup>61</sup>.

<sup>&</sup>lt;sup>56</sup> DD229

<sup>&</sup>lt;sup>57</sup> DD230

<sup>&</sup>lt;sup>58</sup> Sustainability Appraisal, incorporating a Strategic Environmental Assessment, Health Impact Assessment and a Carbon Impact Assessment for Connecting Norfolk, Norfolk's 3<sup>rd</sup> Local Transport Plan" January 2011

<sup>&</sup>lt;sup>59</sup> See Annex 1 to Doc HA/40

<sup>&</sup>lt;sup>60</sup> DD366

 $<sup>^{61}</sup>$  DD330, page 61

- 3.43 Policy 6 of the JCS covers a range of transport aims, including the need to implement NATS; significant improvement to the bus, cycling and walking network including BRT; and enhancing Park & Ride. The JCS also specifically identifies the Postwick junction improvement as one of a package of measures required to deliver growth and facilitate modal shift<sup>62</sup>.
- 3.44 JCS Policy 9, already referred to above, also highlights that the transport infrastructure required to implement NATS, deliver growth and support the local economy will include the construction of the NDR; significant improvement to the bus, cycling and walking network, including BRT on key routes in the Norwich area; enhancing the Norwich Park & Ride system; and junction improvements on the A47 Norwich Southern Bypass.
- 3.45 The above points demonstrate the importance of the A47 trunk road in the region and highlight the need to ensure that the Postwick junction operates well as part of the SRN.

## **Scheme Details**

- 3.46 <u>Scheme Objectives</u>. In light of the above points, doing nothing is not a sensible option as general traffic growth means the performance of the junction would deteriorate over time. The Scheme has therefore been developed, with the following objectives:-
  - to improve the operation of the A47 trunk road junction;
  - to remove the possibility of a HA "Article 14 (now Article 25) Direction that planning permission be not granted" for allocated employment development at BBP (including BGBP);
  - to release land to the north of Dussindale Park for 600 new houses, unlocking potential for at least another 1,000 houses;
  - to provide additional jobs at BBP (including BGBP) and support the continued success of the Norwich economy;
  - to co-locate housing and jobs to encourage sustainable commuting;
  - to make allowance for connection of the planned NDR and the additional traffic which could result from it;
  - to make allowance for the future planned expansion of the Postwick P&R site;
- 3.47 <u>Scheme development and design</u>. A key consideration that has influenced the design of the Scheme is the need to ensure that traffic using the slip roads to exit the A47 (both eastbound and westbound) would not experience congestion on a scale that would risk queues extending back close to or onto the mainline carriageway. Any such queues would impact directly on the ability of the A47 to cater for "through" traffic safely and conveniently. Extensive or unpredictable queues present both a safety hazard and an inconvenience to road users.
- 3.48 In addition, there are a number of physical, engineering, operational, and practical constraints that limit the realistic options to both address the existing problems and provide the capacity to cater for the committed development<sup>63</sup>. In summary they comprise the River Yare/Railway Bridge; the existing Postwick Bridge; the traffic capacity of the existing junction; the traffic capacity of Yarmouth Road (West); the vertical profile of the A47 at this location; the

<sup>&</sup>lt;sup>62</sup> DD330, para 5.47

 $<sup>^{63}</sup>$  See section 6.2 of Doc HA/03/1 and Figure 3 in Appendix A to DD370

- presence of a high pressure gas main to the east of the junction; Heath Farm; Postwick Village; and the BGBP.
- 3.49 Furthermore, whilst the Scheme is justified on its own merits, provision of the NDR is a key part of NCC's transport policy, as noted above. An application for a Development Consent Order for the NDR is currently being prepared, and a Statement of Community Consultation has just been issued. Therefore, in developing the design of the Postwick junction improvements the potential effects of the NDR on the Scheme have been considered, in physical and operational terms. The potential effects of the permitted expansion of the Postwick P&R site have also been taken into account.
- 3.50 Having regard to the above constraints NCC explored a number of options for the Postwick Hub junction, both as part of the NDR scheme and as a stand-alone proposal, in an attempt to design a safe junction improvement which could accommodate the committed development and planned growth whilst retaining the existing A47 eastbound slip roads<sup>64</sup>. However, traffic modelling tests on these various alternative options have shown that releasing the constraint at the P&R junction could cause severe queuing on Yarmouth Road (West). This would block the North West roundabout and extend back on the A47 eastbound diverge slip road and onto the main A47 eastbound mainline carriageway.
- 3.51 These options included a lane drop on the A47 under the existing Postwick Bridge and the introduction of a second successive diverge slip road. But proposals for retention of the eastbound diverge slip road have not been pursued because the minimum spacing between diverges could not be achieved in accordance with the appropriate guidance<sup>65</sup>. Applications for Departures from Standard were submitted but were not successful. Furthermore, a road safety audit (included within DD267) highlighted that the successive diverge slip road layout might be confusing to drivers and could result in late lane changes and collisions.
- 3.52 Accordingly, for safety reasons, it has been found necessary to stop up the existing eastbound diverge slip road and provide a new, separate eastbound diverge slip road. This would also require the provision of a new eastbound merge slip road<sup>66</sup> and, in turn, would require a new bridge crossing the A47 in order to provide a connection between a new Postwick North-East roundabout and the P&R junction<sup>67</sup>. The Scheme layout also includes a Broadland Gate link, a Business Park roundabout and a Business Park Link, to serve the proposed BGBP development<sup>68</sup>. The published Scheme layout is shown in Appendix B to the SoC (Volume 2)<sup>69</sup>, with the general signing strategy for the Scheme shown in Appendix C to this same document.
- 3.53 Despite the concerns of some objectors, the Scheme would not close access to Thorpe St Andrew and Great and Little Plumstead. All existing journeys would remain achievable by means of alternative routes, and all local roads would remain open, but inhabitants of and visitors to these villages would need to use

<sup>&</sup>lt;sup>64</sup> paras 6.3.8-6.3.13 and para 8.1.8 of Doc HA/03/1

<sup>&</sup>lt;sup>65</sup> DMRB Volume 6 Section 2 Part 1: TD22/06 Layout of Grade Separated Junctions - para 4.30

 $<sup>^{66}</sup>$  paras 8.2.1-8.2.4 and para 6.3.19 of Doc HA/03/1  $\,$ 

 $<sup>^{67}</sup>$  The constraints which dictate the positioning of this new bridge are set out in paras 8.11.1-8.11.3 of Doc HA/03/1

<sup>&</sup>lt;sup>68</sup> See Appendix B to DD370

<sup>&</sup>lt;sup>69</sup> DD355

- the new road layout. Both eastbound and westbound traffic would still be able to join and leave the A47 at Postwick in order to travel to or from these villages.
- 3.54 There are 2 PMA which would be affected by the Scheme. Heath Farm currently has a PMA off Broadland Way, north of the Postwick North-West roundabout. As part of the Scheme, a minor realignment of this PMA would be required. The second PMA, serving The Grange, allows eastbound traffic to enter this property by turning left off the A47. However, this "entry only" access arrangement is unsatisfactory in terms of highway safety as it creates a potential conflict with traffic joining the trunk road from the eastbound merge slip road.
- 3.55 It is therefore proposed to stop up this PMA and provide a replacement via the new Postwick North-East roundabout. This is not shown in the draft Side RO as it has been negotiated and agreed separately, and was subject to a separate planning application submitted to BDC in March 2010<sup>70</sup>. Planning permission was granted by BDC in May 2010 and renewed in March 2013<sup>71</sup>.
- 3.56 Postwick Footpath No 2, which lies to the east of the Scheme and runs south from Smee Lane to the A47 (which it crosses at grade), would be stopped up and diverted. It would follow a new alignment<sup>72</sup> which would increase the length of journeys for pedestrians by about 780 m, but would avoid the need to cross the A47 mainline carriageway at grade. The new route would therefore provide a significantly safer option than the current route.
- 3.57 The current pedestrian and cycle facilities across the existing Postwick Bridge would be altered, removing the existing northbound and southbound oncarriageway facility for cyclists. Instead, the Scheme would provide a shared-use facility along the western side of the bridge, linking to the shared-use facilities on the A1042 Yarmouth Road (West) and the new facilities proposed as part of the P&R extension, which include a 3.0 m wide off-carriageway shared-use link from the P&R signalised junction to Oaks Lane<sup>73</sup>. The P&R junction would include a signal-controlled crossing with on-demand phases for pedestrians and cyclists. These proposals are consistent with both the Norwich Cycle Map<sup>74</sup> and a strategic cycle map produced by Sustrans<sup>75</sup>.
- 3.58 To ensure that cyclists would not be disadvantaged by the proposed stopping up of the eastbound diverge slip road, a modification to the draft Side RO is now proposed, as discussed later in this Report.

# Funding<sup>76</sup>

3.59 The Government's Community Infrastructure Fund (CIF) was specifically targeted to support locations designated as "Growth Points", such as Norwich. The CIF bid for £21 million set out a series of objectives (consistent with the Scheme objectives set out in paragraph 3.46 above), and also included an objective to unlock growth for another 10,000 houses. At that time, this was consistent with

 $^{71}$  See DD209 and DD327

 $<sup>^{70}</sup>$  See DD208

<sup>&</sup>lt;sup>72</sup> See Appendix C to Volume 2 of the Statement of Case (DD370)

<sup>&</sup>lt;sup>73</sup> See Appendix P to Doc HA/03/2

<sup>&</sup>lt;sup>74</sup> DD182

 $<sup>^{75}</sup>$  DD183 - see also Appendix Q to Doc HA/03/2

<sup>&</sup>lt;sup>76</sup> See paras 7.3.1-7.4.7 of Doc HA/02/1

- the proposals set out in the emerging JCS and also took into account the delivery of the NDR (as part of the JCS).
- 3.60 In part, this remains, as one of the objectives of the Scheme is to make an allowance for the connection of the NDR, if that scheme is delivered in the future. However, the provision of the further housing (up to a total of 10,000) within Broadland is the subject of further, on-going examination following the legal challenge to the adopted JCS referred to above. The Scheme is therefore not presented in the context of delivering this housing, but it is directly associated with unlocking the housing figure of 1,600 which has been retained in the JCS.
- 3.61 The CIF bid received funding confirmation in March 2009<sup>77</sup>, conditional on Ministers granting Programme Entry to the NDR. Programme Entry of the NDR into the Department's Local Authority Major Schemes Programme was approved in December 2009<sup>78</sup>, and the DfT made it clear that the Postwick junction improvement was being funded separately through the CIF.
- 3.62 However, following the national elections in 2010, the new Coalition Government announced its CSR and as a result, major road schemes requiring DfT funding were put on hold<sup>79</sup>. Following completion of the CSR, the DfT informed NCC that for the purposes of prioritising investments, the NDR as approved in December 2009 and the CIF scheme at Postwick Hub were being considered as a single scheme<sup>80</sup>. Following submission of a Best and Final Bid (BAFB), NCC was subsequently informed that funding had been agreed and Programme Entry for the scheme was reconfirmed<sup>81</sup>.
- 3.63 One of the conditions attached to this approval was that the overall scheme had to be implemented in accordance with the proposals as set out in the BAFB, including that it would be delivered within the timescale set out in the bid, namely that Postwick Hub would be delivered in advance of the NDR. Accordingly, although the 2 elements have been combined in a single Development Pool bid, the intention was always that the Postwick Hub Scheme could proceed separately from and in advance of the NDR.
- 3.64 Further clarity on this point was provided in a letter from the DfT<sup>82</sup> which confirmed a maximum funding contribution of £86.5 million, to include the funding reserved for the Postwick Hub. The letter confirmed that this funding reserved for the Postwick Hub would be released in advance of that for the NDR, subject to satisfactory completion of all remaining statutory procedures.

## **Transport Assessment**

3.65 The Scheme has been tested for peak periods for an assumed year of opening (2015); in the medium term when 50% of the dependent development is assumed to occupied (2020); and in the longer term when 100% of the dependent development is assumed to occupied (2030). The detailed ARCADY<sup>83</sup> results show that the roundabouts are predicted to operate satisfactorily, with

 $<sup>^{77}</sup>$  Announcement by CLG and DfT on 27 March 2009 – see page 23 of Doc HA/02/2

 $<sup>^{78}</sup>$  Letter from DfT dated 8 February 2010 – see page 35 of Doc HA/02/2

 $<sup>^{79}</sup>$  Fuller details are provided in paras 7.3.8-7.3.9 of Doc HA/02/1

 $<sup>^{80}</sup>$  Letter from DfT dated 9 November 2010 – see page 33 of Doc HA/02/2

 $<sup>^{81}</sup>$  See DD244 & DD245 and pages 41-43 of Doc HA/02/2  $\,$ 

 $<sup>^{82}</sup>$  see page 45 of Doc HA/02/2

<sup>&</sup>lt;sup>83</sup> Assessment of Roundabout Capacity and Delay software

- low levels of queuing on all arms<sup>84</sup>. This can be seen diagrammatically in Appendix G to the TFR<sup>85</sup>, which shows the predicted queuing and delays at the Scheme junctions for peak hours in the 3 forecast years, compared to the situation which would exist if nothing is done to the Postwick junction.
- 3.66 The highest delays would occur at the proposed signal junction which would replace the P&R roundabout. LINSIG<sup>86</sup> results show that this junction would operate satisfactorily in the AM peak and inter-peak periods but would be heavily loaded by traffic in the PM peak<sup>87</sup>. However, the signal timings would be adjusted and a queue management system would be used to ensure that queues on Postwick Bridge would not extend back to impede the North-West roundabout. In practice, the MOVA<sup>88</sup> control system would be installed to optimise the operation of the traffic signals for dynamic, real-time traffic conditions.
- 3.67 Overall the delays at this junction would be modest, when compared to the long delays that would be experienced if nothing was done to the Postwick junction. Whilst there would still be some delays at Northside roundabout for westbound traffic, they would be much shorter than in the DM scenario for 2015 and 2020. Sensitivity checks have been undertaken which demonstrate that the junction assessments are robust and that the Scheme could accommodate the consequences of higher levels of locally generated traffic, including from the 600 dwellings proposed at Brook Farm<sup>89</sup>.
- 3.68 In addition, the design of the roundabouts on the Broadland Gate Link Road have been tested to assess whether they would perform acceptably if there was a future connection to the NDR. These tests indicate that with some minor changes to the roundabout geometries, all of the new Scheme roundabouts would operate satisfactorily with acceptably small queues and delays<sup>90</sup>. The performance of the Meridian Way and Northside roundabouts would also be substantially improved, as the NDR would provide relief to the Yarmouth Road (West) corridor, thus eliminating the substantial queues and delays that occur on it at present and that are forecast in the future without the NDR.
- 3.69 With a connection to the NDR the degree of saturation at the signalised junction would exceed the target of 90% in both 2020 and 2030 in the PM peak and in 2030 in the AM peak, although the queues would be contained acceptably in these cases. As already noted, the proposed queue management system would control the signal settings to ensure that queues would not extend back to the Postwick North-West roundabout exit<sup>91</sup>.

#### **Economic Assessment**

3.70 The Scheme has been appraised in isolation, without the dependent developments, following WebTAG Unit 3.16 (Draft) guidance<sup>92</sup>. The economic

<sup>&</sup>lt;sup>84</sup> Tables G8-G13 in Appendix G to the Traffic Forecasting Report (DD336); Tables 6.4, 6.5 & 6.6 in Doc HA/05/2

<sup>&</sup>lt;sup>85</sup> DD336

 $<sup>^{86}</sup>$  Computer assessment program for traffic signal-controlled junctions

 $<sup>^{87}</sup>$  Tables G.19-G.27 in Appendix G to DD336; Table 6.7 in Doc HA/05/2

 $<sup>^{\</sup>it 88}$  MOVA: Microprocessor Optimised Vehicle Actuation

<sup>&</sup>lt;sup>89</sup> paras 6.6.1-6.6.4 of Doc HA/05/1

<sup>90</sup> para 6.7.1-6.7.2 of Doc HA/05/1; Tables H.23-H.30 of Appendix H to DD336; and Tables 6.18 & 6.19 in Doc HA/05/2

 $<sup>^{91}</sup>$  Tables H.31-H.36 of DD336; Table 6.20 in Doc HA/05/2 and para 6.7.2 in Doc HA/05/1

<sup>&</sup>lt;sup>92</sup> DD322 - Web-based Transport Appraisal Guidance

- benefits of land use development have also been assessed in accordance with this WebTAG guidance and the Gross Value Added (GVA) benefits of enabling 5,000 jobs at BGBP and Laurel Farm have also been assessed<sup>93</sup>.
- 3.71 As distances and times for some journeys through the Postwick junction would increase, transport user benefits assessed using TUBA<sup>94</sup> indicate that the Scheme would produce total Present Value Benefits (PVB) of -£74 million in the 60 year assessment period (at 2010 prices, discounted to 2010)<sup>95</sup>. The Present Value of Costs (PVC) is estimated to be £25 million and the Scheme would therefore have a Benefit Cost Ratio (BCR) of -2.9. The vast majority of these disbenefits would arise from small changes in journey times of less than 2 minutes, rising to up to 5 minutes in the worst case in 2030, whereas most of the benefits would derive from larger time savings of more than 5 minutes.
- 3.72 The accident analysis for the Scheme forecasts an increase in total PIAs, but a reduction in fatalities when compared with the DM scenario. This would be offset by increases in serious and slight casualties, such that there would be an overall monetised disbenefit of £4.19 million<sup>96</sup> (at 2010 prices, discounted to 2010). This disbenefit is not unexpected, because even though the Scheme is designed to safe, modern design standards the proposed layout would result in longer travel distances for a number of journeys through the junction.
- 3.73 Transport disbenefits are to be expected from a new development access if the appraisal only assesses its impact on existing highway users, and does not take account of new travel generated by the development. This is the situation here, and it is therefore important to have regard to the benefits which would arise from the dependent development.
- 3.74 The land use development benefits, assuming implementation of the Scheme, are equal to the Planning Gain (PG) arising from the development less the Transport Externality Cost (TEC) and Other Externalities (OE). PG has been calculated for BGBP assuming that 3 ha and 12 ha are unlocked in 2015 and 2020 respectively, and a further 15ha of office development takes place between 2020 and 2030. For Laurel Farm, PG has been calculated assuming that 2 ha and 7 ha are unlocked in 2015 and 2020 respectively, and a further 8 ha of mixed development takes place between 2020 and 2030 on non-previously developed land<sup>97</sup>.
- 3.75 The DfT confirmed that TEC should be calculated for a 30 year period, from 2015 to 2044, and that it should use the approach detailed in draft WebTAG Unit 3.16. Although this is entitled "Appraisal in the Context of Housing Development", Section 4 explains that much of the guidance is likely to be readily applicable to other forms of land use that impact on transport and, in some cases, can be dependent on some form of transport intervention. The approach entails using 2 transport model runs, namely, without the dependent developments but with the Scheme; and with the dependent developments and with the Scheme. The methodology behind the calculation of the TEC means that it would be lower with

<sup>93</sup> See DD362 - Postwick Hub Junction Scheme - Economic Appraisal Report

 $<sup>^{94}</sup>$  DfT software used to assess transport user benefits of transport schemes

 $<sup>^{95}</sup>$  Table 8.1 in Doc HA/05/2

 $<sup>^{96}</sup>$  Calculated with COBA (Cost Benefit Analysis) software - see Section 7 of Doc HA/05/1

<sup>97</sup> paras 8.3.4-8.3.6 of Doc HA/05/1

- the dependent development, than it would if development was more widely distributed across the local districts and constrained to NTEM.
- 3.76 Put another way, with the implementation of the Postwick Hub Scheme the TEC would be lower with the development close to Postwick, than with a wider distribution of development. This outcome is consistent with the draft WebTAG 3.16 guidance and means that in this case the TEC would be negative. The OE refers to the loss or gain in amenity value of the land compared to its existing use. As a result, the overall development benefits arising from the provision of new housing (at least 600 homes) and employment (5,000 jobs) have been calculated to be significant, at £494 million <sup>98</sup>.
- 3.77 The GVA economic assessment has been conducted over a 30 year time horizon and a discount rate of 6% has been used. In addition, an assessment has been made that only two-thirds of the development would occur elsewhere if it were not to proceed at BGBP or Laurel Farm<sup>99</sup>. With all these factors taken into account, the "additional" GVA which would result from releasing the BGBP and Laurel Farm developments has been estimated to be £246 million and £132 million respectively, giving a total of £378 million in 2010 prices discounted to  $2010^{100}$ .
- 3.78 These development and GVA benefits would significantly outweigh the transport disbenefits of £74 million and clearly demonstrate that the Scheme would provide a significant economic benefit, both locally and to the wider economy. Accordingly, with these points in mind, the Scheme is considered to represent good value for money.

# **Environmental Assessment and other Scheme impacts**

- 3.79 The environmental impacts of the Scheme have been considered on several occasions, including as part of an Environmental Impact Assessment (EIA) carried out in 2007/2008 on outline designs for the BGBP and on the full designs for the improvement to the Postwick junction<sup>101</sup>.
- 3.80 They have also been considered in 2 Scoping Opinions given by BDC in August 2008 in relation to BGBP and the Scheme<sup>102</sup>; in an EIA carried out in March 2009 in relation to minor changes to the Scheme prompted by the Postwick P&R extension<sup>103</sup>; in an updated EIA carried out in 2011 in relation to BGBP and the Scheme<sup>104</sup>; in an environmental assessment for the HA carried out in August 2012 on cultural heritage impacts<sup>105</sup>; and in a further, revised environmental statement in April 2013 in relation to BGBP and the Scheme<sup>106</sup>.
- 3.81 In light of the above points the HA produced a Record of Determination dated 14 May 2013<sup>107</sup> that no significant environmental effect was likely to result, that was not already addressed by the previous EIAs.

 $<sup>^{98}</sup>$  paras 8.3.4-8.3.6 and 8.4.4 of Doc HA/05/1, and Section 7.2 of DD362

<sup>99</sup> See Doc HA/39

 $<sup>^{100}</sup>$  paras 8.3.8-8.3.9 and 8.4.5 of Doc HA/05/1, and Section 7.1 of DD362  $\,$ 

<sup>&</sup>lt;sup>101</sup> Broadland Gate Planning Application - ES Vol 1 (December 2008) (DD141) & Vol 2 (December 2008) (DD142)

 $<sup>^{102}</sup>$  Appendix 1 of Vol 2 of the Revised ES (DD147)

<sup>&</sup>lt;sup>103</sup> DD215

<sup>&</sup>lt;sup>104</sup> Broadland Gate Planning Application - ES - Revised Vol 1 (June 2011) (DD146) & Vol 2 (June 2011) (DD147)

<sup>105</sup> DD387

<sup>&</sup>lt;sup>106</sup> Broadland Gate Planning Application - ES – Revised Air Quality, Noise and Water Resource Assessments (DD371)

<sup>&</sup>lt;sup>107</sup> Doc HA/10

- 3.82 <u>Land Use and Agriculture</u><sup>108</sup>. The Postwick area is identified as having high quality Grade 2 agricultural soils and the Scheme and associated access roads would result in the loss of some 9.8 ha of this land. In addition, 3 small areas of Grade 2 agricultural land, amounting to some 0.76 ha, would be severed by the scheme footprint. These areas would be converted into native planting of mixed trees, shrubs and grasses, and would be an ecological benefit of the Scheme as the sensitive planting proposed would increase the biodiversity of the area.
- 3.83 The current owner of the farm affected has confirmed that the remaining agricultural land would continue to be viable for farming<sup>109</sup>. The loss of agricultural land due to the construction of the access roads would result in a permanent negative impact on agricultural economic activity in the area, but this would be limited to within the Scheme.
- 3.84 The loss of agricultural land is an important matter, as it is referred to in the statutory tests for proposed road infrastructure, in the Highways Act 1980. However, adopted Policy 9 of the JCS has identified 25 ha of land in the vicinity of the Scheme for a range of employment uses, much of which would have to be on agricultural land. This indicates that the loss of agricultural land in this area, and for these proposals, has been considered acceptable in planning terms. In any case, the land lost would only be a very small percentage (less than 0.05%) of the total Grade 2 land in the Greater Norwich Development area, and the loss in this case should therefore not weigh heavily against the Scheme.
- 3.85 <u>Cultural Heritage</u><sup>110</sup>. The EIA identified low to neutral effects on archaeology and cultural heritage which would not be significant, assuming appropriate mitigation would be carried out. It is also a planning condition that an Archaeological Written Scheme of Investigation be developed and approved before any works commence. A Written Scheme of Investigation has been produced and is currently being reviewed for approval by the County Archaeologist.
- 3.86 <u>Ecology</u><sup>111</sup>. The EIA determined that there are numerous species in the area of the Scheme which might be impacted. Similarly there are some areas of habitats that would be permanently lost if the Scheme was built, although no protected areas would be directly or indirectly impacted. A number of mitigation measures have been included in the design to offset some of the negative effects, and the overall slight adverse effect would not be significant.
- 3.87 <u>Landscape Impact</u><sup>112</sup>. Whilst the Scheme would have an impact on the landscape setting, the area lies on the urban fringe and the setting is already impacted by the A47, the relatively new developments in the area and the P&R site. The overall effect of the Scheme on the landscape would therefore be neutral, as new planting would provide a slight beneficial effect which would balance the slight adverse effect of loss of agricultural land.
- 3.88 <u>Lighting</u><sup>113</sup>. Although lighting of the roads and junctions has the potential to create a visual impact at night, this would be minimised by using downward reflectors, using low impact lighting. In any case, the existing Postwick Junction

 $<sup>^{108}</sup>$  Paras 4.14-4.17 of Doc HA/06/1

<sup>&</sup>lt;sup>109</sup> See Appendix B to Doc HA/06/2

 $<sup>^{110}</sup>$  Section 5 of Doc HA/06/1

 $<sup>^{111}</sup>$  Section 6 of Doc HA/06/1

<sup>112</sup> Section 7 of Doc HA/06/1

<sup>113</sup> Section 7 of Doc HA/06/1

- and the P&R site are already lit, so the additional lighting is not likely to create a significant change in this visual feature.
- 3.89 <u>Air Quality</u><sup>114</sup>. The air quality in the immediate vicinity of the Scheme is generally good, and there is no Air Quality Management Area defined within 4 kilometres of the Scheme footprint. The recent revised assessment on air quality<sup>115</sup>, used updated traffic forecasts and modelled air quality changes at specific locations where sensitive receptors were identified to exist (mainly along road corridors in the wider area).
- 3.90 The significant pollutants are nitrogen dioxide and fine airborne particles<sup>116</sup>. The air quality assessment has shown that the concentrations at the relatively small number of residential properties near to the junction would remain below the standards set to protect health. At some residential properties, concentrations with the scheme are predicted to increase by a small amount, and at others to decrease. Concentrations of all 3 pollutants are predicted to be well below the air quality objectives at all receptors and the effects of the Scheme on air quality would not be significant.
- 3.91 <u>Water resources and drainage</u><sup>117</sup>. With appropriate drainage designs the ES concluded that there would be no significant impacts on groundwater or surface water, and that the impact on flood risk would be neutral. This conclusion was confirmed in the revised ES assessment<sup>118</sup>. The ESs have been considered by the Environment Agency and there are no outstanding matters of concern. The assessments undertaken also demonstrate that there would be no unacceptable risks to water resources from spillages arising from traffic accidents.
- 3.92 The road drainage is designed to infiltrate into the ground and accordingly there would not be any significant standing water to create a breeding ground for mosquitoes, as feared by some objectors. In any case, the maintenance regime for the drainage network would be in accordance with standard practice operated by NCC. The ES also concluded that there would be no significant risk from the scheme on ground conditions (including potential contaminated land)<sup>119</sup>.
- 3.93 <u>Noise</u><sup>120</sup>. Baseline noise conditions were measured by surveys completed in October 2008<sup>121</sup> and the noise levels used in the revised ES assessment are deemed to be still valid, as no significant changes have occurred in the area since these earlier surveys. There are a number of receptors in the area which would be particularly sensitive to noise. These are the residential buildings at Heath Farm; The Grange; residential areas adjacent to Green Lane (about 900 m to the north-west of the junction); and Postwick village, to the south-east of the junction. Background noise in the area is dominated by existing traffic and is at a level such that noise should be taken into account in the planning process.
- 3.94 The revised ES assessment concluded that in the short term, on Scheme opening, impacts would be less than 1dB at all sensitive receptors and classed as

 $<sup>^{114}</sup>$  Section 9 of Doc HA/06/1

<sup>&</sup>lt;sup>115</sup> DD371

 $<sup>^{116}</sup>$  known as PM10 and PM2.5

<sup>&</sup>lt;sup>117</sup> Section 11 of Doc HA/06/1

<sup>&</sup>lt;sup>118</sup> DD371

 $<sup>^{119}</sup>$  Section 12 of Doc HA/06/1

<sup>&</sup>lt;sup>120</sup> Doc HA/09/1

<sup>&</sup>lt;sup>121</sup> Section 11.5, Volume 1 of the Environmental Statement, DD146

- negligible adverse; in the long term, with the Scheme, impacts at all locations would be less than 2dB and classed as negligible adverse; in the long term, without the Scheme, impacts at all locations would be less than 1dB and classed as negligible adverse.
- 3.95 In summary, the significance of the effects of changes in road traffic noise would be classed as slight adverse at all receptors, both on opening and in the long-term. In the long term, in the absence of the Scheme, the significance of noise effects would also be slight adverse. The overall conclusion is therefore that there would be no significant noise effects associated with the Scheme.
- 3.96 <u>Climate change</u><sup>122</sup>. Climate change is an important issue, with the Government setting a challenging target in the Climate Change Act 2008 to reduce emissions of greenhouse gases by 80% by 2050 (from a 1990 base), through a series of 5-year "Carbon Budgets". The Carbon Plan 2011 sets out the pathway to achieve these reductions in the UK from all sectors, with particular focus on the 4<sup>th</sup> carbon budget, covering the period 2023-2027. The Carbon Plan is supported by the Government's White Paper (2011), which focuses on transport, as does the European Commission White Paper (2011).
- 3.97 The key to achieving reductions from the transport sector over the longer term is seen to be the use of ultra-low emission vehicles, with biofuels, traffic management and local sustainable travel also playing a role. There is no suggestion that development is to be constrained, but the Framework emphasises that locations for development should be as sustainable as possible.
- 3.98 In assessing the impacts of the Scheme, the methodology set out in the DfT's Design Manual for Roads and Bridges (DMRB)<sup>123</sup> has been used, along with up to date vehicle emission factors taken from Defra's<sup>124</sup> Emission Factor Toolkit<sup>125</sup>. Using this methodology, changes in emissions have been looked at across the wider road network, as climate change effects need to be related to the overall change in carbon dioxide emissions from the region and not just the change that would take place in the immediate vicinity of the Postwick junction.
- 3.99 Carbon dioxide accounts for around 99% of greenhouse gas emissions from motor vehicles and an assessment has therefore been made of these emissions from traffic on the road network in the study area, both without and with the Scheme, in 2015, 2020 and 2030. In addition, assessments have been undertaken for the immediate area around the junction, including all new links and changed links, as well as short sections of unaffected road.
- 3.100 The total number of trips on the wider road network is essentially the same in the without-Scheme and with-Scheme scenarios, as the network is constrained to match the expected growth for the area as a whole, as set out in the TFR<sup>126</sup>. The difference between the "without Scheme" and "with Scheme" scenarios is thus the location where future growth takes place. With the Scheme, the BGBP and BFLF traffic is added to the network in the area around Postwick Hub junction, and growth elsewhere across the road network is reduced correspondingly.

<sup>&</sup>lt;sup>122</sup> Docs HA/07/1 & HA/07/2

<sup>123</sup> DMRB, Volume 11, Section 3, Part 1 - DD313

<sup>124</sup> Defra – The Department for Environment, Food and Rural Affairs

<sup>&</sup>lt;sup>125</sup> Defra's Emission Factor Toolkit version 5.2c, published in January 2013.

<sup>126</sup> see section 4 of DD336

- 3.101 Operational emissions of carbon dioxide are predicted to increase across the study area by less than 0.01 kilotonnes (kt) in 2015 and by around 0.55kt in 2020. In 2030 a decrease of 0.85 kt is predicted. These values are extremely small in comparison with the 7,487 kt emitted in 2010 from all sources in the 8<sup>127</sup> local authorities within which the study area road network lies. As such they are considered to be insignificant. As would be expected, carbon dioxide emissions are predicted to increase in all 3 years in the immediate vicinity of Postwick junction with the Scheme. These increases reflect the additional traffic emissions which would arise from the BGBP and Laurel Farm, coupled with some longer distances travelled, and off-set by reduced congestion around the junction.
- 3.102 The monetised value of the change in operational carbon dioxide emissions over a 60 year period is a net PVB of £1.9 million in 2010 prices discounted to 2010, associated with a 37 kt reduction in carbon dioxide emissions. These changes are so small that they are essentially "noise" within the calculations. The monetised benefits/disbenefits should therefore be treated as insignificant.
- 3.103 There would be a one-off figure of 6 kt of carbon dioxide emissions associated with the construction of the scheme, but this should be compared with the calculated saving of 37 kt of carbon dioxide during a 60 year operational period. In summary, there would be no material change in carbon dioxide emissions contributing to climate change with the Scheme. Furthermore, the Scheme is not inconsistent with any of the climate change policies.

## Summary of environmental matters

3.104 Overall, the environmental impacts of the Scheme would be modest. They have been fully considered by BDC's Planning Committee in the context of the ES submitted with the BGBP planning application and have been found to be acceptable in the planning process. Whilst recognising that there would be some modest adverse impacts, the Committee balanced those against the economic benefits that the Scheme would unlock in terms of growth in essential housing and employment opportunities<sup>128</sup>. This is consistent with the planning policies, as set out in the Local Plan and the adopted JCS.

## **Statutory Criteria**

- 3.105 The draft Orders meet the statutory criteria that must be satisfied to ensure full compliance with the Highways Act 1980<sup>129</sup>. Changes to the trunk road network which would be authorised by the Slip RO<sup>130</sup> have had regard to the requirements of published plans and policies at national and local levels<sup>131</sup>. There would be no significant effects of the Scheme on land use, including agricultural land take, and the effect on individual farm holdings would be acceptable.
- 3.106 Although there would be some disadvantageous effects arising from the Scheme, primarily in terms of slightly increased journey length and time for some movements, the proposed changes are considered to be expedient because if nothing is done, over time the performance of the junction would gradually deteriorate. This is shown in the TFR in relation to the Postwick P&R junction,

<sup>127</sup> King's Lynn and West Norfolk, Breckland, Nth Norfolk, Broadland, Norwich, Sth Norfolk, Gt Yarmouth, and Waveney

Planning Committee Minutes (16 August 2006 - DD192) and (17 August 2011 - DD201)

<sup>&</sup>lt;sup>129</sup> DD24

<sup>&</sup>lt;sup>130</sup> DD01 & Doc HA/60

 $<sup>^{131}</sup>$  Section 4 of Doc HA/01/1 & Sections 4, 5 & 6 of Doc HA/04/1

- with queuing in 2015 and 2020<sup>132</sup>. Moreover, without improvement the junction is inhibiting committed development in this part of Norwich which is required to achieve the economic objectives of both national and local planning policy.
- 3.107 The scale of the disbenefits, which would be relatively modest in terms of the effects on individual users, would be more than outweighed by benefits provided in terms of unlocking a substantial level of economic growth and providing a junction with the capacity to effectively accommodate that growth. The impact of the Scheme on the local environment is summarised in the Appraisal Summary Table<sup>133</sup>, which demonstrates that there are no significant environmental effects that could not be addressed adequately with mitigation<sup>134</sup>. The Scheme would therefore be expedient for the purpose of extending, improving or reorganising the national system of routes in England and Wales.
- 3.108 Turning to the draft Side RO, provision is being made for statutory undertakers' apparatus and liaison with the companies affected is on-going. Furthermore, where a highway, public footpath or PMA is to be stopped up, a reasonably convenient alternative route or access would be provided, as described in the Schedule and Plans of the draft Side RO, including proposed modifications as detailed below<sup>135</sup>.
- 3.109 The HA believes that all the above requirements would be met and that all statutory procedures have been followed correctly to ensure that there would be no impediment to implementation. The draft Orders provide the full range of powers necessary to implement the proposed Scheme, including mitigation.

## **Modifications requested to the Orders**

- 3.110 As a result of ongoing discussions with objectors, and further examination of the Orders, the HA is proposing a number of minor modifications to both the draft Slip RO and the draft Side RO. For the draft Slip RO a total of 5 modifications are put forward, as detailed in Doc HA/60. These are all to address either minor drafting errors, or to add clarity and ensure consistency between the Order, the Schedule and the Plan. None of these proposed modifications are contentious.
- 3.111 For the draft Side RO, 15 modifications are proposed, as set out in Docs HA/58 and HA/59. Once again the vast majority of these relate purely to drafting errors or minor matters which are not contentious. It is, however, appropriate to summarise one modification as it is put forward to address a specific matter raised by objectors.
- 3.112 It relates to the existing eastbound diverge slip road which was originally proposed to be completely stopped up. However, it is now proposed that a shared-use facility should be provided along the line of this slip road, allowing cyclists to use it to connect with the existing and proposed cycle network at the Postwick North-West roundabout. For cyclists travelling westbound down the slip road, "end of cycle route" and "cyclists dismount" signs would be provided to inform users that the facility did not continue across the A47 Viaduct<sup>136</sup>.

134 see also Doc HA/06/1

<sup>&</sup>lt;sup>132</sup> Table G.3 of the Traffic Forecasting Report (DD336)

<sup>&</sup>lt;sup>133</sup> DD195

<sup>&</sup>lt;sup>135</sup> see DD02, DD07 & Docs HA/58 & HA/59

 $<sup>^{136}</sup>$  see Appendix R in Doc HA/03/2

3.113 This proposal, referred to as Proposed Modification 7, would require a modification to both the draft Side RO Schedule and the draft Side RO Plan. In addition, it would necessitate other minor drafting changes to both Schedule and Plan which are referred to as Proposed Modifications 6 and 8.

## **Overall Summary**

- 3.114 The Scheme is deliverable in the short term and would provide a significant economic benefit both locally and to the wider economy without detriment to the SRN. Whilst it would give rise to a small transport disbenefit, it would satisfactorily address the transport problems that have been identified at the Postwick Interchange. In particular it would:
  - provide additional highway capacity which would unlock the opportunities for the delivery of residential and commercial growth in the vicinity of the junction;
  - safeguard the SRN and address the HA's concerns regarding the impact of development on the safe operation of the A47 trunk road;
  - enable delivery of the BGBP development;
  - facilitate further improved linkages with the local road network including a possible future NDR;
  - maintain or improve facilities for pedestrians and cyclists by providing new facilities;
  - achieve these aims whilst minimising environmental impacts through measures of mitigation;
  - help serve the planned JCS growth strategy.
- 3.115 The Scheme has been subjected to a detailed appraisal on engineering, social, economic, environmental and amenity considerations and it satisfies the Secretaries of States' objectives. The HA believes that all statutory procedures have been followed correctly. The statutory tests would be met and there is no impediment to implementation. The published Scheme would provide the most appropriate solution for satisfying all of the objectives outlined above and the draft Orders provide the full range of powers necessary to implement the proposed Scheme, including mitigation. The Orders should therefore be made, in accordance with the draft versions as proposed to be modified.

## 4. THE CASES FOR THE SUPPORTERS

4.1 A total of 34 supporters submitted representations in favour of the Scheme, but only one of these, Mr Starkie, appeared at the Inquiry. The points raised are set out below, along with a summary of the written submissions made by Mr Olley on behalf of Ifield Estates Limited, the promoter of the BGBP scheme.

The material points are:

# Mr C Starkie, Managing Director of the New Anglia Local Enterprise Partnership (LEP) $^{137}$

4.2 New Anglia LEP (covering Norfolk and Suffolk) is one of 39 LEPs established in 2011 to bring together business and public sector partners to co-ordinate and stimulate economic development across England. Its role is to enable the creation of more private sector jobs and remove the barriers to growth.

<sup>&</sup>lt;sup>137</sup> Docs SUP/33/01-02 and Doc INQ/03

- 4.3 It recently began consulting on its Plan for Growth<sup>138</sup> and is working with local authority colleagues on a City Deal for Norwich which will help create new jobs in Greater Norwich and Norfolk as a whole. The greatest concentration of growth will be Greater Norwich, as the city is by far the largest economy within Norfolk and Suffolk, and one with significant prospects for growth. In this regard the area around the Postwick Hub is seen as a key business location.
- 4.4 At present there is a real shortage of quality office accommodation in Norwich and the development planned for BBP, BGBP and Laurel Farm is needed, but without the Postwick Hub this development cannot happen. It is clear that the Government sees improvement of the Postwick junction as a priority because it has allocated funding for it. The LEP's Plan for Growth also sees the Postwick Hub as a priority and, most importantly, sees it as a project which needs to be delivered in its own right.
- 4.5 Although concerns have been raised about the potential impact on Great Yarmouth, the LEP believes the business parks around the Postwick Hub are needed and are complementary to the land in Great Yarmouth. Great Yarmouth does not have enough development-ready land to cope with the £50 billion plus of development opportunities presented by the energy sector in the next few years, and the Postwick Hub development would enhance the overall offer.
- 4.6 The LEP therefore supports the proposals for Postwick Hub and the associated proposed improvements to public transport, particularly the extension of the well-used P&R site. The junction improvement would open up badly needed employment land and a significant housing site, as well as enable public transport improvements and improve connectivity. Put simply it is a scheme the LEP wishes to see happen sooner rather than later.

# Mr E Olley on behalf of Ifield Estates Limited (IEL) 139

- 4.7 As promoter of the BGBP scheme, IEL has considerable experience of property development and its Directors have over 70 years experience in the commercial property sector. Between them they have been responsible for, or associated with, the planning and development of over 185,000 sqm (2 million sqft) of major business park and town centre schemes. IEL (Company No 05577784) was formed specifically for the BGBP project.
- 4.8 The BGBP site was chosen to provide a high quality business park because of its accessibility and visibility from the A47 and the fact it could provide a natural extension to the existing employment area of BBP. This view has subsequently been acknowledged in the JCS which seeks to extend the Broadland Business Area by a further 25 ha.
- 4.9 IEL entered into a long term agreement with the landowners in 2006 to bring forward a proposal for a major new mixed use business park and during 2007 and 2008, in conjunction with NCC, it worked up the plans for the BGBP scheme. Detailed market analysis was undertaken in 2008 and a planning application was subsequently submitted jointly between IEL and NCC in 2009 for the Postwick Hub improvements (detailed application) and the BGBP scheme comprising a total of some 64,300 sgm of commercial development (outline application).

<sup>138</sup> See Doc HA/51

 $<sup>^{139}</sup>$  Docs SUP/02/01-02 and Doc INQ/03

- 4.10 BDC resolved to grant planning permission in December 2009 and a Section 106 planning obligation was subsequently agreed (including a public transport contribution of about £2.050 million) and executed in April 2011. This planning permission was challenged by the developers and managers of the adjacent, existing BBP (Lothbury Property Trust Company Limited) and was subsequently quashed by the High Court. However, following the necessary updating of supporting information, taking account of the legal challenge, the application was reconsidered by BDC in August 2011 and received overwhelming support, with planning permission being issued in October 2011.
- 4.11 With the confirmation of the Slip RO and Side RO, together with an implementable planning permission and the expected commitment of pre-lettings and possible land sales, IEL would be in a strong position to secure long term institutional funding to deliver the BGBP scheme. IEL has appointed Lambert Smith Hampton, one of UK's leading advisors on business parks, and given the mix of uses within the planning permission they are confident they can secure early land sales to owner occupiers, together with pre-leasing commitments, once a definitive programme for delivery can be established.
- 4.12 The criticism from other objectors, regarding the lack of marketing of the BGBP scheme, fails to recognise that much of the difficulty in marketing is a result of uncertainty surrounding the deliverability of the Postwick Hub highway improvement scheme. This has been compounded by Lothbury's challenge to the original planning permission and objections to the draft Orders. Without the certainty of an implementable planning permission, seeking investors and/or occupiers is not financially sensible or sustainable.
- 4.13 IEL is aware that objectors to the draft Orders, primarily (SNUB) and the Norfolk and Norwich Transport Action Group (NNTAG), have made negative assertions about the standing of the company and inconsistencies in its accounts. However, some of the objectors have wrongly referred to details of Company No 03965948, which was formed in 2000 and dissolved in 2006. This is not and never has been the company that NCC has been working in partnership with. The present IEL was incorporated in September 2005 and over the past 5 years has expended considerable sums in the procurement and promotion of the BGBP project.
- 4.14 IEL has also noted that it has been criticised by some objectors for not attending this Inquiry, but would respond by pointing out that the Postwick Hub Scheme is not a matter with which IEL has been directly involved, or for which it has any direct responsibility. IEL has therefore been content to leave the matter of dealing with the delivery of the Postwick Hub improvement works with NCC.

# Other Supporters<sup>140</sup>

- 4.15 Other supporters include businesses and landowners in the area, who make regular use of the existing Postwick junction, together with local Councils and other public bodies with responsibilities or interests in the Norwich area. A full list of the supporters and the matters raised can be found at Doc INQ/03. As many of these supporters raised similar points, they are summarised below.
  - Improvement of the existing Postwick junction is long overdue as its lack of capacity is impacting adversely upon existing businesses and proposed development in the area and is not sustainable;

<sup>140</sup> see Doc INQ/03

- Construction of the new road system and the commercial development which has planning permission would unlock important business sites to the east of Norwich and bring economic growth to the area and much needed new employment and housing;
- The junction improvement would help deliver up to 5,000 jobs and 1,600 houses that are "locked" at present;
- An improved junction and associated infrastructure would also deliver an expanded P&R site and a substantial contribution towards public transport that forms part of a city-wide transport improvement project;
- The existing physical constraints mean that the proposed Scheme is the only design that would provide the required junction capacity whilst meeting national highway design standards;
- There is a deficiency in housing supply and early delivery of the road improvements would enable housing development to take place and make a substantial contribution towards meeting current housing need;
- The Scheme would provide a much-needed improvement to the existing situation that results in queuing on the A47 trunk road with vehicles backing up on the existing slip road and congestion on all the other related roads and at adjacent roundabouts, particularly in the morning and evening rush hours;
- The junction improvement would also provide a connection to the national trunk road network for the proposed Norwich NDR, which has recently been allocated funding by the DfT;
- Whilst improvement of the Postwick junction is an essential project in its own right, in conjunction with the NDR it would provide the high quality link to Norwich Airport that will be vital to the offshore energy industries; together these schemes hold the key to a wider transport strategy which has the potential to transform travel choices in Norwich and is fundamental to the city's economic prosperity;
- The Postwick junction improvement and the NDR are essential infrastructure requirements to deliver NATS. In turn, NATS is essential to the delivery of growth set out in the JCS;
- The junction improvement and a future NDR would take traffic off the narrow country lanes;
- Whilst people's right to object to the draft Slip RO and Side RO is acknowledged and respected, the inquiry should not revisit planning issues already considered by BDC, or extend into the merits of the NDR which will have to go through its own planning process.

## 5. THE CASES FOR THE OBJECTORS

5.1 Many of those who spoke against the Scheme and the draft Orders at the Inquiry raised broadly similar points. These are therefore not repeated in detail for each objector, but can be seen in full in the referenced documents. As both NNTAG and the Norwich Green Party (NGP) made substantial contributions to the Inquiry process, and gave detailed closing submissions, their cases are presented first, followed by the cases of the other objectors who appeared at the Inquiry.

The material points are:

# Norfolk and Norwich Transport Action Group (NNTAG) – Case presented by Ms D Carlo and Mr K Buchan $^{141}$

## <u>Overview</u>

- 5.2 The HA maintains that the Scheme is required to tackle tailbacks onto the A47 and that the draft Orders are required to implement conditional planning permission for dependent development. However, the layout for Postwick Hub pre-dated the BGBP and it is no coincidence that the lengthy slip road which NCC conceived in 2006 to serve the NDR is the same slip road which the HA now says is required to replace the eastbound diverge slip road. Indeed, a selection of HA papers for 2006-2010, provided by NNTAG<sup>142</sup>, show that the Scheme was specifically designed to form a key part of the NDR. BGBP became a convenient device for NCC to promote the NDR-A47 Postwick Hub under the guise of a £19 million access road serving a business park.
- 5.3 Since publication of the draft Orders in November 2009 and their readvertisement in February 2012, completely new traffic data has been collected and issued and this has seriously disadvantaged objectors. This new traffic information should have led to a review of the published proposals against other solutions and layouts. That this has not been undertaken is a reason not to make the present Orders, but to withdraw them.
- 5.4 Furthermore, irrespective of whether the Scheme has Local Authority funding, it has planning permission as a private development and not as a County highway project. This means that DfT Circular 02/2007<sup>143</sup> and Guidance on S278 Agreements<sup>144</sup> applies. Under paragraph 31 of the Guidance, the Secretary of State cannot fetter the exercise of his discretion whether or not to make the Orders. Joint representation of the developer and the HA at this Inquiry has fettered the Secretary of State in his duty.
- 5.5 If the draft Orders are made, NCC will use Postwick Hub as the connection to the A47, in support of its application for a Development Consent Order for the NDR under the Planning Act 2008. There could be a seamless move from a business park development and access road to designation of NDR/Postwick Hub as a Nationally Strategic Infrastructure Project (NSIP). The obtaining of planning permission for the NDR-A47 Postwick Junction through these back-door means has involved an abuse of process. There is real danger that the Scheme could result in a legal challenge.
- 5.6 At the hearing on 25 July 2013 into the remitted part of the JCS, the GNDP acknowledged the need for an addendum to the Sustainability Appraisal (SA) of reasonable alternatives in respect of transport carbon emissions, because they conceded that they had not undertaken such an assessment as part of the SA. They will now generate an addendum on transport carbon emission which will go through the required consultation process.
- 5.7 Objectors at this Postwick Hub inquiry similarly consider that the ES was wrong to screen out climate change at an early stage. The ES failed to consider the increase in journey lengths and traffic reassignment on carbon emissions. The

<sup>144</sup> Doc HA/14

<sup>&</sup>lt;sup>141</sup> See Docs OBJ/INQ/28/1/01-2/05 and Doc INQ/2

<sup>&</sup>lt;sup>142</sup> See Doc OBJ/INQ/28/2/04

<sup>&</sup>lt;sup>143</sup> DD136

- NSIP application, scheduled for submission in Autumn 2013, will require an EIA and so a deferred decision on the Postwick Hub Scheme, to allow time for this omission to be remedied need not result in a lengthy delay.
- 5.8 A junction improvement scheme ought to deliver net benefits to the local community who will use the junction, chief amongst which should be measurable journey time savings. It should also have neutral or beneficial impacts on driver safety and the environment. On these and other grounds, the Postwick Hub is a poor scheme, made significantly worse by the proposed slip road closure. If the Inspector is not satisfied on both counts, a recommendation to make the Orders should not be made.
- 5.9 This Scheme has an exceedingly poor BCR of -2.9 and would result in a substantial number of "losers", including the 15,000 residents of Thorpe St Andrew; existing businesses (for example at BBP); future residents in north-east Norwich; and future businesses such as BBP phase 2. In contrast there would only be a small number of "winners", namely businesses on and users of BGBP. However, the promoter of BGBP, IEL, did not attend the inquiry and its investment to date in BGBP has been paltry. It is open to question whether this speculative development will ever be built.
- 5.10 The HA argues that the negative BCR must be balanced against the benefits of the scheme, in particular the job growth the BGBP would deliver. But such benefits are not accorded much weight in DfT WebTAG guidance as there is no certainty that they would materialise. The use of TEC and GVA figures to try to justify such a poor BCR is unprecedented for a transport intervention. It cannot be trusted as non-draft guidance does not exist for it, and simply adding the 2 figures together introduces double counting<sup>145</sup>.

## Statutory Tests in the Highways Act 1980

- 5.11 The Scheme would fail the test of expediency as the HA accepts that the proposed layout would increase journey times and costs for users. All movements would be made less convenient and slower, except (if lights are green) the A47 East to A1042 West and Broadland Way. There would be more distance to travel and more junctions to negotiate. This would result in more fuel consumption, more time spent travelling and more accidents, as a result of increased vehicle kilometres.
- 5.12 Mr White, for the HA, indicated that the SATURN model would re-assign trips in order to avoid or minimise inevitable delays, and accepted that the Scheme would result in some drivers re-assigning their journeys to avoid Postwick Hub. Indeed, the forecast figures show that there would be 500 fewer vehicles using the eastbound diverge slip road in the DS PM peak compared with the DM PM peak<sup>146</sup>. This is a not insubstantial number of vehicles.
- 5.13 The HA's evidence shows that a large majority of traffic currently using the eastbound diverge slip road would enter/exit Norwich via the Southern Bypass junction at Trowse in order to travel to Yarmouth Road West<sup>147</sup>. However, the junctions at the city end of this route are very congested and even small changes

 $<sup>^{145}</sup>$  Doc INQ/04: Day 8 Transcript, page 101 line 8 to page 102 line 20  $\,$ 

<sup>&</sup>lt;sup>146</sup> Doc HA/54

<sup>&</sup>lt;sup>147</sup> Doc HA/RB/OBJ64/03

in traffic can have large consequences. The HA's claim<sup>148</sup> that the deterrent effect of the Scheme on the eastbound diverge slip road would be offset by the west bound slip road is not the case.

## National Planning Test

- 5.14 Postwick Hub is not shown as a national scheme in the HM Treasury Paper "Investing in Britain's Future"<sup>149</sup>, and no improvements to the A47 trunk road are included in this document. The NDR is shown as a Local Authority Scheme but no reference is made to Postwick Hub as a separate scheme. Although NCC's NDR Development Pool Business Case to DfT<sup>150</sup> indicated an earlier start date for Postwick Hub, the DfT continues to refer solely to NDR and makes no separate reference to Postwick Hub as anything other than part of a NDR.
- 5.15 Whilst the HA maintained that the National Infrastructure Plan (NIP)<sup>151</sup> and its update<sup>152</sup> show that Local Authority major transport schemes identified in the Development Pool are national policy, these documents only contain a general reference to these schemes as a whole. The NDR is listed, but not Postwick Hub specifically. Mr Allfrey for the HA highlighted a DfT letter of 3 August 2012<sup>153</sup> to demonstrate that Postwick Hub is a separate scheme, but no specific policy reference to Postwick Hub as a stand-alone scheme can be demonstrated.

## **Economic Growth.**

- 5.16 The Scheme would not meet national objectives to grow and support the economy. Its poor BCR of -2.9 has worsened from -2.7 in August 2012, as a result of further traffic surveys in 2012-2013, and to date the only DfT appraisal of Postwick Hub as a stand-alone scheme took place in 2008. The DfT letter of 27 March 2009<sup>154</sup> remains pertinent when it says that without the NDR in place Postwick Hub would be significantly over engineered. It can only be justified as part of the NDR. As part of the Full Approval Process which the DfT letter of 3 August 2012<sup>155</sup> says that Postwick Hub must undergo, a further appraisal to reflect the latest information on expected costs and benefits will be carried out.
- 5.17 There can be no guarantee that Ministers will accept a scheme with a poor BCR and whilst the HA claims the transport disbenefits would be offset by economic benefits gained from the proposed BGBP, this position was challenged by Mr Buchan who appeared for NNTAG as a transport witness.
- 5.18 <u>Non-conventional benefit calculations</u>. The guidance used for the unconventional benefits is draft, and has been so since January 2010<sup>156</sup>. Whilst the HA has provided 2 examples of negative BCRs being countered by other factors<sup>157</sup>, one is for a strong environmental benefit, not captured in appraisal, whilst the other is on safety grounds. Both of these topics are covered by existing full guidance

<sup>&</sup>lt;sup>148</sup> Doc HA/54

<sup>&</sup>lt;sup>149</sup> Doc HA/34

<sup>&</sup>lt;sup>150</sup> DD245

<sup>&</sup>lt;sup>151</sup> DD337

<sup>&</sup>lt;sup>152</sup> DD338

<sup>&</sup>lt;sup>153</sup> DD283

<sup>&</sup>lt;sup>154</sup> Page 29 of Doc HA/02/2

<sup>&</sup>lt;sup>155</sup> DD283

<sup>156</sup> Doc INQ/04: Day 8 Transcript, page 89, line 1

<sup>&</sup>lt;sup>157</sup> See Doc HA/47

- Units in WebTAG, but the use of GVA or TEC to reject an established appraisal would set a dangerous precedent.
- 5.19 Contrary to the HA's case, TEC and GVA should not be counted together<sup>158</sup>. The 2 are mutually exclusive since GVA depends on there being no reductions in development to balance an increase at Postwick, while the TEC depends on there being just such a reduction, in Norwich, Broadlands and South Norfolk<sup>159</sup>. It is not accepted that the TEC is a valid approach, nor is the way in which it is calculated accepted, as the trips which would be reduced are in areas which are modelled differently. There would be implications from moving trips from a coarsely modelled area into a finely modelled area.
- 5.20 The HA has clarified the relationship between zones and how they connect to the coarse or fine model network<sup>160</sup>, but has not provided information requested by NNTAG to demonstrate where the benefits are predicted to be occurring. Without that, it is impossible to be certain what the effects of differential modelling might be and the TECs should, therefore, be regarded as untested and thus not proven.
- 5.21 Future development at Postwick has been subject to the Broadland District parking standard, but other future development has not. Thus a trip switched from a future development elsewhere in Broadland District, which has not yet obtained planning permission, but is in the model, will not have been subject to such a restriction<sup>161</sup>. If it had been, the car trips would have been fewer, and the TECs less or non-existent. Overall, if TECs are to be calculated, the model and its assumptions must be the same for all trips. The comparison has not been on a like for like basis and this makes the TECs unreliable.
- 5.22 <u>Concerns about the transport model</u>. The transport model is very weak in relation to public transport, walking and cycling; and the public transport assignment model was not updated in 2012 with the Highway model, but left as in 2006<sup>162</sup>. Moreover, the effectiveness of the public transport improvements proposed to accompany the BGBP development<sup>163</sup> have not been tested with the variable demand model, and no use has been made of standard access mapping software, to assess changes in public transport servicing of the development at Postwick<sup>164</sup>.
- 5.23 Furthermore, a variety of figures have been given for public transport mode share which do not seem to be compatible with one another, and this issue has not been fully clarified<sup>165</sup>. Public transport services have not been coded fully outside Norwich, although some trips originate from those areas<sup>166</sup> and there is no mode split forecasting of walking and cycling<sup>167</sup>.
- 5.24 <u>Carbon emissions</u>. No account has been taken of the predicted failure to meet expected reductions in carbon. The HA and NNTAG disagree over whether there is any relationship between the transport forecasts for the effects of individual

 $<sup>^{158}</sup>$  para 8.4.7 of Doc HA/05/1  $\,$ 

<sup>159</sup> para 3.14 of Doc HA/RB/OBJ28/03

Doc INQ/04: Day 8 Transcript, page 80, lines 1-12

<sup>&</sup>lt;sup>161</sup> Doc INQ/04: Day 8 Transcript, page 79, lines 1-6

 $<sup>^{162}</sup>$  para 4.1.3 of Doc HA/05/1

<sup>&</sup>lt;sup>163</sup> Doc INQ/04: Day 8 Transcript, page 68-69, lines 15-18

<sup>&</sup>lt;sup>164</sup> Doc INQ/04: Day 8 Transcript page 70, line 11

 $<sup>^{165}</sup>$  Doc INQ/04: Day 8 Transcript, pages 73-75, & page 88  $\,$ 

<sup>&</sup>lt;sup>166</sup> Doc INQ/04: Day 8 Transcript, page 75 line 11 to page 76, line 17

<sup>&</sup>lt;sup>167</sup> Doc INQ/04: Day 8 Transcript, page 71, lines 10-12

- schemes, and the overall targets for carbon reduction. NNTAG cannot agree that each single scheme has no relevance to the carbon target, and that the scale of the cost is given by looking at the difference between the HA carbon prediction and the projected outcome to achieve the target, as detailed in NNTAG's Addendum $^{168}$ . This amounts to £437 million in 2010 prices. The HA do not dispute these numbers, only whether they apply to the scheme $^{169}$ .
- 5.25 Although Professor Laxen stated that he had not included some factors when producing his forecast of carbon in future years<sup>170</sup>, NNTAG has worked on the basis that speculative further improvements should not be included in the carbon forecast, and that the figures tabled by Professor Laxen therefore remain as the HA's best estimate.
- 5.26 In summary on the above points, the only reliable figure before the Inquiry is the strongly negative BCR as calculated, plus accident disbenefits. This accords with the common sense point that a large number of existing users would disbenefit by having to drive further round the new gyratory. On this basis the scheme should be rejected.
- 5.27 Moreover, introducing unconventional numbers to counter this has been shown to be double counted in one instance, and completely opaque in another. If the appraisal is to be extended in this way, it is only fair to include a disbenefit for carbon. In fact, this is a far more serious issue since failing to meet targets or at least contribute a fair share will result in the UK having to find other carbon savings to meet its target.

The Statutory Test for Local Planning.

- 5.28 NCC's 3rd Local Transport Plan<sup>171</sup> lists the NDR as a scheme in Policy 7 "Strategic Connections", but does not list Postwick Hub. The Scheme is only referred to in the explanatory text under Policy 6 "Transport Infrastructure to Support Growth", which states that delivery of the Postwick Hub will alleviate current capacity issues, serve new development at Broadland Gate and form the junction between the NDR and the A47.
- 5.29 NNTAG acknowledges that the dependent developments are shown in the JCS. However, local plans may be subject to review where circumstances change. The evidence base for a 25 ha further extension to BBP is based on the JCS Employment Growth Study (2008), but this study signalled a preference for the city centre, Norwich Research Park or Longwater over BBP for new, additional 50,000 sqm of office space. A key part of the JCS related to this Scheme (the NEGT) has been remitted and the re-opened JCS hearing has yet to decide the soundness of the proposed NEGT growth location.
- 5.30 On its own, Postwick Hub would not deliver BBP Phase 2, nor would it deliver 600 dwellings at Brook Farm, as both of these are also dependent on the delivery of the link road extension from Broadland Way to Plumstead Road East, in accordance with Policy TSA3 in the saved policies for BLP. The additional 1,000 dwellings which the HA claims the Scheme would release are not allocated to a specific site. The most likely geographical area is to the north of Plumstead Road

<sup>&</sup>lt;sup>168</sup> Doc OBJ/INQ/28/1/05

<sup>&</sup>lt;sup>169</sup> Doc INQ/04: Day 8 Transcript, page 112, lines 19-20

<sup>170</sup> Doc INQ/04: Day 8 Transcript, page 115, line 1 onwards

<sup>&</sup>lt;sup>171</sup> DD229

- East, and in these circumstances this further housing is also contingent upon construction of this link road extension and not solely upon Postwick Hub.
- 5.31 Although construction has begun on the 500-space extension to the Postwick P&R site, in order to keep the planning permission alive, there is no guarantee that the work will progress to completion given that the existing 500-space facility is operating at below 40% occupancy rate in 2012/13.
- 5.32 There is little to instil confidence in the delivery of BGBP as the business park has outline planning permission only. The applicants have not submitted a full planning application and no business case or marketing plan was made available to the Inquiry. Whilst IEL's written statement claimed that the company was formed in 2005 for the purposes of BGBP, the company registration shows that IEL was formed as a speculative venture. IEL also claimed that the company has spent hundreds of thousands of pounds on the scheme, but the company accounts for year ending 2009 show little expenditure and activity in the run up to planning application submission.
- 5.33 Mr Radford of Lothbury Property Trust challenged the BGBP growth assumptions as unrealistic and IEL were not present at the inquiry to counter his expert view. In addition, HA witnesses agreed that growth at Postwick would result in a shift from growth in Norwich and South Norfolk and acknowledged that consideration had not been given to the impact of the Scheme on the potential loss of employment from Great Yarmouth, a weak coastal economy.
- 5.34 The HA argued that the Scheme does not rely on any growth that may come forward in the NEGT. But this does not tally with the draft Orders Explanatory Statement<sup>172</sup> and Updated Explanatory Statement<sup>173</sup> which say the scheme is required to deliver the growth for the NPA as outlined in the Regional Economic Strategy (37,000 dwellings and 26,000 jobs in the JCS Plan period to 2026).
- 5.35 The Inspector dealing with the remitted part of the JCS, running in parallel with this Inquiry, adjourned the hearing on grounds that he did not have sufficient information to find the remitted JCS sound. Any change to the NEGT such as redistribution of housing to other geographical locations would alter the traffic case for the Scheme. This would leave the road layout with spare road capacity which would attract new traffic.
- 5.36 Finally under this heading, as the Postwick Hub layout has been determined by the NCC's plans for a NDR-A47 Postwick Junction connection, a large amount of road space could be unnecessarily provided if the NDR proposal does not come to fruition, for whatever reason.

## **Environmental Statement**

5.37 The original ES for the BGBP planning application remains inadequate, despite undergoing several iterations. As climate change was screened out by BDC, the ES does not assess the carbon impact of longer journeys around the Hub, or traffic reassignment, and impacts on travellers were not fully assessed as the ES did not identify longer journey times, trip reassignment or higher fuel costs. Moreover, the assessment of cumulative impacts on travellers was inadequate. Taking into account the NDR and NEGT, all that the ES concluded was that the

<sup>173</sup> DD04

<sup>&</sup>lt;sup>172</sup> DD03

- cumulative impacts would have a beneficial effect on walking and cycling. The ES did not assess the impacts of increased orbital travel movement around Norwich on such matters as carbon, land use, noise and air quality.
- 5.38 Nor did the ES consider the socio-economic impacts on Great Yarmouth. In unlocking employment land the Scheme would be highly likely to attract people to commute by car from Great Yarmouth, an unemployment blackspot, to jobs at Postwick, but the ES did not consider the impact of traffic generated by the Scheme on the A47 between Norwich and Great Yarmouth. Doc HA/34<sup>174</sup> shows an increase in traffic congestion on the A47 Acle Straight between 2010 and 2040 and traffic growth would have an adverse impact on the Broads Area and on Halvergate Marshes SSSI.
- 5.39 Finally, the choice of alternatives did not include the proposed Scheme without slip road closure or without the BGBP or the Postwick P&R extension.

## **Public Consultation**

- 5.40 Inadequate consultation has been undertaken. The first time the public was consulted on Postwick Hub was at the pre-application exhibition held by the developers in October 2008. At that time the Scheme did not include closure of the eastbound diverge slip road. The HA's lack of public consultation runs counter to Government policy on public participation in road planning since 1973. The HA's 2012 document "Guidance on Public Consultation"<sup>175</sup> emphasis that consultation must be undertaken when proposals are still at a formative stage, before a decision has been reached on which option to implement. The HA did not hold a public exhibition until March 2012, long after publication of the draft Orders and planning permission for BGBP.
- 5.41 By not carrying out public participation on alternative junction layouts before publishing statutory Orders, the HA failed to comply with Government policy on trunk road planning. Had policy been complied with, all these issues and all alternatives for Postwick would have been able to be discussed by interested parties at the planning stage, well before any statutory Order plan was published.

## Consideration of Alternatives

- 5.42 The HA states that the Scheme layout is required to tackle tailbacks onto the A47 and when it identified this issue in its proof of evidence to the BLP inquiry in March 2005 the measures it recommended were proportionate, involving a second bridge over the A47 and improvements to the 2 existing roundabouts.
- 5.43 The HA should consider an alternative DM layout which would involve making only those changes to the present road network which would be necessary to prevent excessive delay and queuing over the time period up to 2030. These could be to widen the slip road, put signals at the junction and widen round to the A1042 towards Norwich. Instead of doing this, the Councils have proposed levering in excessive development and making it dependent upon Postwick Hub. Mr White, for the HA, agreed that alternatives without the BGBP and Postwick P&R extension had not been modelled.
- 5.44 An option without BGBP might have avoided the need for the proposed slip road closure. The failure to consider reasonable alternatives leaves the Postwick Hub

<sup>&</sup>lt;sup>174</sup> Figs 2.1 and 2.2

<sup>&</sup>lt;sup>175</sup> Doc HA/55

- scheme vulnerable to legal challenge. The promoters may claim that it is merely prudent "future proofing" to allow for the NDR and NEGT when considering options, but this does not explain the failure to consider other reasonable alternatives before publication of draft Orders.
- 5.45 AR6 is shown to produce positive traffic benefits, (a PVB of  $\pm \pm 9$  million), and a refinement to this proposal could provide the basis for a more suitable road layout. The costs of this alternative have been inflated by including £2.87 million for land, whereas the published proposal is given a zero land  $\cot^{176}$ . The PVC for a 2012 cost of £9.29 million instead of £12.16 million is (pro-rata) £11.4 million instead of £15 million. That would lift the BCR to  $0.78^{177}$  from the figure of 0.6 as assessed by the HA.
- 5.46 There is nothing in the AR6 description, as published in the press, to say how wide the sections of road proposed should be. The layout assessed by the HA<sup>178</sup> shows no more than 2 lanes on any leg of the gyratory and just one on some sections. Some of the entrance and diverge lanes are also single-lane. This type of gyratory would normally be twice as wide, mostly with 4 lanes, and all entry and exit sections of road would be 2 lanes, with sometimes 3 lanes at entry. Moreover, a gyratory of this type, which is essentially urban, would be signalised, but no traffic signals are assumed or included in the HA interpretation.
- 5.47 The layout does not need to be constrained by the BGBP land to the immediate east and if the layout would operate better by being further east by 200 m-300 m, then that should be examined. Properly designed, evaluated, and developed, AR6 should be able to meet the traffic requirement and have a BCR of greater than +1.0. NNTAG believes that the alternatives such as AR6 and AR14 should be evaluated on an equal footing with Postwick Hub. The Secretary of State will need to be satisfied that all alternatives have been properly considered.

## Summary of the NNTAG case

5.48 For the reasons set out above the draft Orders should not be made. As currently proposed the Postwick Hub Scheme would stand as a monumental mistake resulting from ill judged decision making and mismanaged public expenditure.

# Norwich Green Party (NGP) - Case presented by Cllr A Boswell<sup>179</sup>

#### **Economic Assessment**

5.49 The transport BCR of the Scheme is negative, at -2.9, and the HA acknowledges that this does not represent good value for money when isolated from "external factors"<sup>180</sup>. No assessment of the BCR has been made of the Postwick Hub, unconnected to a NDR, apart from the HA's previous 2012 Economic Appraisal for the postponed Inquiry. The original CIF funding proposal for Postwick Hub calculated a BCR for the NDR as the baseline, and then calculated an incremental BCR with Postwick Hub included<sup>181</sup>. This indicates that the long-term intention of the Scheme promoters is to build Postwick Hub as a connector for the NDR.

 $<sup>^{176}</sup>$  para 6.1 in Doc HA/OBJ121/ALT6

 $<sup>^{177}</sup>$  derived from table 7 in Doc HA/OBJ121/ALT6  $\,$ 

 $<sup>^{178}</sup>$  see drawing R1C150-MP-ALT600

 $<sup>^{179}</sup>$  Docs OBJ/INQ/64/01-09 and Doc INQ/02

<sup>&</sup>lt;sup>180</sup> Para 9.35 to Doc HA/01/1

 $<sup>^{181}</sup>$  Appendix H in Doc OBJ/INQ/64/05, and Doc INQ/04: Day 11 Transcript, page 37-38

- 5.50 The HA has supplied just 2 examples of HA projects that have gone ahead in the past despite having negative BCRs<sup>182</sup>. The first of these, the A69 Brampton Bypass in the late 1980s, went ahead because there were strong environmental grounds that were not included in the BCR appraisal. The second, A590 Newby Bridge, was only built due to a ministerial commitment to improve safety. Neither of these mitigating factors applies in the case of Postwick Hub.
- 5.51 The official position of the DfT<sup>183</sup>, provided at the highest civil service level from evidence given to the Public Accounts Committee, is that few, if any, projects that are low value for money (a BCR of between 1 and 1.5) will be undertaken. It is also the case that no scheme has gone into construction either as Local Authority scheme or as a HA scheme that was not defined as value for money.
- 5.52 A memorandum to the 2010 Transport Committee Select Committee into Transport and Economy<sup>184</sup> comments that the average BCR on 93 HA schemes was 4.66, and for 48 Local Road Schemes was 4.23. The Postwick Scheme falls a long way below these average figures, and at a time of extreme fiscal constraint and over-stretched public funds it would be rash in the extreme to go ahead with a scheme that performs so badly on current economic appraisal methods.
- 5.53 Furthermore, the DfT's guidance on Value for Money (VfM) Assessments<sup>185</sup> indicates that the initial VfM category is identified from the BCR as follows:
  - poor VfM if the BCR is less than 1.0;
  - low VfM if the BCR is less between 1.0 and 1.5;
  - medium VfM if the BCR is less between 1.5 and 2.0;
  - high VfM if the BCR is less between 2.0 and 4.0;
  - very high VfM if the BCR is greater than 4.0;
- 5.54 The Postwick Hub Scheme would come out as worse than "poor" on this measure, and whilst this DfT guidance does refer to the possibility of an "adjusted BCR" being constructed, no adjusted BCR was provided to the Inquiry.
- 5.55 The TEC and GVA estimates cannot be trusted. The WebTAG guidance used for unconventional benefits has been in draft form since January 2010 and NNTAG, has indicated that the way the TEC and GVA have been added together in the HA evidence is unprecedented and involves double counting. The HA accepted that the TEC and GVA figures should not simply be added together<sup>186</sup>, and in these circumstances there can be no case for proceeding with the Side RO and Slip RO.
- 5.56 Moreover, the TEC and GVA calculations are flawed because of the assumptions made about the growth of the economy in the Norwich area up to 2030. The Inquiry heard evidence from Mr Radford<sup>187</sup>, an expert in Investment Management, development and the real estate finance sector, which casts doubt on the medium term prospects of business rental growth. With the current uncertainty about the economy it would be extremely risky to accept an Economic Appraisal that uses the TEC and GVA factors to attempt to offset the very poor VfM assessment that the BCR indicates.

<sup>&</sup>lt;sup>182</sup> See Doc HA/47

<sup>&</sup>lt;sup>183</sup> A report from Sir David Rowlands KCB, Permanent Secretary, Department for Transport – Doc OBJ/INQ/28/2/04F

<sup>&</sup>lt;sup>184</sup> From Professor Phil Goodwin - see Doc OBJ/INQ/64/05

<sup>&</sup>lt;sup>185</sup> Doc HA/49

<sup>&</sup>lt;sup>186</sup> Doc INQ/04: Day 8 Transcript, page 101, lines 16 and 17, and page 102, lines 15 and 16

<sup>&</sup>lt;sup>187</sup> Speaking on behalf of Lothbury Property Trust Company Limited

5.57 Mr Buchan also tried, repeatedly, to establish the relationship between the TEC calculated and the NTEM zones, but the HA failed to provide this information and it has not therefore been possible to establish the method of calculation of the TEC. The TEC figure must be considered completely untrustworthy if this data cannot be provided. No other examples of TEC and GVA calculations being used to offset a very poor BCR have been provided by the HA, and its approach in this case therefore appears to be unprecedented and extremely risky.

### Appraisal of alternatives

5.58 The appraisal of alternatives has been fraught with problems, including the Scheme promoters' lack of engagement with objectors and the very late delivery of HA analysis of alternative proposals submitted at the Inquiry. In view of the negative BCR and the concerns of residents and businesses regarding the negative impacts of the Scheme, it is vital that a further period for the appraisal of alternatives, involving the full co-operation of the Scheme promoters, is provided before any recommendation is made regarding the Scheme.

## Climate Change

- 5.59 The Postwick Hub Scheme needs to be assessed against the Climate Change Act 2008 and the Framework (2012). Any scheme that generates carbon emissions makes an incremental change to the overall UK Carbon Budget, and the levels of future global carbon emissions accumulated in the atmosphere, in the wrong direction. This is counter to the socio-economic responsibilities to reduce carbon that are inherent in current national and local policy, and may make it harder for the Country to deliver that policy.
- 5.60 Whilst the national "legally binding" target for carbon emissions only exists at the level of the national 5-year Carbon Budgets, there are responsibilities at regional and local level down to the Scheme level. Professor Laxen for the HA agreed that challenging targets have been set for carbon reduction in the 5-year Carbon Budgets<sup>188</sup>, and that it would be a logical conclusion that under-achievement in one sector would require over-achievement elsewhere<sup>189</sup>.
- 5.61 Professor Laxen accepted that all parties have to contribute to regional and national sectorial targets <sup>190</sup> and he further agreed that the responsibility to take the lead is at the Local Authority level, in line with the Government's Localism agenda<sup>191</sup>. The NGP's approach is that ownership of the carbon issue at the local level (for example, by Local Authorities) is an important factor and that an evolving ownership is completely consistent with Localism<sup>192</sup>.
- 5.62 As the planning system is charged with producing reductions in carbon dioxide<sup>193</sup>, in line with its contribution to meeting national Carbon Budgets, there are very strong arguments that would preclude schemes assessed as carbon generators. In addition, any single decision process for scheme or project that increases carbon emissions should take account of a socio-economic responsibility to reduce carbon emissions under the Framework and the Climate Change Act 2008.

 $<sup>^{188}</sup>$  Doc INQ/04: Day 11 Transcript, page 112, line 15

<sup>&</sup>lt;sup>189</sup> Doc INQ/04: Day 11 Transcript, page 116, line 12

 $<sup>^{190}</sup>$  Doc INQ/04: Day 11 Transcript, page 121, line 8

<sup>&</sup>lt;sup>191</sup> Doc INQ/04: Day 11 Transcript, page 122, line 9

<sup>&</sup>lt;sup>192</sup> Doc INQ/04: Day 11 Transcript, page 199, line 8 & page 200, line 16

<sup>&</sup>lt;sup>193</sup> The National Planning Policy Framework, para 94

- 5.63 Although the NGP suggested at the Inquiry that a trigger factor might be useful to eliminate very small carbon generating schemes, it now considers that it was not helpful for it to put forward a specific number for a trigger point "on the fly", under cross examination. It therefore wishes to withdraw its suggested figure of 1,000 tonnes of carbon a year, as not only should this have referred to "carbon dioxide equivalents" but, on reflection, it is considered to be at least an order of magnitude too high for a trigger point on transport schemes. Such detail may well vary from sector to sector and between types of scheme, and would be best determined by a wider policy debate.
- 5.64 A Local Authority major transport scheme must be able to demonstrate it can save carbon emissions, according to the transport sector projections under the Carbon Plan<sup>194</sup>. This assumes that an accurate and reliable carbon assessment may be made of a Scheme, but in this case the choice of the study area for the carbon assessment is the same as the entire network being modelled. This leads to the real effects of the growth attributable to the Postwick Hub Scheme, and its associated carbon footprint, being masked out. Growth within the transport model is being constrained by NTEM, and will be of a similar order in both the DM and DS cases, such that the resulting carbon emissions will also be of the same order. Professor Laxen agreed with this analysis but believes that this is a logical way to assess carbon<sup>195</sup>, whereas the NGP strongly disagrees.
- 5.65 Where the transport model is constrained to NTEM, the study area for carbon appraisal should be more focussed on a smaller area in order to avoid the masking effect and to see the real effects of the Scheme on carbon generation. Professor Laxen states that there is no need to consider the change in carbon dioxide emissions at a very local level other than as part of how they contribute to the change in overall carbon dioxide emissions. For this reason, the focus of the calculations he presents is on the change in total emissions across the entire road network used in the traffic model<sup>196</sup>.
- 5.66 However, this ignores the need to assess carbon impacts that attribute carbon to the Scheme in a realistic way, with no consideration being given to what study area would provide the optimum assessment. The local contribution to overall carbon emissions is exactly what a carbon assessment should seek to assess in a numerical way. Local emissions should therefore not be dismissed, but effort should go into scoping a study area that can be used to calculate their realistic contribution to the change in overall carbon emissions. National guidance is lacking in providing a clear steer as to scoping the study area<sup>197</sup>.
- 5.67 The ES which accompanied the Postwick Hub planning application shows that carbon emissions have not been properly scoped from the outset of this project. This is the basis of the NGP's objection to the 14 May 2013 Notice of Determination on the Environmental Assessment, which showed how carbon emissions have been scoped out of that document too.
- 5.68 A study area which only comprised the roads within the Scheme itself would not be a good choice, but one which uses the whole of the modelled network is also wrong. The best choice of study area would be one between these 2

<sup>194</sup> Doc INQ/04: Day 11 Transcript, page 177, line 19

 $<sup>^{195}</sup>$  Doc INQ/04: Day 11 Transcript, page 136, line 19 to page 137, line 19

<sup>&</sup>lt;sup>196</sup> Para 4.2 of Doc HA/07/1

<sup>&</sup>lt;sup>197</sup> Doc INQ/04: Day 11 Transcript, page 217, line 12 to line 19

- extremes<sup>198</sup>. The HA's climate change evidence cannot be trusted until such a scoping exercise is carried out, and the traffic model is re-run, with NTEM constraining, but on the rationally selected study area.
- 5.69 A scoping exercise that chooses several possible study areas and runs the carbon footprinting calculation in the traffic model on each should be undertaken, to help to select a final, most realistic, study area. Such iterative processing of testing options is common in scientific computation and simulation.
- 5.70 To summarise the NGP's key points on carbon, firstly the carbon projections for transport in the national Carbon Plan have a socio-economic responsibility associated with them at each level in the hierarchy down to the individual scheme. Only in very exceptional circumstances should a transport intervention be made if it cannot demonstrate consistency with the national sector projections, in percentage magnitude (of emission reduction) and direction.
- 5.71 Secondly, the HA has not provided a reliable carbon assessment on which to determine this first point, and in the absence of such information it would be contrary to national legislation and the Framework to proceed with the Scheme, and allow the Side RO and Slip RO to be made.

### Mr A Bowell - The Ramblers' Association 199

- 5.72 Mr Bowell appeared at the Inquiry as the Footpath Secretary (Broadland Area), of the Ramblers' Association. He had continued to discuss his concerns with the HA and NCC in the period before the Inquiry, and also whilst the Inquiry was sitting. Some of Mr Bowell's concerns would be addressed by Proposed Modification 7, detailed earlier, whilst other concerns are dealt with through a signed Statement of Common Ground (SoCG) 200 which also clarifies the remaining areas of disagreement between the parties.
- Mr Bowell would like to see the 1.0 m wide unbound footway which would be 5.73 provided along the line of the diverted Footpath No 2 (Item 1(a) in the SoCG), extended along Church Road to meet with a proposed relocated bus stop at the junction of Church Road with Brundall Low Road (to be relocated as part of the Postwick P&R extension scheme).
- In addition, Mr Bowell would like to see the existing service path over the Yare Viaduct replaced with a shared use footway/cycle track, with segregation from the A47 highway. This would link across the railway bridge to the eastbound diverge slip road modification, and via the existing service track to Whitlingham Lane. Mr Bowell has contacted his local Member of Parliament about this matter in the past. On a final point, if the draft Orders are not made, and the eastbound diverge slip road is therefore kept open, the link to Whitlingham Lane should be reviewed on an alternative alignment.

#### Mr A Woods – Postwick with Witton Parish Council<sup>201</sup>

5.75 Mr Woods, who has lived in the village of Postwick for more than 20 years, spoke at the Inquiry as Chairman of the Postwick with Witton Parish Council. The village has a population of some 400 people and is located less than half a mile

<sup>&</sup>lt;sup>198</sup> Doc INQ/04: Day 11 Transcript, page 217, line 12 to line 19

<sup>&</sup>lt;sup>199</sup> Doc OBJ/INQ/02/01 and Doc INQ/02

<sup>&</sup>lt;sup>200</sup> Doc HA/38

<sup>&</sup>lt;sup>201</sup> see Doc INQ/02

- from the proposed Scheme. The village community has concerns about traffic, but more especially about noise as it already suffers considerably from noise from existing roads.
- 5.76 When the southern bypass was built the bridge across the A47 was considered fit for purpose and fit for the future, but the HA now says that it cannot be extended because of engineering problems and that another bridge has to be built. In view of the amount of commercial and housing development that is planned for this area, and the proposed NDR, it is extremely important to be sure that what is proposed for the Postwick Hub is going to stand the test of time.
- 5.77 There are concerns that the proposed closure of the eastbound slip road would not result in a satisfactory junction. A lot of traffic needs to enter the city from this eastern side, and it does not seem sensible to force this traffic to undertake lengthy detours. The closure of the eastbound slip road was not part of the original design, but was imposed by the HA because of safety concerns. Whilst this is understood, if it had been fully thought through at the outset it may be that a different design solution could have been found. Furthermore, it does not seem right that some parts of the proposed layout would be dual-carriageway whilst other parts would be single-carriageway. Whilst this may well work now, it may not do so in 15 years time. The layout should all be dual-carriageway.
- 5.78 On a more general point, the shadow of the proposed NDR hangs over these proposals. Although the NDR is not part of this Inquiry, Postwick Hub and the NDR should have been dealt with as an integral road system, not in parts. The original planning application for the Postwick Hub should not have been combined with the BGBP proposal. NCC were joint applicants with IEL but there should have been separate planning applications for each part.

# Cllr A Townly – Great and Little Plumstead Parish Council<sup>202</sup>

- 5.79 Cllr Townly appeared at the Inquiry representing both Great and Little Plumstead Parish Council, and Thorpe End Garden Village Residents' Association. There have been substantial increases in traffic volumes through Thorpe St Andrew and the Parish of Great and Little Plumstead, with a large proportion of this going by Green Lane North and Green Lane South to and from the Postwick Junction. As a result there is a clear need for improvements to the current Postwick junction, but the Parish Council does not support the current Scheme.
- 5.80 It would close the eastbound slip road which gives access into Thorpe St Andrew and Great and Little Plumstead Parish and would result in longer, convoluted journeys which would cause more frustration and other associated issues. Strong concerns are expressed regarding noise, greater travel times and about carcinogenic pollution. Moreover, studies have shown that children living near busy roads may be at greater risk of diabetes<sup>203</sup>.
- 5.81 The busiest junction on the A47 is the Thickthorn Interchange, but there are no tailbacks at this junction because state of the art traffic management, in the form of "clever" traffic signalling, monitors traffic movements on a constant basis. This type of control could be used for the Postwick junction with AR4. As this Alternative would keep the slip roads open and would not devour productive

Doc OBJ/INQ/08/01. Cllr Townly based his presentation on documents submitted on behalf of Great and Little Plumstead Parish Council (objector No 48) and also under his own name as objector No 8 – see Doc INQ/02
 See Doc HA/RB/OBJ-08/2

- farmland it is strongly supported by the Parish Council. The currently proposed, over-engineered and costly Scheme is only being put forward to facilitate the start of the NDR, which the Parish Council opposes in its current form.
- 5.82 Concern is also expressed about the BFLF development and the fact that BDC has approved an alignment for the link between Peachman Way and Plumstead Road which is opposed by villagers. The Parish Council sees no good reason why Green Lane South should be closed off, as is currently proposed.
- 5.83 Scarce taxpayers' money could be saved by implementing AR4, which would allow Green Lane South to be kept open. It would also ensure efficient traffic flow in and out of Thorpe St Andrew and surrounding parishes. This would result in reduced congestion, improved journey times, reduced carcinogenic pollution and reduced carbon footprint. The public expects local government to spend taxpayers' money wisely, but the currently proposed Scheme would not be wise expenditure, because alternatives are available.

### Mr R S Lindsay<sup>204</sup>

- 5.84 Mr Lindsay spoke as a private individual; as a Rackheath Parish Councillor; and also as a member of SNUB. The proposed Postwick Hub is an integral part of the NDR, and not a stand-alone scheme as the HA and others maintain. Indeed, NCC has put forward the Postwick Hub and the NDR to the Secretary of State, for inclusion into the NSIP Bidding Programme as a complete package. Opposition to the Scheme and the NDR is overwhelming in the village of Rackheath.
- 5.85 The layout and structure of the Postwick Hub is based on traffic modelling from 2006. There is no call for the Scheme, except as the connection between the NDR and the A47. Traffic levels have decreased in the past few years and the existing junction is perfectly adequate to take present day traffic, and will allow for normal expansion of the local population.
- 5.86 The Hub would cause very lengthy inconveniences to all users from whatever direction they approach it, as the layout is silly and would create nothing less than a huge bottle neck. The NDR would cause more carbon dioxide emissions, as all traffic would have to circumnavigate many more roundabouts resulting in more miles per journey. Concern is also expressed about the proposed destruction of agricultural land. Rackheath contains Grade 2 arable land and this Hub and its accompanying NDR would ruin the countryside forever.
- 5.87 There is no justification in spending millions of pounds on a set of roundabouts to feed a business park which will struggle to fill its premises with clients. There are business units in the surrounding areas that lie empty, and have done for years, because of the economic climate. It is therefore requested that consideration of this Scheme be dropped, and that if at all necessary in the future, an appropriate solution or junction be considered.

# Mrs M Howes<sup>205</sup>

5.88 Mrs Howes spoke as a private individual and stated that she frequently uses the existing roundabouts and has never encountered any problems with holdups or queuing. Adding more roundabouts would cut off minor roads and make it extremely difficult for vehicles to find their way, as people would have to switch

<sup>204</sup> Doc OBJ/INQ/12/01 and Doc INQ/02

 $<sup>^{205}</sup>$  Doc OBJ/INQ/24/01 and Doc INQ/02

lanes for their intended destinations, thereby causing accidents. It would also result in more traffic in Thorpe St Andrew and the Plumsteads and would increase carbon emissions. NCC should concentrate on Great Yarmouth development so as to reduce the number of vehicles coming towards the city to use the P&R, and thereby reducing carbon emissions.

- 5.89 The Postwick Hub is being built to include the NDR, which would cover good productive agricultural land and no doubt cause flooding. There is no dual-carriageway from Norwich to the east coast and the monies allocated, including the £86 million for the NDR, should be used to dual the A47 from Great Yarmouth to Norwich. A start should be made by dualling the Acle Straight, which is an accident black spot. The HA stated that there had been 9 accidents in 5 years on the Postwick junction, but there have been 31 accidents on the Acle Straight in the 3 years up to March 2013.
- 5.90 A good road link to the Midlands would attract more businesses into the county and reduce accidents on this road. The Government recently spent millions of pounds on the East Port at Great Yarmouth, but this is hardly used. In addition, the town, together with Lowestoft, has been declared an Enterprise Zone. Dualling the A47 would accord with Government policy as it would link main centres of population and economic activity and provide access to major ports. It is the only way that new businesses will be attracted to the area. Currently there are more businesses in the south-west of the city, all of which are easily accessible from the A11.

# Mr D Eley - Thorpe St Andrew Town Council<sup>206</sup>

- 5.91 Mr Eley spoke at the Inquiry on behalf of Thorpe St Andrew Town Council which strongly opposes the current design of the Postwick Hub Scheme. It would inconvenience the existing commuters who travel to and from the A47, including the residents of Thorpe St Andrew, which has a population of about 14,000, as well as employees and visitors to local businesses.
- 5.92 Closure of the eastbound diverge slip road would remove the direct access which currently exists to Thorpe St Andrew, the BBP, the A1042 Yarmouth Road into Norwich and the Postwick P&R site and would make these existing journeys longer and more involved. The Scheme would add extra time and mileage to these journeys of between  $^{5}/_{8}$  of a mile and  $1^{1}/_{4}$  miles a journey, or between 156 and 312 miles a year. In either case there would be an increase in frustration, journey times, fuel costs and carbon emissions.
- 5.93 By designing the Postwick Hub to accommodate the NDR, the planners have ended up in trying to put a quart into a pint pot and the decision to infill the space between the new road and the business park with the BGBP, to help pay for it, would exacerbate the problem. If NCC and the HA maintain the view that the eastbound slip road has to be closed in order to make this junction work, then the only conclusion that can be reached is that the proposed access to BGBP and the future access to the NDR is flawed, unacceptable and in the wrong place.
- 5.94 An alternative junction should be provided further to the east, as detailed in AR11. Moving the A47 junction to this new position could be cheaper and simpler

Doc OBJ/INQ/36/01. Mr Eley based his presentation on documents submitted originally by Mr Ford on behalf of Thorpe St Andrew Town Council (objector No 36) and also under his own name as objector No 123 – see Doc INQ/02

to construct than the new infrastructure proposed for the Postwick Hub. AR11 would enable traffic from Great and Little Plumstead to directly access the A47, and the P&R site would be easily accessible without having to use BBP roads. Moreover, it would provide direct access to the BGBP and the future NDR without interfering with or having to use the existing Postwick junction, and there would be no need for traffic lights.

- 5.95 HA witnesses indicated that as the BGBP and BFLF proposals have been endorsed through the planning process, the Secretaries of State should attach considerable weight to these commitments to economic development and housing, in determining the draft Orders. But a commitment has already been given to the existing housing and businesses in Thorpe St Andrew when planning permission was given for their construction. The eastbound slip road should have been treated as a site constraint in the same way as the high pressure gas main. NCC should not be able to remove the prized asset of this eastbound slip road from the local community without the agreement of Thorpe St Andrew Town Council.
- 5.96 All of the information and proposals contained in the inquiry documents have been put forward by experts, either independent or by NCC. Most objectors do not have the expertise to query the information or conclusions contained in any of these documents, and cannot afford to engage experts to do so. In these circumstances the Inspector should cross-examine the witnesses, or call independent experts to query and question the proposed Scheme and any objections to the proposed Alternatives.

### Mr A R Williams<sup>207</sup>

- 5.97 Mr Williams spoke at the Inquiry as a private individual. Rather than dealing with the NDR and the Postwick Hub together, NCC has sliced up the problem into small pieces in order to deal with each one as a separate entity. This approach is wrong and the Postwick Hub scheme cannot be justified as it does not achieve any objectives, other than to provide access to the proposed NDR, which has not yet been approved and is almost certainly to be subject to a Public Inquiry. To use this mechanism to avoid proper scrutiny is not acceptable.
- 5.98 The design of the Scheme will not improve traffic flows or ease congestion as the side roads will be made more difficult to negotiate. The present junction configuration is more straightforward, much less convoluted and provides good access to both the business developments and the eastern fringes of Norwich. There are alternatives which could improve this access for future expansion without building a complicated junction like this. The proposed traffic signal junction on the south side of the A47 trunk road, which would also have to cater for traffic to and from the P&R site, would be a total disaster at peak periods.
- 5.99 The congestion created by the Scheme would necessitate more improvements, with their associated costs, on the road into Thorpe St Andrew. Two railway bridges constrain traffic more severely than any inadequacy of the present interchange and one of these (an arched bridge) effectively reduces the whole road to a single-carriageway, such that pantechnicons can only go down the middle of it. However, the Council does not have any plans to take any remedial action regarding it.

 $<sup>^{207}</sup>$  Docs OBJ/INQ/52/01-02 and Doc INQ/02

5.100 Public transport facilities in the area are totally inadequate. The Councils have encouraged the building of out of town shopping centres and business parks, but if people living to the north or west of Norwich want to come and work at the BBP or BGBP by public transport they would have to travel into Norwich, change buses and come out again. The business case for the continuing expansion of this location is not well made. To continue to draw business from the centre of the conurbation to the fringes increases overall car journeys and will be more likely to exacerbate traffic congestion rather than ease it. This is without taking into account the environmental arguments for reducing car journeys.

# Mr E Newberry<sup>208</sup>

- 5.101 Mr Newberry is a private individual and former Councillor who has lived in Thorpe St Andrew continuously since 1970. The HA has acknowledged that there has never been a major disruption because of an accident at the present junction and that the junction has performed well since it was installed. There are therefore no safety issues that need addressing.
- 5.102 The BFLF development would be served well by the link road proposed as part of that scheme, such that there is no great need for the Postwick Hub Scheme. BGBP could, if ever built, be serviced by Broadland Way with no problems. Millions of pounds could be saved as no new bridges would be required. The money could be put to better uses, such as repairing the existing roads, rather than building new roads that the Councils cannot afford to maintain properly.
- 5.103 The proposed traffic signal junction at the P&R site would be horrendous, and likely to become the worst accident black spot in the county, if not the country. Longer journey times with traffic lights and more roundabouts to be negotiated would result in increased fumes. If an accident were to happen at this traffic signal junction there would be chaos, with massive tailbacks. In addition, the road markings would be distracting and difficult to follow and the amount of street furniture needed would be horrendous, adding further blight to the area.
- 5.104 The Postwick P&R site has no services and has been used less of late. The bus from Postwick used to go via Yarmouth Road and Thorpe Road to the main railway station, but it now needs to go via the Southern Bypass to the county hall junction and requires a change of bus in the city to get to the railway station.
- 5.105 The Scheme would offer very little help to employment in the area as the A47 Acle Straight into Great Yarmouth, and the lack of a railhead, are the main reasons for the lack of companies using the port. Good road lengths and a railhead are needed, not this uneconomical Postwick Hub Scheme.

# Mr S Radford - Lothbury Property Trust Co Ltd<sup>209</sup>

5.106 Mr Radford is the Chief Executive of Lothbury Investment Management and the Director of Lothbury Property Trust, referred to throughout his evidence as just Lothbury. Since acquiring BBP in 2002, Lothbury has overseen the development of over 100,000 sqm (1.1 million sqft) of buildings on the park and has recently obtained planning permission for a Phase 2 of the Business Park (the BFLF development). This will provide a further 14.6 ha of employment land and 600 houses, plus all of the necessary associated infrastructure.

<sup>&</sup>lt;sup>208</sup> Docs OBJ/INQ/77/01-03 and Doc INQ/02

 $<sup>^{209}</sup>$  Docs OBJ/INQ/81/01-05 and Doc INQ/02

- 5.107 Lothbury recognises the importance of economic growth to the Government's agenda and is also supportive of local planning policy, most notably the JCS, which seeks the significant expansion of employment opportunities in this part of the county. However, it argues that no firm evidence has been submitted to support the HA's projections that 10% of dependant developments at BGBP and BFLF will be occupied by 2015; 50% by 2020 and 100% by 2030.
- 5.108 The statement from IEL<sup>210</sup> indicates that the BGBP development has not yet been marketed to either long term funders or occupiers, and that this will not happen until the Side RO and Slip RO are confirmed. Although 10% is expected to be potentially capable of occupation by late 2015 or early 2016, no mention is made of the timetable for developing the remaining 90%. The New Anglia LEP which supports the Scheme makes no attempt to evaluate the realistic chances of securing development. Consequently, there appears to be no evidence from anyone active in the market as an advisor, investor or occupier, that the economic benefits hoped for can be achieved in the timescale proposed.
- 5.109 As the investment and development advisor to the owner of BBP, Lothbury is well placed to know what rents are being achieved in the area. Its considers that new development in the current market is unviable, as a recently appraised 2,800 sqm (30,000 sqft) building, on a pre-let basis, generated a required rent almost 75% in excess of the actual market levels for a standing building. As such there was no possibility of the proposal proceeding. Moreover, Lothbury's independent property research consultants estimate rental growth at only 1.6% per annum through to 2017 for the Norwich out of town market. Office development will therefore remain unviable into the medium term.
- 5.110 In this regard it must be noted that BBP already has in place full amenities and site infrastructure to its development plots. These are substantial up-front costs that other development sites, such as BGBP do not have in place, and which will only further delay development activity on such sites.
- 5.111 The views of existing occupiers of the business parks in the area should particularly be taken into account. A number of existing occupiers of premises at BBP and the adjacent Meridian Business Park, canvassed by Lothbury, are not opposed to the improvement of Postwick junction and wish to see economic growth and the success of their business. But the increased travel distances, time and therefore cost which they would experience if the eastbound diverge slip road is closed, would result in major difficulties. They, like Lothbury, are not convinced that sufficient efforts have been made to retain this slip road.
- 5.112 It is to this end that Lothbury has retained highway consultants who consider that the slip road could be retained without compromising the long term operation of an improved Postwick junction. The reality is that this is a proposal that is based upon "boom time" assumptions, but the market has slowed right down and unfortunately is not showing any signs of improvement.

#### Mr D Rapson - Lothbury Property Trust Co Ltd<sup>211</sup>

5.113 Mr Rapson is a Director for Ardent Consulting Engineers who have been engaged by Lothbury to assess the HA and NCC's proposal for the Postwick junction improvement.

<sup>&</sup>lt;sup>210</sup> Doc SUPP/02/1

 $<sup>^{211}</sup>$  Docs OBJ/INQ/81/01-05 and Doc INQ/02

- 5.114 The HA's TFR<sup>212</sup> does not demonstrate any capacity issues at the existing North-West roundabout (with the slip lane retained) at any assessment year with DS traffic flows. Furthermore, no excessive queuing has been demonstrated to extend along Yarmouth Road beyond the downstream end of the slip lane (about 240 m from the A47 Mainline). The TFR shows that in the PM peak hour at 2030, with DS traffic, queues along Yarmouth Road would be less with the existing junction (with the slip lane in place), than with the proposed Scheme in place.
- 5.115 Based on these findings, and results demonstrated in the HA's TFR and SoC, Lothbury considers that the removal of the eastbound diverge lane from the A47 is not wholly justified and would result in an overall disbenefit. Lothbury would look to support the Alternative junction proposals put forward by other objectors, particularly those which would retain the eastbound diverge lane from the A47.
- 5.116 Although these alternative options have been assessed and dismissed by the HA, the capacity assessment methodology and calibration process adopted by the HA is flawed and inappropriate. Moreover, the HA's queuing analysis is incorrect, and misrepresents the impact of queues along Yarmouth Road West. Maximum queues have been used in the HA's assessments, whereas average queues should have been considered. The use of alternative capacity and queuing methodologies could show that an alternative proposal would be viable.
- 5.117 The Scheme would result in increased costs for existing users, resulting also in increased carbon dioxide emissions which are considered unnecessary as the removal of the slip lane has not been justified. This would have a significant and unnecessary impact on the local environment, existing junction users and business owners, who would be economically affected by increased business running costs resulting from increased fuel costs. More importantly, this impact is contrary to national and local policy in respect of economic growth and the reduction of carbon emissions.
- 5.118 In isolation the Scheme is anticipated to cost £25 million, with cost benefits of -£74 million (PVB) and -£4 million (Accidents). It is clear, therefore, that the Scheme would provide no transport benefit. This is accepted by the HA and NCC as they acknowledge that the Scheme has a BCR of -2.9. Lothbury therefore considers that the draft Orders would result in an overall disbenefit on economic and environmental grounds.
- 5.119 Lothbury maintains that improvements to the operation of either, or both, the Northside and Meridian Way roundabouts could reduce queuing on Yarmouth Road West and could result in an overall capacity improvement at the existing Postwick junction. This could therefore allow an alternative junction design to be considered, which could include the retention of the eastbound diverge slip road. This would help to alleviate the disbenefits outlined above.
- 5.120 Improvements to these junctions have been suggested by Lothbury. These are subjective at this stage, and would require further investigation into their potential delivery, in terms of capacity, uptake of land and physical constraints. However, if alternative mitigation measures could be secured, this should reduce the traffic impact on Yarmouth Road, and subsequently require reduced works at the Postwick junction. This is something that has not been undertaken to date, as part of the Scheme design or decision making process.

<sup>&</sup>lt;sup>212</sup> DD336 – Postwick Hub Scheme – Forecasting Report April 2013

5.121 In conclusion, Lothbury are not objecting to the improvement of the Postwick junction in principle, but to the removal of the A47 eastbound diverge lane. It is evident that more work is required to consider the alternatives further and to retain the diverge lane.

# Mr Tony Clarke - Cyclists' Touring Club (CTC)<sup>213</sup>

5.122 Mr Clarke appeared at the Inquiry as the CTC's Right to Ride representative. The CTC has reached an agreement with NCC on the provision of cycle routes north-south to connect with Whitlingham Park and east-west of Brundall, and Mr Clarke therefore formally withdrew the CTC's objections in their entirety. However, he remained concerned about the way in which the Scheme had been managed and processed by NCC and the HA, and about the cost of the Inquiry. He indicated that he had written directly to the Secretary of State for Communities and Local Government (SSCLG) separately on this matter.

**INSPECTOR'S NOTE:** The Inspector informed Mr Clarke that he would not hear evidence relating to such matters as the costs of the Inquiry, especially as the CTC had withdrawn its objections to the draft Orders, which were the subject of the Inquiry. The Inspector did indicate, however, that Mr Clarke's concerns would be brought to the attention of the Secretaries of State. Mr Clarke's concerns are set out in Tab 82 of Doc INQ/02, and in Docs OBJ/INQ/82/01-02.

# Mr S Heard (SNUB and Salhouse Parish Council)<sup>214</sup>

- 5.123 Mr Heard is Chairman of SNUB and a Salhouse Parish Councillor. The planned development of the Postwick Hub is inextricably linked to the plans for the development of the JCS and in particular the plans for the NEGT. This view is supported by the fact that NCC and its local authority partners in the GNDP conducted a prolonged post-legal discussion about whether the plans for the BGBP were included in the remitted elements of the JCS.
- 5.124 The revised consultations on planned development for the NEGT propose a dispersal alternative to the 10,000 houses in the NEGT adjacent to the NDR. If this alternative were to be favoured, then the NDR would not be needed and there would be no need to develop Postwick Hub.
- 5.125 Local opinion shows that investment in roads in and around Norwich would be better placed funding the stalled dualling of the A11, the dualling of the A47 and trunk road connections to employment hotspots in Cambridge and the new LEP centred on the off-shore industries in Great Yarmouth and Lowestoft.
- 5.126 Alternative plans for the additional development of the BBP have been submitted by Lothbury, which would negate the need for major re-development of the Postwick Hub as required by these draft Orders. A reduced level of development could be substantially opened up by a much more modest link road (the Inner Link Road) which could be paid for entirely by development. NCC has, to date, failed to undertake and publish a technical and costed appraisal of this alternative development strategy.
- 5.127 It is not accepted that there is a need for this over-engineered Scheme as there should be a much simpler and cheaper alternative. SNUB prefers AR4 which would reduce congestion, improve journey times, reduce journey costs, and

<sup>&</sup>lt;sup>213</sup> Docs OBJ/INQ/82/01-02 and Doc INQ/02

 $<sup>^{214}</sup>$  Doc OBJ/INQ/86/01 and Doc INQ/02

- reduce air pollution. It would also allow NCC to move towards its statutory obligations to reduce the county's carbon footprint. It is questioned how the published Scheme fits with the ideals of sustainability.
- 5.128 NCC avoided the statutory obligation to hold a planning inquiry into the Postwick Hub proposals and the BGBP by submitting a hybrid speculative planning application to BDC for the 2 schemes together. This was a "Trojan Horse approach" and a convenient device for securing planning permission for Postwick Hub as the first stage of the NDR. The financial viability of the Scheme is questioned as the planned return of £800m contains an element of double counting insofar as the TEC and GVA is concerned.
- 5.129 It is also questioned how the Scheme would achieve the desired outcome of the new Social Values Act, and how it would accord with the Natural Environment and Rural Communities Act of 2006, which is designed to ensure that natural environment is conserved, enhanced and managed for the benefit of present and future generations.
- 5.130 The Scheme would result in longer journeys and in an increase in carbon emissions, contrary to the legal requirement set out in the Climate Change Act 2008 to measure and monitor progress towards a 10% carbon reduction by 2015 on 2007 levels. The HA's, case that emissions from the proposed Postwick Hub can be spread out across the whole county of Norfolk, such that the emissions disappear and become insignificant, is not accepted. There is an adaptation requirement in the Climate Change Act 2008 and it is questioned whether there is any evidence of any adaptation in the Scheme proposals.
- 5.131 Cllr Townly's suggestion that the Postwick Hub junction could be improved and upgraded by the use of "smart technology", as deployed at the existing A47/A11 Thickthorn junction is supported. This would avoid the need to make any changes to the existing Postwick junction.
- 5.132 As there is no evidence from the emergency services it must be assumed that they have not been consulted regarding the Scheme. This is particularly relevant for the East of England Ambulance Service Trust, which is under continual and constant pressure to meet its targets for response times.
- 5.133 The NDR should be seen as a local road scheme, and an application for it to be made a NSIP, on the basis of a planning permission for an access road to a business park, is an abuse of process. For a county road scheme such as Postwick Hub it would be normal for NCC to apply to itself for planning permission, but in this case it went through an unusual route to obtain planning permission by joining up with a speculative property company (IEL), only formed in 2005. It is questioned whether due process was followed in terms of EU procurement regulations. Having researched the details of IEL it is questioned whether this company is an appropriate development partner for NCC to progress the BGBP and Postwick Hub Schemes.
- 5.134 The adoption of a "pooled" Community Infrastructure Levy (CIL), between the constituent authorities of the GNDP, adds to the economic uncertainty of infrastructure projects such as the Postwick Hub.
- 5.135 Finally, the terms of reference for this public inquiry are challenged and it is queried how the Planning Inspectorate can judge Local Plans against guidance that has not yet been published. Current guidance does not take into account the Framework, the Localism Act, or the Growth and Infrastructure Act.

### Mr C Cockcroft<sup>215</sup>

- 5.136 Mr Cockcroft appeared at the inquiry as a private individual. The proposed Postwick Hub junction improvement Scheme presupposes that the NDR, which has not yet received planning permission or been subject to a planning inquiry, will be built. It is, therefore, premature for the HA and NCC to put it forward.
- 5.137 The Scheme is unnecessarily complicated and expensive just for the purpose of serving the proposed BGBP, and would seriously inconvenience the majority of traffic leaving the eastbound A47 at this junction. In place of a simple, protected left turn at Postwick North-West roundabout onto the A1042 westbound, drivers would be faced with lengthy diversions which would lead to longer journey times. In turn this would lead to increased pollution.
- 5.138 Traffic leaving Norwich on the eastbound A1042 would also be inconvenienced. Journeys would, typically, be lengthened by about 1.2 miles. For a regular commuter this would amount to some £40 of extra fuel a year, or about an extra £124 per year for a business person. In the current economic climate these are not insignificant amounts.
- 5.139 To address these shortcomings 2 alternative 2-phased junction improvement schemes are proposed (AR6 and AR14). AR6 would replace the Postwick North-West roundabout by a simple gyratory and a new westbound merge slip to the A47; whilst AR14 proposes a traffic signal based alternative, modelled on the junction of the A47 and the A146 at Trowse Newton. These improvements would smooth current traffic flow and provide for the added BGBP traffic. Neither design would require any of the current slip roads and side roads to be closed, although some amendments to the Heath Farm access would be desirable. AR6 would not require the expense of a new bridge, putting this cost firmly into the NDR budget, although a new 3-lane bridge would form part of AR14.
- 5.140 The second phases of each of these proposals (AR6A and AR14 Phase 2) would allow connections to be made to a future NDR or any alternative. In the case of AR6A, this would be by means of a second gyratory which would straddle the A47 and require an additional bridge. This would provide a much smoother traffic flow than the proposed Postwick Hub, without the expense of any signalisation. The HA's comment that the Scheme is needed to allow access to the permitted BGBP is noted, but it might have been designed differently if a possible, future connection with the NDR had not been taken into account.
- 5.141 Work should be put in hand to relieve the overload on the A1042 Yarmouth Road (West) as the published Scheme would be compromised by the capacity limitations of this road, with traffic queuing back from the Northside roundabout to the Postwick North-West roundabout. Indeed the Scheme appears to be designed to limit the flows on this A1042 Yarmouth Road (West) route by creating deliberate delays, thereby costing road users money. It is not logical to say that the suggested Alternatives would suffer from queuing but that the proposed Scheme would not, as the same traffic has to be catered for in each case. To fully address this, more time should have been allowed for a full and proper discussion and refinement of the ARs to take place.
- 5.142 The draft Orders should not be made at this time. Instead, the HA and NCC should prioritise the elimination of the unsafe stretches of the A47, as proposed

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<sup>&</sup>lt;sup>215</sup> Docs OBJ/INQ/121/01-03 and Doc INQ/02

through AR10, rather than pursuing an improvement of the Postwick junction. The Inspector is requested to recommend this course of action to the SST.

#### Mr A Cawdron<sup>216</sup>

- 5.143 Mr Cawdron spoke at the Inquiry as a private individual. He maintained that granting planning permission for schemes such as BFLF and the BGBP with conditions puts a great burden upon removing those conditions, in order to allow the permissions to be implemented. The implications of such matters as sewerage plants and infrastructure and the need to cross major junctions do not appear to have been fully taken into account when these planning permissions have been granted.
- 5.144 The existing Postwick junction, completed within the last 20 years, is still fit for purpose and suitable to serve any reasonable future development needs. The existing Broadland Way and an upgrade to Green Lane South, for example by building an additional traffic lane, would cater for any proposed permitted developments.
- 5.145 The proposed junction and distributor roads for BGBP appear to be oversized and would involve excessive land-take. The major dual-carriageway link, which would form the beginning of the NDR, appears inappropriately scaled as a local distributor road. The public funds allocated for the Postwick Hub should be redirected to the A47 improvements, to provide genuine growth for the county, particularly Great Yarmouth.
- 5.146 The new road link from Plumstead Road to Peachman Way, as part of the BFLF development, will pass through housing areas and business parks, and will be an unpleasant and long-winded journey in the event of any traffic holdups. This will lead to the proposed Postwick Hub which would involve additional roundabouts, a new traffic signal-controlled junction and longer journeys. It cannot be seen as an improvement for the people who live on the north-east side of the city.
- 5.147 The main environmental concern relates to the permanent loss of agricultural land, amounting to about 95 ha. This excludes additional land loss associated with the JCS. The National Farmers Union estimate that a hectare of sound agricultural land will produce 8-10 tonnes of wheat per season, with a current price of about £195 a tonne, giving a total of about £148,000 to £185,000 per annum. These figures should be included in the economic assessment calculations.
- 5.148 The recent notification from NCC regarding a consultation under Section 47 of the Planning Act, relating to the NDR, includes the Postwick Hub in its provision. It begs the question, are all consultations and Public Inquiries forgone conclusions?
- 5.149 Overall the proposals are disproportionate to this area of Norfolk and Norwich, and the forerunner to the urbanisation of hundreds of acres of existing farmland.

# Mr Davidson (Menzies Distribution Limited)<sup>217</sup>

5.150 Menzies Distribution Limited (MDL) is a leading provider of distribution and marketing services to the UK newspaper and magazine supply chain, handling around 5 million newspapers and 2.1 million magazines each day. It employs

<sup>&</sup>lt;sup>216</sup> Docs OBJ/INQ/127/01-02 and Doc INQ/02

 $<sup>^{217}</sup>$  Doc OBJ/INQ/131/01 and Doc INQ/02

- over 80 staff at its Norwich distribution centre at BBP and a further 25 sub-contractors, the majority of whom travel to work by car or van. Newspapers are delivered from the publishers by articulated lorries which travel directly from the A47 to the business park. Peak operations are between 2200 hours and 0700 hours, 7 days a week. Public transport does not operate during these hours.
- 5.151 The proposed closure of the eastbound slip road gives great cause for concern as the additional time and mileage taken to access BBP would have a serious impact on both inbound and outbound time-sensitive early morning local distribution runs. Late deliveries would disadvantage the 600 local retailers that are supplied on a daily basis and could result in a serious loss of business for many customers and local businesses. Any additional travel time would result in significantly increased fuel consumption and cost to the business, staff, and employees.
- 5.152 MDL is committed to minimising its carbon emissions, but making vehicles travel around in a circle to gain access and egress into BBP totally contradicts what the company is trying to achieve in respect of its Carbon Reduction targets. There is a serious contradiction between what the Government's Local Transport White Paper<sup>218</sup> proposes and what NCC is proposing to do at the Postwick junction.
- 5.153 The White Paper also forms the DfT's overall strategy in delivering the vision to tackle carbon emissions from transport by encouraging people to make more sustainable travel choices for shorter journeys. There is clearly a desire at Government level to shorten journey times and that is one which MDL fully supports, but the closure of the eastbound slip road would do the opposite and increase journey times.
- 5.154 Moreover, any removal of current and critical transport links and facilities in and out of the estates would have a detrimental impact on MDL's property value. This would seriously impact its ability to re-let in the future or sell and would have a definite (negative) effect on rental levels achievable. BBP as a whole would become less desirable as an innovative business destination.
- 5.155 MDL understands that the eastbound slip road can be retained and does not require to be closed. It therefore objects to the draft Orders and the current proposals to close the eastbound slip road.

#### Mr R Bailey<sup>219</sup>

- 5.156 Mr Bailey spoke at the Inquiry as a private individual who maintains that the Postwick Hub and removal of the eastbound slip road is totally unnecessary and would result in circuitous routes which would increase the carbon footprint. Its only function would be to make the NDR a viable entity. He maintained that EIAs for the Scheme need to be updated every 2 years, to ensure that statutory requirements are being met.
- 5.157 One of the arguments for the Postwick Hub is to create a new business park, but the adjacent BBP is not yet running at full capacity and has available space to accommodate more units. If more business space is required in Norfolk then the mass of empty sites in Norwich should be used, as they are well served by the transport links already in existence.

<sup>&</sup>lt;sup>218</sup> Creating Growth, Cutting Carbon – Making Sustainable Local Transport Happen - (January 2011)

 $<sup>^{219}</sup>$  Doc OBJ/INQ/132/01 and Doc INQ/02

5.158 Concern is expressed about lack of public transport and bicycle infrastructure that appears on the plans. There are no dedicated bus stops or underpasses and the message given is that NCC does not want to encourage cycling.

# Matters raised by objectors in written representations<sup>220</sup>

- 5.159 As noted earlier, all bar one of the objections came from non-statutory objectors. Twenty-one of these either appeared at the Inquiry or received a specific written rebuttal from the HA; 2 objectors have deceased since submitting their original objections and one objection was not followed up as the objector could not be contacted. A further objector (No 80 Norwich Cycling Campaign) signed a SoCG with NCC and the HA and did not pursue its objection further.
- 5.160 However, the majority of objectors chose to rely on their written representations, with some 33 objectors submitting a standard pre-printed postcard promoted by NNTAG, in conjunction with CPRE Norfolk, SNUB and Norwich and Norfolk Friends of the Earth. The points raised in these, and the other written objections can be seen in full in Doc INQ/02, but as the points raised generally echo those made orally at the Inquiry, they are not covered in detail here, but are simply summarised below:
  - the Scheme is over-designed, too complex and too complicated;
  - the Scheme would lead to driver confusion;
  - the Scheme would not be safe and would lead to increased numbers of accidents;
  - the Scheme would lead to significant congestion and problems if the traffic signals failed;
  - the Scheme would take too much agricultural land;
  - the Scheme does not make proper provision for pedestrians and cyclists;
  - transport issues could be addressed by smaller, cheaper options;
  - the current design is only being pursued in order to accommodate the NDR, and can only be justified by construction of the NDR;
  - the proposed developments and surface water from the new roads could lead to flooding:
  - the existing infrastructure, particularly sewerage works, is currently at capacity;
  - evidence is sought to demonstrate that the Scheme would not lead to environmental pollution;
  - the closure of the eastbound diverge slip road would result in increased journey times and distances which would seriously inconvenience local businesses and local residents;
  - the closure of the eastbound diverge slip road would unacceptably increase pollution and carbon emissions, and matters of climate change have not been properly assessed;
  - the Scheme should not be pursued as it has a negative BCR and other economic benefits have been overstated;
  - the Scheme has not properly been considered in conjunction with the NDR;
  - BGBP development and other proposed developments are not necessary because there is already an abundant supply of office accommodation;

<sup>&</sup>lt;sup>220</sup> See Doc INQ/02

- planned housing to the north-east of Norwich should, instead, be to the south-west, where the jobs are;
- the Scheme would spoil Norwich by urbanisation;
- the developments should not go ahead as there is plenty of empty, derelict land available;
- that BGBP does not feature in the BLP;
- the planning application for the BGBP and the Scheme was premature because the consultations have not yet been completed on the JCS;
- Sprowston P&R site should be expanded rather than the one at Postwick, as it would be closer to new housing in north-east Norwich;
- the expansion of Postwick P&R site would increase traffic, adding further traffic movements which would increase pollution;
- 70% of traffic using the existing Postwick P&R site originates in outlying areas where there are currently large numbers of empty business parks;
- the scheme would give rise to adverse social, economic and environmental impacts;
- the Scheme would benefit developers; and
- the NDR would displace traffic to Salhouse Road, Plumstead Road and Wroxham Road.

#### 6. THE CASES FOR THE COUNTER-OBJECTORS

- 6.1 A number of Alternative Routes (ARs) have been proposed, as briefly discussed in paragraphs 1.10 to 1.12 above, with 11 of these actively pursued at the Inquiry. Fuller details of the routes themselves, including outline scheme drawings and assessments, can be found in Docs HA/OBJ28/ALT1 to HA/OBJ121/ALT14. All except AR12 and AR14 were submitted in sufficient time for the HA to formally publicise them.
- 6.2 I allowed AR12 and AR14 to be put forward during the course of the Inquiry by objectors who attended the Inquiry and who met with HA and NCC Officers, whilst the Inquiry was sitting, to discuss further options. But whilst the HA was able to undertake an assessment of these additional ARs, the timescale meant that their formal publication was not possible. However, as each of these 2 routes has distinct similarities to ARs which were publicised, I am satisfied that no one who may have wished to comment on them would have been unduly adversely prejudiced by this course of action.
- 6.3 Following publication and advertisement of the 9 ARs which were published and pursued at the Inquiry (ie excluding AR7), a total of 27 counter-objections were received from 11 separate counter-objectors. It is not necessary to report their objections in detail here, as none of the counter-objectors appeared at the Inquiry to present their cases. Mr Newberry, an objector to AR6A did appear at the Inquiry, but the main thrust of his objections has already been reported in paragraphs 5.101 to 5.105 above. Full details of all the points raised by both supporters and objectors to the various ARs can be found at Doc HA/35.

#### 7. THE RESPONSE OF THE HIGHWAYS AGENCY

The material points are:

7.1 The evidence presented by objectors at the Inquiry and in the written submissions focussed on a number of common themes or topics, often raised by more than one objector. These are dealt with in the following sections, with objections relating to procedural matters considered first. An extensive response

to the Alternative Routes is included, reflecting the interest in this topic expressed by many of the objectors. Finally, a response is given to a number of specific matters raised by individual objectors.

#### **Procedural Matters**

- 7.2 Some objectors<sup>221</sup> have challenged the adequacy of the consultation concerning the Scheme, pointing out that the public exhibition for the planning application took place at a time when there was no proposal to close the existing eastbound diverge slip road. NNTAG has pointed out that there was no consultation by the HA prior to the publication of the draft Orders in November 2009 and it is claimed that this has hampered objectors presenting alternatives to the Scheme.
- 7.3 However, planning permission<sup>222</sup> has been granted for the Scheme and has not been subject to legal challenge. There is no regulatory requirement to hold a public exhibition in relation to a planning application. In this case, BDC consulted the public at each stage of the planning application, including a specific round of consultation after the application was revised in August 2009 to close the eastbound diverge slip road. Interested persons had the opportunity to make representations at that stage, and many did.
- 7.4 A further public exhibition was held in February 2012, when the draft Orders were re-advertised. This showed the Scheme as currently proposed, with the closure of the eastbound diverge slip road. This exhibition took place some 3 months before the first invitation for alternatives to be submitted, and over 12 months before the second invitation. Accordingly there has been ample opportunity for anyone putting forward alternatives to be aware that the Scheme was being promoted on the basis that the existing A47 eastbound diverge slip road would not be retained.
- 7.5 There is no regulatory requirement for consultation by the HA before draft Orders are published. Whilst the HA has a practice of consultation in relation to its own schemes<sup>223</sup>, this was not in place at the time the draft Orders were published in November 2009<sup>224</sup>. In any event, these draft Orders relate to a Local Authority Major Project (albeit one affecting the SRN) which only came under the aegis of the HA once the draft Orders had been published. However, it is clear that the advertising of the draft Orders (on more than one occasion) has allowed a full opportunity for interested parties to express their views. The fact that this has been effective is reflected in the range and number of representations received.
- 7.6 The advice on S278 agreements<sup>225</sup>, referred to by NNTAG, is not directly applicable here, as no such agreement is proposed here. Nevertheless, the processes undertaken in this case reflect the advice at paragraph 31 of that document, and it cannot be sensibly said that interested persons have not had an adequate opportunity to make their views known and to participate in the Inquiry process.
- 7.7 On a separate matter, NNTAG has objected on the grounds that the Scheme has planning permission as a "private" development, and that the SST has fettered

<sup>223</sup> See Docs HA/55 and HA/56

<sup>&</sup>lt;sup>221</sup> Objectors 3, 5, 11, 28, 44, 79, 84 and 86

<sup>&</sup>lt;sup>222</sup> DD135

<sup>224</sup> see Doc HA/57

 $<sup>^{225}</sup>$  Doc HA/14 – "Guidance on Agreements with the SST under Section 278 of the Highways Act 1980"

his discretion to determine whether or not to make the Orders, through the HA's reliance (in part) on evidence provided jointly at the Inquiry with NCC, through one Counsel. This objection is wholly misconceived, for a number of reasons. Firstly, the Scheme sits within the "Local Authorities Major Schemes Programme" as set out in the 2011 Local Transport White Paper<sup>226</sup>. This is clear from the submitted evidence regarding funding<sup>227</sup>. The Scheme is therefore correctly described as a "Local Authority Major Project<sup>228</sup>".

- 7.8 Secondly, although the planning application for the Scheme was combined in a single application with commercial development at BGBP, the draft Orders still relate to works either to existing public highways, or to roads/paths that would become public highways. Such works are not "private development" as they would be undertaken by NCC as a local highway authority, and would be available for public use on completion of the works.
- 7.9 Thirdly, NNTAG appears to have misunderstood the advice on the fettering of discretion in Doc HA/14. This simply makes the point that where a legal agreement is required (such as under S278 of the Highways Act 1980) the SST cannot fetter his discretion by contractually committing to undertake works in such an agreement, before any relevant Orders required to authorise those works have been made<sup>229</sup>. Hence, the advice suggests that if the agreement is to be entered into before the relevant Orders are made, it must be made conditional on those Orders being made. This is an entirely conventional legal arrangement.
- 7.10 In the current case NCC will not enter into a S278 agreement with the SST, because if the Orders are made, an agreement will be made under S6 of the Highways Act 1980. This will enable NCC to undertake the relevant works within the Scheme that affect the trunk road<sup>230</sup>. A draft agreement is in preparation<sup>231</sup>, but will not be concluded until the outcome of the Orders process is known. This in no way fetters the discretion of the SST to consider the case for and against the Orders on its merits.
- 7.11 NNTAG's concern that it is wrong for the HA to rely on evidence provided by NCC and its consultants is similarly misplaced. If the Scheme had solely affected the SRN it would have been promoted exclusively by the HA and all of the evidence in such a case would have been provided by the HA and its consultants. The draft Orders would have been promoted by the HA (on behalf of the SST) and ultimately made by the SST<sup>232</sup>. This is a function of the legislation as established by Parliament, which has decided that the SST is still able to take an impartial view of the merits in such a case, especially as the SSCLG is also required to be involved in the decision making process. In the present case the involvement of NCC (and its consultants) in no way compromises the ability of the SST to consider the merits of the Orders on an impartial basis.
- 7.12 NNTAG also raises concern that the SST's decision to publish draft Orders in November 2009 was based on different evidence (particularly in relation to traffic

See sections 7.4 and 7.5 of Doc HA/02/1; DD244; and the DfT funding letters in Appendix F of Doc HA/02/2

<sup>&</sup>lt;sup>226</sup> DD236

<sup>&</sup>lt;sup>228</sup> See Para 1.1.5 of DD369

 $<sup>^{229}</sup>$  See para 31 of Doc HA/14

 $<sup>^{230}</sup>$  See Para 4.20 of Doc HA/01/1 and para 8.12 of Doc HA/RB/OBJ28/1

 $<sup>^{231}</sup>$  See para 4.20 of Doc HA/01/1

 $<sup>^{232}</sup>$  See para 14 of Doc HA/21

matters) to that which is now relied on. NNTAG suggests that the draft Orders should have been withdrawn and the Scheme reviewed, in the light of other alternative solutions and layouts. It is argued that the objectors have been prejudiced by the HA's reliance on new traffic evidence. However, it is not unusual with large scale transport schemes for the evidence at the Order making stage to be different to the evidence at earlier stages of scheme preparation, as such schemes take time to deliver and evidence often has to be updated.

- 7.13 In this case, the suspension of progress on the Scheme during the Government's 2010/11 CSR made an updating exercise almost inevitable. The fact that the original traffic modelling primarily used survey data from 2006 made it necessary to undertake fresh surveys to support a Present Year Validation of the traffic model<sup>233</sup>. Moreover, the evolving planning situation (including the legal challenge to parts of the JCS) made it sensible to revisit some of the modelling assumptions<sup>234</sup>. The delays in progressing the Scheme also meant that different assessment years needed to be considered because the expected year of opening was pushed back<sup>235</sup>.
- 7.14 However, the important point is not whether the evidence has changed, but whether interested persons have had an adequate opportunity to consider the latest evidence and comment upon it. The TFR<sup>236</sup>, the Adjustment of Highway Transport Model using 2012 Data report<sup>237</sup>, the Present Year Validation Report<sup>238</sup>, the Economic Appraisal Report<sup>239</sup>, and the Road Safety Audit Stage 2 Submission and Report<sup>240</sup> were all published with the SoC<sup>241</sup> on 1 May 2013, in accordance with the Inquiry Procedure Rules. The HA proofs of evidence were published on 12 June 2013, in accordance with the timetable established at the PIM, together with the Yarmouth Road Surveys and Northside Roundabout Assessment report<sup>242</sup> which supplemented one element of the traffic appraisal work.
- 7.15 Whilst not all of the HA Rebuttal Proofs were provided in accordance with the timetable, in part this was because some objectors did not submit their principal evidence on the relevant date, and in any event adjustments were then made to the programme to ensure objectors had time to consider that Rebuttal evidence before presenting their cases. There is therefore no substance in the claim that objectors have not been able to consider and respond to the updated evidence now relied on by the HA and no good reason why the draft Orders should be withdrawn and the whole process restarted.
- 7.16 Objectors 36 and 123 raised a concern about the independence of the evidence provided by the HA witnesses, and the difficulty objectors had in testing that evidence without their own expert witnesses. However, the HA witnesses have all recorded, in their proofs, their understanding of their obligations to provide true and professional evidence. All of the HA witnesses have been available for

 $<sup>^{233}</sup>$  See DD332 and DD333

<sup>&</sup>lt;sup>234</sup> See para 5.4.9 of Doc HA/05/1

 $<sup>^{235}</sup>$  See para 5.2.8 of Doc HA/05/1

<sup>&</sup>lt;sup>236</sup> DD336

<sup>&</sup>lt;sup>237</sup> DD332

<sup>&</sup>lt;sup>238</sup> DD333

<sup>&</sup>lt;sup>239</sup> DD362

<sup>&</sup>lt;sup>240</sup> DD363

 $<sup>^{241}</sup>$  DD369 and DD370  $\,$ 

<sup>&</sup>lt;sup>242</sup> Doc HA/12

cross-examination and several of the objectors have taken the opportunity to question the witnesses. Some objectors have commissioned their own expert witnesses to present opposing views. The HA considers that there have been adequate opportunities to allow for its evidence to be tested.

# Impact of the closure of the eastbound slip roads on existing users

- 7.17 It is accepted that users of the A47 eastbound, exiting at Postwick and travelling west into Norwich or north into the existing BBP, would be disadvantaged by the closure of the existing eastbound diverge slip road. They would still be able to leave the A47 at Postwick and reach all destinations, but the new routes would be longer and would involve negotiating additional junctions. This would involve additional journey time and, by implication, extra travel costs. However, any consideration of this disadvantage has to have regard to (i) the scale of the disbenefit; (ii) whether there are benefits to other existing users; and (iii) whether there are wider benefits to future users and others.
- 7.18 On the question of scale, the Scheme is predicted to increase some journey times by up to 2 minutes in the AM peak and by up to 5 minutes in the PM peak<sup>243</sup>. Changes of less than 2 minutes are not considered to be significant and are within the typical daily variation for an average 33 minute commuting trip into Norwich using the existing network<sup>244</sup>. Changes of over 5 minutes are considered to be significant but these would only arise for trips from A47 (West) to Yarmouth Road (West), and only by 2030. In 2020 the increase on that route would be 3.6 minutes. Even in 2030, 83% of the trips which would experience an increased journey time in the PM peak, would increase by less than a minute<sup>245</sup>.
- 7.19 In numeric terms there would be a net transport disbenefit, because there are more existing users who would experience a slight increase in journey times than there are existing users who would experience significant reductions in their journey times. However, the scale of the benefits and disbenefits to individual users is more complex than this. For those using the A47 westbound to access destinations at Postwick, there would be major savings of up to 7 minutes in the AM peak and over 5 minutes in the PM peak because the Scheme would resolve the long-standing queuing problems of the Postwick P&R roundabout<sup>246</sup>.
- 7.20 There would also be benefits to existing users through improved journey time reliability, as all of the Scheme junctions would perform satisfactorily (in contrast with the existing position)<sup>247</sup>. In addition, there would be benefits to public transport both for the existing operation (by reducing delays on Yarmouth Road (East)) and by allowing the expanded P&R facility to take place<sup>248</sup>. The Scheme would also deliver real benefits to NMUs by providing enhanced facilities<sup>249</sup>.
- 7.21 In terms of wider benefits, it is acknowledged that the standard methodology for a transport scheme focuses only on the effects on existing transport users. However, a transport intervention that is promoted to unlock economic growth, as here, would clearly have wider effects because it would enable new

 $<sup>^{243}</sup>$  See para 5.7.2 of Doc HA/05/1 and Tables 5.8 and 5.10 of Doc HA/05/2

<sup>&</sup>lt;sup>244</sup> See paras 5.7.1 and 5.7.2 of Doc HA/05/1

 $<sup>^{245}</sup>$  See para 9.17 of Doc HA/01/1

 $<sup>^{246}</sup>$  See Tables 5.8 and 5.10 of Doc HA/05/2 and para 5.7.1 of Doc HA/05/1

 $<sup>^{247}</sup>$  See para 6.7.18 of Doc HA/02/1

<sup>&</sup>lt;sup>248</sup> See para 6.7.18 of Doc HA/02/1

See paras and 8.4.8 6.7.19 of Doc HA/02/1 and section 9.3 of Doc HA/03/1

development to take place and new jobs to be provided. These benefits need to be captured in an assessment in order that the full effects of the intervention are appraised. This is recognised in the WebTAG advice in draft Unit  $3.16^{250}$ . The inclusion of such benefits accords with the guiding principles in the HM Treasury Green Book<sup>251</sup> that "all benefits" should form part of the appraisal<sup>252</sup>.

7.22 Those benefits have been assessed here, both by reference to the GVA of the additional economic development and by reference to the PG benefits after allowing for the  $TEC^{253}$ . Both assessments produce strong positive values which substantially outweigh the negative transport disbenefits (£378 million in the case of GVA benefits and £494 million in the case of PG, as against £74 million transport disbenefits and £4 million accident disbenefits)<sup>254</sup>. Whilst criticisms have been made of the precise calculation of those benefits, no-one has seriously suggested (let alone substantiated with evidence) that the wider economic benefits would not be significantly greater than the transport disbenefits, when expressed in monetary terms.

# Alleged absence of a sound justification for the closure of the slip roads

- 7.23 Some objectors continue to maintain that the closure of the eastbound slip road would not be necessary if NCC was not seeking to achieve an outcome that facilitates, in due course, the provision of the NDR. This is said to be because NCC's aspirations for the NDR preceded the proposals for the Postwick Hub (and its role in unlocking dependent development), and that both preceded the specific proposal to close the existing A47 eastbound diverge slip road.
- 7.24 The chronology of events is not in dispute<sup>255</sup>, but objectors seem unwilling to accept that there is an independent case for the Scheme in order to unlock the localised growth at Postwick, irrespective of any case that might exist for the provision of a NDR. It should be remembered that NCC had taken the opportunity provided by the CIF funding regime to support its aspirations for growth at Norwich, and had identified a suitable area of land on the eastern side of Norwich that was capable of being developed, subject to highway infrastructure improvements. This area had already been identified for expansion in the BLP, and the then extant East of England Plan had suggested Thorpe St Andrew as a location for business park growth<sup>256</sup>.
- 7.25 The independent case for the Postwick Hub Scheme is not undermined by the fact that it was identified after the proposals for the NDR, with a connection to the A47 at Postwick, were first put forward. The merits of the case should not be measured by when it was suggested, but by the cogency of the evidence that supports it. That evidence, summarised earlier, shows beyond any serious doubt that the constraints at Postwick mean an improvement is required to address existing and future problems if the growth already approved in the JCS and in the planning permissions for BGBP and BFLF is to be achieved.

 $^{252}$  See para 5.25 of DD239 and section 2 of Doc HA/08/1  $\,$ 

 $<sup>^{250}</sup>$  paras 1.3.5, 3.1.1, and 4.1.2. of DD322

<sup>&</sup>lt;sup>251</sup> DD239

 $<sup>^{253}</sup>$  See section 7 of DD362, section 8 of Doc HA/02/1 and section 4 of Doc HA/08/1

<sup>&</sup>lt;sup>254</sup> See para 8.4.7 of Doc HA/05/1

<sup>&</sup>lt;sup>255</sup> See section 7 of Doc HA/02/1

<sup>&</sup>lt;sup>256</sup> DD231, Policy NR1 on p102

- 7.26 Those same constraints, and the conclusions on the ARs (detailed below), mean that there is no realistic prospect of delivering the necessary improvement without the removal of the A47 eastbound diverge slip road and the construction of a junction arrangement that accommodates the BGBP.
- 7.27 Lothbury has challenged the traffic case for the closure of the eastbound slip road, claiming that it has not been "wholly justified". The initial basis for this claim was that the TFR<sup>257</sup> did not show queuing from the Postwick North-West roundabout reaching the mainline of the A47, even in the scenario where DS traffic was assigned to the DM network. It was therefore suggested that there was no need for the removal of the slip road. More recently the claim was expanded to challenge the junction assessments included in the TFR on the basis that they exaggerated queuing problems by focusing on maximum queues, rather than average queues.
- 7.28 However, despite recognising that a "holistic" approach was required to the junction<sup>258</sup>, including all of its slip roads and the junctions that are fed by or feed into those slip roads<sup>259</sup>, Lothbury sought to look exclusively at the Postwick North-West roundabout and the eastbound diverge slip road. This was not a credible stance. Even just focusing on the Postwick North-West roundabout, the scenario of DS traffic assigned to the DM network shows that at 2020 there would be queues on Yarmouth Road (West) that would block the exit from the North-West roundabout and extend onto the eastbound diverge slip road. In such congested conditions, with the potential for significant variability, there would be a risk of queues sometimes extending onto the main carriageway of the A47<sup>260</sup>.
- 7.29 In addition, it is clear that in the scenario of DS traffic assigned to the DM network there would be substantial queuing on the A47 westbound diverge in both 2015 and 2020<sup>261</sup>. The Postwick P&R roundabout would also be substantially over capacity<sup>262</sup>. In terms of both queues and delays the junction as a whole would not perform satisfactorily in that scenario and improvement would be required before the dependent development could take place.
- 7.30 The second criticism foundered on the fact that it wrongly asserted the approach taken by Mr White was contrary to DMRB advice<sup>263</sup>, and ignored the conventional approach to using ARCADY of identifying maximum queues in the peak hour<sup>264</sup>. Moreover, it wholly failed to respect Mr White's engineering judgment that, in the context of a junction with the SRN where significant growth was expected and where any queuing onto the mainline carriageway would be a serious problem, it was appropriate to look at maximum queues to ensure that the assessment would be robust enough to address and avoid any such problems<sup>265</sup>.

<sup>&</sup>lt;sup>257</sup> DD336

<sup>&</sup>lt;sup>258</sup> Doc INQ/04: Day 12 Transcript, p60, lines 3-5; Doc INQ/04: Day 12 Transcript, p90, lines 4-9

<sup>&</sup>lt;sup>259</sup> Doc INQ/04: Day 12 Transcript, p90, lines 10 -24 to p91, lines 1-14

 $<sup>^{260}</sup>$  See para 6.5.3 of Doc HA/05/1 and Fig G.17 of Appendix G of DD336  $\,$ 

<sup>&</sup>lt;sup>261</sup> See Figs G14 and G16 of Appendix G of DD336

 $<sup>^{262}</sup>$  See para 6.5.2 of Doc HA/05/1

<sup>&</sup>lt;sup>263</sup> Doc INQ/04: Day 12 Transcript, p99, lines 9-16

<sup>&</sup>lt;sup>264</sup> Doc INQ/04: Day 12 Transcript, p46, lines 1- 10

<sup>&</sup>lt;sup>265</sup> See para 2.18 of Doc HA/RB/OBJ81/3

- 7.31 A number of other criticisms of the traffic modelling were advanced, including concerns from NNTAG about the implications of moving trips from differently modelled parts of the network when the TECs were calculated; and the implications of the fact that NTEM makes no allowance for different parking standards for different developments. However, whilst Mr White acknowledged this, he pointed out that this is an inevitable consequence of NTEM being a nationally based data set which is not locationally specific as to where or whether individual developments take place<sup>266</sup>.
- 7.32 Mr Buchan, for NNTAG, produced no firm evidence to demonstrate that this matter would be likely to have any significant effect on the reliability of the traffic modelling exercises, and it is clear that Mr White's approach has been conspicuously careful, thoroughly explained, and consistent with all of the applicable guidance<sup>267</sup>. Moreover, the methodology adopted and the results presented have been reviewed by AECOM<sup>268</sup> on behalf of the HA and have been found fit for purpose<sup>269</sup>.

### The fact that the Scheme has a negative BCR

- 7.33 It is not in dispute that the Scheme has a negative BCR. This makes it unusual, particularly if it was to be viewed solely as a transport scheme. However, whether a scheme represents VfM is a matter for the funding department. Where no funding decision has been made, it may be relevant for the matter to be addressed at any relevant Order making stage. But where a funding decision has already been made, as is the case here, it is not the purpose of the Order making stage to revisit that decision or to review the decision making process.
- 7.34 The considerations relevant at the Order making stage are established by the relevant statutory provisions. If there was a realistic alternative to the Scheme that could be achieved at materially lesser expense, then the question of VfM could be relevant to whether the test of expediency was met. However, in this case there is no realistic alternative as the assessments detailed below demonstrate. Moreover, the considerations of local and national planning policy strongly point to the provision of the Scheme in order to unlock the identified economic growth. The fact that the funding department has given its sanction, having regard to its own assessment of VfM, is a matter that deserves respect.
- 7.35 NNTAG challenges the funding decision of December 2011<sup>270</sup> on the basis that it was linked to the decision on the NDR and that there was no VfM assessment of the Scheme in isolation. However, it is clear that the DfT was made aware of the separate basis of the 2 elements of the Development Pool bid<sup>271</sup>. It is also clear that DfT has accepted that the Scheme can come forward in advance of any decision as to whether or not to endorse the NDR at the Statutory Orders and

 $<sup>^{266}</sup>$  See para 3.12 of Doc HA/RB/OBJ28/3

See Doc HA/RB/OBJ28/3

AECOM – Consultants appointed through the HA's Spatial Planning Consultancy Arrangement, to provide consultancy services in the form of advice/support on spatial planning issues, including development proposals affecting the SRN

 $<sup>^{269}</sup>$  See paras 9.1 and 9.2 of Doc HA/01/1

 $<sup>^{\</sup>rm 270}$  See DfT letter of 15 December 2011 in Doc HA/02/2, p41, and DD244

 $<sup>^{271}</sup>$  See paras 7.4.1- 7.4.7 of Doc HA/02/1

- Full Approval stages<sup>272</sup>. Thus, it is entirely reasonable to infer that DfT is content with the Scheme on a stand-alone basis for funding purposes.
- 7.36 Furthermore, the Scheme is not simply a transport intervention designed to address transport problems for existing users of the network. As already noted, it has a wider scope and is directed primarily at providing infrastructure to unlock growth. This is recognised by DfT continuing to identify that funding for the Scheme is "reserved" on a separate basis to the funding for the NDR<sup>273</sup>. Thus any assessment of VfM that was limited to the BCR would be necessarily incomplete. For this reason, the information sought by (and provided to) NNTAG on highway schemes with negative BCRs<sup>274</sup>, and the information on the criteria to be applied in the assessment for funding of HA schemes<sup>275</sup>, rather misses the point.
- 7.37 What is important is the overall position, including all of the benefits and all of the disbenefits. This is clear even from the somewhat dated statement by the former DfT Permanent Secretary to the Public Accounts Committee in 2007 relied on by NNTAG<sup>276</sup>. That was explicit that VfM was not limited to "a narrow BCR calculation". Insofar as both benefits and disbenefits can be expressed in monetary terms, it is clear that there is a strong positive value to the Scheme. The HA is satisfied, having regard to that comprehensive assessment, that the Scheme has sufficient wider benefits to outweigh the transport disbenefits<sup>277</sup>.

#### The alleged over-statement of the economic benefits

- 7.38 The criticisms of the scale of the economic benefits challenge the timescale for their likely delivery, the quantum of new jobs that might be created, the proportion of those jobs that would be additional, and the reliance on TEC to produce much of the PG benefits.
- 7.39 The HA has provided evidence to support its judgment that the timescale for the delivery of the dependent development is realistic<sup>278</sup>. That judgment is reinforced by the material which has been submitted by the commercial developer intending to take the BGBP development forward<sup>279</sup>, and is supported by the views of the developer's property marketing advisers. Whilst Mr Radford suggests, on behalf of Lothbury, that viability would be in issue if current conditions continue, the points he makes are not specific to development in the Postwick area but are simply a reflection of the recent wider economic difficulties.
- 7.40 Mr Radford accepts that those difficulties do not provide a good reason to defer the provision of infrastructure to facilitate economic development<sup>280</sup>. Even using the take-up rates provided by Lothbury, there would seem to be little reason to doubt that the development could be provided in line with the HA's forecasts. But even if this is wrong, it does no more than delay the time when the benefits

<sup>&</sup>lt;sup>272</sup> See DfT letter of 3 August 2012 in Doc HA/02/2, p45

<sup>&</sup>lt;sup>273</sup> See DfT letter of 3 August 2012 as above

 $<sup>^{274}</sup>$  See Docs HA/47 and HA/57

<sup>&</sup>lt;sup>275</sup> See Doc HA/49

<sup>&</sup>lt;sup>276</sup> See section F of Doc OBJ/INQ/28/2/04

 $<sup>^{\</sup>rm 277}$  See paras 9.34 to 9.37 of Doc HA/01/1

 $<sup>^{278}</sup>$  See section 2 of Doc HA/RB/OBJ81/1  $\,$ 

<sup>&</sup>lt;sup>279</sup> See Doc SUP/02/2

<sup>&</sup>lt;sup>280</sup> See para 2.1 of Doc OBJ/INQ/81/3

- would be realised. Given the limited options for employment growth at Norwich, there is every reason to be confident about the development taking place.
- 7.41 The criticism that the numbers of jobs used in the GVA assessment have been overstated by reference to job density calculations has been addressed in the HA's rebuttal evidence<sup>281</sup>. That evidence has not been challenged. Moreover, the criticism of the level of additionality fails to recognise that the HA case is based on a series of conservative assumptions. Much of the literature available, as reviewed by Professor Owen<sup>282</sup>, would point to a higher level of additionality than one third but the HA has remained with that conservative assumption.
- 7.42 The calculation of PG has been undertaken in line with the applicable guidance in WebTAG Unit 3.16<sup>283</sup> and this has not been disputed. Whilst this remains as a draft Unit, Mr White explained that the DfT encouraged its use when the Development Pool bid was being prepared<sup>284</sup>. Mr Buchan, on behalf of NNTAG, has raised a series of concerns about the calculation of the TECs, primarily focused on the level of detailed information available as to where within the NTEM zones the TEC benefits arise, when comparing the DM and DS scenarios.
- 7.43 In this regard the HA has provided a substantial amount of material which shows, unsurprisingly, that the primary source of the TEC benefits arises in the 3 control NTEM districts (84% in Broadland, Norwich, and South Norfolk). Information has been provided on the split between those 3 districts and on the distribution, district by district, not only between those 3 districts but across all 28 districts (zones) in the model<sup>285</sup>. Information has also been provided on the reduction factors that have been applied to the zones within the model where the highway network was modelled (the Norfolk districts plus Waveney in Suffolk)<sup>286</sup>.
- 7.44 The HA considers that sufficient information has been provided to explain the process that has been undertaken and to provide reassurance that the calculation of the TECs is robust<sup>287</sup>. Essentially, what is happening is that in the DS scenario dependent development is concentrated in an accessible location close to large residential areas, whilst in the DM scenario the corresponding growth (within the constant NTEM constraint) is dispersed across the 3 control districts.
- 7.45 Mr Buchan did not challenge the use of NTEM in the traffic model, and agreed that traffic growth for both DM and DS scenarios should be controlled to NTEM growth<sup>288</sup>. Whilst he initially sought to limit this only to the appraisal process and not to the calculation of TECs, this distinction made no sense. It is clear that WebTAG Unit 3.16 expects the calculation to be achieved by applying the NTEM constraint<sup>289</sup>. Mr Buchan then clarified that he accepted the use of the NTEM constraint in the calculation of the TECs but he was not persuaded that the TECs were properly derived because he wanted more information on the trips and trip

<sup>&</sup>lt;sup>281</sup> See section 2 of Doc HA/RB/OBJ81/1

 $<sup>^{282}</sup>$  See Section 4 of HA/08/1, Section 7 of DD362 and Doc HA/39

<sup>283 00222</sup> 

<sup>&</sup>lt;sup>284</sup> Doc INQ/04: Day 8 Transcript, p90, lines 1-8

<sup>&</sup>lt;sup>285</sup> Doc HA/RB/OBJ28/4

 $<sup>^{286}</sup>$  See email White to Buchan 15 July 2013 [12:30] in Doc OBJ/INQ/28/1/05

See Docs HA/RB/OBJ28/4; HA/RB/OBJ64/3; paras 3.3-3.4 of HA/RB/OBJ28/3 and emails in OBJ/INQ/28/1/06  $^{287}$ 

<sup>&</sup>lt;sup>288</sup> Doc INQ/04: Day 8 Transcript, p85, lines 2-11; Doc INQ/04: Day 8 Transcript, p163, lines 4-7

<sup>&</sup>lt;sup>289</sup> DD322, Appendix B, para 9.22

- lengths that resulted in the TECs. The HA considers that this has been satisfactorily addressed, above.
- 7.46 The assumption in the methodology for the calculation of TECs is that employment not provided at the dependent development locations in the DS scenario would arise elsewhere in the DM scenario. This is different to the assumption in the GVA calculation, that a proportion of the employment would be foregone in the DM (ie, the one-third additionality if the dependent development is provided in the DS).
- 7.47 However, the reason for this difference is that the 2 calculations are measuring different things. This does not mean that there cannot be both PG benefits (after allowing for TECs) and GVA benefits from the same Scheme. It simply means that an arithmetic addition of the 2 different types of benefit would not be appropriate. However, even viewing each in isolation, their values would considerably exceed the transport disbenefits.

#### The alleged failure to adequately address alternatives

7.48 Each of the Alternatives Routes (ARs) is the subject of a detailed report<sup>290</sup> and most have been subject to some form of operational assessment, apart from those which fail on a fundamental point (AR5 and AR10) or which are too similar to another AR which <u>has</u> been operationally assessed (AR6A and AR12). Detailed descriptions of the ARs are not given here, as they can be seen in the aforementioned detailed reports, along with layout diagrams. The assessments of each AR are, however, summarised in the following sections.

# Alternative Route 1 (AR1)<sup>291</sup>

- 7.49 AR1, put forward by NNTAG (objector No 28), would cost much less than the published Scheme (£5.4 million compared to £20.0 million) and would have lower potential environmental effects. It would have transport disbenefits, resulting in a BCR of -0.2. However, the network would not perform acceptably as there would be queuing down the eastbound diverge slip road onto the A47 mainline carriageway, giving rise to an increased risk of accidents as high speed traffic would encounter stationary traffic.
- 7.50 The eastbound diverge slip road, and weaving lengths associated with the new Broadland Way and new Postwick North-West roundabouts would require Departures from Standards. There would be safety issues which would require justification and risk assessments, and several issues for pedestrians and cyclists. Resolution of these issues could be problematic. There would also be issues with maintaining access to statutory undertakers' apparatus and maintaining a private means of access off the A1042 Yarmouth Road (West).
- 7.51 Although this Alternative would require less agricultural land than the published Scheme, it would involve land-take from the existing BBP and would therefore result in a loss of land designated for employment. Land compensation payments would be some £0.9m more than the published Scheme as it is assumed that the land acquisition would require a Compulsory Purchase Order (CPO). The Alternative would not provide adequate access to the proposed BGBP

<sup>&</sup>lt;sup>290</sup> Docs HA/OBJ28/ALT1 to HA/OBJ121/ALT14

<sup>&</sup>lt;sup>291</sup> Doc HA/OBJ28/ALT1

- development so this planning permission, and that for BFLF, could not be implemented and the development benefits would therefore not be realised.
- 7.52 AR1 could not be delivered under the published draft Orders and would require new statutory and planning processes. This would mean inevitable delays due to detailed design, EIA, and taking the AR through the planning process which would add a minimum of at least a year to the programme. Negotiations with third party landowners and developers would be expected to take much longer and might cause a delay to implementation of over 2 years, plus any additional time required for a possible public inquiry.
- 7.53 AR1 would fail to meet the first of the Scheme Objectives identified in the SoC<sup>292</sup>, namely to improve the operation of the A47 trunk road junction. The subsequent objectives could therefore not be achieved. The desk-top assessment of AR1 has shown that it would not be a viable alternative to the published Scheme.

Alternative Route 2 (AR2)<sup>293</sup>

- 7.54 AR2, also put forward by NNTAG, would cost much less than the published Scheme (£7.7 million compared to £20.0 million) and would have lower potential environmental effects. It would have transport disbenefits, resulting in a BCR of -2.2. It would require a Departure from Standards for the new westbound merge slip road (the published Scheme has a similar Departure from Standards to retain the existing westbound merge slip road. There are some issues with the provision of facilities for pedestrians and cyclists, but a satisfactory design could probably be produced.
- 7.55 However, the network would not perform acceptably as there would be queuing down the eastbound diverge slip road onto the A47 mainline carriageway, giving rise to problems as already outlined for AR1. Like AR1, this Alternative would not provide adequate access to the proposed BGBP development so this and the BFLF planning permissions could not be implemented and the development benefits would not be realised. Moreover, AR2 could not be delivered under the published draft Orders and would fail to meet the first of the Scheme Objectives. For similar reasons to those outlined for AR1, above, AR2 would not be a viable alternative to the published Scheme.

Alternative Route 4 (AR4)<sup>294</sup>

- 7.56 AR4 is a further Alternative put forward by NNTAG. At £5.9 million it would cost much less than the published Scheme and would have lower potential environmental effects. It would have transport disbenefits, resulting in a BCR of -0.9. As with AR2, a Departure from Standards would be required for the new westbound merge slip road.
- 7.57 However, as with the previous ARs, the network would not perform acceptably as there would be queuing down the eastbound diverge slip road onto the A47 mainline carriageway, giving rise to safety problems as already outlined. In addition, long queues are predicted at the Postwick P&R roundabout in the PM peak in 2020 and 2030. AR4 would have similar failings to both AR1 and AR2 with regard to not providing adequate access to the BGBP, thereby failing to achieve the benefits associated with the BGBP and the BFLF developments.

<sup>&</sup>lt;sup>292</sup> DD369

<sup>&</sup>lt;sup>293</sup> Doc HA/OBJ28/ALT2

<sup>&</sup>lt;sup>294</sup> Doc HA/OBJ28/ALT4

Again as with the earlier Alternatives, AR4 could not be delivered under the published draft Orders and would fail to meet the first of the Scheme Objectives. It would therefore not be a viable alternative to the published Scheme.

# Alternative Route 5 (AR5)<sup>295</sup>

- 7.58 This Alternative is an indicative route for a new link road between Salhouse Road and Plumstead Road, put forward by CPRE Norfolk Broadland District (objector No 27). No modifications are proposed to the existing A47 Postwick junction. CPRE considers that this AR would provide access to development in the NEGT and avoid the need to build a NDR to the east and further out. It would not, however, enable the approved and committed development to proceed without introducing traffic problems at the Postwick junction.
- 7.59 The proposed link road is technically feasible and a geometric design could be found that follows the suggested alignment. It would require a new planning permission and it is assumed that it would connect with the 2 proposed adjoining developments. The requirement to obtain planning permission could introduce uncertainty over the delivery timescale. AR5 could be progressed without modification to the current slip road arrangements and would therefore avoid the need for new Slip and Side Roads Orders. However, this alternative would not address the problems at the existing Postwick junction and would not meet the Scheme Objectives. For these reasons AR5 would not be a viable alternative to the published Scheme.

#### Alternative Route 6 (AR6)<sup>296</sup>

- 7.60 AR6 is proposed by Mr Cockcroft (objector No 121). It would cost less than the published Scheme (£12.0 million) would have transport benefits and a BCR of 0.6. It would have lower potential environmental effects than the published Scheme, but would require land take from the existing BBP and would therefore result in a loss of land designated for employment. A landowner affected by this AR has indicated that his land would not be made available unless it was the subject of a CPO.
- 7.61 Departures from Standards would be required for 2 weaving lengths on the gyratory, the eastbound diverge slip road, the spacing on the A47 between the westbound merge slip road and the bus-only merge slip road from the P&R roundabout. Highway safety concerns mean that the Departure from Standards for the short weaving lengths and bus-only slip road are unlikely be acceptable.
- 7.62 AR6 would have similar failings to ARs discussed earlier as it would result in queuing down the eastbound diverge slip road onto the A47 mainline carriageway, giving rise to safety problems as already outlined. AR6 would fail to provide adequate access to the proposed BGBP development and the benefits associated with the BGBP and the BFLF developments would therefore not be achieved. AR6 could not be delivered under the published draft Orders and would fail to meet the first of the Scheme Objectives. It would therefore not be a viable alternative to the published Scheme.

<sup>&</sup>lt;sup>295</sup> Doc HA/OBJ27/ALT5

<sup>&</sup>lt;sup>296</sup> Doc HA/OBJ121/ALT6

### Alternative Route 6A (AR6A)<sup>297</sup>

- 7.63 AR6A is the second phase of the proposal put forward by Mr Cockcroft. It would cost significantly more that the published Scheme (£30 million compared to £20 million). Moreover, the overall potential environmental effects would be greater than for the published Scheme due to the larger physical footprint and the increase in the land take of existing agricultural land. AR6A would require land take from the existing BBP and would therefore result in a loss of land designated for employment. As with AR6, a landowner affected by this AR has indicated that his land would not be made available unless it was the subject of a CPO.
- 7.64 A number of Departures from Standards would be required, for various weaving lengths, and the spacing between merges and between successive diverges. Highway safety concerns mean that it is unlikely that all of these Departures from Standard would be acceptable.
- 7.65 AR6A would have similar failings to ARs discussed earlier as it would result in queuing down the eastbound diverge slip road onto the A47 mainline carriageway, giving rise to safety problems as already outlined. It would fail to provide adequate access to the proposed BGBP development and the benefits associated with the BGBP and the BFLF developments would therefore not be achieved. AR6A could not be delivered under the published draft Orders and would fail to meet the first of the Scheme Objectives. In addition, the construction programme would need to be extended to accommodate diversion of the high pressure gas main, such that implementation would be 2019 at the earliest. For all the above reasons AR6A would not be a viable alternative to the published Scheme.

# Alternative Route 7 (AR7)<sup>298</sup>

7.66 AR7 was put forward by Thorpe St Andrew Town Council but, whilst not formally withdrawn, Mr Eley who appeared for the Town Council indicated that this AR would not be pursued. It is therefore not discussed further here.

#### Alternative Route 9 (AR9)<sup>299</sup>

- 7.67 AR9 is proposed by Mr J Adams (objector No 129). In summary it would entail a new grade-separated junction with the A47 about 1 mile to the east of the existing Postwick junction. It would cost significantly more that the published Scheme (£44 million compared to £20 million) and land compensation payments would be some £1.9 million more. Two landowners affected by AR9 have indicated that their land would not be made available unless it was the subject of a CPO. Transport disbenefits would result in a BCR of -0.9.
- 7.68 The potential adverse environmental effects would be far greater than for the published Scheme as the larger physical footprint would have a negative impact on PRoWs, landscape and visual amenity, the ecology and species in the area. There would also be increased land take of existing agricultural land and a diversion of the existing high pressure gas main would be required, which could take up to 2 years to procure.

<sup>&</sup>lt;sup>297</sup> Doc HA/OBJ121/ALT6A

<sup>&</sup>lt;sup>298</sup> Doc HA/OBJ36/ALT7

<sup>&</sup>lt;sup>299</sup> Doc HA/OBJ129/ALT9

- 7.69 It is likely that Departures from Standards would be needed for the weaving length between eastbound merge and diverge slip roads at the proposed A47 grade-separated junction, and also for weaving lengths between the slip roads at this junction and those for the proposed dumb-bell roundabout on Smee Lane.
- 7.70 Operational assessment of AR9 indicates that the Meridian Way roundabout would exceed capacity in the AM peak and that Northside roundabout would also exceed capacity in both the AM and PM peaks. In the PM peak significant queues are forecast, extending back from Northside roundabout onto the A47 eastbound carriageway in the 2030 PM peak. Furthermore, the signal-controlled roundabout replacing the existing P&R roundabout would not operate acceptably in future years. The qualitative safety assessment indicates large adverse safety issues.
- 7.71 AR9 could not be delivered under the published draft Orders and would fail to achieve the Scheme Objectives of releasing land for economic development. AR9 would not be a viable alternative to the published Scheme.

# Alternative Route 10 (AR10)300

- 7.72 AR10, put forward by Mrs M Howes (objector No 24), is a proposal to dual the single-carriageway sections of the A47 between Great Yarmouth and Peterborough. Possible improvements that could form part of this Alternative are East Winch/Middleton Bypass; North Tuddenham to Easton; Blofield to Burlingham; and Acle Straight. The published Scheme would be replaced by this Alternative, which does not propose any modification to the existing A47 Postwick junction and would therefore maintain the current slip road configuration and access arrangements at the Postwick junction.
- 7.73 However, AR10 would not address the problems at the existing Postwick junction and would not enable the approved and committed BGBP and BFLF developments to proceed without introducing traffic problems at the Postwick junction. No part of AR10 could be delivered under the published draft Orders. Each individual improvement would require new statutory procedures and be subject to funding availability. This AR would not meet the Scheme Objectives and would therefore not be a viable alternative to the published Scheme.

# Alternative Route 11 (AR11)301

- 7.74 AR11 is put forward by Thorpe St Andrew Town Council (objector No 36). Like AR9, it would provide a new grade-separated junction about one mile to the east of the existing Postwick junction, consisting of a new roundabout either side of the A47 connected by a single-carriageway bridge in a dumb-bell arrangement.
- 7.75 It would cost significantly more that the published Scheme (£33 million compared to £20 million) and land compensation payments would be some £1.5 million more. Two landowners affected by AR11 have indicated that their land would not be made available unless it was the subject of a CPO. Although there would be transport benefits, resulting in a BCR of 1.6, the AR would not provide adequate access to the proposed BGBP development, therefore the planning permissions could not be implemented and the development benefits could not be realised.
- 7.76 In addition, AR11 would have the same disadvantages as AR9 with regards to the need for Departures from Standards, the need to divert the high pressure gas

<sup>300</sup> Doc HA/OBJ24/ALT10

<sup>301</sup> Doc HA/OBJ36/ALT11

main and the potential adverse environmental effects. Operationally, queues would extend back from the Northside roundabout onto the A47 eastbound carriageway and the Postwick P&R roundabout would be over capacity. Moreover, the new Business Park Link and the new dumb-bell roundabout junction would carry very low traffic flows such that the new construction would be hard to justify.

7.77 AR11 could not be delivered under the published draft Orders and would fail to achieve the Scheme Objectives. It would therefore not be a viable alternative to the published Scheme.

Alternative Route 12 (AR12)<sup>302</sup>

- 7.78 AR12 is put forward by the NGP (objector No 64). It has some similarities with AR1 and would satisfactorily address some of the geometric layout problems of this latter AR. However, northbound traffic from the existing Postwick Bridge would have to merge with traffic from the eastbound diverge slip road at the same location, and this would introduce added complexity and could cause confusion on the part of drivers. AR12 raises safety concerns due to the short weaving section between the Broadland Way roundabout and the diverge/merge slip roads, which would be significantly below the minimum standard. It is unlikely that these significant Departures from Standards would be acceptable.
- 7.79 In general, the same operational concerns exist with AR12 as with AR1. In particular, long queues of up to 370 PCUs in a single lane are predicted in the 2030 PM peak at Northside roundabout, amounting to a queue of over 2 km which would extend back through the Meridian Way roundabout and the new Broadland Way roundabout. This would result in queues extending back onto the A47 eastbound diverge slip road and onto the A47, giving rise to a regular and unacceptable potential risk of high speed accidents occurring. Furthermore it is predicted that the operation of the new Broadland Way roundabout would not be acceptable, even without the queues predicted that would extend back from Northside roundabout.
- 7.80 Because of the late submission of this Alternative a full economic appraisal has not been undertaken. However, the poor operational performance means that it would not be acceptable for the implementation of the planning permissions for the dependent developments and, therefore, the development benefits would not be realised. Accordingly, AR12 would fail to achieve the Scheme Objectives and could not be considered a viable alternative to the published Scheme.

Alternative Route 14 (AR14)303

7.81 AR14 is another Alternative put forward by Mr Cockcroft. As with AR12, this Alternative was not submitted in advance of the Inquiry and has not been published in the local press. The HA has carried out a limited desk-top assessment of AR14 but has not undertaken a detailed engineering design, or environmental assessment. It is unlikely that the Type A 2 lane diverge slip road shown for the eastbound diverge slip road would be within standards<sup>304</sup>. It would not be possible to provide a Type B layout on the existing slip road alignment

<sup>302</sup> Doc HA/OBJ64/ALT12

<sup>303</sup> Doc HA/OBJ121/ALT14

 $<sup>^{304}</sup>$  DMRB Volume 6 Section 2: TD22/06 "Layout of Grade Separated Junctions"

- without affecting the River Yare bridge. A Departure from Standard would be required to retain the existing Type A diverge layout.
- 7.82 The proposed Phase 2 alignment would impact on the BFLF development, for which planning permission has already been granted. Phase 2 would also result in significant traffic flows between the existing BBP and the BGBP and this would compromise the ability to encourage walking and cycling access (and hence the sustainable travel planning) for the BGBP development.
- 7.83 Operational assessments of the proposed traffic signal junctions indicate that the junction on Broadland Way would be substantially over capacity with very long queues and delays. In the AM peak, for all forecast years, queuing at this junction would be likely to extend back to the Postwick North-West junction and adversely affect its operation. This in turn could result in queuing across the bridge to the P&R junction and adversely affect its operation. In addition, the Postwick North-West junction would be substantially over capacity in the 2030 AM peak with long queues that would extend back down the eastbound diverge slip road onto the A47 main carriageway. This would present a regular, unacceptable risk of high speed accidents occurring.
- 7.84 A full economic appraisal has not been undertaken, but the very poor operational performance means that it would be unacceptable for the implementation of the planning permissions for the dependent developments and therefore the development benefits could not be achieved. AR14 would therefore fail to achieve the Scheme objectives and could not be considered a viable alternative to the published Scheme.

#### Summary of the Alternative Routes

- 7.85 Alternatives only become relevant if the published Scheme and the draft Orders can be shown to be unacceptable in some material respect. If that proves to be the case, it may then be necessary to consider whether there is some alternative way of meeting the Scheme objectives that would not involve that unacceptable consequence. Only if it is clear that the suggested alternative would not give rise to any unacceptable effects of its own, would it become necessary to consider the realism of the delivery of that apparently acceptable alternative.
- 7.86 In this case the alternatives fail at the first test, as the draft Orders would not give rise to consequences that render the Scheme unacceptable. The Scheme would facilitate the provision of substantial economic growth in line with both national and local planning policy objectives, and on whatever basis this growth is calculated the benefits would substantially outweigh the transport disbenefits.
- 7.87 Furthermore, as detailed above, all of the ARs put forward would fail at the second test, as none can claim to achieve the Scheme objectives without giving rise to unacceptable effects. None of the ARs could deliver the dependent development without unacceptable impacts on the A47 mainline. Several would also give rise to serious design constraints which would preclude them on those grounds, also. In addition, several of the ARs would be unlikely to be deliverable at reasonable expense and within a reasonable timescale, particularly where works would be required to protect or divert the high pressure gas main which runs close to the Scheme to the west of The Grange.
- 7.88 Some objectors found it hard to accept that operational problems were predicted to arise with their ARs, but not with the published Scheme, when they considered that each junction should be having to accommodate the same traffic flows. But

as Mr White explained, such assumptions do not allow for the workings of the traffic model, which tries to replicate driver behaviour by choosing different routes through the network, depending on the particular travel costs on the various routes<sup>305</sup>. As a result, whilst the number of trips between any origin and destination would be the same regardless of which AR was being tested, the routes which traffic would be assigned to, between those origins and destinations, could vary, depending on the predicted operation of the network.

7.89 The overall conclusion on this matter is that none of the ARs merits further consideration, in preference to the Scheme.

#### The alleged failure to adequately consider climate change

- 7.90 Two essential points are made by the main objectors who raise this issue (NNTAG and the NGP). The first concerns the substantive issue of whether the Scheme would have a material effect on climate change. The second concerns the procedural question of EIA.
- 7.91 On the substantive issue, Mr Buchan, for NNTAG, believes that it is necessary for the Scheme to achieve a reduction in carbon dioxide emissions compared to the base figure in 2009, irrespective of any change compared to the DM scenario. Since this is not achieved by 2030 Mr Buchan considers the Scheme must be objectionable, even if the calculation of the change provided by the HA is correct. Cllr Boswell accepts that the proper comparison should be between DM and DS scenarios, but considers that the study area that has been used is too extensive and that it artificially reduces the magnitude of the change in carbon dioxide emissions.
- 7.92 It is clear from the DMRB<sup>306</sup> that the appropriate assessment of the effects of the Scheme requires a comparison of a DM scenario with a DS scenario, effectively comparing "without scheme" and "with scheme". The same point is made in WebTAG Unit 3.3.5<sup>307</sup>. Mr Buchan wrongly claims that there is a scheme-level target for a 15% reduction in carbon dioxide emissions between 2009 and 2030 because the Government has projected a potential fall of that amount for the UK transport sector as a whole by the continuation of "current policies"<sup>308</sup>.
- 7.93 Even if the 15% was a target (which it is not) and even if it applied to individual schemes (which it does not), it is not the effects of the Scheme which mean this "target" is not achieved. In the DM scenario the levels of carbon dioxide emissions at 2030 are just slightly more than they would be with the Scheme in place<sup>309</sup>. Thus any "undershoot" cannot sensibly be attributed to the effects of the Scheme. In addition, no evidence has been presented (by anyone) that, on a UK basis, the transport sector is not going to achieve the current projection, irrespective of what happens in relation to the Scheme<sup>310</sup>.
- 7.94 Mr Buchan starts from the legally binding targets in the Climate Change Act 2008, and then moves to the carbon budgets derived from those targets. But he

<sup>&</sup>lt;sup>305</sup> Day 6 Transcript, Page 60 lines 4-24

 $<sup>^{306}</sup>$  See paras 3.7 and 3.31 of DD313

 $<sup>^{307}</sup>$  See paras 2.1.1 and 2.2.1 on p45 of Doc HA/07/2

 $<sup>^{308}</sup>$  See para 2.76 on p17 of Doc HA/07/2

 $<sup>^{309}</sup>$  See Table 1 on p7 of Doc HA/07/2

 $<sup>^{310}</sup>$  Doc INQ/04: Day 11 Transcript, page 151 lines 6 to 13  $\,$ 

then applies those targets and budgets to the subordinate levels of regions, local authorities, and schemes. This approach, in effect, says that a national target is only achievable if every constituent element below the national level achieves a carbon reduction in line with the national target.

- 7.95 However, Government has not sought to place such a strait-jacket on local authorities, let alone on individual schemes. To do so would not only be unduly prescriptive, it would be to ignore the contributions of other initiatives, particularly in the field of transport. Changes to the vehicle fleet over time (including Ultra Low Emissions Vehicles) are expected to play an important part in the achievement of carbon emission reductions from the transport sector. This is recognised in the current Carbon Plan<sup>311</sup>. Whilst they have not been factored into Professor Laxen's calculations, they do mean that the modest reductions he is predicting from the Scheme are likely to be exceeded in reality<sup>312</sup>.
- 7.96 Cllr Boswell takes a different stance, but his concern about the size of the study area disregards both the geographic circumstances of Norwich and its rural hinterland<sup>313</sup>, and the relevant guidance in DD313. He considers that the inclusion of the outlying Norfolk districts (and Waveney) in the modelled highway network means that the carbon dioxide calculation is diluting the changes in movements that are attributable to the Scheme, by the inclusion of areas where there would be no change and so the degree of change is artificially minimised.
- 7.97 However, the modelled network has been identified on the basis that it embraces the areas where changes in movements as a result of the Scheme can be anticipated<sup>314</sup>. Moreover, despite ClIr Boswell's concerns about the extent of the modelled study area, he was unable to suggest any alternative study area other than to say that it should be based on "something that can be attributed to the Postwick Hub scheme"<sup>315</sup>. Essentially that is the study area that Professor Laxen has chosen, so as to capture all the changes resulting from the Scheme, and he was quite clear in his view that there would be no logic in using anything other than the wider study area<sup>316</sup>.
- 7.98 The primary changes are, understandably, in the areas closest to Norwich but there is no rationale for excluding all the changes that can be identified. Accordingly, Professor Laxen has assessed all the changes across the modelled network<sup>317</sup> between DM and DS scenarios. This indicated that in absolute terms, the change would be a minor reduction of some 0.85 kt/year of carbon dioxide by 2030 as a result of the Scheme. As a percentage change this would be a reduction of about 0.062% compared to the DM. Even the interim position in 2020 (when there is a modest increase of 0.55 kt/year) falls below the indicative threshold of 1 kt/year that Cllr Boswell indicated would mean changes were at a scale where offsetting would not be required<sup>318</sup>.

 $<sup>^{311}</sup>$  See paras 2.75 and 2.79 of Doc HA/07/2

<sup>312</sup> Doc INQ/04: Day 8 Transcript, p115

 $<sup>^{313}</sup>$  See para 5.8 of Doc HA/07/1; paras 13.65 to 13.67 of DD231

 $<sup>^{314}</sup>$  Doc INQ/04: Day 11 Transcript, p128, line 11 to p129, line 11

<sup>&</sup>lt;sup>315</sup> Doc INQ/04: Day 11 Transcript, p216, lines 1-3

 $<sup>^{316}</sup>$  Doc INQ/04: Day 11 Transcript, page 137, line 20 to page 138 line 15

In accordance with the approach suggested in para 3.39, p3/6, DMRB Vol 11, Section 3, Part 1 (DD313)

<sup>&</sup>lt;sup>318</sup> Doc INO/04: Day 11 Transcript, p178, lines 14-23; Table 1 on p7 of VHA/07/2

- 7.99 Although Cllr Boswell subsequently sought to withdraw his suggestion that 1 kt/year would be an appropriate threshold, on the grounds that he made it "on the fly" under cross-examination, the use of closing submissions to withdraw evidence given to the Inquiry is not appropriate. The evidence is the evidence and submissions are submissions. The weight to be given to this part of Cllr Boswell's evidence should have regard to the fact that he has undoubtedly given this matter considerable thought over the years.
- 7.100 The sensible conclusion on this topic has to be that there has been a more than adequate assessment of the potential for the Scheme to have effects on climate change, and a robust modelling exercise that fully reflects current guidance has shown that the effects would be a minimal improvement compared to the position without the Scheme.
- 7.101 With regards to Mr Heard's query, as to what evidence there is that "adaptation" has been taken into account in these proposals, as required by the Climate Change Act 2008, the HA's response is that climate change adaptation for roads principally requires consideration of increased rainfall in the design of the drainage network. This is embedded in highways drainage design which requires climate change impacts on rainfall to be allowed for in scheme design<sup>319</sup>.
- 7.102 On the procedural point raised by objectors concerning the EIA, it is correct to note that the EIA at the planning application stage did not fully assess the carbon dioxide effects of the proposal, but focused instead on the built development and the development traffic. Wider traffic changes on the improved highway network were not included in that assessment and none of the statutory consultees at the planning application stage suggested there was a need to include such changes.
- 7.103 However, it is now abundantly clear that the changes to carbon dioxide emissions as a result of the Scheme, when properly assessed by reference to the relevant study area, would not constitute a "significant environmental effect" and so there is and was no need to assess the changes to these emissions as part of the EIA. Nor does the effect on carbon dioxide emissions call into question the decision made by the HA on behalf of the SST that the Scheme did not require EIA<sup>320</sup>. Whilst Cllr Boswell has asked for this decision to be withdrawn, there is no basis for considering there would be a significant environmental effect and so no basis for changing the decision reached<sup>321</sup>.
- 7.104 That conclusion has been supported by clear reasons, taking into account not only the views of Professor Laxen but also the views of Cllr Boswell and Mr Rapson (on behalf of Lothbury). Whilst it is open to the Inspector to consider whether he should invite the Secretary of State to revisit the question of whether EIA should be required, there is no evidence to suggest that the conclusion reached was erroneous or that carbon dioxide changes would constitute a significant environmental effect so as to require assessment in a formal EIA. There is therefore no basis for suggesting that the decision needs to be revisited.

#### The alleged failure to consider the Scheme in conjunction with the NDR

7.105 Objectors contend that there would be prejudice to a proper consideration of the NDR if the current draft Orders are made on a stand-alone basis. However,

320 Doc HA/11

<sup>&</sup>lt;sup>319</sup> see DD261

<sup>&</sup>lt;sup>321</sup> Doc HA/40

whilst it is accepted that making the Orders would limit the options for any likely NDR route to connect to the A47, any prejudice would be reduced to the minimum as the Scheme reflects the current proposals for the NDR as shown on the BLP Proposals Map<sup>322</sup>. To ignore the NDR in the design of the Scheme when the NDR is a proposal of LTP3 (and the NATS), and has secured Programme Entry from DfT (and features in the recent Command Paper "Investing in Britain's Future")<sup>323</sup> would be perverse.

- 7.106 Assertions that the Orders are a "back-door" route to secure permission for the NDR are simply wrong. There is nothing "back-door" about the Orders process. Planning permission has already been secured for the Scheme and any further consents for the NDR will be a matter for NCC to resolve and address.
- 7.107 The final point raised by objectors is that it is inconsistent for the HA to present a case for the Scheme on a stand-alone basis, whilst NCC is currently consulting on a combined project which includes the Postwick Hub works within a proposed NDR NSIP. But this fails to recognise the timescale implications of progressing infrastructure projects. NCC has indicated that it wishes to proceed with the NDR and the NSIP route it has chosen involves considerable pre-application consultation, which has now commenced. Clearly, at present the outcome of this Inquiry is unknown and neither the HA nor NCC would seek to presume its outcome, or the timescale for it<sup>324</sup>.
- 7.108 In these circumstances, it is wholly unsurprising that NCC has taken the cautious view of including the works that comprise the Scheme within its NDR proposal, so that that proposal can proceed to its next stage. This enables NCC to minimise any delay to either proposal by allowing for both to be approved on a separate basis but also recognising that the decision on the Orders is simply unknown.

#### **Individual Objections**

- 7.109 In terms of the individual objections, the current position is that objections remain outstanding from 127 separate objectors<sup>325</sup>. There is one statutory objector (objector No 3), namely the Postwick with Witton Parish Council, for whom Mr Woods presented evidence at the Inquiry. However, whilst he maintained his objection, particularly in relation to the closure of the eastbound slip road, he welcomed the proposal that a pedestrian/cycle route would be provided on the slip road, if it was to be closed<sup>326</sup>.
- 7.110 The remaining objections are from non-statutory objectors. The HA has provided a detailed Rebuttal Proof (or Proofs) to all objectors who have appeared at the Inquiry<sup>327</sup>, and Rebuttal Proofs have also been prepared for a number of objections where the objector decided not to attend the Inquiry<sup>328</sup>. These Rebuttal Proofs are comprehensive and fully address all of the points raised, with the main contentious issues being addressed above. There were, however, some

 $^{323}$  See para 2.6 and Table A2 of Doc HA/34  $\,$ 

<sup>&</sup>lt;sup>322</sup> DD366

<sup>324</sup> See Doc INQ/04: Day 3 Transcript, p35, lines 13-21

<sup>&</sup>lt;sup>325</sup> Of the 131 objectors referred to in the HA's closing submissions, 2 had subsequently deceased, 1 could not be contacted and one signed a SOCG and did not pursue their objection further.

See Doc INQ/04: Day 7 Transcript, p15, lines 16-24

<sup>&</sup>lt;sup>327</sup> Objector Nos 2, 8, 12, 24, 28, 36, 52, 64, 77, 81, 82, 86, 121, 127, 131, 132

<sup>&</sup>lt;sup>328</sup> Objector Nos 27, 35, 128, and 129

- matters raised in the closing submissions given by NNTAG which warrant separate mention here.
- The first point relates to NNTAG's reference to the hearings into the remitted part of the JCS and the fact that an addendum on transport carbon emissions is to be prepared as part of that process. The fact remains, that those hearings only relate to the remitted part of the JCS, with that Inspector making it clear that he is not considering wider matters concerning the adopted JCS<sup>329</sup>.
- The second point relates to NNTAG's criticism of the HA's traffic assignments which show that implementation of the Scheme would result in some traffic which currently uses the eastbound diverge slip road to reach the Yarmouth Road (West) area, reassigning to enter and exit Norwich via the Southern Bypass junction at Trowse. Although NNTAG maintained that the deterrent effect of the Scheme on the eastbound diverge slip road would not be offset by the west bound slip road, Mr White clearly explained the reasoning for the reassignments and why improving traffic conditions for drivers using the westbound diverge slip road would balance flows at the Postwick junction<sup>330</sup>.
- The third point NNTAG raises is that the provision of the 1,600 dwellings is not 7.113 solely dependent on the improvements to the Postwick junction, but also require the provision of the link road from Broadland Way to Plumstead Road East. This is quite correct, but the link road now has the benefit of planning permission as part of the BFLF permission, with the development site being under the control of Lothbury, the proposed developer. Whilst Mr Radford, expressed some concerns about the timescale for delivery of those dwellings, it was clear from his evidence that Lothbury has every intention of bringing this development forward.
- NNTAG also comments that Professor Owen has not considered the effect of the Scheme on any loss of employment at Great Yarmouth. However, evidence on this was provided by Mr Starkie on behalf of New Anglia LEP<sup>331</sup> and Mr Morris for the HA<sup>332</sup>, both of whom referred to the complementary relationships between Great Yarmouth and Norwich.
- NNTAG asserts that the HA did not dispute that the Postwick Hub design has been determined by the County Council's plans for a NDR A47 Postwick junction connection. That is not correct, as can be seen both in Mr Kemp's written evidence<sup>333</sup>, and in his response to cross-examination by NNTAG<sup>334</sup>, where he made it quite clear that the design with or without the NDR would effectively be the design that appears before this Inquiry.
- A further matter raised by NNTAG is its view that the Scheme is highly likely to attract people to commute by car from Great Yarmouth to jobs at Postwick. However, figures 5.2 and 5.3 in Doc HA/05/2 show the predicted flows on the A47 east of Postwick and it is clear that the traffic model is not identifying significant changes in flows that might jeopardise the performance of the A47 east of Norwich.

<sup>&</sup>lt;sup>329</sup> See paras 2.3 and 2.4 of Doc HA/RB/OBJ64/4

<sup>330</sup> See Doc HA/54

 $<sup>^{\</sup>rm 331}$  Doc INQ/04: Day 11 Transcript, page 221, line 15 to page 222, line 9

 $<sup>^{\</sup>rm 332}$  Doc INQ/04: Day 10 Transcript, page 18, line 4 to page 19, line 6

 $<sup>^{333}</sup>$  paras 6.3.2, 6.3.19-6.3.23 and 13.2.12 of Doc HA/03/1

<sup>&</sup>lt;sup>334</sup> Doc INO/04: Day 10 Transcript, page 86, lines 1-12

- 7.117 The final NNTAG point that needs to be addressed is its assertion that the HA and NCC have failed to consider alternatives to the Scheme which did not include the BGBP and the Postwick P&R extension. However, both BGBP (which is a development promoted in the statutory development plan) and the P&R extension, have planning permission, with the P&R permission having been implemented. The HA does not consider it is reasonable to have modelled a scenario without those existing commitments.
- 7.118 On other matters, it is of note that although Mr Bowell (objector No 2) sought to make a case for improvements to the Yare viaduct to cater for cyclists, there is no rational basis for suggesting that such an improvement is required as a consequence of the changes to the highway network proposed by the Orders. In reality Mr Bowell conceded this in his evidence<sup>335</sup>. The bodies representing cycling groups and interests have withdrawn their objections<sup>336</sup>. In addition, when informed, at the Inquiry, that the proposed relocated bus stop at the junction of Church Road with Brundall Low Road is only used by a school bus, Mr Bowell indicated that his request for an extended footpath to serve this bus stop was not to be treated as an objection to the Scheme.
- 7.119 Furthermore, although a number of existing businesses made representations about the likely impact of the Scheme, it was apparent that there was a lack of understanding of the real scale of the changes in terms of additional journey times. In the particular case of MDL (objector No 131), the nature of their night-time operations means that the extra journey time would be about 30 seconds, for one direction only. Whilst any detrimental effects on existing businesses are regrettable, they have to be seen in the light of the substantial new economic opportunities that the Scheme would enable.
- 7.120 Although some objectors were fearful of the consequences of a traffic signal failure at the proposed P&R junction, this junction would be remotely monitored by NCC as is the case with all signal sites across Norfolk. Any faults would be automatically notified to NCC's traffic control centre and the junction would be classed as a priority site for fault and maintenance support. As a result engineer support would be available on a "24/7" basis.
- 7.121 Mr Heard commented that as there is no evidence from the emergency services, it must be assumed that they have not been consulted regarding the Scheme. This is not the case. The Scheme, along with the BGBP development, has been through the necessary planning processes and consultations twice (due to a legal challenge to the first planning permission). All of the emergency services are consulted as statutory consultees as part of the planning process and no objections were raised by those services.
- 7.122 Mr Heard also comments that the adoption of a "pooled" Community Infrastructure Levy (CIL), between the constituent authorities of the GNDP, adds to the economic uncertainty of infrastructure projects such as the Postwick Hub. However, such matters are not relevant to this case as the funding for the Postwick Hub Scheme has already been approved by central Government, as has been explained earlier.

<sup>335</sup> Doc INQ/04: Day 7 Transcript, pp33-34

 $<sup>^{336}</sup>$  Docs HA/29 and HA/32

- 7.123 In addition, Mr Heard made reference to the Social Values Act<sup>337</sup>, and queried how the Scheme would accord with the Natural Environment and Rural Communities Act of 2006, although no direct objection was lodged on these points. In any case, the Public Services (Social Value) Act 2012, excludes public works contracts and so is not directly relevant to this Scheme. Moreover, the Scheme has been subject to full EIA.
- 7.124 On a final, general point, it should be noted that there is no remaining objection to the stopping up of Footpath No 2.
- 7.125 Any other remaining objections have been responded to by the HA in the objection files, with specific correspondence responding to each objection<sup>338</sup>.

# **Overall Summary of the HA's Case**

- 7.126 The merits of the 2 Orders are inextricably linked and have to be considered together. However, there are no outstanding objections to the proposed stopping up of the 2 private means of access so there is no need to address section 125 of the Highways Act 1980. Similarly, as there are no outstanding objections to the stopping up of Footpath No 2 there is no need to address section 14 of this Act in relation to that highway. It is clear that in both these cases, users would be provided with a reasonably convenient alternative.
- 7.127 The key tests are therefore the interplay between sections 10 and 14 of the Highways Act 1980 in relation to the changes to the slip roads and their proposed replacements. In order for the existing slip roads to be stopped up, the Secretaries of State will need to be satisfied that "another reasonably convenient route" would be available to cater for all previously possible movements. This involves an assessment of the new slip roads, because the HA relies on their provision as an essential part of the "reasonably convenient route" that would be made available.
- 7.128 The HA considers its evidence clearly makes the case for stopping up the slip roads, because the new arrangements which would be provided by the Scheme would be "reasonably convenient" to highway users. This is an objective test, rather than a comparative test with the existing situation. Equivalent replacement is not required and the fact that some journeys would be longer than is currently the case does not mean that they would not still be "reasonably convenient". All movements would continue to be possible and whilst the transport disbenefits of the necessary re-routings have been acknowledged, the case for the Orders is nonetheless "expedient", because of the benefits that would be enabled.
- 7.129 The transport network at Postwick has the opportunity to be an engine for economic growth. That is part of the proper function of an important element of public infrastructure. That growth, which has been approved through the planning process, both in the development plan and by the grant of planning permissions, is being held back by the deficiencies of the present arrangements. Change is needed, and the Scheme would deliver that change. There have not been shown to be any lesser alternatives that could achieve the same outcomes. None of the objections should therefore be upheld, and the Secretaries of State are invited to make the Orders, as proposed to be modified.

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<sup>337</sup> Assumed to be the Public Services (Social Value) Act 2012

<sup>338</sup> See Doc INQ/02

## 8. CONCLUSIONS

8.1 Bearing in mind the submissions and representations I have reported, I have reached the following conclusions, reference being given in superscript brackets <sup>[]</sup> to earlier paragraphs where appropriate.

### **Structure of Conclusions**

- 8.2 These conclusions first set out the tests which the Slip Roads Order (Slip RO) and the Side Roads Order (Side RO) must satisfy if they are to be made. They then review and consider the proposed improvements to the Postwick Hub junction ("the Scheme" or "the Postwick Hub Scheme") and the associated proposal for the Broadland Gate Business Park (BGBP), in the context of the current and emerging planning and transport policies and strategies for the area.
- 8.3 The matters raised by objectors, the vast majority of whom are non-statutory, are dealt with next. Many of the objections contain common themes and, where possible and appropriate, these are dealt with on a topic basis to reduce repetition. Some of the points raised are of limited, direct relevance to the Slip RO and the Side RO but, in the interests of natural justice, these objectors were heard at the Inquiry and written submissions were also accepted. However, where these relate to matters which are clearly outside the scope of this Inquiry, they have not been responded to in detail in these conclusions.
- 8.4 Consideration is given to the various Alternative Routes (ARs) suggested by objectors, and to other more general matters raised by objectors, which do not fall easily within the aforementioned topic headings. Finally, the conclusions are drawn together into recommendations on each of the Orders.
- 8.5 I have taken account of the Environmental Statement (ES) submitted to support the joint planning application for the BGBP and the Scheme, together with the revised ES of April 2013 and all other environmental information submitted in connection with the Scheme, in arriving at my recommendations<sup>[1.4]</sup>.

# The Statutory Tests against which the Orders need to be assessed

- 8.6 The Slip RO is drafted under sections 10 and 41 of the Highways Act 1980. It would authorise the new slip roads to be constructed, connecting the eastbound carriageway of the A47 trunk road with the A1042 Yarmouth Road (as proposed to be improved by the Secretary of State for Transport (SST)) at the existing Postwick junction (referred to in the draft Orders as the Postwick Interchange).
- 8.7 The requirements of local and national planning policies and the requirements of agriculture must be borne in mind when making changes to the trunk road network. Furthermore it is a requirement that the changes are expedient for the purpose of extending, improving or reorganising the national system of routes in England and Wales. Many of the objections touched on matters covered by these tests, and they are explored in the following sections.
- 8.8 The Side RO is drafted under Sections 12, 14 and 125 of the Highways Act 1980. It would provide for roads, accesses and public rights of way (PRoWs) adjoining or crossing the trunk road to be altered or diverted as necessary. It would also authorise the SST to provide new means of access and alterations to existing highways, footpaths and private means of access (PMA) to premises as necessary.

- 8.9 Provision has to be made for the preservation of any rights of statutory undertakers in respect of their apparatus, and no stopping up order shall be made unless either another reasonably convenient route is available or will be provided before the highway is stopped up. Furthermore, the stopping up of a PMA shall only be authorised if the Secretaries of State are satisfied that no access to the premises is reasonably required, or that another reasonably convenient means of access to the premises is available or will be provided.
- 8.10 Many of the objections oppose the Scheme on grounds relating to the alternative routes proposed to be provided under the Side RO, and these are discussed in the following sections. It is of note, however, that none of the extant objections relate to either the proposed re-routing of Postwick Footpath No 2<sup>[2.8, 3.56]</sup>, or the replacement PMAs to Heath Farm and The Grange. The first of these points is discussed in paragraph 8.81 below.
- 8.11 On the second point, the replacement PMA for Heath Farm would be provided through implementation of the Scheme<sup>[3.54]</sup>, whilst the replacement PMA for The Grange would be provided through a separately granted planning permission<sup>[3.54-3.55]</sup>. Both would be reasonably convenient alternatives to the current accesses and, accordingly, I conclude that these replacement PMAs would satisfy the relevant test in the Side RO.

# **Policy Considerations**

- 8.12 As noted above, the statutory tests for the making of the Orders need to take account of the requirements of local and national planning policies and the requirements of agriculture when changes to the trunk road network are being considered. In this case, the key starting point in the consideration of this matter is the fact that the relevant developments, including the Scheme itself, all benefit from extant planning permissions, granted relatively recently<sup>[1.2, 3.26, 3.28]</sup>.
- 8.13 The BGBP and the Scheme were the subject of a hybrid planning application which sought outline planning permission for the business park and full planning permission for the highway works. Although the original planning permission for this joint proposal was the subject of judicial review, outstanding matters were resolved and a fresh planning permission now exists<sup>[1,2]</sup>. Some of the necessary highway works are not covered by the planning permission as they can be carried out under permitted development rights<sup>[1,2]</sup>.
- 8.14 The BGBP was granted planning permission as it is in accordance with all relevant policies of the development plan, including Policy 9 of the Joint Core Strategy (JCS), which deals with the strategy for growth in the Norwich Policy Area (NPA), within which the Postwick junction and BGBP lie. Amongst other matters this policy makes specific provision for an extension to the Broadland Business Park (BBP) of around 25 hectares (ha) for general employment uses<sup>[3.33]</sup>.
- 8.15 However, existing and forecast traffic problems at the Postwick junction, and the Highways Agency's (HA's) need to protect the operation of the A47 trunk road, mean that development in the area is being constrained until the Postwick junction is improved. As a result, the outline planning permission for the BGBP is subject to a number of conditions, including Condition 3 which requires that the approved improvements to the Postwick junction be completed and made available for public use before any part of the business park development is occupied<sup>[3.25]</sup>.

- 8.16 These junction capacity problems are also preventing any further development at the existing BBP, established under policies TSA2 and TSA3 of the Broadland District Local Plan (BLP)<sup>[3.24]</sup>. These policies make it clear that a maximum of 85,000 sqm of floorspace could be constructed as the first phase of the business park development, but that before any second phase of development could take place, 2 important elements of highway infrastructure had to be provided.
- 8.17 The first of these is a link road through the development area, to join up with Plumstead Road<sup>[3.24, 3.27]</sup>. The second is that an improvement to the A47 Postwick junction needs to be carried out<sup>[3.24]</sup>. As the first phase floorspace limit has now been reached, further development at BBP is dependent upon, amongst other things, improvements to the Postwick junction.
- 8.18 The other piece of highway infrastructure referred to above the link road to Plumstead Road forms part of the recently granted outline planning permission for the Brook Farm/Laurel Farm (BFLF) development, which will extend the BBP northwards, providing some 600 dwellings and 14.6 ha of employment land<sup>[3.24]</sup>. This permission is conditioned to prevent occupation of any part of the development until both the link road and the Postwick Hub Scheme have been completed and are available for use.
- 8.19 In addition to these constraints on employment and housing development, the existing and forecast conditions at the Postwick junction also mean that a 500 space extension to the Postwick Park & Ride (P&R) site, for which planning permission exists, cannot be fully progressed. Whilst a start was made on this development in April 2013, Condition 14 attached to the permission means that the extended facility cannot be brought into use until the Postwick Hub Scheme has been implemented<sup>[3.28]</sup>.
- 8.20 The aforementioned developments are all important elements in the growth strategy for the area, and clearly there is an urgent need to resolve the infrastructure constraints which are preventing them from being progressed.
- 8.21 In terms of the housing strategy contained in the JCS, Policy 4, which deals with housing delivery, seeks to ensure that allocations can be made to secure at least 36,820 new homes by 2026, with about 33,000 of these within the NPA<sup>[3.31]</sup>. At present there is still some uncertainty regarding growth of about 10,000 houses in what is referred to as the North East Growth Triangle (NEGT), as this element of the originally adopted JCS was remitted for further consideration following a legal challenge from Stop Norwich Urbanisation (SNUB) <sup>[3.30]</sup>. Hearings into this remitted part of the JCS were taking place at the same time as this Inquiry into the Slip RO and the Side RO, and the outcome is not yet known.
- 8.22 However, the remainder of the JCS remains adopted, including the overall scale of housing and jobs growth, the requirement for a new allocation at BBP, and the identification of the need to improve Postwick junction<sup>[3,30]</sup>. Therefore, leaving aside any considerations of housing provision in the NEGT, the adopted JCS still makes allowance for a minimum of 1,600 dwellings to be delivered in this general area, subject to acceptable improvements to Postwick junction (in the form of the Postwick Hub Scheme or a suitable alternative) <sup>[3,32, 3,60]</sup>.
- The 600 dwellings contained in the BFLF permission would be included within this 1,600 dwelling target, and I accept the HA's point that there is therefore an "in principle" commitment to a further 1,000 dwellings in this area, although there is no specific allocation or planning permission for them at present<sup>[3.46, 5.30]</sup>. These 1,600 dwellings would make an important contribution to the overall JCS housing

- target. Moreover, as the latest AMR demonstrates that there is currently not a 5-year supply of housing land, and that the biggest shortfall is in the Broadland part of the NPA, removing any obstacles to the release of these dwellings clearly is of great importance<sup>[3.31]</sup>.
- 8.24 In terms of employment growth, JCS Policy 5, which deals with the economy, has a target of making provision for at least 27,000 additional jobs in the period up to 2026<sup>[3.33]</sup>. The land which would be released by the Scheme would provide a significant contribution to the delivery of this economic potential. Indeed, it is estimated that around 5,000 jobs could be provided by the developments now permitted at BGBP and BFLF<sup>[3.34]</sup>.
- 8.25 Furthermore, the submitted evidence indicates that negotiations with the Government to develop a "City Deal" for Norwich are predicated on significantly exceeding job growth targets<sup>[2.2, 3.35]</sup>. The expansion of BBP provides the best general employment opportunity for early growth, but the inability to implement this expansion, through the already permitted BGBP and BFLF proposals, would undermine the JCS's economic growth strategy.
- 8.26 Turning to transport matters, the NATS was updated and agreed by NCC's Cabinet in  $2010^{[3.36]}$ . It has been designed to help deliver growth, address problems such as congestion, and to help ensure that Norwich develops as a sustainable urban community.
- 8.27 NATS promotes travel choice, recognising the need to maintain the economic health of the Norwich area, and does not propose radical restrictions on vehicular access. It does, however, have a policy of accommodating the growth in number of trips by means other than the car, and aims to achieve this through promotion and improvements of other modes, including public transport. A Northern Distributor Road (NDR) is identified as an important element of the NATS strategy, to enable growth within and around Norwich<sup>[3.36]</sup>.
- 8.28 NCC's latest LTP [3.37] was adopted in March 2011 and is supported by an LTPIP which covers the period from 2011 to 2015 [3.37]. Chapter 4 of the LTP deals with sustainable growth and includes, within its short to medium term priorities, the requirement that the implementation plan for transport in the Norwich area, including a NDR, continues to be delivered as part of the JCS for enabling growth in the Greater Norwich area. The LTP states that delivery of the Postwick Hub will alleviate current capacity issues, serve new development at Broadland Gate and form the junction between the NDR and the A47 [3.38].
- 8.29 It further states that these improvements will free up capacity on the existing road network in the city centre, providing the scope to implement a package of complementary measures including bus priority, walking and cycling improvements<sup>[3,38]</sup>. In this regard it is of note that the BGBP permission is also subject to a S106 agreement to implement an agreed Travel Plan. This would provide a public transport contribution likely to be in the range of £1.5 million to £2 million<sup>[3,25]</sup>. The Postwick Hub proposal and the NDR are both included in the capital programme in the LTPIP<sup>[3,38]</sup>.
- 8.30 Furthermore, Policy 7 of the LTP, dealing with Strategic Connections, highlights the importance of the A47 in the region. It explains that it is part of the European TEN-T network, providing the main east-west road connection and route to the Midlands and north of England, and that via a future NDR it would provide a connection to what are referred to as Norfolk's gateways, namely Norwich Airport and the ports at King's Lynn and Great Yarmouth<sup>[3.41]</sup>.

- 8.31 Improvements to the Postwick junction and the protected corridor for the proposed NDR are both shown on the BLP Proposals Map (as modified following adoption of the JCS in 2011) [3.42]. The Scheme is shown as located at the end of a proposed BRT corridor linking the BBP/BGBP area with the city centre. All these schemes are also shown, diagrammatically in the proposed implementation plan for NATS which is contained within the JCS<sup>[3.42]</sup>.
- 8.32 Policy 6 of the JCS covers a range of transport aims, including the need to implement NATS; significant improvement to the bus, cycling and walking network including BRT; and enhancing Park & Ride. The JCS also specifically identifies the Postwick junction improvement as one of a package of measures required to deliver growth and facilitate modal shift<sup>[3,43]</sup>.
- 8.33 JCS Policy 9, referred to previously, also highlights that the transport infrastructure required to implement NATS, deliver growth and support the local economy will include the construction of the NDR; significant improvement to the bus, cycling and walking network, including BRT on key routes in the Norwich area; enhancing the Norwich P&R system; and junction improvements on the A47 Norwich Southern Bypass<sup>[3.44]</sup>.
- 8.34 The above points demonstrate the importance of the A47 trunk road, and confirm that a proposal to improve the existing Postwick junction has been a significant and important part of the transport strategy for the area for some years. They also highlight the significance of such an improvement and the implementation of the NATS generally, to the economic growth potential of the area.
- 8.35 Most of the planning permissions referred to above were granted before the National Planning Policy Framework ("the Framework") was issued in March 2012. Clearly, adoption of the BLP and the JCS also preceded the Framework. Nevertheless, as the thrust of the Framework is to promote sustainable economic growth and jobs, the development plan policies referred to above still accord with this more recent national guidance<sup>[3.23, 3.31, 3.97]</sup>.
- 8.36 Indeed, the employment and housing growth opportunities which would be released by construction of the Scheme, coupled with the improvements to non-private car modes of transport which would arise from the BGBP public transport contributions and the P&R extension, would fully accord with the Framework's aims. They would also help to secure sustainable economic growth and thereby align with what the Government has said is the highest national priority<sup>[3.21]</sup>.
- 8.37 Taking all the above points into account, I conclude that development of the BGBP and the associated construction of an improvement to the existing Postwick junction would accord with national and local planning and transport policies. I therefore further conclude that there is no policy impediment to the Scheme proceeding.

## **Issues Raised By Objectors**

# The Principle of New Development in the Postwick Area 339

8.38 I acknowledge that some issues concerning the remitted parts of the JCS are still to be resolved<sup>[3.30, 3.33, 5.6, 5.29, 5.35, 5.123, 7.111]</sup>. However, in light of my conclusions on the various policy matters, set out above, I give little weight to those

<sup>&</sup>lt;sup>339</sup> Objections covered by this topic include those raised by the following - objector Nos 4, 7, 9, 12, 15, 17, 22, 27, 28, 33, 36, 70, 74, 85, 86, 123, and 132

objections which oppose new development in this area as a matter of principle, or put forward arguments which do not go to the heart of the statutory tests for these Orders. This includes those objections which argue that:

- the BGBP development and other proposed developments are not necessary because there is already an abundant supply of office accommodation;
- planned housing to the north-east of Norwich should, instead, go to the south-west, where the jobs are;
- the Scheme would spoil Norwich by urbanisation;
- the developments should not go ahead as there is plenty of empty, derelict land available;
- that the BGBP does not feature in the BLP;
- that the BGBP and the P&R expansion should not be taken into account when junction improvements are being considered.
- 8.39 Notwithstanding any final resolution on outstanding JCS matters, such objections are at odds with the adopted planning and transport policies and strategy for the area, and in some cases appear to disregard the fact that planning permissions have already been granted. In these circumstances I conclude that those objections which relate to such matters cannot be supported.

# Objections relating to Procedural Matters

- 8.40 Several objectors argued that there had been inadequate consultation on the Postwick Hub proposals<sup>340</sup>, and were particularly concerned about what was seen as a lack of opportunity to comment on the proposal to close the eastbound diverge slip road, which had not been part of the original design for the junction<sup>[5,40, 5,77, 7,4]</sup>. I acknowledge that the nature of this proposal, which is essentially a local authority highway proposal which has implications for the SRN, is a somewhat unusual Scheme. It clearly differs from a straight-forward trunk road project, initiated and promoted by the HA, and in this regard I can appreciate the disquiet expressed by some objectors.
- 8.41 However, it is clear that full consultation was carried out by BDC on the hybrid planning application for the BGBP proposal and the Postwick Hub Scheme, and that this included a specific round of consultation in August 2009, after the application was revised to close the eastbound diverge slip road<sup>[7.3]</sup>. In addition, a further public exhibition into the current, draft Orders was held in February 2012, when they were re-advertised<sup>[7.4]</sup>.
- The advertising of the draft Orders has given interested persons full opportunity to make their comments and objections known on the proposal, and whilst some objectors consider that it would have been more meaningful to have a consultation at an earlier stage, before the Scheme design was finalised, this rather overlooks the fact that planning permission has been properly granted for the published Scheme, following normal planning application and consultation procedures, as detailed above. In view of these points I am satisfied that the consultation process which has been undertaken has been adequate, and has given all those who may have wished to comment on the Scheme, full opportunity to do so.

Objections covered by this topic include those raised by the following - objector Nos 5, 11, 14, 28, 44, 56, 79, 84, 86, 126

- 8.43 NNTAG expressed concerns about the fact that evidence from the HA and NCC has changed during the lifetime and development of the Scheme, particularly with regards to such matters as traffic information. It is argued that the late presentation of such evidence has adversely prejudiced objectors and has hampered their ability to put forward alternatives to the Scheme. Because of this, objectors have suggested that the draft Orders should be withdrawn and the Order advertisement procedure restarted<sup>[5.3, 7.12, 7.15]</sup>.
- 8.44 However, it is certainly not unusual for evidence to change and evolve as a Scheme is developed. This is particularly the case when, as here, an enforced delay has been imposed on development and progression of the Scheme<sup>[1.1, 3.62, 7.12, 7.13]</sup>. There is a clear need to ensure that in such circumstances evidence is brought up to date, so that the most reliable information is available to allow debate to be undertaken and decisions to be made.
- 8.45 It is apparent that the vast majority of evidence, including all the key documents, was submitted in accordance with the Inquiry Procedure Rules<sup>341</sup> and the timetable drawn up at the PIM <sup>[7.14]</sup>. As such, objectors will have had an adequate opportunity to consider the latest evidence and make comments on it. I accept that submission of some of the HA's Rebuttal Proofs of Evidence did not accord with the PIM timetable<sup>[7.15]</sup>, but Rebuttal Proofs do not form part of the formal requirement for inquiries such as this, and are usually only submitted to assist in the clarification of matters and to help focus concerns.
- 8.46 Having regard to the above points I do not consider that the manner and timescale in which the evidence has been submitted could be said to have unduly prejudiced objectors, or unduly compromised their ability to present their cases. In these circumstances I am not persuaded that there are any grounds for suggesting that the draft Orders be withdrawn and the whole process restarted.
- 8.47 On a separate matter, NNTAG lodged an objection on the grounds that the Scheme has planning permission as a private development and not as a NCC highway project<sup>342</sup>. NNTAG maintains that in those circumstances, DfT Circular 02/2007 and the Guidance on S278 Agreements apply, and that under this latter guidance the SST cannot fetter his discretion as to whether or not to make the Orders. It is NNTAG's view that joint representation of the developer and the HA at this Inquiry, through one Counsel and one set of witnesses, has fettered the SST's discretion<sup>[5,4]</sup>.
- 8.48 It seems to me, however, that this objection cannot be supported, for a number of reasons. Firstly, during the course of the Inquiry, it was clearly established, through letters from the DfT approving the funding for the project, that the joint NDR/Postwick Hub Scheme is correctly categorised as a Local Authority Major Scheme<sup>[1,3, 3,61, 7,5, 7,7]</sup>. Moreover, regardless of the specific route the HA and NCC have chosen to implement the Scheme, the end result of the Order making exercise (if successful), would be to produce public, not private, highways<sup>[3,25, 7,8]</sup>.
- 8.49 Finally on this matter, my reading of the Guidance referred to by NNTAG is that the "fettering of discretion" point means that the SST should not enter into any agreement or contract relating to the construction of the Scheme, until a decision

<sup>&</sup>lt;sup>341</sup> SI 1994/3263: The Highways (Inquiries Procedure) Rules 1994

Other objectors who raised concerns about joint submission of the planning application and joint representation include objector Nos 3, 65 and 86

- has been taken on whether or not the Orders should be made. It does not relate to any matters of joint representation at the Inquiry $^{[5.4,\ 5.78,\ 7.7-7.9]}$ .
- 8.50 The evidence before me is that a Section 6 agreement under the Highways Act 1980 is what is intended between the HA and NCC in this case, and that whilst that currently exists in draft form, it will not be finalised until the outcome of the Inquiry is known<sup>[7.10]</sup>. In these circumstances I am satisfied that the HA has acted properly in this matter, and that the SST's discretion has in no way been fettered, especially as any decision on the Orders will be made jointly by the SST and the SSCLG<sup>[7.11]</sup>.
- 8.51 Several objectors maintained that consideration of the Postwick Hub Scheme was premature, as consultations have not yet been completed on the JCS<sup>343</sup>. In this regard I acknowledge that in view of the fairly lengthy history to this Scheme, some of the objections raising this point were lodged prior to the JCS being adopted, in March 2011. From this point of view, some of the originally lodged objections are now of lesser relevance. As noted above, I do accept, however, that some aspects of the JCS are still under consideration, as a result of a successful legal challenge. But the key matters of concern in the current case, such as the need to improve the existing Postwick junction, and the proposed extension to the BBP, remain within the adopted part of the JCS<sup>[3.30]</sup>. As such their consideration cannot be seen as premature.
- 8.52 Some objectors<sup>344</sup> raised a procedural concern relating to the independence of the evidence provided by the HA witnesses and the difficulty objectors had in testing that evidence, without their own expert witnesses<sup>[5,96,7,16]</sup>. However, I have been mindful of the fact that all HA witnesses made clear their understanding of their obligations to provide true and professional evidence, and all were made available for cross-examination on their evidence. Several of the objectors took the opportunity to question the witnesses, and in some cases, objectors commissioned their own expert witnesses to present opposing views. Having regard to these points I am satisfied that the HA's evidence is reliable and that adequate opportunities have been provided for this evidence to be tested.
- 8.53 Finally, as NCC has recently begun a consultation process for the NDR, which includes the Postwick Hub Scheme within its provisions<sup>[5.5, 5.84, 5.133, 5.148]</sup>, Mr Cawdron<sup>345</sup> poses the question as to whether all consultations and Public Inquiries are forgone conclusions<sup>[5.148]</sup>. However, for reasons set out by the HA I agree that as the NDR is clearly an essential element of both the NATS and the JCS, it is a sensible and pragmatic approach for NCC to include the works that comprise the Scheme within its NDR proposal, so that that proposal can proceed to its next stage<sup>[3.36, 3.37, 7.108]</sup>. This in no way indicates a pre-judging of the current Inquiry into the draft Orders.
- 8.54 In summary on the above points, I conclude that there are no procedural matters which would stand in the way of the Orders being made.
- 8.55 Turning to other, general matters of principle raised, although a small number of objectors appeared to argue that no improvement at all is necessary to the existing Postwick junction<sup>[5.85, 5.88, 5.97, 5.101, 5.124, 5.145, 5.157]</sup>, this was not a view

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Objections covered by this topic include those raised by the following - objector Nos 17, 18, 23, 25, 28, 54, 57, 62, 63, 86

<sup>&</sup>lt;sup>344</sup> This matter was raised by objector Nos 36 and 123

<sup>345</sup> Objector No 127

generally held. Nor is it borne out by the submitted evidence, which not only indicates that there are significant present day queuing and delay problems at the P&R roundabout, but that if this "constrained" traffic was released it would add to and exacerbate present day problems at the Postwick North-West roundabout<sup>[3.6-3.9]</sup>. Moreover, these problems are predicted to significantly worsen in future years, as a result of general traffic growth and, more importantly, the existing problems are preventing already permitted development in the area from taking place<sup>[3.10, 3.19, 3.20]</sup>.

8.56 The vast majority of objectors accept that some improvement of the overall junction is necessary, with the main areas of objection relating to the detailed design of the published Scheme. Most of the objections, in one way or another, relate to the design, layout and operational performance of the proposed junction improvement, with the intended closure of the eastbound diverge slip road being that element of the proposal which has attracted most objection and criticism. Although there is some overlap and inter-relation between several of the points raised, they have been grouped together, wherever possible, for convenience and to avoid repetition. They are dealt with in the following paragraphs, under separate sub-headings.

# The Design and Layout of the Scheme

- 8.57 The Scheme is over-designed, too complex and too complicated. The Scheme has been designed to accommodate the predicted traffic flows, including traffic forecast to be generated by the dependent developments, with assessments undertaken up to the year 2030<sup>[3.16]</sup>. Whilst some of the written objections raised questions about the assumed level of traffic growth, these were not pursued in any significant way at the Inquiry. Indeed, apart from some criticisms by NNTAG of the treatment of public transport, walking and cycling within the transport model, and some concerns about the way the traffic modelling interrelated with the calculations of TECs see later <sup>[5.10, 5.18-5.23]</sup>, no objectors seriously disputed the traffic forecasts used in the design of the Scheme. Certainly no firm, alternative traffic growth scenarios were advanced.
- 8.58 To my mind, the submitted evidence indicates that the traffic forecasting and transport modelling exercises have been undertaken in a thorough, rigorous manner and have made realistic and defendable assumptions about future growth, consistent with the adopted development plan strategy<sup>[3.12-3.16]</sup>. I therefore find no grounds to question the traffic forecasts which have been used as the basis for the design of the Scheme.
- 8.59 In terms of the design itself, several objectors make reference to a letter from the Department for Transport (DfT), dated 27 March 2009, which describes the Postwick Hub as being significantly over-engineered without the NDR in place<sup>[5.16, 5.81, 5.127]</sup>. It is clear, however, that this DfT view was provided at a relatively early stage in the development of this proposal, well before the Scheme which is now the subject of this Inquiry was accepted for Government funding<sup>[3.59-3.64]</sup>.
- 8.60 The acceptance of the combined NDR/Postwick Hub Scheme for funding, and confirmation that the funding reserved for the Postwick Hub Scheme would be released in advance of the funding contribution for the NDR, is detailed in DfT letters dated 15 December 2011 and 3 August 2012<sup>[3.62-3.64, 7.35]</sup>. This acceptance

Objections covered by this topic include those raised by the following - objector Nos 4, 7, 8, 11, 14, 15, 21, 24, 27-31, 35-37, 40, 42, 43, 48-53, 56, 58-60, 64-70, 72, 75, 77, 78, 86, 121, 123, 124, 127 and 129

- makes it clear that whatever the DfT's previous views were, it is now content that the design of the Scheme is acceptable.
- 8.61 Notwithstanding the DfT's acceptance of the Scheme design, other objections under this heading referred to the Scheme as being over-designed and having a complicated and confusing layout. However, those objectors who are critical of the Scheme's design and layout do not appear to have had much regard to the various constraints which the HA has indicated have had to be taken into account and accommodated in the final design<sup>[3.48, 7.25, 7.26]</sup>.
- 8.62 These comprise the location of the River Yare/Railway Bridge and the location and design of the existing Postwick Bridge; the traffic capacity of the existing junction and of Yarmouth Road (West); the vertical profile of the A47 at this location and its limiting effect on the possible locations for a new bridge; the presence of a high pressure gas main to the east of the junction; the need to limit impact on properties at Heath Farm and within Postwick Village; and the need to respect the approved planning permission for the BGBP and ensure that any new road infrastructure would be able both to serve that development and avoid utilising the footprint of the development<sup>[3.48]</sup>.
- 8.63 The HA's Scheme Design witness, Mr Kemp, explained that if the existing capacity problems at the Postwick junction are to be satisfactorily addressed, and the permitted development accommodated, then the constraints highlighted above necessitate both closing the existing eastbound slip roads and providing a new bridge over the A47<sup>[3.52, 7.26]</sup>. I have noted that the HA and NCC explored a number of options to try to avoid closing these eastbound slip roads, but that no practicable alternative solution could be found<sup>[3.50-3.52, 7.34]</sup>.
- 8.64 The HA's position is therefore that once the constraints are taken into account the proposed layout not only represents a practical and cost effective design solution, but that there is no significantly reduced scale of improvement that would be workable, even if no future connection to the proposed NDR was planned<sup>[7.115]</sup>. This is borne out by the HA's assessment of the ARs (AR1 to AR14) put forward by objectors and discussed in more detail in the following main section, where the operational performance of the Scheme is discussed. On the basis of the submitted evidence I see no grounds to take a contrary view on these points.
- 8.65 In this regard, I have noted the comment from Mr Eley, representing Thorpe St Andrew Town Council, that the retention of the existing eastbound slip road should have been considered as a constraint in the scheme design<sup>[5,95]</sup>. It is clear, however, as noted above, that although the HA and NCC endeavoured to produce a design which kept this slip road open, it did not prove possible. In these circumstances I consider it both understandable and acceptable that the current design has been adopted, and because of this, this objection cannot be supported.
- 8.66 With regard to those objectors who claim that the Scheme layout is unduly complicated and would be confusing to drivers, it is certainly the case that the Scheme would result in some significant changes to some current movements through the junction. However, whilst the proposed layout may well seem somewhat involved when viewed in plan form, I do not consider that it would prove to be unduly difficult or confusing to negotiate in practice.
- 8.67 All of the individual elements merges and diverges, roundabouts and signal-controlled junctions would be familiar to all drivers, and details of what appears

- to be a rational and sensible signing strategy have been included in the HA's SoC <sup>[3.52]</sup>. Whilst drivers may experience some difficulties the first few times they use the junction, I see no good reason why it should give rise to any insurmountable problems.
- 8.68 In view of all the above points I am satisfied that the chosen design is an appropriate and satisfactory response to the need to accommodate predicted traffic flows whilst producing a safe design, in accordance with the relevant standards, and responding to and accommodating the physical constraints described above.
- 8.69 The Scheme would not be safe and would lead to increased numbers of accidents. A number of objectors pointed out that the existing Postwick junction has a good safety record, and argued that introducing greater complexity with more traffic travelling at higher speeds is likely to result in increased numbers of accidents [5.11, 5.88, 5.161]. Particular criticism was levelled at the proposed signal-controlled P&R junction, which was described by some as likely to become a significant accident black spot [5.98, 5.103, 5.161]. However, insofar as the criticism of the proposed traffic signal-controlled junction relates primarily to its design, I have already indicated above that I consider the design and layout satisfactory. In such circumstances I see no reason why it should give rise to any particular accident problem.
- 8.70 Moreover, in terms of overall safety the HA's SoC explains that as network operator, the HA is satisfied that the Scheme has been designed in accordance with standards as set out in the DfT's DMRB and has been subject to a series of road safety audits<sup>[2.4, 3.51, 7.14]</sup>. Further safety audits would provide the opportunity to assess the safety performance of the Scheme once built. I consider that this would ensure the continuing safe operation of this junction.
- 8.71 The submitted evidence is, however, quite clear that the Scheme would have an overall accident disbenefit of some £4.19 million, assessed over a 60 year period<sup>[3.72]</sup>. Whilst this may be considered regrettable, I share the HA's view that such a disbenefit would not be unexpected in a situation like this, where despite being designed to safe, modern design standards, the proposed highway layout would result in longer travel distances for a number of journeys<sup>[3.73]</sup>. For reasons set out below, I do not consider that these disbenefits should be decisive in the overall assessment of the Scheme.
- 8.72 The Scheme would lead to significant congestion and problems if the traffic signals failed. As has already been noted, some objectors raised specific concerns about the proposed traffic signal-controlled junction which would replace the existing P&R roundabout. The contention was that if an accident was to happen at this junction, or if the traffic signals were to fail, this would cause a major traffic disruption, with significant tailbacks<sup>[5.98, 5.103, 5.161]</sup>.
- 8.73 However, the HA has given a clear response to these objections, pointing out that as is the case with all traffic signal sites across Norfolk, this junction would be remotely monitored by NCC and any faults would be automatically notified to NCC's traffic control centre. In this regard the HA confirmed that this junction would be classed as a priority site for fault and maintenance support. As such,

<sup>&</sup>lt;sup>347</sup> Objections covered by this topic include those raised by the following - objector Nos 21, 24, 27-31, 37, 40, 42, 43, 47, 50, 51, 58-60, 65-69, 72, 79, 84, 87-115, 117-120 and 122-124

 $<sup>^{348}</sup>$  Objections covered by this topic include those raised by the following - objector Nos 52, 77

- engineer support would be provided on a "24 hours a day, 7 days a week" hasis<sup>[7.120]</sup>.
- 8.74 There are other traffic signal-controlled junctions in the Norwich area, including other junctions with the A47 Southern Bypass, but no evidence was placed before me to indicate that any past signal failures at other junctions in the area had caused insurmountable problems. Whilst I accept that the layout of this proposed junction differs from others in the locality this is not, in itself, reason to think that it would be more prone to signal failure, or that any such signal failure would lead to the sort of problems suggested by objectors.
- 8.75 The absence of any firm evidence demonstrating a clear likelihood of future traffic problems leads me to the view that the objections made in this regard cannot be supported.
- 8.76 The Scheme would take too much agricultural land and result in a loss of countryside. Evidence submitted to the Inquiry indicates that the Scheme and associated access roads would result in the loss of some 9.8 ha of Grade 2 agricultural land, with about a further 0.76 ha of such land severed by the scheme footprint which would be retained and sensitively planted [3.82]. The loss of agricultural land is an important consideration, as Section 10 of the Highways Act 1980 says the requirements of agriculture need to be taken into account when changes to the trunk road network are being assessed [3.3, 3.84, 3.105].
- 8.77 It is the case, however, that adopted Policy 9 of the JCS has identified 25 ha of land in the area of the Scheme for a range of employment uses. Much of this would have to be on agricultural land, and in these circumstances it seems self-evident that the loss of agricultural land in this area, and for these proposals, has been considered acceptable in planning terms<sup>[3.84]</sup>. In any case, I have noted that the land lost would only be a very small percentage (less than 0.05%) of the total Grade 2 land in the Greater Norwich Development area<sup>[3.84]</sup> and, that the Scheme would give rise to no significant issues of agricultural severance<sup>[3.83]</sup>.
- 8.78 For all of these reasons I conclude that the loss of this agricultural land should carry little weight in the overall assessment of the Scheme.
- 8.79 The Scheme would not make proper provision for pedestrians and cyclists.<sup>350</sup> Although a number of objectors have raised objections along these lines, no specific areas of concern have been referred to, with the objections, instead, being more of a general nature. It seems to me, however that the Scheme contains some significant provisions for pedestrians and cyclists.
- 8.80 In particular it would provide a new shared-use facility across the existing Postwick Bridge, linking in with existing cycle facilities detailed on both the Norwich Cycle Map and a strategic cycle map produced by Sustrans<sup>[3,57]</sup>. This provision would include a signal-controlled crossing with specific on-demand phases for pedestrians and cyclists at the proposed P&R signalised junction<sup>[3,57]</sup>.
- 8.81 An improvement to Postwick Footpath No 2 also forms part of the Scheme<sup>[3.56]</sup>. Whilst I acknowledge that this would result in an increased length of journey for pedestrians of some 780 m, it would remove the current at-grade, uncontrolled

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<sup>&</sup>lt;sup>349</sup> Objections covered by this topic include those raised by the following - objector Nos 4, 6, 7, 9, 11, 12, 14, 15, 19, 20, 22, 24, 28, 33-35, 56, 70, 71, 79, 127

Objections covered by this topic include those raised by the following - objector Nos 4, 5, 7, 11, 14, 15, 19, 27-31, 35, 37, 40, 42, 43, 49-51, 53, 56, 58-60, 64-69, 71, 72, 75, 76, 83 and 124

- crossing of the A47 mainline carriageway, and accordingly would result in a much safer facility for pedestrians than the current route<sup>[3.56]</sup>. This is one of the PRoWs directly affected by the Scheme, and therefore an important component of the draft Side RO. I conclude that the alternative route proposed to be provided for Postwick Footpath No 2 would be reasonably convenient for walkers to use and would therefore satisfy the Side RO test.
- 8.82 Furthermore, I note that the HA and NCC are now promoting a modification to the draft Side RO which would enable cyclists to continue to use the existing A47 eastbound diverge slip road to connect with the existing and proposed cycle network at the Postwick North-West roundabout<sup>[3,112,3,113]</sup>. This would clearly mean that cyclists would not be disadvantaged by the proposed stopping up of this eastbound slip road. I consider that proposed modification, which I return to later, would be a clear improvement to the draft Side RO.
- 8.83 I consider that these elements of the Scheme, detailed above, would be beneficial to both cyclists and pedestrians. Significantly, I have noted that specific objections from cycling groups, lodged earlier in the Inquiry process, have been withdrawn, following discussions and negotiations between the objectors concerned and the HA/NCC<sup>[7.118]</sup>. In light of the above points, and in the absence of any specific and detailed objection on this matter, I have to conclude that those objections which contend that the Scheme would not make proper provision for cyclists and pedestrians cannot be supported.
- 8.84 <u>Transport issues could be addressed by smaller, cheaper options</u>. Many of the objectors who lodged concerns couched in these general terms provided no further detail of what they meant by "smaller or cheaper" options and it is therefore not possible to fully appreciate what they may have had in mind. It is, however, apparent from the submitted evidence, that the HA and NCC examined a range of options for the improvement of the Postwick junction before deciding upon the published Scheme. Some of these would undoubtedly have been simpler and cheaper than the currently proposed option. But it is clear that none of these alternative options would have been capable of providing an acceptable solution which met the objectives for the improvement of this junction [3.50-3.52].
- 8.85 It is also the case that a total of 13 ARs were submitted to the HA for consideration, with support for 11 of these being maintained at the Inquiry<sup>[1.11, 1.12, 6.1-6.3, 7.48-7.89]</sup>. The operational performance of these ARs are discussed in the following main section, but it is relevant to briefly note here that the HA's assessment is that none of these ARs could satisfactorily accommodate the predicted traffic flows and meet the Scheme objectives<sup>[3.46]</sup>. Leaving this important point aside for the moment, of the ARs for which a cost was estimated, only 4 would have resulted in a cheaper option than the Scheme, with some of the others estimated to cost considerably more.
- 8.86 The possibility of smaller, more modest improvements was put to the Inquiry by Mr Rapson, who presented traffic evidence on behalf of Lothbury. Mr Rapson accepted the need for the Postwick Hub junction to be improved, but opposed the specific matter of the proposed closure of the eastbound diverge slip road, which he argued had not been wholly justified<sup>[5.115, 5.121]</sup>. To support this view his evidence comprised, in the main, a critique of the HA's evidence, including

Page 93

Objections covered by this topic include those raised by the following - objector Nos 5, 9, 27, 28, 64, 79, 81, 87-115 and 117-123

- criticisms of the HA's approach of using maximum queues rather than average queues to assess the performance of the network and the roundabouts $^{[5.114-5.119]}$ .
- 8.87 However, by their very nature, maximum queue lengths would exceed average queue lengths on many occasions. Accordingly, in a sensitive location such as this, where safety is at issue and where there is a clear potential for queues to impede the operation of the SRN, it is important to assess the implications of maximum queues. Reliance on average queue lengths would be neither sensible nor appropriate.
- 8.88 Moreover, despite acknowledging that the operation of the Postwick Hub junction has to be looked at holistically, Mr Rapson's evidence concentrated on the operation of the Postwick North-West roundabout, and how its performance and capacity could be improved by increasing the capacity of both the Meridian Way and Northside roundabouts<sup>[5.116, 5.119, 5.120]</sup>. But such an approach would not address the very long queues and large delays which currently occur on the westbound diverge slip road, and which are predicted to significantly worsen in the various Do-Minimum (DM) scenarios<sup>[3.17-3.19]</sup>.
- 8.89 Furthermore, such an approach does not acknowledge the traffic constraining effect of the P&R roundabout, both present day and in the future DM scenarios, and the "protection" this affords to the North-West roundabout<sup>[3.7, 3.50]</sup>. It is also of note that improving traffic capacity for general traffic on an important radial route such as Yarmouth Road, through improvements at the Meridian Way and Northside roundabouts or the existing railway bridge, would be at odds with the NATS approach which is seeking to promote non-car modes of transport, and develop the Yarmouth Road corridor for Bus Rapid Transit (BRT) [3.42, 3.44].
- 8.90 In short, Mr Rapson put forward no firm proposals for improving the Postwick junction as a whole. Neither he, nor any other objector, was able to demonstrate that the junction could be improved in a manner which would allow the dependent developments to go ahead, and for the P&R site to be extended, through smaller and/or cheaper options than the currently proposed Scheme.
- 8.91 The relationship of the Scheme to the NDR. Many of the objectors were critical of various aspects of the Scheme's relationship with the NDR, both in terms of design and timing. These included claims that the Scheme has been designed to be able to accommodate the NDR and can only be justified by construction of the NDR; that the scheme would form the start of the NDR and that by dealing with it in this way NCC is trying to avoid proper scrutiny of the NDR proposals; and that consideration of the Postwick Hub Scheme is premature, as it should form an integral part of a comprehensive planning application with full public consultation for the entire length of the NDR, to enable the traffic impact of the road scheme to be fully assessed.
- 8.92 The history of the Scheme shows quite clearly that in its early days the Postwick Hub junction improvement was being investigated as part of a wider NDR proposal<sup>[5,2]</sup>. As the NDR is an integral part of the NATS, and clearly needs to have a connection with the A47, I consider that such an exercise is perfectly understandable. However, although some objectors see the Postwick Hub Scheme as a way of getting a NDR "through the back-door", this stance does not acknowledge the fact that an improvement of the junction, unconnected with any

Page 94

<sup>&</sup>lt;sup>352</sup> Objections covered by this topic include those raised by the following - objector Nos 3-9, 11, 12, 14, 15, 16, 19-22, 24, 26-32, 34-38, 40-44, 48-53, 55, 56, 61, 62, 64-73, 75, 78, 79, 83-115, 117-124 and 129

- wider NDR proposal, is a pre-requisite of any second phase of development at BBP, and has been since BLP Policy TSA3 was adopted in May 2006<sup>[3.24]</sup>.
- 8.93 Moreover, as has been made quite clear elsewhere in this Report, more recent planning permissions, for the BGBP, the extension to the Postwick P&R site, and the BFLF development, are all directly dependent on an improvement to the Postwick junction not on the construction of a NDR. Such matters have prompted the need for the Scheme to be separated from the NDR, in both funding and timing terms, although it is clear that in overall assessment terms, the Government has had due regard to both elements of this overall proposal in deciding to allocate funding<sup>[3.59-3.64, 7.35]</sup>.
- 8.94 Objectors who argue that the Scheme and the NDR should be the subject of a joint planning application appear to be ignoring the fact that the Scheme already benefits from a valid, extant planning permission<sup>[1,2]</sup>. Moreover, there appears to be a reluctance on the part of some objectors to acknowledge that there are physical constraints in the vicinity of the existing junction to which any improvement needs to have regard.
- 8.95 In any case, as noted earlier and stated in the HA's SoC, the NDR is a key element of NATS for which NCC adopted a preferred route in September 2005. Furthermore, it is identified as a strategic improvement in the JCS. Whilst the NDR has not yet gone through the planning process, I share the HA's view that it is prudent infrastructure planning to ensure that if the Postwick Hub junction is to be improved, the improvement should have sufficient capacity to cater for other planned development and highway proposals that may come forward in the foreseeable future<sup>[3.68, 3.69, 7.105-7.108]</sup>.
- 8.96 This does not pre-empt or prejudice the planning process for the NDR but rather minimises the potential disruption to the A47 trunk road and the Postwick Hub junction in the event that the NDR is, in due course, approved. If there were a lesser form of junction improvement than the published Scheme, which could be demonstrated to fully cater for predicted growth and the permitted developments, then the objections set out above might carry more weight. But as has already been explained, the physical constraints mean that no suitable alternative proposal has been identified. This is covered in more detail in the section on the ARs, below.
- 8.97 I accept that if the Scheme is approved it would, in practice, limit the route alignments that would be available for consideration to provide the connection between the NDR and the A47. Indeed on this point the HA has acknowledged that to that extent, the Scheme could be seen to prejudice a full consideration of alternative options for this part of the NDR route<sup>[7.105]</sup>. However, the HA is correct to point out that it is invariably the case that transport and planning decisions are made in the context of other emerging proposals which may be at different stages of the approval process. As a result it is not uncommon that decisions taken in relation to one project or proposal may limit the options in relation to another project or proposal. But this is not a reason to not make a decision at all, or to delay making a decision.
- 8.98 In this case the Scheme design is consistent with, and would complement, NCC's published preferred route for the NDR. In turn, this reflects the proposals for the NDR and Postwick Hub in LTP3 and NATS, and which is also the protected route shown on BDC's Proposals Map and shown indicatively in the JCS<sup>[3.42]</sup>. The Scheme therefore minimises, so far as is practicable, the degree of potential

prejudice. In view of these points I consider that the objections raised in this regard cannot be supported.

## Conclusions

8.99 Having regard to all the above points, I conclude that none of the objections relating to various aspects of the Scheme's design and layout, including its relationship with the NDR, can be supported. None, therefore, constitute a reason for the Orders not to be made.

### The Predicted Operational Performance of the Scheme

- 8.100 <u>Closure of the eastbound diverge slip road would result in increased journey times and distances which would seriously inconvenience local businesses and local residents</u>. It is clearly the case that closing the eastbound diverge slip road would lead to increased journey distances and times for some users of the proposed Postwick Hub junction, primarily those who currently use the eastbound slip road to reach destinations on the BBP and along Yarmouth Road (West).
- 8.101 This has been demonstrated in both diagrammatic and tabular form in the HA's evidence, which shows that for the AM peak, the maximum increase in journey time for such movements would be just over 2 minutes in 2030. An increase of similar magnitude is predicted for the inter-peak period in this year, with a predicted increase of just over 5 minutes in the 2030 PM peak<sup>[3.71, 7.18]</sup>.
- 8.102 It is the case, however, that many of the journey time increases are predicted to be much lower than these maximum figures, with several movements predicted to increase by less than a minute in all future assessment years. Indeed the HA comments that even in 2030, 83% of the trips which would experience an increased journey time in the PM peak would increase by less than a minute<sup>[7.18]</sup>.
- 8.103 In addition, some journey times are predicted to be shorter with the Scheme, primarily those movements which currently use the A47 westbound diverge slip road to access the BBP or Yarmouth Road (West). The greatest time savings would be recorded in both the AM and the PM peak, where long queues and large delays exist currently and are predicted to continue and worsen in the DM scenarios in future years. For these movements, a maximum saving of just less than 7 minutes is predicted in the AM peak, and just over 5<sup>1</sup>/<sub>2</sub> minutes in the PM peak<sup>[7.19]</sup>. Some other movements are also predicted to experience journey time savings of up to about a minute.
- 8.104 This demonstrates that, to use the words of some objectors, there would be both "winners" and "losers" in terms of changes to journey times. There would, of course, also be changes to journey distances, with most of those assessed being longer with the Scheme, to some degree.
- 8.105 However, in respect of the above points I share the HA's view that it is important to not simply look at the increases or decreases in journey times in isolation, but to relate them to the larger trips of which these discrete portions will only be part. In this regard, evidence submitted by the HA, and not disputed by objectors, indicates that the average duration of a commuting trip into Norwich, using the existing network, is 33 minutes<sup>[7.18]</sup>.

<sup>&</sup>lt;sup>353</sup> Objections covered by this topic include those raised by the following - objector Nos 3, 4, 6-12, 14, 15, 17-25, 28-31, 33, 35,-37, 39-44, 46-52, 54-57, 62-75, 77, 78, 81, 83, 84, 86-115, 117-126 and 129-131

- 8.106 The HA argues that when considered in this context, changes of less than 2 minutes should not be seen as significant, but rather would fall within the typical daily variation of a 33 minute peak period commuting trip. Whilst no firm evidence has been submitted to support this assertion, the fact that peak period travel conditions can be variable and unpredictable leads me to the view that the HA's position is not unreasonable. The HA acknowledges that changes in excess of 5 minutes should be regarded as significant, but points out that such increases are only predicted to arise for trips from A47 (West) to Yarmouth Road (West), and only by 2030. In 2020 the increase on that route would be just over 3<sup>1</sup>/<sub>2</sub> minutes<sup>[7,18]</sup>.
- 8.107 In considering the matter of journey time increases I have been mindful of the fact that the dependent developments are not included in the DM scenarios, which assumes the Postwick junction remains in its current form. Instead, growth across the area in the DM scenarios would be based on NTEM figures. In the particular circumstances of this case, the realism of such a scenario has to be questioned, as it would not accord with the adopted planning or transport strategies for the area, nor take account of extant planning permissions which the developers and promoters concerned would undoubtedly wish to see implemented.
- 8.108 But notwithstanding this point, there is no dispute that insofar as existing users are concerned, the Scheme would give rise to transport user disbenefits. Assessed with TUBA, the Scheme would produce PVB of -£74 million in the 60 year assessment period (at 2010 prices, discounted to 2010). As the PVC is estimated to be £25 million, the Scheme would have a Benefit Cost Ratio BCR of  $-2.9^{[3.71]}$ .
- 8.109 If this were the end of the matter, there would clearly be little merit in pursuing the Scheme as it would not represent VfM using the DfT's guidance, referred to by NNTAG<sup>[5,53]</sup>. However, as already made clear, the Scheme has been put forward as part of a joint application to bring about major employment development in the area, in accordance with the adopted JCS and for which an extant planning permission exists. Moreover, it would enable other permitted employment and housing development to proceed, and would also remove restrictions on the extension to the Postwick P&R site which also benefits from an extant planning permission.
- 8.110 In these circumstances, and having regard to the high national priority placed by the Government on promoting sustainable economic growth and jobs, I consider that the benefits of releasing the economic potential, which these extant planning permissions are clearly capable of giving rise to, should be taken into account in the overall assessment of whether or not the Scheme represents VfM. These additional benefits are discussed in the next section.
- 8.111 The Scheme should not be pursued as it has a negative BCR and other economic benefits have been overstated. The HA acknowledges that the Scheme has a negative BCR and that this makes it somewhat unusual [7.33]. However, the HA maintained that going ahead with schemes with a negative BCR was not unprecedented, and following questioning from NNTAG it produced examples of 2 such highway schemes which it had taken forward. One of these went ahead because there were strong environmental grounds which were not included in the

 $<sup>^{354}</sup>$  Objections covered by this topic include those raised by the following - objector Nos 28, 35, 64 and 81

- BCR appraisal. The second scheme was taken forward because of a Ministerial commitment to improve safety $^{[5.18,\ 5.50]}$ .
- 8.112 NNTAG points out that both of these topics are covered by existing full guidance units in WebTAG<sup>[5.18]</sup>, but maintains that it would be setting a dangerous precedent to use the draft guidance in Unit 3.16 to calculate TEC and Gross Value Added (GVA) benefits and use them to go against the negative BCR for the current Scheme.
- 8.113 The WebTAG Unit 3.16<sup>[3.70, 3.75, 7.42, 7.45]</sup> is, indeed, only available in a draft form, and has been since first issued in January 2010. It is entitled "Appraisal in the Context of Housing Development", but Section 4 makes it quite clear that the DfT recognises that other kinds of land use development, including industrial, impact on transport and can, in some cases, be dependent on some form of transport intervention<sup>[3.75]</sup>. This is clearly the case here.
- 8.114 Section 4 goes on to say that much of the guidance is likely to be readily applicable to other forms of land use, and that the same 2-stage assessment process should be used, as when assessing housing developments. It clarifies that this approach is to first of all assess the benefits of the transport intervention in isolation; and then assess the benefits of the land use development, assuming the transport intervention is provided. This is precisely the approach used by the HA in the current case, and despite the draft status of this WebTAG Unit, evidence presented to the Inquiry confirmed that the DfT had encouraged its use when the Development Pool bid for the NDR (incorporating the Postwick Hub Scheme) was being prepared in 2011<sup>[3.75, 7.42]</sup>.
- 8.115 I have also had regard to the 2007 Statement from a former DfT Permanent Secretary to the Public Accounts Committee, submitted to the Inquiry by NNTAG<sup>[5.51]</sup>. This makes it clear that, at that time, no scheme had gone into construction either as a local authority scheme or a HA scheme that was not defined as VfM. But, importantly, the Statement also clarifies that a VfM calculation is not a narrow BCR calculation done just on the basis of cost and obvious benefits, for example to the motorist<sup>[7.37]</sup>.
- 8.116 Although, in this regard, the Statement highlights environmental benefits and disbenefits, it goes on to refer to a key policy direction for transport investment as supporting productivity and economic growth. This chimes well with more recent Government guidance in the Framework concerning the priorities of the planning system, and the fact that benefits to the economy are important considerations when transport consents are being determined<sup>[3.21]</sup>.
- 8.117 Taken together, these points lead me to the view that the use of draft WebTAG Unit 3.16 is appropriate in this case, and that it would be acceptable to take account of development-related benefits when forming a view on the VfM credentials of the Scheme.
- 8.118 Turning then, to the calculations of TEC and GVA, the HA's case is that the TEC would be lower with the dependent development and the Scheme, than if the Scheme was constructed but development took place more widely in the local area and was constrained to NTEM figures. This is stated to be an expected outcome in accordance with WebTAG guidance, and results in a negative figure for TEC. In turn, this means that there would be positive total benefits for the development, amounting to some £494 million<sup>[3.76, 7.22]</sup>.

- 8.119 With regards to the GVA calculation, the HA's case is that implementation of the Scheme would lead to some 5,000 jobs being created at BGBP and BFLF. It has further assumed that only two-thirds of this overall development would occur elsewhere, if it was not to proceed at BGBP and BFLF, leading to an overall benefit of £378 million (in 2010 prices), attributable to these additional jobs<sup>[3.77]</sup>.
- 8.120 The main queries regarding the TEC calculations came from Mr Buchan for NNTAG who raised a number of detailed points about the modelling process. These related mainly to concerns about where, within the NTEM zones, the TEC benefits would arise; what the implications of differing parking standards for different developments would be; and how moving trips between the coarser and more detailed parts of the modelled network would influence the TEC calculations<sup>[5.18-5.23]</sup>. Mr Buchan was keen to be able to identify in which parts of the network the TECs were being generated, in order to understand the logic behind the source of this benefit and to be able to test its robustness.
- 8.121 However, despite maintaining that more information was needed, to be able to fully understand the source of the TEC benefits, Mr Buchan made no direct challenge to the TEC calculations. He confirmed his acceptance of the use of NTEM to control the growth in both the DS and the DM scenarios, and also accepted that the use of a traffic model containing both coarse and fine zones, to calculate TECs, is not unusual<sup>[7.31, 7.32, 7.42-7.45]</sup>.
- 8.122 It seems to me that the HA has supplied a wealth of information on this topic and its explanation, that the changes occur in all zones across the network, but are concentrated in the Norwich, Broadland and South Norfolk sector (where 84% of the TEC) occurs, appears both logical and understandable<sup>[7.43]</sup>. In these circumstances, and being mindful of the fact that the HA has followed the recommended procedures set out in draft WebTAG Unit 3.16, I am not persuaded that there are good grounds to question the calculation of the TEC benefits.
- 8.123 With regard to the calculation of GVA, I have noted that there has been some criticism of the numbers of jobs used in the GVA assessment, and also criticism of the growth assumptions used for development of the BGBP site and the viability of office development, in the current climate<sup>[5.33, 5.56, 5.106-5.110]</sup>. That said, the HA has provided extensive and persuasive evidence to demonstrate why it believes its judgment that the timescale for the delivery of the dependent development is realistic<sup>[7.38-7.40]</sup>. It has also pointed out that there are limited opportunities for large scale employment growth occurring elsewhere in Norwich<sup>[3.33, 3.34]</sup>, and I have further noted that IEL, the promoters of the BGBP development, have engaged a leading business park advisor to assist with the marketing and development of the site<sup>[4.11, 4.12]</sup>.
- 8.124 In these circumstances, and despite the contrary views expressed by Mr Radford for Lothbury (who will be promoting their own commercial development at BFLF), I see no firm grounds to doubt the growth forecasts for BGBP, over the period up to 2030<sup>[3.16]</sup>. I accept that viability in the office investment market may well be poor at present and I acknowledge that sites such as BBP, which already benefits from full amenities and site infrastructure, have some advantage over newly promoted sites, such as BGBP<sup>[5.110]</sup>. However, I consider that the correct approach is not to simply plan for a continuation of the current position, but rather to seek to establish the conditions for growth to take place.
- 8.125 Clearly, the expansion of the BBP contained in Policy 9 of the JCS, as part of the strategy to deliver at least 27,000 additional jobs in the NPA by 2006, cannot

- take place until the Postwick junction is improved. Moreover, the Government has made it clear that the provision of infrastructure is vital to the success of a modern economy<sup>[3.22]</sup>, and whilst the provision of necessary infrastructure in the form of the Postwick Hub Scheme cannot guarantee that the economic development which it would unlock would all come forward, it is clear that it cannot come forward at all if the junction is not improved.
- 8.126 The HA has explained why it considers that one-third of the jobs would be foregone if the Scheme is not implemented, and has pointed out that this is based on conservative assumptions<sup>[7.41]</sup>. This figure has not been seriously challenged and I see no reason to not accept it as reasonable. On this basis I accept that the Scheme would give rise to GVA benefits amounting to £378 million, in 2010 prices discounted to 2010.
- 8.127 I do, however, accept the point highlighted by Mr Buchan, that whereas the GVA calculation assumes that the jobs concerned would not occur elsewhere in the area, the NTEM constraints used in the calculation of TEC means that they would<sup>[5.19, 5.55]</sup>. This apparent contradiction, brought about by the different methodologies used to calculate each figure, means that the TEC and GVA benefits cannot simply be added together, and no evidence was put to the Inquiry to suggest the most appropriate way of combining them, or indeed whether combination would be appropriate.
- 8.128 But neither was any firm evidence submitted to persuade me that the Scheme could not be legitimately seen as giving rise to both types of benefit. In these circumstances I share the HA's view that even if these benefits were viewed in isolation, their values would significantly exceed the identified transport and accident disbenefits<sup>[7.47]</sup>.
- 8.129 Having regard to all the above points I am satisfied that the calculation of TEC and GVA is acceptable, and that they should be taken into account in the overall assessment of benefits. Even if considered in isolation, I conclude that the development benefits arising from the TEC of £494 million, and GVA of £378 million, should be seen as outweighing the transport user disbenefits of £74 million and the accident disbenefits of £4.19 million.
- 8.130 As a separate matter under this general topic of economic benefits and disbenefits, I have noted Mr Cawdron's assertion that the lost value of crop production should be taken into account in the overall economic assessment. He estimates that this would be some £148,000 to £185,000 a year, based on a loss of some 95 ha of agricultural land<sup>[5.148]</sup>. However, this land figure is considerably in excess of the agreed amount of agricultural land which would be lost to the Scheme, namely about 10 ha<sup>[3.82-3.84]</sup>. As a result, the monetary figures suggested by Mr Cawdron need to be significantly reduced.
- 8.131 But notwithstanding this point, whilst the requirements of agriculture is clearly a matter which needs to be considered at Order making stage, any cost implications of lost agricultural production are matters which will have been weighed in the overall planning balance when planning permission was granted for the Scheme and the BGBP. The cost details are therefore not matters which need to be considered here, and do not alter my conclusions on this subject.

- 8.132 The Scheme would unacceptably increase pollution and carbon emissions and matters of climate change have not been properly assessed. A significant number of objectors raised concerns regarding various aspects of climate change, primarily that alterations to the junction would result in increased journey distances, which would give rise to increases in carbon emissions. The concerns raised by objectors in written representations were repeated and elaborated upon by 2 of the objectors who appeared at the Inquiry, NNTAG and the NGP.
- 8.133 Several objectors also raised concerns that expansion of the Postwick P&R site would further add to traffic movements and give rise to additional pollution. But whilst I acknowledge that this expansion is dependent on the Postwick Hub junction Scheme being implemented, it is a separate scheme which already benefits from planning permission. It therefore lies outside the scope of this Inquiry.
- 8.134 All parties are agreed that the legal framework on this matter is set by the Climate Change Act 2008, which sets legally binding targets to reduce net UK greenhouse gas emissions by at least 80% by 2050, against a 1990 baseline<sup>[3.96]</sup>. This will be done through 5-year "carbon budgets", 4 of which have been set to date, covering the period up to 2027. The Carbon Plan 2011 details how the Government will deliver its plans for a low carbon economy, with particular focus on the 4th carbon budget, which covers the period 2023-2027<sup>[3.96, 5.60, 7.94]</sup>.
- 8.135 Differences between the HA and the objectors do not centre on the actual calculations of predicted carbon emissions, but rather on the way in which the assessment has been carried out and on the interpretation of the results<sup>[5.59-5.71]</sup>. Mr Buchan for NNTAG could not fully agree the HA's final figures as he had concerns and queries about the distribution and assignment of traffic, as discussed earlier, but he did not seriously dispute the actual calculations undertaken by the HA.
- 8.136 There is no dispute that the Scheme would lead to increased mileage for some existing drivers on the highway network around Postwick junction, and that by allowing the dependent developments to take place, it would also generate new traffic in the area. As a result, the HA is quite clear that carbon dioxide emissions are predicted to increase in the immediate vicinity of the Postwick junction if the Scheme were to be implemented<sup>[3.101]</sup>.
- 8.137 For many of the objectors, this is sufficient reason, in itself, to say that the Scheme should not go ahead and that the Orders should not be made. However, this rather simplistic view of the situation is not the way that current DMRB guidance indicates that such highway schemes should be assessed<sup>[3.98]</sup>. But before moving on to this matter in detail, it is essential to note that there is an acknowledged tension between the need to reduce carbon emissions, in line with the Climate Change Act and the Carbon Plan, whilst at the same time supporting and securing growth and economic development. As has already been noted, these latter objectives are the Government's top priority for the planning system<sup>[3.21]</sup>.
- 8.138 This tension has been referred to in NCC's 3rd Local Transport Plan (LTP), "Connecting Norfolk" and its accompanying Sustainability Appraisal (SA). Amongst other matters this identifies the conflict between the objective of

<sup>&</sup>lt;sup>355</sup> Objections covered by this topic include those raised by the following - objector Nos 4,6-8, 10-12, 14, 15, 17-25, 27-31, 33, 35-37, 40-43, 48, 50, 51, 54, 56, 57, 61-70, 72, 74, 81, 83, 84, 86-115, 117124, 131 and 132

- reducing carbon dioxide and 3 of the LTP's key objectives, namely delivering sustainable growth; enhancing strategic connections; and improving accessibility<sup>[3.39]</sup>.
- 8.139 The HA has highlighted the fact that this SA states that carbon dioxide reduction has been considered throughout the development of "Connecting Norfolk", and that in those cases where some policies or measures are predicted to have a negative impact, there is overwhelming evidence of their economic or social benefit to Norfolk<sup>[3,40]</sup>. Sustainable development for this area, as set out in the JCS and supported through NATS and the LTP clearly falls into this category.
- 8.140 Having considered the submitted evidence I am satisfied that the HA has followed recommended practice, set out in the DMRB, for assessing the operational carbon dioxide emissions associated with highway schemes. Rather than simply looking at a scheme in isolation, as appears to be the approach of many objectors, the guidance is clear that the overall planning and development framework for the area in question has to be considered, in all future assessment years<sup>[3.96-3.103]</sup>.
- 8.141 Put simply, this means that assessments need to recognise that planned growth in a particular local authority area is assumed to go ahead, whether or not any specific highway schemes, or specific developments take place. In assessment terms, the growth in trips in future years is therefore constrained to NTEM, to ensure consistency of appraisal throughout the country<sup>[3.15]</sup>. In the current case, this means that the total number of trips on the wider road network is essentially the same in both the "without Scheme" and "with Scheme" situations, relating to the DM and DS scenarios used in the traffic modelling<sup>[3.100]</sup>.
- 8.142 I can fully appreciate the concerns expressed by the NGP, that this approach appears to "mask" the increased carbon dioxide emissions associated with a particular scheme<sup>[5.64-5.66]</sup>. The point is, however, that if the growth planned for in the JCS takes place at BGBP and BFLF, it will not take place elsewhere in the JCS area. But if it does not take place at BGBP and BFLF, the adopted JCS strategy will require it to take place somewhere else in the same overall planning area.
- 8.143 I have noted the specific concerns expressed by Cllr Boswell, for the NGP, regarding the choice of study area for the assessment of carbon dioxide emissions, and his contention that too large an area has been used to compare the DM and DS situations<sup>[5.64-5.66]</sup>. However, not only is the use of the entire network area used by the HA consistent with the DMRB advice, I consider it perfectly reasonable to use such an area, to ensure that the complete picture of changes in carbon emissions associated with a particular scheme is captured.
- 8.144 On this basis, the HA's evidence indicates that there would just be a slight increase, over the modelled network as a whole, of some 0.55 kt/yr of carbon dioxide emissions, by 2020, but a decrease of 0.85 kt/yr by 2030<sup>[3.101, 7.98]</sup>. To my mind this demonstrates the benefits which would arise from the Scheme by ensuring future development is in a sustainable location, close to areas of existing housing, well served by a range of transport modes other than the car.
- 8.145 Moreover, however much objectors may wish that the targets for carbon dioxide emissions should apply to individual areas or even individual schemes, or that there should be a socio-economic requirement for individual local authorities to adopt the same targets or projections as apply at the UK level, this is not the case. The submitted evidence is quite clear that the 15% figure for a reduction in carbon dioxide emissions from 2009 to 2030 is a projection, rather than a

- target; and that it relates to the UK transport sector as a whole<sup>[7.92, 7.93]</sup>. In this regard I have further noted that no evidence has been submitted to suggest that the UK transport sector is not going to achieve the current projection<sup>[7.93]</sup>.
- 8.146 Under this climate change heading Mr Heard, for SNUB, queried whether the HA and NCC had made any provision for "adaptation" in the design of the Postwick Hub Scheme, as required by the Climate Change Act 2008<sup>[5.131]</sup>. I have noted the HA's comment that climate change adaptation for roads principally requires consideration of increased rainfall in the design of the drainage network and this is embedded in highways drainage design<sup>[7.101]</sup>. As no contrary evidence was presented on this point, I am satisfied that this matter has been adequately addressed in the Scheme design.
- 8.147 On a further matter, I have noted the criticisms from the NGP that the EIA undertaken at the planning stage for the joint BGBP/Postwick Hub Scheme did not fully assess the proposal in terms of carbon dioxide emissions<sup>[5.7, 5.37-5.39, 5.67]</sup>. It is indeed the case that wider traffic changes were not included in that assessment, but it is also clear that none of the statutory consultees at the planning application stage considered that there was a need to consider such changes<sup>[7.101-7.103]</sup>.
- 8.148 Notwithstanding whether this was the correct approach or not it is now apparent, from the detailed evidence prepared for the Scheme and submitted to this Inquiry (summarised above), that changes in carbon dioxide emissions, when considered over the correct assessment area, would not constitute a "significant environmental effect" [3.101]. On this basis I see no reason why the HA's decision that the Scheme did not require EIA (set out in its Record of Determination) [3.81], needs to be reassessed.
- 8.149 Having regard to all the above points, it is my view that there is no firm evidence to show that the Scheme, when properly assessed in accordance with current guidance, would unacceptably increase carbon dioxide emissions. It follows that I am satisfied that matters of climate change have been properly assessed.
- 8.150 <u>Alternative Routes have not been properly considered</u>.<sup>356</sup> Objectors have been able to submit alternative proposals for the junction improvement on a number of occasions, with the first formal period expiring on 8 June 2012 and the last period running to 3 May 2013<sup>[1.10]</sup>. In practice the HA accepted alternatives submitted after this May 2013 date, with some ARs being submitted whilst the Inquiry was sitting<sup>[1.11]</sup>. Whilst I acknowledge that traffic data has changed during the lifetime of the Scheme, with the final TFR being issued in April 2013, I see no reason why this should have inhibited the submission of alternatives, especially as no-one submitting an AR undertook any detailed traffic assessment or testing of their proposals. In these circumstances, and having regard to the assessments of the ARs undertaken by the HA, I do not consider that any further work on seeking an alternative to the published Scheme would be justified<sup>[5,141]</sup>.
- 8.151 Of the 11 ARs which were pursued at the Inquiry, 2 (AR5 and AR10) are not, strictly speaking, alternatives to the published Scheme. AR5<sup>[7,48, 7,58, 7,59]</sup> would simply provide a new link between Plumstead Road and Salhouse Road, whilst AR10<sup>[7,48, 7,72, 7,73]</sup> proposes the dualling of the A47 between Peterborough and Great Yarmouth. Neither of these propose any alterations to the existing

Page 103

<sup>&</sup>lt;sup>356</sup> Objections covered by this topic include those raised by the following - objector Nos 8, 24, 27, 28, 36, 48, 64, 77, 81, 86-115, 117-123, 129 and 132

- Postwick junction, and therefore would not fulfil the Scheme objectives and would not allow the dependent developments or the P&R extension to take place. For these reasons these ARs cannot be supported.
- 8.152 AR9 and AR11 both propose major new grade-separated junctions well to the east of the existing junction, in the vicinity of Church Road, rather than seeking to improve the existing Postwick junction, which would remain largely unaltered in both alternatives. AR9 appears to be very much geared towards providing an element of a future NDR, whilst key parts of AR11 are forecast to carry very low traffic flows, such that the new construction would be hard to justify<sup>[7.74-7.77]</sup>.
- 8.153 Both alternatives are estimated to cost considerably more that the published Scheme (£44 million and £33 million respectively), and both would require the diversion of the high pressure gas main, would need Compulsory Purchase powers to be invoked to acquire the necessary land, and would be likely to have more significant environmental impacts than the published Scheme. Most importantly, both are predicted to give rise to significant operational problems and would fail to achieve the Scheme objectives<sup>[7.67-7.71, 7.74-7.77]</sup>. There is nothing before me to persuade me that either of these alternatives would offer any advantages over the published Scheme, and they therefore cannot be supported.
- 8.154 The remaining alternatives, AR1, AR2, AR4, AR6, AR12 and AR14 all propose new layout arrangements for the existing Postwick junction and in this regard can be considered true alternatives<sup>[7.49-7.57, 7.60-7.62, 7.78-7.84]</sup>. It should be noted that both AR6 and AR14 (both put forward by Mr Cockcroft) comprise 2-phase proposals, with the 2nd phase in each case being geared very much towards the provision of a NDR and not, therefore, capable of being assessed in isolation.
- 8.155 Whilst all of these alternatives (with the exception of the 2nd phases of AR6 and AR14) would cost appreciably less than the published Scheme, none of them would be able to be delivered under the published draft Orders and all are assessed as giving rise to operational problems and difficulties which mean that they would be unable to deliver the Scheme objectives and would therefore not allow the dependent developments to take place.
- 8.156 I have noted NNTAG's criticism of some of the detailed layout assumptions used by the HA for AR6, including criticisms of the number of lanes tested on the suggested gyratory and the form of junction control assumed<sup>[5.46-5.48]</sup>. However, the fact remains that no detailed alternative designs were put to the Inquiry by any appropriately qualified traffic or transport professionals, despite their involvement on behalf of some objectors, and despite the overall length of time which has been available for any such ARs to be developed. In these circumstances, whilst I can understand NNTAG's concerns, and similar concerns expressed by other objectors, there is no firm evidence before me to suggest that the HA's assessments of the suggested ARs have not been reasonable and carefully undertaken. I therefore give such criticisms little weight.
- 8.157 Some objectors queried why their ARs were predicted to give rise to operational problems, whereas the published Scheme was not, when each junction would have to accommodate the same traffic flows<sup>[7.88]</sup>. However, as the HA explained, this is a somewhat simplistic way of viewing the situation which does not recognise the workings of the traffic model, which seeks to replicate driver behaviour and respond to prevailing traffic conditions on the network.
- 8.158 This means that the model seeks to find alternative routes to avoid congestion on the network, such that whilst the amount of traffic between any origin and

- destination would be the same, regardless of which alternative was being tested, the routes which traffic would be assigned to between those origins and destinations could well vary between alternatives, depending on the predicted operation of the network<sup>[7.88]</sup>.
- 8.159 The fact that unacceptable queuing is predicted with each of these ARs means that no preferable route could be found for traffic to be assigned to, in preference to using the Postwick junction. This serves to demonstrate that none of these alternatives would perform as well as the published Scheme, and none could therefore be supported.
- 8.160 Finally, I have noted NNTAG's criticism that alternative options were not considered without the BGBP or the Postwick P&R extension<sup>[5.39]</sup>, but as both of these already benefit from extant planning permissions, it would not have been reasonable to disregard this fact and test such options.
- 8.161 Having regard to the above points I am satisfied that adequate and satisfactory consideration has been given to all of the submitted ARs, but conclude that none of them would be preferable to the published Scheme. In these circumstances, and having regard to the fact that the published Scheme has been shown to achieve the stated objectives, I am not persuaded that any further work on any of the ARs would be justified. Nor do I consider that any AR should be recommended to be pursued in preference to the published Scheme<sup>[5,142]</sup>.

### Conclusions

8.162 Drawing together the matters detailed under this sub-heading, my overall conclusion is that none of the objections which relate to various aspects of the Scheme's operational performance, including its effect on climate change and the consideration of alternatives, can be supported. None, therefore, constitute a reason for the Orders not to be made.

# Other environmental concerns

- 8.163 Those objections which raised concerns about carbon dioxide emissions and air pollution, and the loss of farmland or countryside have already been dealt with above. Other environmental matters which were raised were likely noise impacts; increased risks of flooding and pollution from surface run-off and other water-related matters; and potential light pollution.
- 8.164 <u>Noise</u>. Noise Noise from the proposed Scheme, claiming that the village already suffers considerably from noise from existing roads In this regard I have noted that Postwick village was identified as a sensitive receptor (along with a number of other locations) in the revised ES assessment undertaken in April 2013 3.93.
- 8.165 The ES acknowledged that background noise in the area is dominated by existing traffic but concluded that the long-term significance of noise effects would be classed as slight adverse at such receptors, whether or not the Scheme went ahead<sup>[3.94, 3.95]</sup>. In these circumstances, and in the absence of any contrary evidence, I conclude that there would be no significant noise effects associated with the Scheme.

 $<sup>^{357}</sup>$  Objections covered by this topic include those raised by the following - objector Nos 3 and 34

- 8.166 Flood risk, surface run-off and other water-related matters. The objections relating to these matters are all generalised concerns, with no detailed evidence to support the views expressed. The evidence before the Inquiry indicates that such matters were thoroughly explored in the original ES and the revised ES and that the Scheme would lead to no significant impacts on groundwater or surface water, or flood risk<sup>[3.91]</sup>. The assessments undertaken also demonstrate that there would be no unacceptable risks to water resources from spillages arising from traffic accidents<sup>[3.91]</sup>. Moreover, the ES has been considered by the Environment Agency and there are no outstanding matters of concern<sup>[3.91]</sup>.
- 8.167 Although an objection was raised concerning the potential for "mud and mosquitoes" arising from storage ponds to hold rainfall runoff, the road drainage is designed to infiltrate into the ground and accordingly there would not be any significant standing water to create a breeding ground for mosquitoes. The maintenance regime for the drainage network would be in accordance with standard practice operated by NCC<sup>[3.92]</sup>.
- 8.168 <u>Air Quality</u>. 359 Objectors raised concerns that the increased journey lengths which the Scheme would give rise to would lead to increased vehicle emissions, and that in turn this would result in increased carcinogenic and particulate pollution. These concerns were, however, submitted in a generalised form, unsupported by any firm data. Such matters were considered in detail in the original ES and the revised ES, and on the basis of the evidence before me, I see no reason to disagree with the HA's assessment that overall air quality in the immediate vicinity of the Scheme is generally good and that the Scheme would not alter this fact<sup>[3.89]</sup>.
- 8.169 Assessments have shown that concentrations of nitrogen dioxide and fine airborne particles at the relatively small number of residential properties near to the Postwick junction would remain below the standards set to protect health. Concentrations of all 3 pollutants are predicted to be well below the air quality objectives at all receptors, and the effects of the Scheme on air quality would not be significant<sup>[3,90]</sup>. In view of this and the other points detailed above, I conclude that the objections relating to the topic of air quality cannot be sustained.
- 8.170 <u>Light Pollution</u>. One objector raised concerns about possible light pollution. However, the ES points out that the existing Postwick junction and the P&R site are already lit, and concludes that any additional lighting would not be likely to create a significant visual change<sup>[3.88]</sup>. I see no reason to take a contrary view.

#### Conclusions

8.171 In view of the above points I am satisfied that the likely environmental impacts of the Scheme have been thoroughly assessed by the HA and NCC and that appropriate mitigation measures have been satisfactorily planned. I therefore conclude that objections raised on these topics cannot be sustained and that there are no reasons on environmental grounds why the Orders should not be made.

<sup>&</sup>lt;sup>358</sup> Objections covered by this topic include those raised by the following - objector Nos 6, 9-11, 14, 17, 18, 23, 24, 48, 54, 56, 57, 62, 63

<sup>&</sup>lt;sup>359</sup> Objections covered by this topic include those raised by the following - objector Nos 8, 18, 27, 35, 41, 48, 54, 57, 62, 63, 74, 84, 86, 121

 $<sup>^{360}</sup>$  This matter was raised by objector No 120

## **Other Matters**

- 8.172 Some objectors argue that there is no sense in extending the Postwick P&R site as the existing P&R facility is operating well below capacity. Other objections on this general topic, argue that the P&R site at Sprowston should be expanded in preference to the site at Postwick, as it would be closer to new housing in northeast Norwich<sup>361</sup>. However, not only is a consideration of P&R provision outside the scope of this Inquiry, such matters do not have a direct bearing on the statutory tests for the Orders, which I must have regard to. In any case, planning permission has already been granted for expansion of the Postwick site<sup>[3.28]</sup>. For all these reasons, these objections cannot be supported.
- 8.173 A number of objectors raised concerns about the impact of the Scheme on the economy of Great Yarmouth<sup>362</sup>. However, it seems to me that these are concerns relating to the effect of the proposed BGBP and BFLF developments at Postwick, rather than the junction improvement Scheme itself. NCC and the New Anglia LEP both referred to the complementary relationships between Great Yarmouth and Norwich, rather than predicting any adverse impact, and there is no firm evidence before me to cause me to take a contrary view<sup>[4.5, 7.114]</sup>.
- 8.174 Furthermore, the traffic forecasts do not indicate any significant changes in flows on the A47 to the east of Postwick, to suggest that the Scheme would attract people to commute by car from Great Yarmouth to jobs in the Postwick area, as feared by NNTAG<sup>[7.117]</sup>. Regardless of these points, the fact that the BGBP and BFLF developments accord with the development plan, and have already been granted planning permission, mean that these objections cannot be supported.
- 8.175 NNTAG also raised concerns about the financial standing of NCC's development partner, IEL, but any such matters would have been taken into account by BDC when it was considering the planning application for the BGBP<sup>[4.13, 5.32]</sup>. It is of no direct relevance to the merits behind the case for the making of these Orders.
- 8.176 NNTAG also maintained that the HA's claim that the Scheme does not rely on any growth that may come forward in the NEGT, does not tally with the Explanatory Statement and the Updated Explanatory Statement for the draft Orders, which states that the scheme is required to deliver the growth for the NPA as outlined in the Regional Economic Strategy<sup>[5.34]</sup>. However, having regard to the points set out earlier in the Policy section of these conclusions, I am satisfied that a sound case has been made for the Orders, regardless of any further growth which may be allocated to this area in the NEGT.
- 8.177 I have noted that Mr Bowell, representing the Ramblers' Association, would like to see the existing service path over the Yare Viaduct replaced with a shared-use footway/cycle track, with segregation from the A47 highway. Such a facility would link across the railway bridge to the eastbound diverge slip road modification and, via the existing service track, to Whitlingham Lane<sup>[5,74]</sup>. This is something which Mr Bowell has been trying to achieve for some time<sup>[5,74]</sup>, but as it is not required as a consequence of the changes proposed by the Orders this matter cannot be supported<sup>[7,118]</sup>.

<sup>&</sup>lt;sup>361</sup> Objections covered by this topic include those raised by the following - objector Nos 7, 10, 17-20, 23, 25, 28, 30, 35, 37, 48, 50, 51, 54, 57-60, 62-69, 72, 74, 77, 12

 $<sup>^{362}</sup>$  Objections covered by this topic include those raised by the following - objector Nos 24, 28, 77

- 8.178 A further outstanding matter raised by Mr Bowell is his wish to see a footpath extended along Church Road to meet with a proposed relocated bus stop at the junction of Church Road with Brundall Low Road<sup>[5.73]</sup>. However, only a school bus uses this bus stop at the present time and there is no evidence of a demand for the length of footpath sought<sup>[7.118]</sup>. Mr Bowell confirmed, at the Inquiry, that he made this point more as an observation than an objection to the Scheme, and because of this, coupled with the lack of any clear evidence that such a footpath would be warranted, this matter cannot be supported.
- 8.179 Mr Heard queried how the Scheme would achieve the desired outcome of the Social Values Act<sup>363</sup>, and how it would accord with the Natural Environment and Rural Communities Act of 2006<sup>[5.130]</sup>. But as no specific objection in this regard was lodged, the substance of Mr Heard's concerns is unclear. Indeed, the HA has pointed out that the Public Services (Social Value) Act 2012 excludes public works contracts and so is not directly relevant to this Scheme<sup>[7.123]</sup>. Furthermore, insofar as the Natural Environment and Rural Communities Act is concerned, the Scheme has been subject to EIA as part of the planning application process, in accordance with the relevant legislative and regulatory framework<sup>[1.4, 7.123]</sup>. In view of these points I consider that Mr Heard's concerns in these regards should not weigh against the case for making the Orders.
- 8.180 Although not raised specifically as objections, Mr Heard expressed concerns about the funding of the Scheme and also questioned the involvement of the emergency services in the design of the Scheme<sup>[5.133, 5.135]</sup>. But in view of the HA's response on these points<sup>[7.121, 7.122]</sup>, I am satisfied that neither matter throws doubt on the case for the Orders being made.
- 8.181 Mr Heard also challenged the terms of reference for the Inquiry, querying how Local Plans can be judged against guidance that has not yet been published, and arguing that current guidance does not take into account the Framework, the Localism Act, or the Growth and Infrastructure Act<sup>[5.136]</sup>. However, self-evidently this Inquiry is not directly concerned with Local Plans, but has been called to consider the draft Orders, made under the Highways Act 1980. The "requirements of local and national planning" have to be considered in the context of whether the Slip RO should be made, and I have reached my conclusion on this matter in paragraph 8.37 above.
- 8.182 Finally, many objectors argued that the Scheme would be expensive and a waste of public money which could not be justified in the current climate<sup>364</sup>. However, I have already indicated how the Scheme accords with the planning and transport strategies for the area, and clear evidence has been given that the Scheme is supported and would be funded by the Government<sup>[3,59-3,64]</sup>. In these circumstances these objections cannot be supported.

### **Conclusions**

8.183 Having taken account of the range of objections touching on other matters, as detailed above, my conclusion is that none of the issues raised go to the heart of the case for making these Orders, and none can be supported.

<sup>&</sup>lt;sup>363</sup> Assumed to be the Public Services (Social Value) Act 2012

Objections covered by this topic include those raised by the following - objector Nos 5, 6, 8, 10-12, 14, 17, 18, 21, 23, 25, 27-31, 35, 37, 40, 42, 43, 48-51, 53, 54, 56-60, 62-69, 72, 74, 75, 77, 78, 82, 85, 124, 126 and 127

# **Overall Conclusions on the Slip Roads Order**

- 8.184 The HA asks that the Slip RO be made in a modified form, to incorporate the 5 proposed modifications set out in Doc HA/60<sup>[3.110]</sup>. These modifications are not contentious, and are simply put forward to address minor drafting errors in the original Order or to add clarity and ensure consistency between the Order, the Schedule and the Plan. I consider that these proposed modifications are necessary in the interests of accuracy and clarity, and can all be made in accordance with paragraph 8 of Schedule 1 to the Highways Act 1980.
- 8.185 The Slip RO would authorise the new slip roads to be constructed, connecting the eastbound carriageway of the A47 trunk road with the A1042 Yarmouth Road (as proposed to be improved by the SST) at Postwick Interchange.
- 8.186 The tests for making the Slip RO are set out in paragraphs 8.6 to 8.11 above. In paragraph 8.37 I conclude that the Scheme accords with national and local planning and transport policies and strategies and in paragraph 8.78 I conclude that the loss of agricultural land should not weigh heavily against the Scheme.
- 8.187 In paragraph 8.99 I conclude that there are no issues of design, layout, or other related matters which point to the Slip RO not being made. In paragraph 8.162 I conclude that there are no matters concerning the operational performance of the Scheme, including its effect on climate change and the consideration of alternative proposals, which would constitute a reason for the Slip RO not to be made. Finally, in paragraphs 8.171 and 8.183 I conclude that there are no environmental or other matters which would amount to a reason why the Slip RO should not be made.
- 8.188 In view of these points, in my assessment, the published Scheme is expedient for the purpose of improving the national system of routes in England and Wales and is justified in the public interest. I consider that the objections made to the Slip RO cannot be sustained and that the ARs proposed do not justify further investigation. I therefore conclude that the Slip RO should be made with the modifications detailed in paragraph 8.184 above.

## **Overall Conclusion on the Side Roads Orders**

- 8.189 The HA asks that the Side RO be made in a modified form, to incorporate the 15 proposed modifications set out in detail in Docs HA/58 and HA/59<sup>[3.111]</sup>. As with the Slip RO, these modifications are not contentious but are, in the main, put forward to address minor drafting errors or to improve clarity and ensure consistency between the Order, the Schedule and the Plan. The exception is Modification 7 which is proposed to address a specific matter raised by objectors<sup>[3.112]</sup>.
- 8.190 Under this modification the existing eastbound diverge slip road would remain open to cyclists and pedestrians through the creation of a shared-use path along its length. Cyclists and pedestrians currently use the service path over the A47 Viaduct and this proposed shared-use facility would enable cyclists to continue to use the existing A47 eastbound diverge slip road to connect with the existing and proposed cycle network at the Postwick North-West roundabout. "End of cycle route" and "cyclists dismount" signs would be provided to inform cyclists travelling westbound down the slip road that the facility does not continue across the A47 Viaduct<sup>[3.112, 3.113]</sup>.

- 8.191 The modification would require changes to the draft Side Roads Order Schedule and Plan, and would also necessitate other, associated minor drafting changes which are referred to as Proposed Modifications 6 and 8<sup>[3.113]</sup>.
- 8.192 I consider that all the above modifications to the Side RO are necessary, to ensure that cyclists would not be disadvantaged by the stopping up of the eastbound diverge slip road and to ensure clarity and accuracy. I further consider that they can all be made in accordance with paragraph 8 of Schedule 1 to the Highways Act 1980.
- 8.193 With regard to the statutory criteria to be satisfied, I am mindful that the Council is well aware of the need to make provision for Statutory Undertakers' apparatus within the proposal<sup>[3.108]</sup>. Moreover, where a highway, public footpath or PMA is to be stopped up, I have concluded in paragraphs 8.11 and 8.81 above that a reasonably convenient alternative route or access would be provided, as described in the Schedule and Plan to the Side RO.
- 8.194 I conclude that the Side RO should be made with the modifications detailed in paragraphs 8.189 to 8.192 above.

### 9. RECOMMENDATIONS

- 9.1 I recommend that the **A47 Trunk Road (Postwick Interchange Slip Roads) Order 201.** should be modified as indicated in paragraph 8.188 above, and that the Order so modified should be made.
- 9.2 I recommend that the **A47 Trunk Road (Postwick Interchange Side Roads) Order 201.** should be modified as indicated in paragraph 8.194 above, and that the Order so modified should be made.

David Wildsmith

**INSPECTOR** 

## **APPENDIX 1 - APPEARANCES**

### FOR THE HIGHWAYS AGENCY:

Mr Michael Bedford of Counsel, instructed by Heidi Slater, Pinsent

Masons LLP and Tony Nwanodi, Treasury

Solicitor.

He called:

Mr Philip Morris Principal Planner, Norfolk County Council

BSc(Hons) DipTP MRTPI

Mr Mark Kemp Project Team Manager, Norfolk County Council

CEng MICE

Mr Christopher White Project Director, Mott MacDonald Ltd

CEng MICE MCIHT

Professor Glyn Owen Consultant Economic Advisor

BA MA PhD

Mr James Montgomery Divisional Director, Mott MacDonald Ltd

CGeol MIEMA

Professor Duncan Laxen Managing Director, Air Quality Consultants Ltd

PhD MSc BSc FIAQM

Mr Max Forni Principal Acoustic Engineer, Mott MacDonald Ltd

CEng MIOA

Mr David Allfrey Highway and Major Projects Team Manager,

CEng MICE Norfolk County Council

Mr Eric Cooper Asset Development Team Leader, the Highways

BSc(Hons) Agency

## SUPPORTERS OF THE ORDERS:

Mr Chris Starkie Managing Director, New Anglia Local Enterprise

Partnership

## **OBJECTORS TO THE ORDERS:**

Mr Tony Clarke Right to Ride representative of the Cyclists' Touring

Club

Mrs Mollie Howes Private individual Private individual

Mr Alan Woods Postwick with Witton Parish Council

Mr Alan G S Bowell Ramblers Association
Mr Davidson Menzies Distribution Ltd

Cllr Alfred Townly Great & Little Plumstead Parish Council (also

appeared as a private individual)

Mr Stephen Heard Stop Norwich Urbanisation (SNUB) and Salhouse

Parish Council

Mr Keith Buchan Norfolk and Norwich Transport Action Group

(NNTAG)

Mr Dennis Eley Thorpe St Andrew Town Council Mr S Radford The Lothbury Property Trust

Ms Denise Carlo Norfolk and Norwich Transport Action Group

(NNTAG)

Cllr Andrew Boswell Norwich Green Party

Mr R Stewart Lindsay Private individual and Rackheath Parish Councillor

Mr Robert Bailey Private individual

Mr D Rapson The Lothbury Property Trust

# **APPENDIX 2 - INQUIRY DOCUMENTS**

# **Highways Agency - Deposited Documents**

DD01 DD02 DD03 DD04 DD05	A47 Trunk Road (Postwick Interchange Slip Roads) Order A47 Trunk Road (Postwick Interchange Side Roads) Order Explanatory Statement Updated Explanatory Statement (February 2012) Letter from Government Office for East Midlands dated 2 August 2010- decision to defer Public Inquiry
DD06 DD07 DD08	Notice dated 24 February 2012 re-advertising draft orders Schedule describing modifications to Side Roads Order Notice dated 11 May 2012 in which the Secretary of State announced that a Public Inquiry would be held
DD09 DD10 DD11	Notice dated 22 June 2012 announcing Pre-Inquiry Meeting Notice dated 10 August announcing Public Inquiry Scheme Plan
DD12	Highways Agency Outline Statement of Case Volume 1 (June 2012) (superseded)
DD13	Highways Agency Outline Statement of Case Volume 2 (June 2012) (superseded)
DD14 DD15 DD16 DD17	Highways Agency Statement of Case (August 2012) (superseded) Highways Agency Letter dated 31 August 2012 Not Used Not Used
DD18 DD19 DD20 DD21 DD22 DD23 DD24 DD25 DD26 DD27 DD28 DD29	Acts of Parliament Ancient Monuments and Archaeological Areas Act 1979 Countryside Act 1968 Countryside and Rights of Way Act 2000 Control of Pollution Act 1974 Environmental Protection Act 1990 Environment Act 1995 Highways Act 1980 Planning and Compensation Act 1991 Planning (Listed Buildings and Conservation Areas) Act 1990 Planning & Compulsory Purchase Act 2004 Town & Country Planning Act 1990 Not Used
DD30 DD31 DD32	Statutory Instruments Highways (Inquiries Procedure) Rules 1994 (S.I 3263) Highways (Assessment of Environmental Effects) 1988 (S.I 1241) Highways (Assessment of Environmental Effects) 1994 (S.I 1002)

DD33 DD34	Highways (Assessment of Environmental Effects) 1999 (S.I 369) Not Used
DD35	The Town & Country Planning (Environmental Impact Assessment) Regulations 2011 (S.I. 1824)
DD36 DD37 DD38	Noise Insulation Regulations 1975 (S.I 1763) Noise Insulation (Amendment Regulation) 1988 (S.I 2000) Groundwater Regulations 1998 (S.I 2746)
DD39 DD40	The Conservation (Natural Habitats) Regulations 1994 (S.I 2716) The Conservation (Natural Habitats) 1994 Amended England Regs 2000 (S.I 192)
DD41 DD42	Air Quality Standards Regulations 2007 (S.I 317) Not Used
DD43	Other Legislation (Acts & Statutory Instruments) Land Drainage Act 1991
DD43	Land Drainage Act 1991 Land Drainage Act 1994
DD45	Noise and Statutory Nuisance Act 1993
DD46	Protection of Badgers Act 1992
DD47	Water Resources Act 1991
DD48	Water Act 2003
DD49	Wildlife & Countryside Act 1981
DD50	Wild Mammals Protection Act 1996
DD51 DD52	Surface Waters (River Ecosystem Regs) 1994 (S.I 1057) Water Supply (Water Quality) Regulations 2000 (S.I 3184)
DD52	Water Supply (Water Quality) Regulations 2000 (3.13164) Water Supply (Water Quality) Regulations 2000 Amendment 2007
DD53	Air Quality Regulations England 2000 (S.I 928)
DD55	Air Quality Limit Values Regulations 2003 (S.I 2121)
DD56	Air Quality Limit Values (Amendment Regs) England 2004 (S.I 2888)
DD57	Hedgerow Regulations 1997 (S.I 1160)
DD58	Conservation of Habitats and Species Regulations 2010
DD59	Not Used
DDCO	Government White Papers
DD60 DD61	A New Deal for Trunk Roads in England - July 1998 A New Deal for Transport: Better For Everyone 1998
DD61	Transport 2010 - The 10 Year Plan
DD63	The Future of Transport: A Network for 2030
DD64	A New Deal for Trunk Roads in England: Guidance on the New Approach to
	Appraisal
DD65	A New Deal for Trunk Roads in England: Understanding the New Approach
DDCC	to Appraisal
DD66	Delivering Better Transport: Progress Report- (DfT 2002)
DD67	A Better Quality of Life-Strategy for Sustainable Development for the UK (DETR 1999)
DD68	Our Countryside the Future: A Fair Deal for Rural England (DETR 2000)
DD69	Biodiversity Impact: A Good Practice Guide for Road Schemes (July 2000)
DD70	Landscape Character Assessment- Guidance for England & Scotland (2002)
DD71	Air Quality Strategy for England, Scotland, Wales & Northern Ireland (DETR 2000)
DD72	Air Quality Strategy for England, Scotland, Wales & Northern Ireland Addendum)

DD73	Not Used
DD74 DD75 DD76 DD77	Planning (Note – these Planning Policy Statements and Planning Policy Guidance Notes have been superseded by the National Planning Policy Framework) Planning Policy Statement 1: Delivering Sustainable Development Planning Policy Guidance 2: Green Belts Planning Policy Statement 3: Housing Planning Policy Guidance 4: Industrial & Commercial Development & Small
יוטט	Firms
DD78 DD79 DD80 DD81 DD82 DD83 DD84	Planning Policy Statement 6: Planning for Town Centres Planning Policy Statement 7: Sustainable Development in Rural Areas Planning Policy Statement 9: Biodiversity & Geological Conservation Planning Policy Statement 11: Regional Spatial Strategies Planning Policy Statement 12: Local Development Frameworks Planning Policy Guidance 13: Transport Planning Policy Guidance 14: Development on Unstable Land
DD85 DD86	Planning Policy Guidance 11: Development on Offstable Land Planning Policy Guidance 15: Planning and the Historic Environment Planning Policy Guidance 16: Archaeology and Planning
DD87 DD88	Planning Policy Guidance 10: Archaeology and Flamming Planning Policy Guidance 17: Sports and Recreation Planning Policy Guidance 21: Tourism
DD89	Planning Policy Guidance 25: Development and Flood risk
	Additional Documents
DD90	Guidance on the Methodology for Multi Modal Studies- Volume 1, March 2000
DD91	Guidance on the Methodology for Multi Modal Studies- Volume 2, March 2000
DD92 DD93 DD94	Biodiversity: The UK Action Plan 1994 Biodiversity: The UK Steering Group Report, Volume 2 Action Plan 1995 Trunk Roads and the Generation of Traffic (The Standing Advisory Committee on Trunk Road Assessment 1994)
DD95	Transport and the Economy (The Standing Advisory Committee on Trunk Road Assessment 1999)
DD96	Not Used
DD97	<b>European Union Directives</b> 75/440 EEC Council Directive of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States
DD98	76/160 EEC Council Directive of 8 December 1975 concerning the quality of Bathing Water
DD99	78/659 EEC Council Directive of 18 July 1978 on the quality of fresh waters needing protection or improvement in order to support fish life
DD100 DD101	79/409 EEC: Council Directive on the Conservation of Wild Birds 80/68 EEC Council Directive of 17 December 1979 on the protection of groundwater against pollution caused by certain dangerous substances
DD102 DD103	85/337 EEC Council Directive of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment 91/441 EEC Council Directive of 26 June 1991 amending Directive 70/220/EEC on the approximation of the laws of the Member States relating to measures to be taken against air pollution by emissions from motor vehicles

**DD104** 91/692 EEC Council Directive of 23 December 1991 standardizing and rationalizing reports on the implementation of certain Directives relating to the environment **DD105** 92/43 EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora 97/11 EC Council Directive of 3 March 1997 amending Directive **DD106** 85/337/EEC on the assessment of the effects of certain public and private projects on the environment 2000/60 EC Directive of 23 October 2000 establishing a framework for **DD107** community action in the field of water policy 2003/35 EC Directive of 26 May 2003 providing for public participation in **DD108** respect of the drawing up of certain plans and programmes relating to the environment DD109 Not Used **International Conventions DD110** Ramsar Convention on Wetlands (1971) Bern Convention on the Conservation of European Wildlife and Natural DD111 Habitats (1979) Bonn Convention on the Conservation of Migratory Species of Wild Animals DD112 (1979)DD113 Convention on Biological Diversity (1992) DD114 Not Used to **DD129** DD130 Broadland Gate Planning Application - Covering letter 8 December 2008 & 6 January 2009 Broadland Gate Planning Application - Original application 8 January 2009 DD131 Broadland Gate Planning Application - Amended covering letter (existing DD132 eastbound diverge slip road closed) 18 August 2009 DD133 Broadland Gate Planning Application - Amended Covering letter (access into development from east/west link modified) 20 November 2009 Broadland Gate Planning Application - Decision 1 April 2010 DD134 DD135 Broadland Gate Planning Application - Decision Refreshed 19 October 2011 DD136 DfT Circular 02/2007 Planning and the Strategic Road Network DD137 Broadland Gate Planning Application - Transport Assessment Original - 8 January 2009 **DD138** Broadland Gate Planning Application - Transport Assessment Amended - 18 August 2009 DD139 Broadland Gate Planning Application - Transport Assessment Addendum and Errata - 20 November 2009 Broadland Gate Planning Application - Transport Assessment Amended - 9 DD140 June 2011 DD141 Broadland Gate Planning Application - Environmental Statement Vol 1 Original - 8 January 2009 Broadland Gate Planning Application - Environmental Statement Vol 2 DD142 Original - 8 January 2009 Broadland Gate Planning Application - Environmental Statement Non DD143 Technical Summary - 8 January 2009 Broadland Gate Planning Application - Environmental Statement Amended **DD144** - 18 August 2009

- DD145 Broadland Gate Planning Application Environmental Statement Amended 20 November 2009
- DD146 Broadland Gate Planning Application Environmental Statement Vol 1 Revised - 9 June 2011
- DD147 Broadland Gate Planning Application Environmental Statement Vol 2 Revised - 9 June 2011
- DD148 Broadland Gate Planning Application Environmental Statement Vol 2 Revised - 9 June 2011
- DD148 Broadland Gate Planning Application Environmental Statement Non Technical Summary Refreshed- 9 June 2011
- DD149 Broadland Gate Planning Application Flood Risk Assessment Draft 8 January 2009
- DD150 Broadland Gate Planning Application Arboricultural Assessment 8 January 2009
- DD151 Broadland Gate Planning Application Framework Travel Plan 8 January 2009
- DD152 Broadland Gate Planning Application Framework Travel Plan Amended Addendum 8 June 2011
- DD153 Broadland Gate Planning Application Framework Travel Plan Amended 18 August 2009
- DD154 Broadland Gate Planning Application Framework Travel Plan Amended 20 November 2009
- DD155 Broadland Gate Planning Application Site Waste Management Plan 8 January 2009
- DD156 Broadland Gate Planning Application Statement of Community Involvement 8 January 2009
- DD157 Broadland Gate Planning Application Design and Access Statement 8 January 2009
- DD158 Broadland Gate Planning Application Design and Access Statement Addendum 18 August 2009
- DD159 Broadland Gate Planning Application Design and Access Statement Addendum 20 November 2009
- DD160 Broadland Gate Planning Application Planning Statement 8 January 2009
- DD161 Broadland Gate Planning Application Amended Planning Statement 08 June 2011
- DD162 Broadland Gate Planning Application Amended Retail Impact Assessment 8 June 2011
- DD163 Broadland Gate Planning Application Sustainability Strategy 8 January 2011
- DD164 Broadland Gate Planning Application Office Market Report 18 November 2008
- DD165 Broadland Gate Planning Application Office Market Report Addendum 18 August 2009
- DD166 Broadland Gate Planning Application Heath Farm Proposed Landscape Strategy - November 2009
- DD167 Broadland Gate Planning Application Section 106 April 2010
- DD168 Broadland Gate Planning Application Section 106 October 2011
- DD169 Planning Policy Statement Eco-towns
- DD170 Broadland Gate Planning Application PLAN: Landscape Framework Plan November 2009

- DD171 Broadland Gate Planning Application PLAN: Landscape Framework Plan January 2009
- DD172 Broadland Gate Planning Application PLAN: Landscape Framework Plan August 2009
- DD173 Broadland Gate Planning Application Road Infrastructure Drawings November 2008 / submitted January 2009
- DD174 NATS Model Update for Norwich Northern Distributor Road Development Pool Bid Highway Local Model Validation Report September 2011
- DD175 NATS Model Update for Norwich Northern Distributor Road Development Pool Bid - Public Transport Local Model Validation Report - September 2011
- DD176 NATS Model Update for Norwich Northern Distributor Road Development Pool Bid Supplementary Data Collection Report September 2011
- DD177 Postwick Hub Scheme- Forecasting Report August 2012 Amended on 17 August 2012 Superseded, please see DD336
- DD178 Postwick Hub Scheme Economics and Safety superseded, please see DD362 and DD363
- DD179 Brook Farm Laurel Farm 20090886 development Application
- DD180 Brook Farm Laurel Farm 20090886 development Planning meeting minutes
- DD181 SuDS Manual C697
- DD182 Norwich Cycle Map
- DD183 Extract from Sustrans website showing proposed cycling route.
- DD184 GNDP (Greater Norwich Development Partnership) Greater Norwich Employment Growth and Sites & Premises Study Final Report
- DD185 Broadland Gate Planning Application PLAN: Development Framework Plan January 2009
- DD186 Broadland Gate Planning Application PLAN: Red Line Plan January 2009
- DD187 Broadland Gate Planning Application PLAN: Red Line Plan August 2009
- DD188 Broadland Gate Planning Application Revised Road Alignment Supplementary Submission August 2009
- DD189 Broadland Gate Planning Application PLAN: Development Framework Plan August 2009
- DD190 Broadland Gate Planning Application PLAN: Development Framework Plan November 2009
- DD191 Broadland Gate Planning Application Revised road alignment Supplementary Submission November 2009
- DD192 Broadland Business Park Planning Committee Minutes -16 August 2006
- DD193 Broadland Business Park Plot L1 Broadland Bus Park 20060918 16 August 2006
- DD194 Broadland Business Park Supplementary Schedule of Applications 16 August 2006
- DD195 Appraisal Summary Table
- DD196 Social and Distributional Impacts Assessment
- DD197 DMRB Volume 12 Section 1: The Application of Traffic Appraisal to Trunk Roads Schemes
- DD198 DMRB Volume 12 Section 2: Traffic Appraisal Advice
- DD199 DMRB Volume 13 Section 1: The COBA manual
- DD200 The Highways (Assessment of Environmental Effects) 2007
- DD201 Broadland Gate Planning Committee 17 August 2011
- DD202 Broadland Gate Planning Application PLAN: Proposed Mid-Section from Business Park and Dual Carriageway Links November 2009

- DD203 Broadland Gate Planning Application PLAN: Residential Boundary Treatments Northern Boundary Section A-AA November 2009
- DD204 Broadland Gate Planning Application PLAN: Residential Boundary Treatments Northern Boundary Section B-BB November 2009
- DD205 Broadland Gate Planning Application PLAN: Illustrative Master Plan November 2009
- DD206 Broadland Gate Planning Application PLAN: Infrastructure Plan Amended November 2009
- DD207 Broadland Gate Planning Application PLAN: Red Line Plan Amended November 2009
- DD208 Infiltration drainage lagoon and vehicular access to the lagoon and The Grange Planning Application Application Form 15 March 2010
- DD209 Infiltration drainage lagoon and vehicular access to the lagoon and The Grange Planning Application Decision 19 May 2010
- DD210 Infiltration drainage lagoon and vehicular access to the lagoon and The Grange Planning Application Infrastructure drawing
- DD211 Infiltration drainage lagoon and vehicular access to the lagoon and The Grange Planning Application Envirocheck® Historical Data Report Datasheet 15 March 2010
- DD212 Infiltration drainage lagoon and vehicular access to the lagoon and The Grange Planning Application Design & Access Statement 15 March 2010
- DD213 Postwick Park & Ride Planning Application Application form July 2009
- DD214 Postwick Park & Ride Planning Application Decision 10 May 2010
- DD215 Postwick Park & Ride Planning Application Environmental Statement March 2009
- DD216 Postwick Park & Ride Planning Application Flood Risk Assessment March 2009
- DD217 Postwick Park & Ride Planning Application Site Waste Management Plan March 2009
- DD218 Postwick Park & Ride Planning Application Design and Access Statement July 2009
- DD219 Postwick Park & Ride Planning Application Planning Supporting Statement July 2009
- DD220 Norwich Area Transport Strategy Public Consultation Analysis Report May 2004
- DD221 Norwich Area Transport Strategy Public Consultation Analysis Report June 2004 Supplement
- DD222 Northern Distributor Route Questionnaire Public Consultation Results February 2005
- DD223 Norwich Area Transportation Strategy Public Consultation and Engagement Outputs and Analysis March 2010
- DD224 NCC report to Cabinet 2 April 2012 'Delivering Economic Growth in Norfolk' the strategic role for Norfolk County Council
- DD225 High Court Case Report 24 February 2012 legal challenge to the adoption of the Joint Core Strategy: Heard -v- Broadland District Council, South Norfolk District Council and Norwich City Council [2012] EWHC 344 (Admin)
- DD226 Order issued by Mr Justice Ouseley in the High Court on 25 April 2012 in connection with the case of Heard –v- Broadland District Council, South Norfolk District Council and Norwich City Council [2012] EWHC 344 (Admin)

- DD227 Report on the Examination of the Joint Core Strategy for Broadland, Norwich & South Norfolk Development Plan Document, 22 February 2011
- DD228 East of England Plan to 2031 Draft revision March 2010
- DD229 Local Transport Plan (LTP3) Connecting Norfolk Strategy Norfolk's Transport Plan for 2026
- DD230 Local Transport Plan (LTP3) Connecting Norfolk Implementation Plan 2011-2015
- DD231 East of England Plan May 2008
- DD232 Norwich Area Transportation Strategy (NATS) Public Consultation October 2009
- DD233 Joint Core Strategy (JCS) for Broadland Adoption statement 24 March 2011
- DD234 Joint Core Strategy for Broadland, Norwich and South Norfolk Adopted March 2011
- DD235 The Broadland District Council Local Plan (Replacement) May 2006
- DD236 Making Sustainable Local Transport Happen White Paper January 2011
- DD237 National Infrastructure Plan November 2011
- DD238 National Planning Policy Framework
- DD239 HM Treasury Green Book 2011
- DD240 The New Anglia Local Enterprise Partnership Business Plan
- DD241 Responses to HA issue no.1 -11 September 2009
- DD242 Broadland District Council's Parking Standards Supplementary Planning Document (June 2007)
- DD243 Construction Environmental Management Plan
- DD244 Department for Transport (DfT) Local Authority Major Scheme decisions December 2011
- DD245 Best & final funding bid form September 2011
- DD246 Department for Transport 'The Transport Business Case' April 2011
- DD247 Alan Cook's Review of the Strategic Road Network 'A Fresh Start for the Strategic Road Network'
- DD248 The Government's Response to Alan Cook's Review of the Strategic Road Network, 'A Fresh Start for the Strategic Road Network: The Government Response' (May 2012)
- DD249 DfT Communities and Local Government (CLG) Guidance on Transport Assessment (March 2007)
- DD250 Design Manual for Roads and Bridges (DMRB) Volume 6 Section 1 Part 1: TD9/93 Highway Link Design
- DD251 DMRB Volume 6 Section 1 Part 2: TD27/05 Cross Sections and Headrooms
- DD252 DMRB Volume 6 Section 2 Part 1: TD22/06 Layout of Grade Separated Junctions
- DD253 DMRB Volume 6 Section 2 Part 3: TD16/07 Geometric Design Of Roundabouts
- DD254 DMRB Volume 6 Section 2 Part 3: TD50/04 The Geometric Layout of Signal-Controlled Junctions and Signalised Roundabouts.
- DD255 DMRB Volume 2 Section 2 Part 8: TD19/06 Requirement for Road Restraint Systems
- DD256 DMRB Volume 5 Section 2 Part 2: HD19/03 Road Safety Audit
- DD257 DMRB Volume 6 Section 3 Part 5: TD51/03 Segregated Left Turn Lanes and Subsidiary Deflection Islands at Roundabouts
- DD258 DMRB Volume 6 Section 3 Part 5: TA90/05 The Geometric Design of Pedestrian, Cycle & Equestrian Routes
- DD259 DMRB Volume 1 Section 3 Part 8: BA57/01 Design for Durability

- DD260 DMRB Volume 1 Section 3 Part 7: BD57/01 Design for Durability
- DD261 DMRB Volume 4 Section 2 Part 3: HD33/06 Surface and Sub-surface Drainage System for Highways
- DD262 DMRB Volume 8 Section 3: TD34/07 Design of Road Lighting for the Strategic Motorway and All Purpose Trunk Road Networks
- DD263 DMRB Volume 11 Section 3 Part 7: Noise and Vibration HD 213/11
- DD264 Department for Transport Local Transport Note 1/09 Signal Controlled Roundabouts
- DD265 Department for Transport Local Transport Note 02/08 Cycle Infrastructure Design
- DD266 The Construction (Design and Management) Regulations 2007
- DD267 Road Safety Audit Stage 2
- DD268 DMRB, Volume 11, Section 3 Part 10 : Road Drainage and the Water Environment HD 45/09
- DD269 Postwick Junction Options Report Vol 1 Rev A November 2008
- DD270 Postwick Junction Options Report Vol 2 Rev A November 2008
- DD271 DMRB, Volume 11, Section 3 Part 5: Landscape Effects
- DD272 Norwich Area Transportation Strategy (NATS) 2006 (Incorporating 2010 changes)
- DD273 HA Postwick Junction Options Report
- DD274 DMRB Volume 6 Section 3: Roadside Features TA 57/87
- DD275 DMRB Volume 5 Section 2 Part 4: Provision for non-motorised users TA 91/05
- DD276 The Town and Country Planning (Environmental, Impact Assessment) (Amendment) (England) Regulations 2008.
- DD277 The Air Quality Standards Regulations 2010
- DD278 Part IV of the Environment Act 1995 updated 2000
- DD279 Air Quality (England) (Amendment) Regulations 2002 (SI: 2002/3043)
- DD280 Communities and Local Government letter to Broadland District Council Application for planning permission for proposed Broadland Gate Business Park and Postwick (A47) Junction improvements 20081772 28 September 2011
- DD281 Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 (SI: 2003/3242)
- DD282 The Renewable Fuel Obligations Order 2011 No. 2937
- DD283 Department for Transport funding clarification letter dated 3 August 2012
- DD284 Local Investment Plan And Programme Prepared By Greater Norwich Development Partnership and dated February 2012
- DD285 EC Directive on the Conservation of Wild Birds (Birds Directive 2009) (2009/147/EC);
- DD286 Broadland Gate Broadland District Council acquiesced to judgment 9
  December 2009
- DD287 The Highways Agency Application for a Record of Determination and Notice of Determination Submission to Secretary of State for Screening Opinion August 2012
- DD288 Bonn Convention on the Conservation of Migratory Species of Wild Animals Agreement on the Conservation of Bats in Europe (1991).
- DD289 Consent Order issued by the High Court (Admin) on 15 August 2011 in respect of agreed terms of settlement in connection with judicial review challenge by Lothbury Property Trust Limited (Claimant) –v- Broadland District Council (Defendant)
- DD290 Broadland District Council Letter to SoS RE: Planning Application

- DD291 The Conservation of Habitats and Species Regulations 2010
- DD292 Natural Environment and Rural Communities Act 2006
- DD293 Contaminated Land (England) Regulations 2000 and 2006
- DD294 Norfolk Structure Plan 1999
- DD295 Planning Policy Statement 23 Planning and Pollution Control (PPS23)
- DD296 Planning Policy Guidance PPG24: Planning and Noise (PPG24)
- DD297 Planning Policy Statement 5: Planning for the Historic Environment (PPS5, DCLG 2010) March 2010
- DD298 Department for Communities and Local Government, June 2006. Guidance On Changes To The Development Control System (Circular 01/2006);
- DD299 Department for Communities and Local Government, June 2006. Environmental Impact Assessment: A guide to Good Practice and Procedures: A Consultation Paper
- DD300 Department for Environment, Transport and the Regions, 1999. Environmental Impact Assessment (Circular 02/1999)
- DD301 Environmental Resources Management, June 2001. Guidance on EIA: EIS Review. European Union
- DD302 Institute of Environmental Management and Assessment, Guidelines for Environmental Impact Assessment, 2006 updates
- DD303 Office of the Deputy Prime Minister, 1999. Note on Environmental Impact Assessment Directive for Local Planning Authorities;
- DD304 Office of the Deputy Prime Minister, January 2000. Environmental Impact Assessment: A Guide to Procedures.
- DD305 Postwick P&R Red Line Plan
- DD306 Postwick P&R Site Plan
- DD307 Institute of Ecology and Environmental Management (IEEM), Ecological Impact Assessment 2006.
- DD308 Guidelines for Landscape and Visual Assessment (3rd Edition Consultation Draft), Institute of Environmental Management and Assessment and the Landscape Institute
- DD309 Assessing the Effect of Road Schemes on Historic Landscape Character, Highways Agency and English Heritage, Draft for discussion March 2007.
- DD310 Traffic Signs Regulations and General Directions (2002)
- DD311 National Planning Policy Framework and associated guidance document on flood risk.
- DD312 Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions, European Commission, May 1999.
- DD313 DMRB, Volume 11, Section 3, Part 1: Air Quality
- DD314 DMRB Volume 11, Section 3 Part 2 : Cultural Heritage Interim Advice Note 92/07 (note this is now superseded by HA 208/07)
- DD315 NCC Cabinet Report 19 September 2005
- DD316 NCC Cabinet Report 2 April 2012
- DD317 Dft Transport Analysis Guidance Unit 2.7
- DD318 Dft Transport Analysis Guidance Unit 3.4.1 April 2011
- DD319 Dft Transport Analysis Guidance Unit 3.5 modules 1-14
- DD320 Dft Transport Analysis Guidance Unit 3.10 modules 1 to 7
- DD321 Dft Transport Analysis Guidance Unit 3.15 modules 1,2 and 5
- DD322 Dft Transport Analysis Guidance Unit 3.16D
- DD323 Dft Transport Analysis Guidance 3.19D May 2012
- DD324 Postwick P&R Transport Assessment
- DD325 Postwick P&R Environmental Statement Addendum December 2009
- DD326 Infiltration drainage lagoon and vehicular access to the lagoon and The

- Grange Planning Application Application to extend the time limit for implementation Application December 2012
- DD327 Infiltration drainage lagoon and vehicular access to the lagoon and The Grange Planning Application Application to extend the time limit for implementation Decision March 2013
- DD328 Infiltration drainage lagoon and vehicular access to the lagoon and The Grange Planning Application Application to extend the time limit for implementation Infrastructure drawing
- DD329 NCC report to Cabinet 3 December 2012
- DD330 Joint Core Strategy for Broadland, Norwich and South Norfolk Submission Document February 2013
- DD331 DfT draft policy document: The Strategic Road Network and the Delivery of Sustainable Development February 2013
- DD332 Postwick Hub Junction Scheme Adjustment of Highway Transport Model using 2012 data March 2013
- DD333 Postwick Hub Junction Scheme Present Year Validation Report March 2013
- DD334 The Ministerial Statement of 23 March 2011 by Rt Hon Greg Clark MP
- DD335 Government's invitation to Greater Norwich to negotiate a "2nd Wave" City Deal (HM Treasury Press Notice 101/12 Norwich dated 29 October 2012)
- DD336 Postwick Hub Scheme Forecasting Report April 2013
- DD337 National Infrastructure Plan Update 2012 December 2012
- DD338 National Infrastructure Plan Update: HM Treasury, March 2013
- DD339 Highways Agency Scheme Identification Study A47 Postwick River Yare Crossing Draft February 2000
- DD340 European Commission Annex to the Proposal for a regulation of the European Parliament and of Council on Union guidelines for the development of the trans-European transport network December 2011
- DD341 Duplicate of DD317
- DD342 DfT Transport Analysis Guidance Unit 3.4.1 August 2012
- DD343 Duplicate of DD319
- DD344 Duplicate of DD320
- DD345 DfT Transport Analysis Guidance 3.19 August 2012
- DD346 Notice dated 1 March 2013 announcing Pre-Inquiry and Public Inquiry Meeting
- DD347 The Town and Country Planning (General Development Procedure) Order 2010 (SI 1995/419)
- DD348 Direction Under Paragraph 1(3) of Schedule 8 to the Planning and Compulsory Purchase Act 2004 Policies contained in Broadland District Local Plan (Replacement 2006) 17 March 2009
- DD349 Brook Farm Laurel Farm 20090886 development Planning meeting minutes August 2011
- DD350 The Treaty on the Functioning of the European Union ("TFEU")
- DD351 Letter dated 27 March 2009 from DfT to NCC
- DD352 The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (SI 1999/293)
- DD353 DMRB Volume 11, Section 3, Part 2: HA 208/07, Cultural Heritage
- DD354 Highways Agency Outline Statement of Case Volume 1 (April 2013)
- DD355 Highways Agency Outline Statement of Case Volume 2 (April 2013)
- DD356 NATS Model Update For Norwich Northern Distributor Road Development Pool Bid
- DD357 Housing Monitoring Report April 2009 March 2010

**DD358** Highways Agency Departure from Standard Approval - Westbound Merge, DAS ID 67370 **DD359** Highways Agency Departure from Standard Approval - Eastbound Merge, DAS ID 52545 **DD360** Highways Agency Departure from Standard Approval - Eastbound diverge, DAS ID 52543 DD361 Highways Agency Departure from Standard Approval - Abutment Galleries, DAS ID 59837 **DD362** Postwick Hub Scheme - Economic Appraisal Report - April 2013 **DD363** A47/A1042 Postwick Hub Junction Road Safety Audit - Stage 2 Submission and Report April 2013 **DD364** Strategic road network performance specification 2013-2015 (April 2013) DD365 GNDP JCS Annual Monitoring Report 2011-2012 **DD366** Broadland Local Plan proposals map as modified as a result of the adoption of the JCS in 2011 **DD367** Environment Agency, Groundwater Protection: Principles and practice DD368 A47 Wider Economic Benefits, Mott MacDonald (August 2012) DD369 Highways Agency Full Statement of Case Volume 1 (May 2013) DD370 Highways Agency Full Statement of Case Volume 2 (May 2013) Environmental Statement - Revised Air Quality, Noise and Water Resource DD371 Assessments - April 2013 **DD372** DfT Transport Analysis Guidance Unit 2.13 - Summary Guidance on Social and Distributional Impacts of Transport Interventions

DfT Transport Analysis Guidance Unit 3.17 - Detailed Guidance on Social

#### **Highways Agency - Statement of Case and Proofs of Evidence**

and Distributional Impacts of Transport Interventions

HA/01/1	Eric Cooper Proof of Evidence - Highways Agency
HA/01/2	Eric Cooper Appendices to Proof of Evidence - Highways Agency
HA/01/3	Eric Cooper Summary of Proof of Evidence - Highways Agency
HA/02/1	David Allfrey Proof of Evidence - Scheme Justification
HA/02/2	David Allfrey Appendices to Proof of Evidence - Scheme Justification
HA/02/3	David Allfrey Summary of Proof of Evidence - Scheme Justification
HA/03/1	Mark Kemp Proof of Evidence - Scheme Design
HA/03/2	Mark Kemp Appendices to Proof of Evidence - Scheme Design
HA/03/3	Mark Kemp Summary of Proof of Evidence - Scheme Design
HA/04/1	Philip Morris Proof of Evidence - Planning
HA/04/2	Philip Morris Appendices to Proof of Evidence - Planning
HA/05/1	Christopher White Proof of Evidence - Traffic, Safety and Economics
HA/05/2	Christopher White Appendices to Proof of Evidence - Traffic, Safety
	and Economics
HA/05/3	Christopher White Summary of Proof of Evidence - Traffic, Safety and
	Economics
HA/06/1	James Montgomery Proof of Evidence - Environmental
HA/06/2	James Montgomery Appendices to Proof of Evidence - Environmental
HA/06/3	James Montgomery Summary of Proof of Evidence - Environmental
HA/07/1	Professor Duncan Laxen Proof of Evidence - Climate Change
HA/07/2	Professor Duncan Laxen Appendices of Proof of Evidence - Climate
	Change
HA/08/1	Glyn Owen Proof of Evidence - Economics

**DD373** 

HA/08/2 Glyn Owen Appendices of Proof of Evidence - Economics

HA/09/1 Max Forni Proof of Evidence - Noise

#### **Rebuttal Documents submitted by the Highways Agency**

HA/RB/OBJ02/1	Rebuttal Proof to Evidence of Mr Bowell - The Ramblers'
	Association
HA/RB/OBJ03/1	Rebuttal Proof to Evidence of Mr Woods - Postwick with Witton
	Parish Council
HA/RB/OBJ08/1	Rebuttal Proof to Evidence of Cllr A Townly - Great and Little
	Plumstead Parish Council
HA/RB/OBJ08/2	Addendum to the written objections of Cllr A Townly - Great
	and Little Plumstead Parish Council
HA/RB/OBJ12/1	Rebuttal Proof to Evidence of Mr R Lindsay
HA/RB/OBJ24/1	Rebuttal Proof to Evidence of Mrs M Howes
HA/RB/OBJ27/1	Rebuttal Proof to Evidence of Mr P Woolnough on behalf of
, , ,	CPRE Norfolk
HA/RB/OBJ28/1	Rebuttal Proof to Evidence of Ms D Carlo - Norwich and Norfolk
, ,,	Transport Action Group
HA/RB/OBJ28/2	Rebuttal Proof to Evidence of Mr K Buchan - Norwich and
,,, -	Norfolk Transport Action Group
HA/RB/OBJ28/3	Rebuttal to Supplementary Proof of Evidence of Mr K Buchan
( ) 5 2 3 2 3 / 5	on behalf of NNTAG
HA/RB/OBJ28/4	Analysis of TECs
HA/RB/OBJ35/1	Rebuttal Proof to Evidence of Ms S Berry - Campaign for Better
111 (112) 023333 1	Transport
HA/RB/OBJ36/1	Rebuttal Proof to Evidence of Thorpe St Andrew Town Council
11/1/11/00/00/1	(Mr Eley and Mr Ford)
HA/RB/OBJ52/1	Rebuttal Proof to Evidence of Mr A Williams
HA/RB/OBJ52/2	Addendum to the Rebuttal to the written objections of Mr A
117/10/00332/2	Williams
HA/RB/OBJ64/1	Rebuttal Proof to Evidence of Cllr A Boswell on behalf of
117 (110) 0030 1/ 1	Norwich Green Party
HA/RB/OBJ64/2	Addendum to the Rebuttal Proof to Evidence of Cllr Boswell on
117/10/00304/2	behalf of the Norwich Green Party
HA/RB/OBJ64/3	Analysis of Traffic Reassignment caused by the implementation
	of the Scheme & Forecast Traffic Movements through Postwick
	Junction
HA/RB/OBJ64/3A	Traffic Reassignment Routes, to be read with HA/RB/OBJ-64/3
	(Map showing Street Names)
HA/RB/OBJ64/4	Second Addendum to Rebuttal Proof of Cllr Boswell on behalf of
11A/ KD/ ODJ04/4	the Norwich Green Party
HA/RB/OBJ77/1	Rebuttal Proof to Evidence of Mr E Newberry
HA/RB/OBJ77/1	,
	Addendum to written objections of Mr Newberry
HA/RB/OBJ81/1	Rebuttal Proof to Evidence of Mr P Wilkinson - Lothbury
UA/DD/OD101/2	Property Trust  Rebutted Proof to Evidence of Mr. D. Bangan Lethbury Property
HA/RB/OBJ81/2	Rebuttal Proof to Evidence of Mr D Rapson - Lothbury Property
HA/DD/ODIO1/2	Trust
HA/RB/OBJ81/3	Rebuttal Proof to Additional Evidence of Mr D Rapson -
UA/DD/OD102/4	Lothbury Property Trust  Rebutted Proof to Evidence of Mr. Clarks - CTC Norfells
HA/RB/OBJ82/1	Rebuttal Proof to Evidence of Mr Clarke - CTC Norfolk
HA/RB/OBJ86/1	Rebuttal Proof to Evidence of Mr S Heard - SNUB

HA/RB/OBJ86/2	Addendum to the Rebuttal of Mr Heard on behalf of SNUB and
	Salhouse Parish Council
HA/RB/OBJ121/1	Rebuttal Proof to Evidence of Mr C Cockcroft
HA/RB/OBJ127/1	Rebuttal Proof to Evidence of Mr A Cawdron
HA/RB/OBJ128/1	Rebuttal Proof to Evidence of BNP Paribas Real Estate on behalf
	of Aviva PLC
HA/RB/OBJ129/1	Rebuttal Proof to Evidence of Mr J Adams
HA/RB/OBJ131/1	Rebuttal Proof to Evidence of Menzies Distribution Limited
HA/RB/OBJ132/1	Rebuttal Proof to Evidence of Mr R Bailey

#### **Alternative Route Reports submitted by the Highways Agency**

HA/OBJ28/ALT1	Alternative Route 1 Report
HA/OBJ28/ALT2	Alternative Route 2 Report
HA/OBJ28/ALT4	Alternative Route 4 Report
HA/OBJ27/ALT5	Alternative Route 5 Report
HA/OBJ121/ALT6	Alternative Route 6 Report
HA/OBJ36/ALT6a	Alternative Route 6a Report
HA/OBJ36/ALT6a/1	Correction to Report on Alternative Route 6a
HA/OBJ36/ALT7	Alternative Route 7 Report
HA/OBJ129/ALT9	Alternative Route 9 Report
HA/OBJ24/ALT10	Alternative Route 10 Report
HA/OBJ36/ALT11	
, ,	Alternative Route 11 Report
HA/OBJ64/ALT12	Alternative Route 11 Report Alternative Route 12 Report
	•

#### Other documents submitted by the Highways Agency

HA/10 HA/11 HA/12	Signed Record of Determination dated 14 May 2013 Environmental Impact Assessment - Notice of Determination Postwick Hub Scheme - Yarmouth Road Surveys and Northside Roundabout Assessment Final Version dated June 2013
HA/13	Calculation of Road Traffic Noise
HA/14	Department for Transport - Section 278 Agreement Guidance
HA/15	Impact of RDA Spending - National Report, Volume 1, Main Report dated March 2009
HA/16	Department for Transport - Introduction to Modelling - TAG Unit 3.1.1
HA/17	Department for Transport - Model Structures and Traveller Responses
	for Public Transport Schemes - TAG Unit 3.11.1
HA/18	Planning Permission for BFLF dated 28 June 2013
HA/19	NCC Screening Option on Northside Roundabout
HA/20	Compliance Pack
HA/21	HA Opening Statement
HA/22	Corrections to Planning Proof of Evidence by Phillip John Morris
HA/23	Corrections to Scheme Design Proof of Evidence by Mark Kemp
HA/24	Corrections to Traffic, Safety and Economic Proof of Evidence by Chris
	White
HA/25	Corrections to Environmental Impact Proof of Evidence by James
	Montgomery
HA/26	Corrections to Climate Change Proof of Evidence by Duncan Laxen
HA/27	Corrections to Scheme Justification Proof of Evidence by David Allfrey

HA/28	Correction to Economics Proof of Evidence by Glyn Owen
HA/29	Statement of Common Ground between the Highways Agency, Norfolk
	County Council and John Elbro on behalf of Norwich Cycling Campaign
HA/30	Statement of Common Ground between the Highways Agency, Norfolk
	County Council and Mr D Eley on behalf of Thorpe St Andrew Town
114/21	Council
HA/31	Corrections to Highways Agency Proof of Evidence by Eric Cooper
HA/32	Statement of Common Ground between the Highways Agency, Norfolk County Council and Tony Clarke on behalf of the Cyclists' Tourist Club
	(CTC)
HA/33	NNTAG Transcript of Exchanges at Pre-Inquiry Meeting held on 8 May
117,33	2013
HA/34	HM Treasury Statement 27 June 2013 - Investing in Britain's Future
HA/35	Alternatives Pack
HA/36	Updated Correction to Report on Alternative Route No. 6A
HA/37	Note to Inquiry regarding SRO Modifications
HA/38	The Ramblers' Association signed Statement of Common Ground
HA/39	Glyn Owen's Additional Statement regarding Calculation of One Third
	Additionality
HA/40	Response to Cllr Boswell's letter of 27 June 2013
HA/40/1	Appendix to HA/40
HA/41	Alternative 11 amendments proposed by Mr Eley in an email dated 17
	July 2013 (received on 18 July 2013)
HA/42	Notes from the meeting between NCC and objectors on 11 July 2013 to
114/42	discuss alternative routes
HA/43	Approval of non-material amendments
HA/44	Comments on the addendum on climate change submitted by Cllr Boswell (OBJ/64) on 22 July 2013
HA/45	M1 J19 Improvement Environmental Statement Volume 2
HA/46	Planning Inspectorate Guidance - Transport Orders
HA/47	Responses to questions put by Denise Carlo (NNTAG) to Eric Cooper
	(Highways Agency) during cross-examination on Day 9 of the Postwick
	Inquiry, Friday 19 July 2013
HA/48	Responses to questions put by Cllr Boswell (Green Party) to Eric
	Cooper (Highways Agency) during cross-examination on Day 11 of the
	Postwick Inquiry, Tuesday 23 July 2013
HA/49	Value for Money Assessments
HA/50	Investment in Local Major Transport Schemes: 2nd Update
HA/51	New Anglia Local Enterprise Partnership for Norfolk and Suffolk -
114/53	Towards a growth plan July 2013
HA/52	Response to question on Alternative Route 1 (during day 6)
HA/53	Response to question on Queues reported in HA/12
HA/54	Response to question from Denise Carlo regarding reassignment
HA/55	Guidance on public consultation  Consultation principles Highways Agency guidance
HA/56 HA/57	Consultation principles Highways Agency guidance Response to question from Denise Carlo to Eric Cooper during cross-
TIA/3/	examination on Day 9
HA/58	Proposed modifications to A47 Trunk Road (Postwick Interchange Side
117 4 30	Roads) Order
HA/59	Further proposed modifications to A47 Trunk Road (Postwick
, 55	Interchange Side Roads) Order
HA/60	Proposed modifications to A47 Trunk Road (Postwick Interchange Slip
,	,

	Roads) Order
HA/61	Not Allocated
HA/62	Addendum to corrections to traffic, safety and economics Proof of
	Evidence by Chris White
HA/63	Response to question put by Mr Buchan (NNTAG) to Eric Cooper during
	cross-examination on Day 8
HA/64	Scheme Evaluation Table, November 2012
HA/65	Closing Submissions
HA/66	Details of all objections that did not have specific rebuttals

#### **Documents submitted to the Inquiry by Supporters**

	Mr Edward Olley on behalf of Ifield Estates Limited			
SUP/02/01	Written Statement			
SUP/02/02	Letter dated 24 July 2013			
	Mr Chris Starkie on behalf of New Anglia Local Enterprise			
	Partnership			
SUP/33/01	Letter			
SUP/33/02	Statement			

#### **Documents submitted to the Inquiry by Objectors**

	The Ramblers' Association
OBJ/INQ/02/01	Letter dated 27 February 1986, referred to at the Inquiry by Mr
	A Bowell
	Great and Little Plumstead Parish Council
OBJ/INQ/08/01	Statement and Appendix from Cllr Alfred N Townly
	Mr R Stewart Lindsay
OBJ/INQ/12/01	Statement
	Mrs M Howes
OBJ/INQ/24/01	Statement and Appendices
	Norwich and Norfolk Transport Action Group (NNTAG)
OBJ/INQ/28/1/01	Proof of Evidence of Mr Keith Buchan
OBJ/INQ/28/1/02	Appendix to Mr Buchan's Proof of Evidence
OBJ/INQ/28/1/03	Supplementary Proof of Evidence of Mr Keith Buchan
OBJ/INQ/28/1/04	Appendices to Mr Buchan's Supplementary Proof of Evidence
OBJ/INQ/28/1/05	Addendum to the Supplementary Proof of Evidence on
	transport and sustainable transport
OBJ/INQ/28/1/06	Submission including material referred to during cross
	examination on transport and sustainable transport
OBJ/INQ/28/2/01	Proof of Evidence of Ms Denise Carlo
OBJ/INQ/28/2/02	Appendices to Ms Carlo's Proof of Evidence
OBJ/INQ/28/2/03	Supplementary Note on Planning Matters
OBJ/INQ/28/2/04	Appendices to Supplementary Note on Planning Matters
OBJ/INQ/28/2/05	Closing Submissions
	Thorpe St Andrew Town Council
OBJ/INQ/36/01	Addendum to Statement from Mr D Eley
	Mr A R Williams
OBJ/INQ/52/01	Statement/Speaking Notes
OBJ/INQ/52/02	Response to the rebuttal proof HA/RB/OBJ52/1
	Norwich Green Party
OBJ/INQ/64/01	Proof of Evidence of Cllr Andrew Boswell

OBJ/INQ/64/02	Appendix to Cllr Boswell's Proof of Evidence
OBJ/INQ/64/03	Summary to Cllr Boswell's Proof of Evidence
OBJ/INQ/64/04	Addendum on Climate Change
OBJ/INQ/64/05	Addendum Appendix on Climate Change and Scheme Overall
OBJ/INQ/64/06	Additional Addendum Appendix on Climate Change and Scheme
	Overall
OBJ/INQ/64/07	Supporting documents accompanying Proof of Evidence
OBJ/INQ/64/08	Joint Core Strategy note on Resumed Hearings 24-25 July 2013
OBJ/INQ/64/09	Closing Statement
	Mr E Newberry
OBJ/INQ/77/01	Written Statement dated 4 June 2013
OBJ/INQ/77/02	Statement and Appendices
OBJ/INQ/77/03	Letter dated 24 July 2013
	Lothbury Property Trust Company Ltd
OBJ/INQ/81/01	Proof of Evidence of Mr Peter Wilkinson (not presented orally at
	the inquiry)
OBJ/INQ/81/02	Proof of Evidence of Mr Daniel James Rapson
OBJ/INQ/81/03	Statement from Simon Radford
OBJ/INQ/81/04	Rebuttal Proof of Evidence from Mr Rapson
OBJ/INQ/81/05	Statement from Mr Rapson
	Cyclists' Touring Club
OBJ/INQ/82/01	Statement from Mr Tony Clarke (not presented orally at the
	inquiry)
	Letter dated 16 July 2013
	Stop Norwich Urbanisation (SNUB) and Salhouse Parish
OD1/INO/06/01	Council Statement from My Stank on Heard
OBJ/INQ/86/01	Statement from Mr Stephen Heard
OBJ/INQ/121/01	Mr Christopher Cockcroft Statement
OBJ/INQ/121/01 OBJ/INQ/121/02	Letter dated 17 July 2013
OBJ/INQ/121/02 OBJ/INQ/121/03	Letter dated 17 July 2013 Letter dated 25 July 2013
ODJ/1NQ/121/03	Mr Andrew Cawdron
OBJ/INQ/127/01	Statement
OBJ/INQ/127/01 OBJ/INQ/127/02	Further Statement
OD3/1NQ/12//02	Menzies Distribution
OBJ/INQ/131/01	Memo from Mr Davidson, dated 1 July 2013
000/1110/101/01	Mr Robert Bailey
OBJ/INQ/132/01	Statement

#### **General Inquiry Documents**

INQ/01	Notes of the Pre-Inquiry Meeting held at the King's Centre on 8 May
	2013
INQ/02	Two lever arch folders containing letters of Objection received by the
	Highways Agency
INQ/03	One lever arch folder containing letters of Support received by the
	Highways Agency
INQ/04	Daily Transcripts of the Inquiry proceedings – covering Days 1 to 14
-	, , , , , , , , , , , , , , , , , , , ,



# Appendix C



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#### Summary of Representations made under Regulation 20, with Officer Response

In the following table the respondents are categorised under "Type" to provide an indication of the distribution of organisations and individuals that have responded:

I = individual

U = service provider, utility company

G = Government agency

D = developer, landowner (or their representative)

PC = Parish Council

N = neighbouring authority

IG = interest group

P = Political party

Ref:	Name	Type	Support / Object	Significant issues raised	Officer Summary	Comment
5	Strategic and Building Partnerships Ltd				low carbon community as developers who will deliver significant part of the strategy. Would welcome confirmation of approach to district centres in NEGT through the AAP. Suggest amendments to Appendix 6 to show development has not yet commenced at Rackheath. Concern that SA underestimates the sustainability credentials of north east sector outside NDR in relation to biodiversity and landscape	
12418	Norfolk Association of Architects	IG	0	Soundness objection related to distribution of growth	Current recession and large stock of existing planning permissions provide sufficient time to enable a complete rethink of strategy. The current strategy will lead to poorly planned urban sprawl with poor access to services – the "Essexification" of Norfolk. An expanded Acle (10-15k population growth over 20 years) could meet the majority	The proposals are impractical as only very limited expansion of Acle is possible as the great majority of the land surrounding it is not suitable for development - there is grade 1 agricultural land to the west and the Broads, with land at high risk of flooding, to

Ref:	Name	Туре	Support / Object	Significant issues raised	Officer Summary	Comment
					of growth needs over the programmable future, along with existing permissions, limited infill and community expansion where wanted. Acle should be linked to Norwich and Gt Yarmouth by light rail network using funding currently dedicated to NDR.	the east, north and south.

#### **Detailed Officer Response:**

Alternatives involving differences of principle have not been investigated at all, and moreover seem not to have kept faith with the spirit of the judgement.

The authorities contend that this is simply not the case. By way of explanation, consideration must first be given to the judgement itself and subsequent order. The substance of the judgement was that the Sustainability Appraisal Report had not explained which Reasonable Alternatives to the North East Growth Triangle had been considered, or if no reasonable alternatives existed, why that was the case. The order then remitted (that is, returned to the draft stage) the content of those policies which related to the distribution of residential development within the Broadland part of the NPA, and to matters which were a direct consequence of the designation of the NEGT.

Critically, the order did not quash the JCS either in part or as a whole. Nor did the judge see fit to quash, or even remit, the housing targets.

In order to address the consequences of the order the judge required a further Sustainability Appraisal to be prepared for the remitted policies, taking into account in particular the strategic growth in the North-East Growth Triangle and the reasonable alternatives (if any) to this.

Should, as is suggested by the Norfolk Association of Architects (NAA), the judge have intended there to be a full re-evaluation of the

Ref:	Name	Type	Support /	Significant issues raised	Officer Summary	Comment
			Object			

principles of the strategy then it was open to him to quash the strategy as a whole, rather than only to return a specific part of the strategy back to the point before the proposed submission stage. Therefore, it is not considered that the contention of the NAA is accurate.

#### The present submission is ... unsound and outside what might be defended as sustainable.

The authorities are of the opinion that, within the scope provided by the remitted policies, the draft plan represents that most sustainable strategy when considered against all other reasonable alternatives. This is demonstrated within the Sustainability Appraisal Report that was published alongside the draft plan. No substantive or convincing evidence has been put forward by the NAA that would lead to a different conclusion.

There are sufficient granted and unimplemented consents in the districts that comprise the GNDP to allow space in time for policies to be re-formulated at little risk to current housing programmes.

The authorities do not concur with this view. It is a matter of public record that currently the GNDP authorities do not currently have a 5-year supply of housing land within the NPA. It is well documented that across the country that such an absence is becoming a significant consideration in the determination of planning appeals, and this has already been cited as a reason for approval on a number of planning appeals locally. This is causing significant concern within local communities and any undue delay which creates ongoing uncertainty is certainly not considered to be in the public interest. In addition, there are inherent risks associated with ad-hoc, piecemeal development for making joined-up planning decisions and delivering infrastructure.

#### Crudely adding large numbers (of homes) to dispersed locations in fringe positions amounts to sprawl.

A central part of the draft plan as submitted seeks to concentrate development (almost 80% of the total number of homes) in one particular area, the North-East Growth Triangle. Therefore the implied suggestion that the draft plan will further exacerbate problems of providing infrastructure for a dispersed population is unjustified.

There is a need for a policy that will make a proper distinction between satisfying local community needs and dealing with relatively larger dormitory and "incoming growth", which should better be concentrated.

Ref:	Name	Туре	Support / Object	Significant issues raised	Officer Summary	Comment
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It is the view of the authorities that the draft plan does exactly this. Through allowing for a floating allowance of homes (2,000) to be directed to fringe settlements and adjacent villages over the course of the next 14 years but concentrating almost 80% (7000) new homes over the same period to the North-East Growth Triangle a clear distinction, and appropriate balance between dispersed localised development and concentrated strategic development has been made.

#### Growth should be allowed to evolve at whatever rate, and in whatever numbers until environmental capacity is reached.

The numbers expressed for the Growth Triangle provides scope for development, which would eventually total 10,000 homes. The basis of this minimum number is to guarantee the long term viability of the new secondary school that would be required. This is within the evidenced environmental capacity of the area. Whilst 10,000 might be the limit of growth in this area, this is beyond the scope of the current plan to consider.

#### Drawing attention to a supporting document, most recently entitled "Better Places for Living".

This document sets out a strategic approach to development, which is heavily reliant upon the delivery of a light and heavy rail system. This system, the so called "Yare Valley Transit", is intended to utilise the existing Norwich to Great Yarmouth line with light rail extensions at the Norwich end from Thorpe to UEA, N&N hospital and science park, and at the Yarmouth end from the station to the sea front and outer harbour.

No information has been provided about the feasibility of the delivery of such a transit system, in either financial, environmental or technical terms. NAA suggest that it could be possible to re-use NDR monies to fund Yare Valley Transit. Putting aside the fact that the NDR proposal lies outside the scope of the draft plan, as was held to be the case in the High Court, DFT monies granted to deliver a particular road project could not simply be redirected. Therefore the basis of the alternative strategy seems to be a transit system which has not been tested, to any degree, as to its technical or financial deliverability. In contrast the NDR has gone through significant DFT testing and is a key component part of the adopted NATS strategy, which also incorporates improved public transport in the form of BRT. It is also worthwhile noting that the Norwich to Cromer railway passes through the NEGT, affording similar opportunities for heavy and light rail in connection with the draft plan, only with an additional possibility of a fast, direct and high quality bus service to Norwich.

Ref:	Name	Туре	Support / Object	Significant issues raised	Officer Summary	Comment

The exemplar development proposed by NAA is for a sizeable development at Acle. Whilst the details of the proposed development are limited, the proposal states that it would seek to add 10 – 15,000 in population over a 20-year period. Assuming that current household size is maintained, this would equate to somewhere between 4,500 and 7,000 homes. It is not clear where these homes are to go. It is, however, worth noting that all of the land surrounding Acle is either within flood zone 2 (when the effects of climate change are accounted for) or surrounded by Grade I or II agricultural land (i.e. the best and most versatile agricultural land). The North East Growth Triangle is neither in a Flood Risk zone, nor is it wholly underlain by Grade I & II agricultural land (although some pockets of such land do exist).

The NAA proposals have not been subject to any formal consultation process and therefore it is difficult to determine whether public support would be forthcoming. However, it seems likely that there would be public concern about major development proposals in the same way that there has been in other locations.

12419	PJ Shingfield	I	0	Object that scale of growth	Growth targets are
				proposed is unnecessary, also	evidence based.
				concern over loss of green	Growth locations avoid
				space and agricultural land.	higher grade
					agricultural land and
				r	new development is
				r	required to provide
					green infrastructure.

#### **Housing Numbers**

The level of housing provision was not remitted by Mr. Justice Ouseley. It remains part of the adopted Joint Core Strategy and is not included in the proposed submission text.

Notwithstanding the above, as part of the SA/SEA process, the evidence for the level of housing requirement has been reviewed and the Topic Paper supporting the adopted JCS updated to take account of any changes in background data. This document "Topic Paper



# Appendix D



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# Greater East of England Forecasting Model (EXTRACT)

2013 30.08.13

Table 1: Key indicators

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Demography																					
Total population Working age	335.0	335.5	336.5	338.0	340.1	340.6	343.1	344.3	346.6	349.2	352.0	354.3	357.0	359.4	362.7	365.3	367.3	370.2	373.5	378.0	381.4
population Migration & other	214.3	213.9	213.6	213.9	215.4	215.8	217.3	218.3	219.8	221.9	223.9	226.1	228.1	230.1	232.7	234.7	235.9	237.3	238.6	240.9	242.2
changes	-	0.4	0.2	1.6	1.9	1.4	1.5	1.9	2.5	3.2	2.8	2.8	2.5	2.6	3.3	2.5	1.6	2.5	3.1	3.9	2.8
Labour market Employees in																					
employment	162.6	158.8	158.7	154.9	153.1	153.1	162.7	165.3	163.4	157.9	165.1	169.5	173.5	177.2	180.2	191.3	188.9	181.6	177.6	174.3	174.2
Self employed	22.1	23.5	23.9	24.2	24.3	22.8	22.9	22.6	23.6	20.6	22.0	22.7	26.0	26.3	25.5	27.9	26.6	26.4	26.8	29.2	29.7
Total employment (jobs) Total workplace	184.7	182.4	182.6	179.2	177.4	175.8	185.6	188.0	187.0	178.5	187.1	192.3	199.6	203.5	205.7	219.2	215.6	208.0	204.4	203.5	203.9
employed people Residence	169.4	167.1	167.2	164.0	162.4	160.4	170.2	171.0	170.9	162.7	171.6	174.4	182.0	186.2	187.4	199.7	196.5	188.6	186.3	186.2	185.3
employment Residence	-	-	-	145.0	145.6	147.4	148.8	151.5	154.3	160.1	164.2	162.8	162.8	168.0	171.0	172.3	172.1	174.0	170.6	172.4	176.4
employment rate	-	-	-	58.6	58.7	59.4	59.8	60.6	61.4	63.0	64.1	63.0	62.4	63.7	64.2	64.0	62.9	62.3	60.2	59.8	60.2
Net commuting	-	-	-	19.0	16.8	13.0	21.5	19.5	16.6	2.6	7.5	11.6	19.2	18.2	16.4	27.4	24.3	14.6	15.7	13.7	8.9
Unemployment level	9.8	13.0	14.5	13.0	11.9	10.7	8.4	7.1	6.4	5.4	4.4	4.0	4.1	3.9	4.3	4.7	4.3	4.5	7.4	7.2	7.3
Unemployment rate	4.6	6.1	6.8	6.1	5.5	5.0	3.9	3.3	2.9	2.5	1.9	1.8	1.8	1.7	1.8	2.0	1.8	1.9	3.1	3.0	3.0



# Appendix E



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#### **RETAIL & LEISURE DEVELOPMENT TOPIC PAPER**

#### RETAIL & LEISURE DEVELOPMENT TOPIC PAPER

#### 1. Introduction

- 1. This topic paper is part of a series of background papers which provide the evidence base for the submitted Development Management Policies and Site Allocations development plan documents (DPDs). Together with the Joint Core Strategy (JCS) for Broadland, Norwich and South Norfolk (adopted March 2011) and the Northern City Centre Area Action Plan these DPDs will form the Norwich Local Plan. The background papers form part of the supporting documentation for the Regulation 22 'submission' versions of both plans.
- 2. The main purpose of this paper is to provide additional information to the supplementary text in the submitted DPDs to set out and justify:
  - the detailed planning policy approach to retail and leisure development in the Development Management plan policies DM18, 20, 21 and 25;
  - the main locations for retail growth identified in the Site Allocations plan.
- 3. The main focus of this topic paper is on retail and leisure development for the city as a whole. It also refers to town centre uses, including offices, culture and tourism, in that they support the city's role as a regional centre, though policies for office development are primarily addressed through the Employment topic paper. The multiplicity of retail facilities and supporting services which sustain the long term strength of successful city centres like Norwich are interdependent.
- 4. The paper outlines relevant national and sub regional policy in the JCS. It then sets out how the more detailed policies in the Development Management and Site Allocations plans conform to national policy and the JCS, enabling implementation of strategic aims. The topic paper is intended to complement the accompanying text to submitted policies by providing additional context for the submitted policies rather than points of detail.
- 5. To provide a more complete overview in which to understand the proposed policies, this paper will also:
  - Summarise the recent policy approach which has helped to bring about the success of retail and town centre policy in Norwich
  - Provide up to date data on the retail centres in Norwich, with a major focus on the city centre to update the 2007 JCS evidence base;

- Consider the relevance of the recent Portas Report on retailing, and the government's response to it, to planning policy for Norwich.
- 6. The topic paper shows the success of the retail policy approach to strengthen Norwich city centre and other centres in recent years and justifies continuing that strategic approach through the JCS. The paper then explains JCS policies will be implemented through the Development Management Policies (DM) plan. It also sets out that the sites to meet the planned growth of retailing and leisure uses will be made available through a combination of sites allocated in the Site Allocations Plan and policies in the JCS and DM policies which promote intensification of uses in existing centres and expansion of those centres where necessary.

#### 2. Context

- 7. Norwich city centre is the region's highest ranking retail centre and is in the top ten nationally. The high ranking is based on a strong and attractive retail offer and the fact that the city has a large hinterland (see appendix 3, map 1) with a growing population, with the main competing centres at some distance.
- 8. As a major regional centre it has a wide range of shopping attractions as well as leisure and service facilities. It has an attractive environment and a unique identity and character, which all form part of its attraction to shoppers. Its "comparison" shopping offer is exceptionally good, though the city centre's "convenience" shopping offer is more limited.
- 9. Norwich generated £970 million of retail expenditure in 2012 as measured by CACI. It provides a strong and diverse retail offer in both high street multiples (with 6 department stores and two malls) and local independent/ speciality shopping (Norwich Market and the Lanes). It has relatively low retail vacancy rates despite the recession, and a strong and complementary leisure and evening economy. It has the highest proportion of its retailing in its centre of any major city in the country. In addition, it is a major regional centre for tourism and cultural facilities and an important office based employment centre. Retailing is was the second biggest employment sector locally in 2011, with 20,700 employees or 11.6% of all employees in the greater Norwich area.
- 10. This success is in part the result of the long term policy approach, dating from the late 1980s, of promoting a strong, vibrant and diverse city centre,

<sup>&</sup>lt;sup>1</sup> **Comparison shopping**: Comparison retailing is the provision of items not obtained on a frequent basis. These include clothing, footwear, household and recreational goods.

<sup>&</sup>lt;sup>2</sup> **Convenience shopping**: Convenience retailing is the provision of everyday essential items, including food, drinks, newspapers/magazines and confectionery

attracting high quality retail development to the centre. This has been supported by a programme of continuous access improvements and enhancement of public spaces. The development of the library and cultural activities at the Forum and elsewhere in the city centre, along with leisure facilities, have enhanced Norwich's role as a regional centre. To support this, policy has limited the spread of out-of-town retail development. Norwich's early pioneering of the "Town Centres first" policy approach helped to shape national planning policy in the 1990s. As a result of this, Norwich was commended by government in 2007 as an example of best practice for planning for town centres, with Ruth Kelly of the Department for Communities and Local Government stating "Look at the vibrant town centres in Guildford, Norwich and Newcastle. Let those who talk about Ghost Town Britain see what the best local authorities are achieving when they plan for the future of their centres."

- 11. This policy approach has led to an increase of almost 50% to the city centre's overall retail floorspace offer compared with the situation in 1989. In the last two decades, two city centre malls (Castle Mall in 1993 and Chapelfield in 2005) have been developed. Improvements have been made to the market and the specialist shopping areas, particularly "Norwich Lanes". In addition, edge of centre retail warehouse facilities and supermarkets have been developed at Riverside and Queens Road. The main convenience stores are located on the periphery of the centre and provide a limited floorspace compared with other centres of Norwich's size.
- 12. The success of this approach to promoting city centre retailing is reflected in the current national retail ranking of 9 (Venuescore 2011/12) in comparison with its rank of 45 in 1989 (Hillier Parker, Shopping Centres of Great Britain, 1990).
- 13. Although Norwich has experienced a small reduction in retail floorspace in recent years and a reduction in spending (see paragraphs 96 and 103), overall retailing has not suffered greatly from the recession and vacancy rates, at 7.1%, remain low in comparison with other large retail centres nationally.
- 14. In addition to the city centre, Norwich has a network of smaller retail centres which meet the more everyday shopping needs of the residents of the city. In recent years many of these have been strengthened by the development of small scale supermarkets and convenience stores.
- 15. Norwich also has two retail warehouse parks which provide locations for bulky goods retailing which can not be located in centres due to the nature of the goods they sell. There are also retail warehouse parks and large individual units beyond the city council boundary. The main parks are at Longwater and Sprowston.
- 16. Recently adopted policy in the JCS and the detailed emerging policies in the Development Management and Site Allocations Plans continue the 'town



# Study Norwich Sub Region: and Town Centres

October 2007

www.gvagrimley.co.uk

# NORWICH CITY CENTRE: QUALITATIVE ASSESSMENT 0

- geographically with an extensive catchment area across Norfolk. It is the regional administrative Venuescore (2006) place the city 5th in the UK, behind only Glasgow, Birmingham, Edinburgh Norwich city centre is a regional centre located in East Anglia. It occupies an isolated location centre and county town of Norfolk. The most recent national retail rankings produced by Javelin and Manchester. Norwich's location in relation to other regional centres means that it has a very strong catchment extending across a wide area, into most of Norfolk and North Suffolk. 6.1
- falls within the city centre boundary and is defined as a Secondary Retail Area. These areas are The city's Primary Retail Area comprises a number of distinct retail areas encompassing the historic city centre (including Chapelfield and Castle Mall shopping centres), Riverside Retail Park and a Sainsbury's store located to the south of Queens Road. Cathedral Retail Park also illustrated on the plan below. The retail area around Anglia Square and Magdalen Street falls within the city centre boundary but is separated from the primary retail area by the River Wensum. This area is defined separately in the Local Plan as a large district centre.

6.2



Table 6.3: City Centre Managed Floorspace

Shopping Centre	Shopping Centre Type of development	Date of Opening	Retail Floorspace (sqm gross)	Anchor Retailers
Caste Mall	90% enclosed 10% open shopping centre	1993 (Refurbished 1999 and 2005/6)	38,554	Argos/Boots/H&M/Virgin, Vue Cinema/TK Maxx
Chapelfields	Shopping Centre	2005	49,238	House of Fraser/Borders/Zara
Cathedral Retail Park	Edge of centre retail park	1988 (reconfigured in 1999)	5,452	TK Maxx/Brantano/Farmfoods/Toys R Us (opened in 1999).
Riverside Retail Park	Retail park	2001 (Morrisons opened in 1999)	23,412	Morrisons(7,729 sqm gross)/Woolworths/Big W/Argos Extra/ Next/Currys

Source: Egi and Trevor Wood

- We consider that pedestrian legibility and permeability to the centre could be Chapelfield shopping centre opened in September 2005 and is anchored by House of It has a strong fashion provision including retailers such as Zara, River Island and Rampant Horse Street and St Stephens's Street), it is still somewhat divorced from the city performance of the shopping centre, its opening hours and problems with traders moving out. However, the scheme won the 2006 British Council of Shopping Centres (BCSC) Gold number of factors including; commercial success from a tenant's viewpoint, integration with French Connection. Although the shopping centre has two main pedestrian entrances (i.e. Award for 'Best In-Town Retail Scheme'. This is a prestigious award which is based on There have also been reported concerns over the initial surrounding city centre, contribution to regeneration and architectural design. significantly improved.
- Market which is the largest six day open-air Market in Britain (pictured). There are 160 permanent Traditionally the city centre's prime pitch has been the pedestrianised Gentleman's Walk and the eastern side of Haymarket, with Jarrold's department store to the north and Debenhams and Marks and Spencer to the south. Retailers along here include some of the major high street fashion multiples such as Next, Primark and Top Shop. This is also the location of Norwich stalls selling fresh meat, fish, cheese, fruit & vegetable, household products etc.

6.9



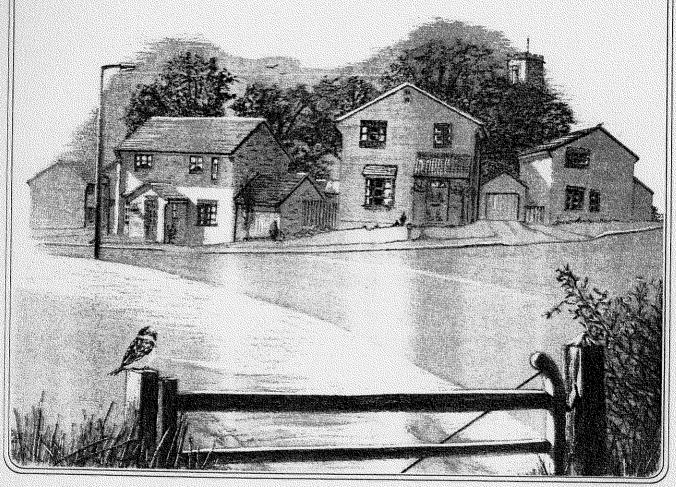
# Appendix F



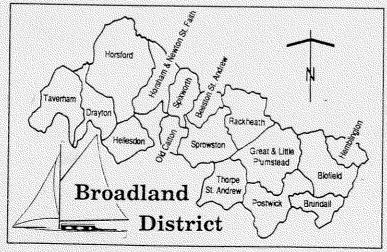
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# DRAFT

# Norwich Area Local Plan



March 1990



Broadland District Council Broads Authority

**S**S

#### 25. THORPE ST. ANDREW

#### 1. INTRODUCTION

- 1.1 Thorpe St. Andrew is now a residential suburb of Norwich although it was once a separate village, based on the River Yare. It still retains much of its character despite recent estate developments with important features being the river itself and the wooded scarp and historic buildings particularly related to the River Yare.
- 1.2 Thorpe St. Andrew is served by the A.47 trunk road which is severely congested at peak hours. The proposed Norwich Southern Bypass commencing in 1990 with its interchange at Postwick will have an effect on the parish making it more accessible to other parts of the Norwich Urban Area, although traffic flows on the A.47 may not be reduced as a result. These area policies include the adjoining part of Postwick parish which will be affected by the Southern Bypass.
- 1.3 The southern part of the parish falls within the Broads Authority Executive Area.
- 1.4 Part of Thorpe St. Andrew is covered by the Thorpe St. Andrew (Pound Lane) Local Plan adopted by the District Council in February, 1986.

  This part of the parish is excluded from the provisions of the Norwich Area Local Plan,

### 2. ST. ANDREWS HOSPITAL (NORTH SIDE)

- POLICY TSA.1 AN AREA OF APPROXIMATELY 29.5 HA. (72.9 ACRES) IS ALLOCATED FOR EMPLOYMENT USE AT THORPE ST. ANDREW HOSPITAL (NORTH SIDE), OF WHICH 3 HA (7.4 ACRES) WILL REMAIN AS OPEN SPACE. THIS WILL ALLOW FOR THE REUSE OF THE EXISTING HOSPITAL BUILDINGS PLUS A BUSINESS PARK DEVELOPMENT WITHIN THE HOSPITAL GROUNDS. USES CONTAINED WITHIN CLASS B1 OF THE TOWN AND COUNTRY PLANNING (USE CLASSES) ORDER 1987 WILL BE CONSIDERED APPROPRIATE ON THE SITE. THE ALLOCATION MUST BE SERVED BY A NEW ROAD CONSTRUCTED TO NORFOLK COUNTY COUNCIL STANDARDS TO LINK THE SITE DIRECTLY TO THE PROPOSED ROUNDABOUT AT THE A.47 SOUTHERN BYPASS POSTWICK INTERCHANGE ALONG THE APPROXIMATE ROUTE SHOWN ON THE PROPOSALS MAP. A SECONDARY ACCESS DIRECTLY ONTO YARMOUTH ROAD, APPROXIMATELY 100 M. WEST OF THE EXISTING ACCESS IS ALSO REQUIRED.
- 2.2 The allocation is restricted to the area south and east of the existing hospital buildings to minimise the intrusion into the landscape to the north and east. The highway situation is such that there is a need to minimise the increase in traffic flows onto the A.47 into Norwich in particular due to the problems at the A.47/Ring Road/Pound Lane junction. (The County Council may require a contribution from the developer towards improvements to this junction.) A direct link to the Southern Bypass is therefore required. The precise route of this road is critical in order to reduce any adverse effects of development in the landscape on both sides of Green Lane and to minimise the development on high quality agricultural land to the east. For this reason the suggested route follows the lower valley land and to the south of the scarp in the hospital grounds. The existing accesses at Boundary Lane and Green Lane to the A.47 should be closed off. The line should provide for a connection for the north of the site to the proposed A.1151/A.47 link (See Policy TR.2).
- 2.3 <u>POLICY TSA.2</u> ADEQUATE CAR PARKING WILL BE PROVIDED WITHIN THE SITE TO THE COUNCIL'S PARKING STANDARDS. CAR PARKING FOR THE MAIN HOSPITAL BLOCK, ONCE CONVERTED, SHOULD BE PROVIDED TO THE REAR OF THE EXISTING BUILDINGS.

- 2.4 Sufficient car parking needs to be provided for business use of the site. The attractive setting of the existing hospital buildings should be maintained as far as possible.
- 2.5 <u>POLICY TSA.3</u> A NEW NETWORK OF INTERNAL ROADS WILL BE REQUIRED TO SERVE THE DEVELOPMENT AND MUST COMPLY WITH THE NORFOLK COUNTY COUNCIL'S HIGHWAY STANDARDS. ACCESS TO THE EXISTING HOSPITAL BUILDINGS PLUS THE NORVIC CLINIC MUST BE RETAINED.
- 2.6 The existing main hospital block will be retained and converted to business use and the Norvic Clinic will remain on site in its current use. The new network of internal roads which will be required must maintain access to these buildings.
- 2.7. <u>POLICY TSA.4</u> TREE BELTS NOT LESS THAN 30 M. WIDE SHOULD BE PLANTED ALONG THE SOUTHERN, EASTERN AND WESTERN BOUNDARIES OF THE PROPOSED BUSINESS PARK.
- 2.8. It is important that the business park is adequately screened to minimise the intrusion into the landscape.
- 2.9 POLICY TSA.5 THE FOLLOWING STANDARDS OF DESIGN WILL APPLY:
  - THE DESIGN AND LAYOUT OF THE DEVELOPMENT SHALL PROVIDE FOR AN ATTRACTIVE, SPACIOUS AND WELL-LANDSCAPED BUSINESS PARK.
  - LOADING AND STORAGE AREAS SHALL BE ENCLOSED BY SCREEN WALLS OF AN APPROPRIATE HEIGHT WHERE POSSIBLE. LARGE AREAS OF OPEN STORAGE WILL BE RESISTED.
  - ALL NEW BUILDINGS SHOULD RESPECT THE IMPORTANCE OF THE EXISTING MAIN BLOCK AS A VISUAL FOCUS IN THEIR HEIGHT AND ORIENTATION.
  - PART OF THE AREA LAID OUT AS GRASS AT PRESENT WILL BE KEPT AS LAWN/RECREATION AREA (AS SHOWN ON THE INSET MAP) TO PROVIDE AN APPROPRIATE SETTING FOR THE IMPRESSIVE FRONT FACADE OF THE EXISTING MAIN BLOCK.
- 2.10. It is intended that the development of the site will be of a very high standard to complement the existing main block and in recognition of the prime location of the site in relation to the strategic road network. It is anticipated that the ratio of buildings to plot size will not exceed 35%, including any future extensions. In addition, design and landscaping will be required to comply with policies E.7 and publish a Development Brief setting out the details of design required on the site.

### 2.11. Servicing Requirements

### 2.11.1. General

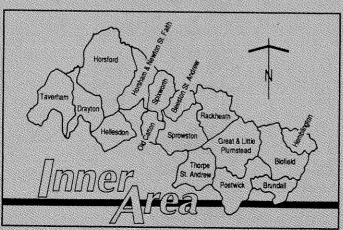
The site is crossed by a number of existing services which will need to be diverted to allow development to take place. Early contact with the service agencies is recommended.

### 2.11.2. Foul Sewerage

Existing foul sewers in Yarmouth Road will be extended into the site. Anglian Water Services' standard connection charges would apply. At some point during the development in this area, Anglian Water Services will be required to uprate the sewers, carry out improvements to the Common Lane pumping station and improve the pumping main from Common Lane to the Whitlingham Sewage Treatment Works. This may affect the timing of development and early contact with Anglian Water Services is recommended.

# Broadland District Local Plan (Inner Area)





Broadland District Council Broads Authority

### Introduction

25.4

- 25.1 Thorpe St. Andrew is a predominantly built up fringe parish with a historic core based on the River Yare. It still retains much of its character, despite recent estate developments, with important features being the river itself and the wooded scarp and historic buildings particularly related to the River Yare. The southern part of the parish falls within the Broads Authority Executive Area.
- 25.2 The area policies for Thorpe St. Andrew include the adjoining part of Postwick parish which will be affected by the Southern Bypass.
- 25.3 Part of Thorpe St. Andrew is covered by the statutory Thorpe St. Andrew (Pound Lane) Local Plan adopted by the District Council in February 1986. This part of the parish is excluded from the provisions of this Local Plan.

# Business Park Development at St. Andrews's Hospital (North)/Postwick Interchange POLICY TSA1

- (i) AN AREA OF APPROXIMATELY 50 HA. (124 ACRES) IS ALLOCATED FOR A HIGH QUALITY BUSINESS PARK COMPRISING A CO-ORDINATED DEVELOPMENT OF OFFICE, INDUSTRY AND WAREHOUSING (B1, B2 AND B8 USES) ON LAND TO THE EAST OF THORPE ST. ANDREW, AS SHOWNON THE PROPOSALS MAP. WITHIN THIS AREA A MAXIMUM OF 38HA (94 ACRES) CAN BE DEVELOPED FOR BUSINESS USE, THE REMAINDER OF THE LAND BEING TAKEN UP BY THE RELATED MAIN ROAD INFRASTRUCTURE AND LANDSCAPING.
- (ii) AN ADDITIONAL 4.86 HA (12 ACRES) IS ALLOCATED FOR THE COMPLETION OF THE ST. ANDREWS PARK DEVELOPMENT, TO BE SERVED BY AN ACCESS TO THE A1042 YARMOUTH ROAD (THE PROVISIONS OF POLICY TSA2 DO NOT APPLY TO THE AREA REFERRED TO IN TSA1(ii)).
- Following the completion of the Norwich Southern Bypass the area to the east of Thorpe St. Andrew has become of major strategic importance, with excellent transport links via the Postwick Interchange. In recognition of this fact, an extensive area of land is allocated to accommodate a major part of the Norwich area's employment growth to 2001. The area allocated is split into three sites:
  - part of the curtilage of St. Andrew's Hospital (North) to the west of Green Lane South; this includes the area mentioned at TSA1(ii) which has an existing planning permission;
  - b) land to the east of Green Lane South;
  - c) a site to the south of Yarmouth Road and to the west of Postwick Interchange;
- 25.6 To reflect its prime location the business park should be of the highest quality. Development must be well designed, at low density and well landscaped. The overall intention is to provide a parkland setting for the buildings, producing an attractive environment for people to work and visit, and which will relate well to adjacent countryside and residential areas.

Although the total area allocated amounts to some 50 hectares, after taking account of the necessary main highway provisions and structural landscaping required in the business park development, a maximum of 38 hectares will be available as land developable for commercial use. In addition to the B1, B2 and B8 uses (as defined in the Town and Country Planning (Use Classes) Order 1987) an element of commercial leisure and hotel use, ancillary to the business park development may also be considered appropriate. The main elements of the development are set out in Policy TSA2 below; however a planning brief will be produced by the District Council to guide the developers, setting out in more detail the requirements for the development of the site.

### 25.8 POLICY TSA2 WITHIN THE DEVELOPMENT ALLOCATED IN POLICY TSA1(i):

- a) A MIX OF USES CONTAINED WITHIN CLASS B1 OF THE TOWN AND COUNTRY PLANNING (USE CLASSES) ORDER 1987 (OFFICES, RESEARCH AND DEVELOPMENT AND LIGHT INDUSTRY) WILL BE CONSIDERED APPROPRIATE ON THE MAJORITY OF THE LAND FOR BUSINESS USE, I.E. A MINIMUM OF 60% AND MAXIMUM OF 80% OF THE AREA. ON THE REMAINDER, USES WITHIN CLASS B2 AND B8 WILL BE APPROPRIATE. THE AREA TO THE SOUTH OF YARMOUTH ROAD WILL BE SOLELY FOR B1 USE.
- b) IN THE AREA TO BE DEVELOPED FOR B1 USES THE RATIO OF BUILDING FLOORSPACE TO PLOT AREA (I.E. EXCLUDING ESTATE ROADS, STRUCTURAL LANDSCAPING AND OTHER ANCILLARY STRUCTURES SUCH AS ELECTRICITY SUB-STATIONS AND PUMPING STATIONS) WILL AVERAGE NO MORE THAN 20% OVERALL AND NORMALLY WILL NOT EXCEED 25% ON INDIVIDUAL PLOTS.
- c) IN THE AREA TO BE DEVELOPED FOR B2 AND B8 USES THE RATIO OF BUILDING FLOORSPACE TO PLOT AREA (I.E. EXCLUDING ESTATE ROADS, STRUCTURAL LANDSCAPING AND OTHER ANCILLARY STRUCTURES SUCH AS ELECTRICITY SUB-STATIONS AND PUMPING STATIONS) WILL AVERAGE NO MORE THAN 30% OVERALL, AND NORMALLY WILL NOT EXCEED 35% ON INDIVIDUAL PLOTS.
- d) THE LAND TO THE NORTH OF YARMOUTH ROAD WILL BE SERVED OFF A NEW ROAD LINKING THE A47 NORWICH SOUTHERN BYPASS POSTWICK INTERCHANGE TO GREEN LANE SOUTH AT ITS JUNCTION WITH SMEE LANE, AS INDICATED ON THE PROPOSALS MAP.
- e) OTHER HIGHWAY IMPROVEMENTS AND TRAFFIC MANAGEMENT MEASURES WILL ALSO BE NECESSARY, INCLUDING MAJOR IMPROVEMENTS TO THE A47 NORWICH SOUTHERN BY PASS POSTWICK INTERCHANGE AND THE PROVISION OF TRAFFIC LIGHTS ON GREEN LANE SOUTH TO CONTROL FLOWS AT THE RAILWAY BRIDGE, AS REASONABLY REQUIRED BY THE HIGHWAY AUTHORITY.

- f) ADEQUATE PUBLIC TRANSPORT IN FRASTRUCTURE WILL BE PROVIDED AND THE DEVELOPMENT LAID OUT TO FACILITATE PUBLIC TRANSPORT SERVICES.
- g) NO DEVELOPMENT WILL BE PERMITTED UNTIL A PHASING PLAN INDICATING AN ORDERLY SEQUENCE OF DEVELOPMENT HAS BEEN SUBMITTED TO AND APPROVED BY THE LOCAL PLANNING AUTHORITY. THIS WILL NEED TO SHOW BROADLY HOW INFRASTRUCTURE AND SERVICES ARE TO BE CO-ORDINATED WITH DEVELOPMENT, TAKING INTO ACCOUNT THE NEED FOR DEVELOPMENT TO BE SUSTAINABLE AND RESPONSIVE TO MARKET DEMANDS. THE PHASING PLAN WILL INCLUDE LAND BEING MADE AVAILABLE FOR USES FALLING WITHIN CLASSES B2 AND B8 (OF THE TOWN AND COUNTRY PLANNING USE CLASSES ORDER 1987) IN THE EARLY STAGES OF THE DEVELOPMENT.
- h) A LANDSCAPE MASTERPLAN, TO THE SATISFACTION OF THE LOCAL PLANNING AUTHORITY, WILL BE REQUIRED PRIOR TO THE COMMENCEMENT OF DEVELOPMENT.
- 25.9 The main elements of the allocated development are detailed in Policy TSA2. An appropriate mix of uses is required to ensure that the employment needs of the area are met whilst maintaining a high quality development. Similarly the density of the development must be kept relatively low to achieve a well landscaped business park. These factors, together with the amount of land available for business use, are also determinants in the amount of traffic that will be generated by the business park. Accordingly, broad controls on them are needed to ensure that the development does not overburden the highway network. The District Council will impose conditions controlling the conversion of B2/B8 land to B1 uses and vice versa.
- To accommodate the development major highway improvements will need to be undertaken, including a new road between the Postwick Interchange and the Green Lane/Smee Lane junction to provide access to the main site. This alignment is necessary to give an adequate highway design, avoiding the housing on Green Lane South and providing access to the northern part of the allocation. The present Green Lane South accessing onto the Yarmouth Road is not adequate for the development. Green Lane South and Boundary Lane (North) will need to be closed to vehicular traffic at the southern boundary of the development, where they will need to be reduced to bridleway status. The costs of closure and all other highway improvements and traffic management necessarily required for the development will be the responsibility of the developer.
- 25.11 Within the development the transport network should cater for pedestrians and cyclists as well as motor vehicles, and road-based public transport should also be enabled with roadways designed to accommodate bus services, including suitable layouts and parking bays. It is important that adequate access to the development is available to all, not just car users.

- 25.12 The business park development will need to take place in a co-ordinated and comprehensive manner, with due regard to infrastructure provision, market demands etc, following an established phasing plan. Related to this, a landscape masterplan will be required, setting out how the business park will be integrated into the landscape.
- 25.13 POLICY TSA3 LAND TO THE NORTH OF THE DEVELOPMENT ALLOCATED IN POLICY TSA1 IS RESERVED FOR THE EXPANSION OF THE BUSINESS PARK AFTER 2001, AS SHOWN ON THE PROPOSALS MAP.
- Although not specifically allocated for development in this local plan, which is for the period up to 2001, the land to the north of the business park development in Policy TSA1 is reserved for the extension of the business park in the future. The allocation of this area for employment land will be considered when the planning policies of the area are "rolled forward" beyond 2001. As part of this consideration, the infrastructure requirements, and the need for a rail-halt on the Norwich to Sheringham line and a footpath/cycleway link to Dussindale will be taken into account.
- POLICYTSA4APPROXIMATELY3HA (7.0 ACRES) IS ALLOCATED FOR A PARK-AND-RIDE SITE AND ASSOCIATED OPERATIONAL FACILITIES TO THE SOUTH OF THE A47 NORWICH SOUTHERN BYPASS POSTWICK INTERCHANGE. WITHIN THIS SITE ABOUT 1.8 HA (4.5 ACRES) WILL BE DEVELOPED FOR THE PARK AND RIDESITE AND ASSOCIATED OPERATIONAL FACILITIES, WITH THE REMAINDER BEING LANDSCAPED. WITHIN THE SITE, LAND WILL BE RESERVED FOR A RAIL-HALT AND ASSOCIATED PARKING.
- 25.16 The County and District Councils in the Norwich Area are co-operating in the development of a park-and-ride network as part of the Norwich Area Transportation Strategy. The Postwick Interchange area has been identified as a suitable location being ideally placed to serve the eastern side of the city. Access to the park-and-ride site will be directly from the southern roundabout of the interchange. Additionally, there is the opportunity for a rail halt on the Norwich to Great Yarmouth railway line, and a site will be reserved for this use. Extensive landscaping/screening will be required in the site, reflecting its sensitive location in the countryside adjacent to the Broads Area. Although some low-level buildings for facilities required for the operation of the park-and-ride may be permitted (e.g. waiting area, public toilets etc) no other built development within the site or on adjacent land is regarded as appropriate because of the sensitive location.

### SERVICING REQUIREMENTS

### General

25.17 The site is crossed by a number of existing services which will need to be diverted to allow development to take place. Early contact with the service agencies is recommended.

### Foul Sewerage

There is no available capacity in the existing foul sewerage system. The developers will need to provide an on-site pumping station to cater for all foul flows from the allocations and a new rising main direct to Whitlingham Sewage Treatment Works. Developers should consult with Anglian Water Services at an early stage to ensure a co-ordinated drainage strategy and to determine the works involved.



# Appendix G



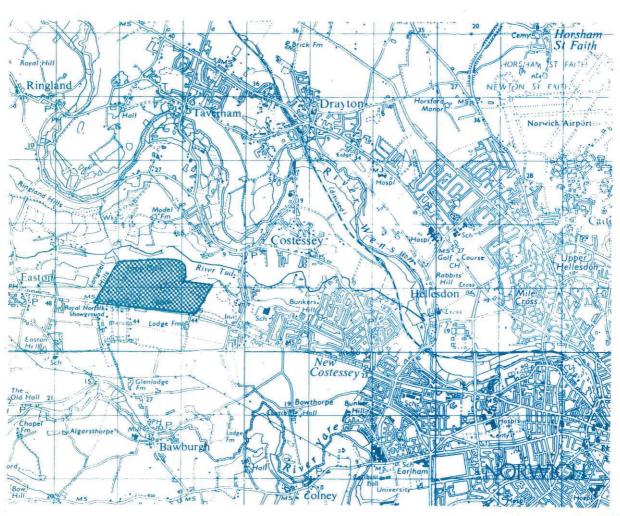
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## South Norfolk District Council



# LONGWATER INDUSTRIAL ESTATE COSTESSEY

FEASIBILITY STUDY



June 1979

### INTRODUCTION

The West Costessey, Wensum and Yare Valleys Local Plan, prepared by South Norfolk District Council and informally certified by the County Council as generally consistant with the Norfolk Structure Plan, allocates the Longwater Graval Pits, south of the River Tud for industrial development. In order to progress this idea the District Council required a Feasibility Study of the infrastructure problems to be carried out. The Terms of Reference for the Feasibility Study were agreed and are shown in Appendix A. Drawing 1 shows the location of the proposed Longwater Industrial Estate.

Consultations have been held with interested Authorities and the assistance of the following is acknowledged:

the River, Sewage & Water Divisions of Anglian Water Authority
the Eastern Gas Board
the Post Office Telecommunications (Norwich area)
and the Eastern Electricity Board.

In addition, the assistance of the Norfolk County Council Highways Department should be noted, as they undertook the site investigations work. The assistance of Mr. H.M. Haslam, Chief Planning Officer to the District Council, and his staff is also much appreciated.

#### SECTION 1

### STUDY AREA

### 1.1 Location

The Longwater Industrial Estate lies 8 kilometres (5 miles) west of Norwich City Centre and is situated on the north side of the A47 trunk road, the location is shown on Drawing 1. The Study Area is largely worked out sand and gravel workings, known locally as the Costessey Pits. Some parts of the Study Area have already been developed for industrial purposes.

The Study Area has been divided into three phases as shown on Drawing 1:

Phase 1 the western part of the area south of the River Tud covering approximately 40 hectares (100 acres)

Phase 2 the remainder of the area south of the River Tud covering about 60 hectares (150 acres), part of which is already developed. The total developed area at the end of Phase 2 would be 100 hectares (250 acres)

Phase 3 the area north of the River Tud which amounts to about 33 hectares (80 acres). The total developed area at the end of Phase 3 would be 133 hectares (330 acres).

### 1.2 Rate of Development

There is a small amount of existing industrial development in the areas both north and south of the River Tud. To the north this amounts to about 5 hectares and to the south about 10 hectares. The areas already committed south of the River Tud are shown on Drawings 1 and 2.

Three distinct phases of development are referred to above, although these are expected to run sequentially and without interruption. The first phase amounts to 40 hectares and the Local Plan suggests that this development "could be completed within the next 5 to 8 years, dependent on demand for sites". It should therefore be assumed that the total area of industrial land that will be developed by 1985 will be 55 hectares.

By the end of Phase 2 development south of the River Tud, up to 100 hectares, will be complete and this development will take place over the rest of the Local Plan Period. It is estimated therefore that by the mid 1990s, the total area developed will be 105 hectares.

# Norfolk Structure Plan

# APPROVED WRITTEN STATEMENT

1979 With Approved Alterations
October 1981 and December 1982

Norfolk County Council

4.1.32 PROVISION WILL BE MADE FOR LAND FOR INDUSTRIAL DEVELOPMENT SUBJECT TO THE RESOLUTION OF LOCAL PROBLEMS IN THE FOLLOWING LOCATIONS:

NORWICH AIRPORT INDUSTRIAL ESTATE LONGWATER INDUSTRIAL ESTATE, COSTESSEY RACKHEATH INDUSTRIAL ESTATE

At Norwich Airport, about 12 hectares of land could be allocated for industrial development if the airport terminal is relocated. At Rackheath industrial development could take place on a limited scale, subject to the improvement of the access to the A.1151. The Longwater estate, in Costessey, would be suitable for problem or "bad neighbour" industrial uses, if existing access problems could be solved. The possibility of industrial development in the Horsford/Taverham area will be examined as part of the Local Plan for housing development there.

- 4.1.33 WHERE INDUSTRIES IN THE CENTRAL AREA ARE INAPPROPRIATELY LOCATED IN RESPECT OF NOISE, VIBRATION, POLLUTION OR LIABILITY TO GENERATE HEAVY TRAFFIC, HELP WILL BE GIVEN TO FIRMS TO RELOCATE THEMSELVES AWAY FROM THE CENTRAL AREA WITH THE MINIMUM DISTURBANCE TO THEIR PRODUCTION. A number of industrial uses remain in the central area which detract from the environment and contribute to congestion by bringing heavy lorries into the centre.
- PERMISSION FOR NEW OFFICE DEVELOPMENT IN OR NEAR THE CITY CENTRE WILL 4.1.34 ONLY BE GIVEN WHEN IT IS REQUIRED FOR THE EXPANSION OR RELOCATION OF LOCALLY ESTABLISHED FIRMS, OR FIRMS HAVING A SPECIAL JUSTIFICATION TO LOCATE IN NORWICH, WHERE THE FIRM IS UNABLE TO MAKE USE OF PERMITTED OR VACANT OFFICE PREMISES. DEVELOPMENT WILL NORMALLY ONLY BE ACCEPTED ON SITES WHERE THERE IS AN OVERRIDING GAIN, IN TERMS OF CONSERVATION OR REHABILITATION, WHICH CANNOT BE ACHIEVED BY THE INTRODUCTION OF RESIDENTIAL OR OTHER NON-COMMERICAL USES. OFFICE DEVELOPMENT IN OTHER LOCATIONS OUTSIDE THE CITY CENTRE WILL NOT NORMALLY BE PERMITTED UNLESS RELATED TO AN ESTABLISHED LOCAL NEED. Strict control over new office development is necessary in view of the large outstanding commitment to such development and its effect on traffic and the character of the central area, and the land requirements and cost of service provision which would result from the associated population growth. Restraint on further office development will also help to avoid an imbalance between service employment and manufacturing employment. A total embargo on new office development would, however, have an adverse effect on local firms, and could result in an increasing number of vacant buildings and derelict sites in the central area.
- 4.1.35 The rate of population growth in the Inner Norwich Area should, eventually, be reduced by the policy of selective employment growth. However, if the national economic situation improves, population growth could be substantial in the 1980's as a result of the committed and potential employment growth.



Monday to Saturday (see Code)

Monday to Saturday (see Code)

### Frequent, direct buses between Norwich City Centre and Queen's Hills • Every 30mins • 6 days a week

### Queen's Hills • Longwater • Dereham Road • City Centre

Welcome aboard service 5

1509 1541 1611 1641 1711 1741 1811 1849

monday to outdiday (see code)																		
Code			S	NS														
Queen's Hills, Sir Alfred Munning's Rd	0710	0740	0810	0810	0840	0910	0940	then	10	40		1440	1515	1545	1615	1645	1715	1745
Longwater, opp Pizza Hut	0712	0742	0812	0812	0842	0912	0942	at	12	42		1442	1517	1547	1617	1647	1717	1747
Dereham Rd, Roundwell Medical Centre	0715	0745	0815	0816	0845	0915	0945	these	15	45		1445	1520	1550	1620	1650	1720	1750
Dereham Road, opp Larkman Lane	0721	0752	0822	0824	0852	0922	0952	mins	22	52	until	1452	1527	1557	1627	1657	1727	1757
Dereham Road, Bowthorpe Road	0726	0756	0826	0829	0856	0926	0956	past	26	56		1456	1531	1601	1631	1701	1731	1801
City Centre, Castle Meadow	0734	0807	0837	0842	0907	0937	1007	the	37	07		1507	1542	1612	1642	1712	1742	1812
City Centre, Theatre Street	0738	0811	0841	0846	0915	0945	1015	hour	45	15		1515						

Queen's Hills-Larkman Lane to City Centre • Adult.... Single £2.50 • Return £4 • Weekly £16 • Monthly £50 Aged 16-19? Get 20% off the above fares - no ID required! Aged 5-15? Ask for a Child fare and get 30% off.

### City Centre • Dereham Road • Longwater • Queen's Hills

0800

0834

0905

0914

0939

Code			S	NS															
City Centre, Castle Meadow, Stand CT	0735	0808	0838	0843	0910	0940	1010	then	40	10		1440	1510	1540	1610	1640	1710	1740	1820
City Centre, Theatre Street	0738	0811	0841	0850	0915	0945	1015	at	45	15		1445	1515	1545	1615	1645	1715	1745	1825
Dereham Road, Bowthorpe Road	0744	0817	0847	0857	0922	0952	1022	these	52	22		1452	1524	1554	1624	1654	1724	1754	1834
Dereham Road, Larkman Lane	0749	0822	0852	0902	0927	0957	1027	mins	57	27	until	1457	1530	1600	1630	1700	1730	1800	1839
Dereham Rd, opp R'well Medical Centre	0753	0826	0856	0906	0931	1001	1031	past	01	31		1501	1534	1604	1634	1704	1734	1804	1843
Longwater, opp Pizza Hut	R	R	R	R	R	1005	1035	the	05	35		1505	R	R	R	R	R	R	R

konectbus Return, Weekly, Monthly and Annual tickets valid on First Norwich 23B Evenings (after 18:20) and Sundays & Bank Holidays

1009

CODES									
NS	Does not operate on Saturdays								
S	Operates on Saturdays only								
R	Drops off by request to the driver								

Queen's Hills, Sir Alfred Munning's Rd

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feedback@konectbus.co.uk	01362 851210*

1039

39

SERVICE	UPDATES	
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### Timetables for Service Number: 24/24A



Mondays to Fridays Valid from: 12/01/2014 Valid to: 30/08/2014

Thorpe St. Andrew - Costessey, Queens Hills ( Red Line )
 Via Laundry Lane, Plumstead Road, City Centre & Dereham Road
 Thorpe St. Andrew - Costessey, Queens Hills ( Red Line )

Via Booty Road, Plumstead Road, City Centre & Dereham Road

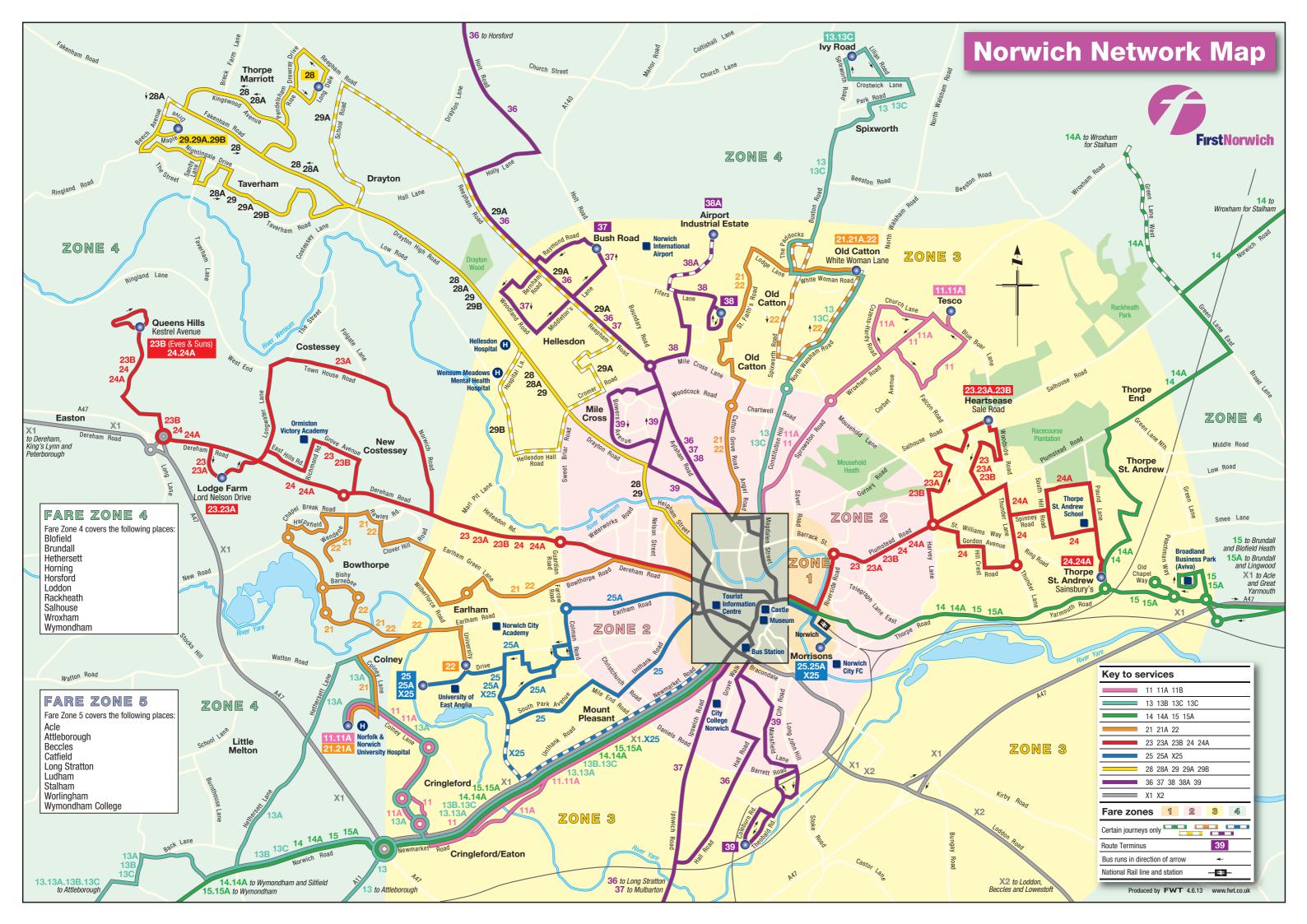
Service No.:	24	24A	24	24A	24	24A	24	24A	24	24A	24	24A	24	24A	24
Notes:															
Dussindale Drive,Desborough Way	0557														
Thorpe St.Andrew,Sainsburys		0638	0701	0717	0734	0751	0804	0821	0834	0854	0907	0924	0937	0954	1007
South Hill Road, Charles Avenue	0603		0704		0737		0807		0837		0910		0940		1010
Booty Road, Woodlands Crescent		0640		0720		0754		0824		0857		0927		0957	
Gordon Avenue, Hillcrest Road	0610		0712		0745		0815		0845		0918		0948		1018
Plumstead Road,The Heartsease	0614	0649	0716	0730	0749	0804	0819	0834	0849	0907	0922	0937	0952	1007	1022
Rail Station, Wensum House	0620	0655	0727	0741	0800	0815	0830	0845	0900	0915	0930	0945	1000	1015	1030
Castle Meadow [CT]	0624	0659	0732	0746	0805	0820	0835	0850	0905	0920	0935	0950	1005	1020	1035
City Centre, Theatre Street [BE]	0627	0702	0736	0750	0809	0824	0839	0854	0909	0925	0940	0955	1010	1025	1040
Dereham Road, Adelaide Street	0633	0708	0743	0757	0816	0831	0846	0901	0916	0932	0947	1002	1017	1032	1047
Dereham Road, Larkman Lane	0638	0713	0750	0804	0823	0838	0853	0908	0923	0939	0954	1009	1024	1039	1054
Roundwell Medical Centre	0643	0718	0755	0809	0828	0843	0858	0913	0928	0944	0959	1014	1029	1044	1059
Queens Hills,Kestrel Avenue	0653	0728	0805	0819	0838	0853	0908	0923	0938	0954	1009	1024	1039	1054	1109
Service No.:	24	4A 2	24 24	4A	2	24 24	A 24	24A		24	24A	24	24A	24	24A
Notes:															
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Thorpe St.Andrew,Sainsburys	10	24 10	37 10	54	07	24	37	54		1607	1622	1635	1652	1708	
South Hill Road, Charles Avenue		- 10	)40	-	10	)	40			1610		1638		1711	
Booty Road, Woodlands Crescent	10	27	- 10	)57 the	en	27		57			1625		1655		
Gordon Avenue, Hillcrest Road		- 10	)48	- at	18	}	48			1618		1646		1719	
Plumstead Road,The Heartsease	10	37 10	)52 11	07 the	ese 22	2 37	52	07		1622	1635	1650	1705	1723	
Rail Station, Wensum House	10	45 11	00 11	15 mi	ns. 30	45	00	15	until	1630	1643	1658	1713	1731	
Castle Meadow [CT]	10	50 11	05 11	20 pa	st 35	50	05	20		1635	1648	1703	1718	1736	1756
City Centre, Theatre Street [BE	] 10	55 11	10 11	25 ea	ch 40	55	10	25		1640	1653	1708	1723	1741	1801
Dereham Road, Adelaide Street	11	02 11	17 11	32 ho	ur 47	02	17	32		1647	1703	1718	1733	1751	1808
Dereham Road, Larkman Lane		00 44	24 11	39	54	09	24	39		1654	1711	1726	1741	1759	1815
	11	09 11	24 11	39	3-	1 09	24	39		1004		1720	17-7-1	1700	
Roundwell Medical Centre	11			44	59		29	44		1659	1716	1731	1746	1804	1820

Service No.: Notes:	24	24
Dussindale Drive, Desborough Way		
Thorpe St.Andrew,Sainsburys	1743	1802
South Hill Road, Charles Avenue	1746	1805
Booty Road, Woodlands Crescent		
Gordon Avenue, Hillcrest Road	1754	1813
Plumstead Road, The Heartsease	1758	1817
Rail Station, Wensum House	1806	1825
Castle Meadow [CT]	1811	1830
City Centre, Theatre Street [BE]	1816	1835
Dereham Road, Adelaide Street	1823	1842
Dereham Road, Larkman Lane	1830	1849
Roundwell Medical Centre	1835	1854
Queens Hills,Kestrel Avenue	1845	1904

Costessey, Queens Hills - Thorpe St. Andrew (Red Line)
 Via Dereham Road, City Centre, Plumstead Road & Laundry Lane
 Costessey, Queens Hills - Thorpe St. Andrew (Red Line)
 Via Dereham Road, City Centre, Plumstead Road & Booty Road

Service No.:	24A	24	24	24A		24	24A								
Notes:															
Queens Hills,Kestrel Avenue	0631	0655	0705	0718	0735	0753	0809	0824	0843	0858	0913	0928		43	58
Longwater,Sainsbury's	0636	0702	0712	0725	0742	0800	0816	0831	0850	0905	0920	0935		50	05
Roundwell Medical Centre	0640	0706	0716	0729	0746	0804	0820	0835	0854	0909	0924	0939		54	09
Dereham Road, Larkman Lane	0645	0713	0723	0736	0753	0811	0827	0842	0901	0916	0931	0946	then	01	16
Dereham Road, Adelaide Street	0651	0720	0730	0743	0800	0818	0834	0849	0908	0923	0938	0953	at	80	23
Red Lion Street, Debenhams [BK]	0701	0730	0740	0753	0810	0828	0844	0859	0918	0933	0948	1003	these	18	33
Castle Meadow [CF]	0706	0735	0745	0758	0815	0833	0849	0904	0923	0938	0953	1008	mins.	23	38
Rail Station, Riverside Road	0710	0739	0750	0803	0820	0838	0854	0909	0927	0942	0957	1012	past	27	42
Plumstead Road,The Heartsease	0716	0745	0759	0812	0829	0847	0903	0918	0933	0948	1003	1018	each	33	48
Gordon Avenue,Hillcrest Road		0748	0802		0832		0906		0936		1006		hour	36	
South Hill Road, Charles Avenue		0755	0809		0839		0913		0943		1013			43	
Booty Road, Woodlands Crescent	0724			0820		0855		0926		0956		1026			56
Thorpe St.Andrew,Sainsburys	0728	0759	0813	0824	0843	0859	0917	0930	0947	1000	1017	1030		47	00
Dussindale Drive,Desborough Way															

Service No.:	24	24A		24	24A								
Notes:													
Queens Hills,Kestrel Avenue	13	28		1543	1558	1613	1628	1643	1658	1715	1733	1748	1803
Longwater,Sainsbury's	20	35		1550	1605	1620	1635	1650	1705	1722	1740	1755	1810
Roundwell Medical Centre	24	39		1554	1609	1624	1639	1654	1709	1726	1744	1759	1814
Dereham Road, Larkman Lane	31	46		1601	1616	1631	1646	1701	1716	1733	1751	1806	1821
Dereham Road, Adelaide Street	38	53		1608	1623	1638	1653	1708	1723	1740	1758	1813	1828
Red Lion Street, Debenhams [BK]	48	03		1618	1633	1648	1703	1718	1733	1750	1808	1823	1838
Castle Meadow [CF]	53	80	until	1623	1638	1653	1708	1723	1738	1755	1813	1828	1843
Rail Station, Riverside Road	57	12		1627	1642	1657	1713	1728	1743	1800	1817	1832	1847
Plumstead Road, The Heartsease	03	18		1633	1648	1703	1722	1737	1752	1809	1823	1838	1853
Gordon Avenue, Hillcrest Road	06			1636		1706		1740		1812		1841	
South Hill Road, Charles Avenue	13			1643		1713		1747		1819		1848	
Booty Road, Woodlands Crescent		26			1656		1730		1800		1831		1901
Thorpe St.Andrew,Sainsburys	17	30		1647	1700	1717	1734	1751	1804	1823	1835	1852	1905
Dussindale Drive, Desborough Way													





## Appendix H



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Monday to Saturday (see Code)

Monday to Saturday (see Code)

### Frequent, direct buses between Norwich City Centre and Queen's Hills • Every 30mins • 6 days a week

### Queen's Hills • Longwater • Dereham Road • City Centre

Welcome aboard service 5

1509 1541 1611 1641 1711 1741 1811 1849

monday to outdiday (see code)																		
Code			S	NS														
Queen's Hills, Sir Alfred Munning's Rd	0710	0740	0810	0810	0840	0910	0940	then	10	40		1440	1515	1545	1615	1645	1715	1745
Longwater, opp Pizza Hut	0712	0742	0812	0812	0842	0912	0942	at	12	42		1442	1517	1547	1617	1647	1717	1747
Dereham Rd, Roundwell Medical Centre	0715	0745	0815	0816	0845	0915	0945	these	15	45		1445	1520	1550	1620	1650	1720	1750
Dereham Road, opp Larkman Lane	0721	0752	0822	0824	0852	0922	0952	mins	22	52	until	1452	1527	1557	1627	1657	1727	1757
Dereham Road, Bowthorpe Road	0726	0756	0826	0829	0856	0926	0956	past	26	56		1456	1531	1601	1631	1701	1731	1801
City Centre, Castle Meadow	0734	0807	0837	0842	0907	0937	1007	the	37	07		1507	1542	1612	1642	1712	1742	1812
City Centre, Theatre Street	0738	0811	0841	0846	0915	0945	1015	hour	45	15		1515						

Queen's Hills-Larkman Lane to City Centre • Adult.... Single £2.50 • Return £4 • Weekly £16 • Monthly £50 Aged 16-19? Get 20% off the above fares - no ID required! Aged 5-15? Ask for a Child fare and get 30% off.

### City Centre • Dereham Road • Longwater • Queen's Hills

0800

0834

0905

0914

0939

Code			S	NS															
City Centre, Castle Meadow, Stand CT	0735	0808	0838	0843	0910	0940	1010	then	40	10		1440	1510	1540	1610	1640	1710	1740	1820
City Centre, Theatre Street	0738	0811	0841	0850	0915	0945	1015	at	45	15		1445	1515	1545	1615	1645	1715	1745	1825
Dereham Road, Bowthorpe Road	0744	0817	0847	0857	0922	0952	1022	these	52	22		1452	1524	1554	1624	1654	1724	1754	1834
Dereham Road, Larkman Lane	0749	0822	0852	0902	0927	0957	1027	mins	57	27	until	1457	1530	1600	1630	1700	1730	1800	1839
Dereham Rd, opp R'well Medical Centre	0753	0826	0856	0906	0931	1001	1031	past	01	31		1501	1534	1604	1634	1704	1734	1804	1843
Longwater, opp Pizza Hut	R	R	R	R	R	1005	1035	the	05	35		1505	R	R	R	R	R	R	R

konectbus Return, Weekly, Monthly and Annual tickets valid on First Norwich 23B Evenings (after 18:20) and Sundays & Bank Holidays

1009

CODES									
NS	Does not operate on Saturdays								
S	Operates on Saturdays only								
R	Drops off by request to the driver								

Queen's Hills, Sir Alfred Munning's Rd

GET IN TOU	JCH
Email us at:	Phone us on:
feedback@konectbus.co.uk	01362 851210*

1039

39

SERVICE	UPDATES	
Online at:	Follow us at:	
www.konectbus.co.uk	@konectbuses	7

### Timetables for Service Number: 24/24A



Mondays to Fridays Valid from: 12/01/2014 Valid to: 30/08/2014

Thorpe St. Andrew - Costessey, Queens Hills ( Red Line )
 Via Laundry Lane, Plumstead Road, City Centre & Dereham Road
 Thorpe St. Andrew - Costessey, Queens Hills ( Red Line )

Via Booty Road, Plumstead Road, City Centre & Dereham Road

Service No.:	24	24A	24	24A	24	24A	24	24A	24	24A	24	24A	24	24A	24
Notes:															
Dussindale Drive,Desborough Way	0557														
Thorpe St.Andrew,Sainsburys		0638	0701	0717	0734	0751	0804	0821	0834	0854	0907	0924	0937	0954	1007
South Hill Road, Charles Avenue	0603		0704		0737		0807		0837		0910		0940		1010
Booty Road, Woodlands Crescent		0640		0720		0754		0824		0857		0927		0957	
Gordon Avenue, Hillcrest Road	0610		0712		0745		0815		0845		0918		0948		1018
Plumstead Road,The Heartsease	0614	0649	0716	0730	0749	0804	0819	0834	0849	0907	0922	0937	0952	1007	1022
Rail Station, Wensum House	0620	0655	0727	0741	0800	0815	0830	0845	0900	0915	0930	0945	1000	1015	1030
Castle Meadow [CT]	0624	0659	0732	0746	0805	0820	0835	0850	0905	0920	0935	0950	1005	1020	1035
City Centre, Theatre Street [BE]	0627	0702	0736	0750	0809	0824	0839	0854	0909	0925	0940	0955	1010	1025	1040
Dereham Road, Adelaide Street	0633	0708	0743	0757	0816	0831	0846	0901	0916	0932	0947	1002	1017	1032	1047
Dereham Road, Larkman Lane	0638	0713	0750	0804	0823	0838	0853	0908	0923	0939	0954	1009	1024	1039	1054
Roundwell Medical Centre	0643	0718	0755	0809	0828	0843	0858	0913	0928	0944	0959	1014	1029	1044	1059
Queens Hills,Kestrel Avenue	0653	0728	0805	0819	0838	0853	0908	0923	0938	0954	1009	1024	1039	1054	1109
Service No.:	24	4A 2	24 24	4A	2	24 24	A 24	24A		24	24A	24	24A	24	24A
Notes:															
Dussindale Drive, Desborough Way				-											
Thorpe St.Andrew,Sainsburys	10	24 10	37 10	54	07	24	37	54		1607	1622	1635	1652	1708	
South Hill Road, Charles Avenue		- 10	)40	-	10	)	40			1610		1638		1711	
Booty Road, Woodlands Crescent	10	27	- 10	)57 the	en	27		57			1625		1655		
Gordon Avenue, Hillcrest Road		- 10	)48	- at	18	}	48			1618		1646		1719	
Plumstead Road,The Heartsease	10	37 10	)52 11	07 the	ese 22	2 37	52	07		1622	1635	1650	1705	1723	
Rail Station, Wensum House	10	45 11	00 11	15 mi	ns. 30	45	00	15	until	1630	1643	1658	1713	1731	
Castle Meadow [CT]	10	50 11	05 11	20 pa	st 35	50	05	20		1635	1648	1703	1718	1736	1756
City Centre, Theatre Street [BE	] 10	55 11	10 11	25 ea	ch 40	55	10	25		1640	1653	1708	1723	1741	1801
Dereham Road, Adelaide Street	11	02 11	17 11	32 ho	ur 47	02	17	32		1647	1703	1718	1733	1751	1808
Dereham Road, Larkman Lane		00 44	24 11	39	54	09	24	39		1654	1711	1726	1741	1759	1815
	11	09 11	24 11	39	3-	1 09	24	39		1004		1720	17-7-1	1700	
Roundwell Medical Centre	11			44	59		29	44		1659	1716	1731	1746	1804	1820

Service No.: Notes:	24	24
Dussindale Drive, Desborough Way		
Thorpe St.Andrew,Sainsburys	1743	1802
South Hill Road, Charles Avenue	1746	1805
Booty Road, Woodlands Crescent		
Gordon Avenue, Hillcrest Road	1754	1813
Plumstead Road, The Heartsease	1758	1817
Rail Station, Wensum House	1806	1825
Castle Meadow [CT]	1811	1830
City Centre, Theatre Street [BE]	1816	1835
Dereham Road, Adelaide Street	1823	1842
Dereham Road, Larkman Lane	1830	1849
Roundwell Medical Centre	1835	1854
Queens Hills,Kestrel Avenue	1845	1904

Costessey, Queens Hills - Thorpe St. Andrew (Red Line)
 Via Dereham Road, City Centre, Plumstead Road & Laundry Lane
 Costessey, Queens Hills - Thorpe St. Andrew (Red Line)
 Via Dereham Road, City Centre, Plumstead Road & Booty Road

Service No.:	24A	24	24	24A		24	24A								
Notes:															
Queens Hills,Kestrel Avenue	0631	0655	0705	0718	0735	0753	0809	0824	0843	0858	0913	0928		43	58
Longwater,Sainsbury's	0636	0702	0712	0725	0742	0800	0816	0831	0850	0905	0920	0935		50	05
Roundwell Medical Centre	0640	0706	0716	0729	0746	0804	0820	0835	0854	0909	0924	0939		54	09
Dereham Road, Larkman Lane	0645	0713	0723	0736	0753	0811	0827	0842	0901	0916	0931	0946	then	01	16
Dereham Road, Adelaide Street	0651	0720	0730	0743	0800	0818	0834	0849	0908	0923	0938	0953	at	80	23
Red Lion Street, Debenhams [BK]	0701	0730	0740	0753	0810	0828	0844	0859	0918	0933	0948	1003	these	18	33
Castle Meadow [CF]	0706	0735	0745	0758	0815	0833	0849	0904	0923	0938	0953	1008	mins.	23	38
Rail Station, Riverside Road	0710	0739	0750	0803	0820	0838	0854	0909	0927	0942	0957	1012	past	27	42
Plumstead Road,The Heartsease	0716	0745	0759	0812	0829	0847	0903	0918	0933	0948	1003	1018	each	33	48
Gordon Avenue,Hillcrest Road		0748	0802		0832		0906		0936		1006		hour	36	
South Hill Road, Charles Avenue		0755	0809		0839		0913		0943		1013			43	
Booty Road, Woodlands Crescent	0724			0820		0855		0926		0956		1026			56
Thorpe St.Andrew,Sainsburys	0728	0759	0813	0824	0843	0859	0917	0930	0947	1000	1017	1030		47	00
Dussindale Drive,Desborough Way															

Service No.:	24	24A		24	24A								
Notes:													
Queens Hills, Kestrel Avenue	13	28		1543	1558	1613	1628	1643	1658	1715	1733	1748	1803
Longwater,Sainsbury's	20	35		1550	1605	1620	1635	1650	1705	1722	1740	1755	1810
Roundwell Medical Centre	24	39		1554	1609	1624	1639	1654	1709	1726	1744	1759	1814
Dereham Road, Larkman Lane	31	46		1601	1616	1631	1646	1701	1716	1733	1751	1806	1821
Dereham Road, Adelaide Street	38	53		1608	1623	1638	1653	1708	1723	1740	1758	1813	1828
Red Lion Street, Debenhams [BK]	48	03		1618	1633	1648	1703	1718	1733	1750	1808	1823	1838
Castle Meadow [CF]	53	80	until	1623	1638	1653	1708	1723	1738	1755	1813	1828	1843
Rail Station, Riverside Road	57	12		1627	1642	1657	1713	1728	1743	1800	1817	1832	1847
Plumstead Road, The Heartsease	03	18		1633	1648	1703	1722	1737	1752	1809	1823	1838	1853
Gordon Avenue, Hillcrest Road	06			1636		1706		1740		1812		1841	
South Hill Road, Charles Avenue	13			1643		1713		1747		1819		1848	
Booty Road, Woodlands Crescent		26			1656		1730		1800		1831		1901
Thorpe St.Andrew,Sainsburys	17	30		1647	1700	1717	1734	1751	1804	1823	1835	1852	1905
Dussindale Drive, Desborough Way													

### Timetables for Service Number: 24/24A



Saturdays

Valid from: 12/01/2014 Valid to: 30/08/2014

24 Thorpe St. Andrew - Costessey, Queens Hills ( Red Line )
Via Laundry Lane, Plumstead Road, City Centre & Dereham Road

24A Thorpe St. Andrew - Costessey, Queens Hills (Red Line)
Via Booty Road, Plumstead Road, City Centre & Dereham Road

Service No.:	24	24	24	24	24A	24	24A	24	24A	24	24A		24	24A	24
Notes:															
Thorpe St.Andrew,Sainsburys	0700	0734		0804	0821	0834	0854	0907	0924	0937	0954		07	24	37
South Hill Road, Charles Avenue	0703	0737		0807		0837		0910		0940			10		40
Booty Road,Woodlands Crescent					0824		0857		0927		0957	then		27	
Gordon Avenue, Hillcrest Road	0711	0745		0815		0845		0918		0948		at	18		48
Plumstead Road,The Heartsease	0715	0749		0819	0834	0849	0907	0922	0937	0952	1007	these	22	37	52
Rail Station, Wensum House	0726	0800		0830	0845	0900	0915	0930	0945	1000	1015	mins.	30	45	00
Castle Meadow [CT]	0731	0805	0820	0835	0850	0905	0920	0935	0950	1005	1020	past	35	50	05
City Centre, Theatre Street [BE]	0735	0809	0824	0839	0854	0909	0925	0940	0955	1010	1025	each	40	55	10
Dereham Road, Adelaide Street	0742	0816	0831	0846	0901	0916	0932	0947	1002	1017	1032	hour	47	02	17
Dereham Road, Larkman Lane	0749	0823	0838	0853	0908	0923	0939	0954	1009	1024	1039		54	09	24
Roundwell Medical Centre	0754	0828	0843	0858	0913	0928	0944	0959	1014	1029	1044		59	14	29
Queens Hills, Kestrel Avenue	0804	0838	0853	0908	0923	0938	0954	1009	1024	1039	1054		09	24	39
·									-						
Service No.:	24		24	24A	24	24A	24	24A	24	24A	24	24A	24	24	
Service No.: Notes:	24			24A	24				24	24A	24	24A	24		
	24 <i>P</i> 54			24A 1524	24 1537				24	24A 1654	24	24A 1724	24 1738		
Notes:			24			24A	24	24A						24	
Notes: Thorpe St.Andrew,Sainsburys	54		24 1507	1524	1537	24A 1554	24	24A 1624	1637	1654	1707	1724	1738	24 1753	
Notes: Thorpe St.Andrew,Sainsburys South Hill Road, Charles Avenue	54 		24 1507 1510	1524	1537 1540	24A 1554 	24 1607 1610	24A 1624	1637 1640	1654	1707 1710	1724	1738 1741	24 1753 1756	6
Notes: Thorpe St.Andrew,Sainsburys South Hill Road, Charles Avenue Booty Road,Woodlands Crescent	54  57		24 1507 1510	1524  1527	1537 1540 	24A 1554  1557	24 1607 1610	24A 1624  1627	1637 1640 	1654  1657	1707 1710	1724  1727	1738 1741	24 1753 1756	5 1
Notes: Thorpe St.Andrew,Sainsburys South Hill Road, Charles Avenue Booty Road,Woodlands Crescent Gordon Avenue,Hillcrest Road	54  57 		24 1507 1510  1518	1524  1527 	1537 1540  1548	24A 1554  1557	24 1607 1610  1618	24A 1624  1627	1637 1640  1648	1654  1657 	1707 1710  1718	1724  1727 	1738 1741  1749	24 1753 1756  1804	1 1
Notes: Thorpe St.Andrew,Sainsburys South Hill Road, Charles Avenue Booty Road,Woodlands Crescent Gordon Avenue,Hillcrest Road Plumstead Road,The Heartsease	54  57  07		24 1507 1510  1518 1522	1524  1527  1537	1537 1540  1548 1552	24A 1554  1557  1607	24 1607 1610  1618 1622	24A 1624  1627  1637	1637 1640  1648 1652	1654  1657  1707	1707 1710  1718 1722	1724  1727  1737	1738 1741  1749 1753	24 1753 1756  1804 1808	5 4 3
Notes: Thorpe St.Andrew,Sainsburys South Hill Road, Charles Avenue Booty Road,Woodlands Crescent Gordon Avenue,Hillcrest Road Plumstead Road,The Heartsease Rail Station,Wensum House	54  57  07 15		24 1507 1510  1518 1522 1530	1524  1527  1537 1545	1537 1540  1548 1552 1600	24A 1554  1557  1607 1615	24 1607 1610  1618 1622 1630	24A  1624 1627 1637 1645	1637 1640  1648 1652 1700	1654  1657  1707 1715	1707 1710  1718 1722 1730	1724  1727  1737 1745	1738 1741  1749 1753 1801	24 1753 1756  1804 1808 1816	3 3 3
Notes: Thorpe St.Andrew,Sainsburys South Hill Road, Charles Avenue Booty Road,Woodlands Crescent Gordon Avenue,Hillcrest Road Plumstead Road,The Heartsease Rail Station,Wensum House Castle Meadow [CT]	54  57  07 15 20		24 1507 1510  1518 1522 1530 1535	1524  1527  1537 1545 1550	1537 1540  1548 1552 1600 1605	24A 1554 1557 1607 1615 1620	24 1607 1610  1618 1622 1630 1635	24A  1624 1627 1637 1645 1650	1637 1640  1648 1652 1700 1705	1654  1657  1707 1715 1720	1707 1710  1718 1722 1730 1735	1724  1727  1737 1745 1750	1738 1741  1749 1753 1801	24 1753 1756  1804 1816 1821	3 3 3 1
Notes: Thorpe St.Andrew,Sainsburys South Hill Road, Charles Avenue Booty Road,Woodlands Crescent Gordon Avenue,Hillcrest Road Plumstead Road,The Heartsease Rail Station,Wensum House Castle Meadow [CT] City Centre, Theatre Street [BE]	54  57  07 15 20 25		24 1507 1510  1518 1522 1530 1535 1540	1524  1527  1537 1545 1550 1555	1537 1540  1548 1552 1600 1605 1610	24A 1554  1557  1607 1615 1620 1625	24 1607 1610  1618 1622 1630 1635 1640	24A  1624 1627 1637 1645 1650 1655	1637 1640  1648 1652 1700 1705	1654  1657  1707 1715 1720 1725	1707 1710  1718 1722 1730 1735 1740	1724  1727  1737 1745 1750	1738 1741  1749 1753 1801 1806 1811	24 1753 1756  1804 1808 1816 1821 1826	33 33 35 10 33
Notes: Thorpe St.Andrew,Sainsburys South Hill Road, Charles Avenue Booty Road,Woodlands Crescent Gordon Avenue,Hillcrest Road Plumstead Road,The Heartsease Rail Station,Wensum House Castle Meadow [CT] City Centre, Theatre Street [BE] Dereham Road,Adelaide Street	54  57  07 15 20 25 32		24 1507 1510  1518 1522 1530 1535 1540 1547	1524  1527  1537 1545 1550 1555 1602	1537 1540  1548 1552 1600 1605 1610	24A  1554 1557 1607 1615 1620 1625 1632	24 1607 1610  1618 1622 1630 1635 1640 1647	24A  1624 1627 1637 1645 1650 1655 1705	1637 1640  1648 1652 1700 1705 1710	1654  1657  1707 1715 1720 1725 1735	1707 1710  1718 1722 1730 1735 1740	1724  1727  1737 1745 1750 1755 1802	1738 1741  1749 1753 1801 1806 1811 1818	24 1753 1756  1804 1808 1816 1821 1826 1833	14 13 13 13 13 13 13 13 13 14 14 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16

24 Costessey, Queens Hills - Thorpe St. Andrew (Red Line)
Via Dereham Road, City Centre, Plumstead Road & Laundry Lane

24A Costessey, Queens Hills - Thorpe St. Andrew (Red Line)
Via Dereham Road, City Centre, Plumstead Road & Booty Road

Service No.:	24	24	24A	24	24A	24	24A	24	24A		24	24A	24	24A	
Notes:															
Queens Hills,Kestrel Avenue	0735	0809	0824	0843	0858	0913	0928	0943	0958		13	28	43	58	
Longwater,Sainsbury's	0742	0816	0831	0850	0905	0920	0935	0950	1005		20	35	50	05	
Roundwell Medical Centre	0746	0820	0835	0854	0909	0924	0939	0954	1009		24	39	54	09	
Dereham Road, Larkman Lane	0753	0827	0842	0901	0916	0931	0946	1001	1016	then	31	46	01	16	
Dereham Road, Adelaide Street	0800	0834	0849	0908	0923	0938	0953	1008	1023	at	38	53	80	23	
Red Lion Street,Debenhams [BK]	0810	0844	0859	0918	0933	0948	1003	1018	1033	these	48	03	18	33	
Castle Meadow [CF]	0815	0849	0904	0923	0938	0953	1008	1023	1038	mins.	53	08	23	38	until
Rail Station, Riverside Road	0820	0854	0909	0927	0942	0957	1012	1027	1042	past	57	12	27	42	
Plumstead Road,The Heartsease	0829	0903	0918	0933	0948	1003	1018	1033	1048	each	03	18	33	48	
Gordon Avenue, Hillcrest Road	0832	0906		0936		1006		1036		hour	06		36		
South Hill Road, Charles Avenue	0839	0913		0943		1013		1043			13		43		
Booty Road, Woodlands Crescent			0926		0956		1026		1056			26		56	
Thorpe St.Andrew,Sainsburys	0843	0917	0930	0947	1000	1017	1030	1047	1100		17	30	47	00	
Service No.:	24	24A	24	24A											
Notes:															
Queens Hills,Kestrel Avenue	1513	1528	1543	1558	1613	1628	1643	1658	1713	1730	1748	1803	3		
Longwater,Sainsbury's	1520	1535	1550	1605	1620	1635	1650	1705	1720	1737	1755	1810	)		
Roundwell Medical Centre	1524	1539	1554	1609	1624	1639	1654	1709	1724	1741	1759	1814	1		
Dereham Road, Larkman Lane	1531	1546	1601	1616	1631	1646	1701	1716	1731	1748	1806	1821	1		
Dereham Road, Adelaide Street	1538	1553	1608	1623	1638	1653	1708	1723	1738	1755	1813	1828	3		
Red Lion Street, Debenhams [BK]	1548	1603	1618	1633	1648	1703	1718	1733	1748	1805	1823	1838	3		
Castle Meadow [CF]	1553	1608	1623	1638	1653	1708	1723	1738	1753	1810	1828	1843	3		
Rail Station, Riverside Road	1557	1612	1627	1642	1657	1713	1728	1743	1758	1814	1832	1847	7		
Plumstead Road,The Heartsease	1603	1618	1633	1648	1703	1722	1737	1752	1807	1820	1838	1853	3		
Gordon Avenue, Hillcrest Road	1606		1636		1706		1740		1810		1841				

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South Hill Road, Charles Avenue

Booty Road, Woodlands Crescent

Thorpe St.Andrew,Sainsburys



# Appendix I



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# Transport for Norwich Tracker





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Sul

Description	2003 to 2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018-2025 Future Schemes	Total Expected Spend
Bus Rapid Transit						£558,980	£567,004	£361,990	£885,490	£663,000	£758,750	£1,858,750	£2,226,250	£23,325,000	£31,205,214
Bus Priority Schemes/Bus Infrastucture	£8,719,974	£647,003	£533,745	£1,019,372	£909,887	£154,035	£107,952	£1,361,043	£648,750	£632,500	£370,417	£267,500	£200,000	£325,000	£15,897,178
Ticketing			£16,959	£47,828		£2,500	£32,500	£142,500	£200,000	£200,000	£200,000	£25,000	£25,000	£150,000	£1,042,287
Improvements to P & R	£1,564,011		£74,249	£540,002	£374,599	£245,839					£50,000		£1,500,000	£1,600,000	£5,948,700
Northern Distributor Road (NDR)	£928,020	£1,225,049	£1,929,808	£2,635,316	£3,377,169	£1,539,067	£702,747	£2,000,000	£3,550,000	£9,950,000	£25,300,000	£63,200,000	£17,930,000		£134,267,176
Postwick Hub including Phase 1 of Park and Ride expansion				£490,852	£1,097,676	£346,359	£273,832	£1,358,000	£4,350,000	£17,600,000	£3,200,000	£300,000			£29,016,719
City Centre Improvements		£4,373	£10,976	£24,397		£2,202,000	£246,000	£207,000	£145,500	£1,574,000	£105,000	£200,000	£625,000	£5,845,000	£11,189,246
Safety/Capacity Improvements	£1,414,719	£313,508	£406,918	£434,547	£558,994	£200,000	£70,000	£554,000	£375,000	£450,000	£1,400,000	£250,000	£250,000	£55,020,000	£61,697,686
Traffic Management	£985,503	£647,201	£665,532	£1,308,820	£1,297,768	£49,370	£20,000	£10,000	£29,000	£20,000		£60,000		£65,000	£5,158,194
Rail	£85,728	£379,078	£91,495				£50,000				£1,000,000		£1,050,000	£350,000	£3,006,301
Cycling - Norwich City Cycle Network Masterplan		£442,228	£167,598	£157,375	£179,976	£127,000	£155,000	£645,250	£428,000	£4,100,000	£2,000,000	£1,200,000	£1,200,000	£302,000	£11,107,427
Walking		£924,788	£215,610	£1,051,683	£1,496,958	£524,000	£77,500		£90,000	£60,000	£285,000	£285,000	£30,000	£30,000	£5,070,539
Smarter Travel Choices		£50,000	£80,000	£50,000	£20,000		£220,000	£428,600	£30,000	£20,000	£20,000	£20,000	£20,000	£120,000	£1,078,600
Freight	£8,145	£26,362	£171,965	£145,281	£2,339										£354,092
Total for Year	£13,706,100	£4,659,590	£4,364,855	£7,905,473	£9,315,366	£5,949,150	£2,522,535	£7,068,383	£10,731,740 £35,269,500		£34,689,167	£34,689,167 £67,666,250 £25,056,250		£87,135,000 <b>Total</b> Spend	£316,039,359 £316,039,359



# Appendix J



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### Schedule of Budgets and Programmes for Norwich City 2011-2012

### Routine Maintenance (Revenue)

Cyclic		
		£ 82,190
Verges, Hedges, etc		£ 62, 190 £241,215
Grass Cutting		£103,461
Gully Emptying		£29,808
Emergency Cleaning		223,000
Aids to movement		£34,149
Signs  Read Marking		£77,849
Road Marking		277,040
Repairs		£70,469
Fencing  Proing		£76,836
Drainage Potholes	•	£132,188
		£79,006
Footways etc Structures		£1013
<del> </del>		£568,816
Patching including winter damage		2000,010
Works Bridges (County)		
Other Expenditure		•
Surveys		£0
Winter Maintenance		£100,000
Viliter Mainternance		2.00,000
Total City Routine Maintenance (Revenue)		£1,597,000
Total City Routine Maintenance (Revende)		£1,597,000
Additional Budgets Winter Damage	,	£1,397,000
Additional Budgets Winter Damage		£1,397,000
Additional Budgets Winter Damage Surfacing		21,397,000
Additional Budgets Winter Damage  Surfacing A147 Barrack Street		£1,397,000
Additional Budgets Winter Damage Surfacing		£1,397,000
Additional Budgets Winter Damage  Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road		£1,397,000
Additional Budgets Winter Damage  Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road C865 Surrey Street		£1,397,000
Additional Budgets Winter Damage  Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road C865 Surrey Street C808 Woodcock Road		21,397,000
Additional Budgets Winter Damage  Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road C865 Surrey Street C808 Woodcock Road C816 Gurney Road		21,397,000
Additional Budgets Winter Damage  Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road C865 Surrey Street C808 Woodcock Road C816 Gurney Road U42609 Cremone Lane		21,397,000
Additional Budgets Winter Damage  Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road C805 Surrey Street C808 Woodcock Road C816 Gurney Road U42609 Cremone Lane U40204 Arminghall Close		21,397,000
Additional Budgets Winter Damage  Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road C865 Surrey Street C808 Woodcock Road C816 Gurney Road U42609 Cremone Lane	Total	£972,645
Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road C865 Surrey Street C808 Woodcock Road C816 Gurney Road U42609 Cremone Lane U40204 Arminghall Close U21545 Raynam Street  Surface Dressing	Total	£972,645
Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road C865 Surrey Street C808 Woodcock Road C816 Gurney Road U42609 Cremone Lane U40204 Arminghall Close U21545 Raynam Street  Surface Dressing B Road	Total	£972,645 £49,750
Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road C865 Surrey Street C808 Woodcock Road C816 Gurney Road U42609 Cremone Lane U40204 Arminghall Close U21545 Raynam Street  Surface Dressing		£972,645 £49,750 £85,774
Surfacing A147 Barrack Street A140 Farrow Road B1108 Earlham Road C800 Unthank Road C865 Surrey Street C808 Woodcock Road C816 Gurney Road U42609 Cremone Lane U40204 Arminghall Close U21545 Raynam Street  Surface Dressing B Road	Total	£972,645 £49,750

### Schedule of Budgets and Programmes for Norwich City 2011-2012

### Improvement schemes (including fees)

Norwich DDA Bus stop upgrades

£25,000

Total - Bus Infrastructure Schemes:

£25,000

Total - Cycling Schemes:

Total - Road Crossings:

Total - Walking Schemes:

Total - Local Road Schemes:

Total - SHJS:

Total - Local Safety Schemes:

Norwich-Newmarket Road / Eaton Road (Awaiting NHAC meeting)	£100,000
Norwich- Yarmouth Road links (Possible Reallocation)	£10,000
Minor Traffic Management schemes - City	£10,000

Total - Traffic Management and Traffic Calming:

Total – For all schemes:

£145,000

### Structural Maintenance (including fees)

Drainage	£80,000
C & U Surfacing	£ 144,389
Cat 3/4 Footways	£419,282
Cat1/2 footways	£148,789
B Roads (surfacing)	£75,600
B Roads (Surface Dressing)	£0
A Roads (surfacing)	£966,669
A Roads (surface treatment)	£208,592
C & U Surface Dressing	£344,000
Total	£2,387,321

### Schedule of Budgets and Programmes for Norwich City 2012-2013

### Routine Maintenance (Revenue)

Cyclic	
Verges, Hedges, etc	£ 75,480
Grass Cutting	£236,640
Gully Emptying	£94,310
Weed Killing	£29,695
Emergency Cleaning	£30,600
Aids to movement	
Signs	£26,520
Road Marking	£71,245
Repairs	
Fencing	£63,240
Drainage	£71,196
Potholes	£71,400
Footways etc	£80,580
Patching carriageway	£530,400
Patching footway	£97,920
	£1,479,226
Other Expenditure	
Surveys	03
Winter Maintenance	£65,000
Total City Routine Maintenance (Revenue)	£1,544,226

## Schedule of Budgets and Programmes for Norwich City 2012-2013

## Improvement schemes (including fees)

Total – For all schemes:	£315,000
Total - Traffic Management and Traffic Calming:	£20,000
Minor Traffic Management / Future Waiting Restrictions	£20,000
Total - Local Safety Schemes:	£70,000
LSS Schemes Ipswich Road, Drayton Road, Dereham Road	£70,000
Total - SHJS:	ſ
Total - Local Road Schemes:	£40,000
NATS IP Koblenz Avenue Congestion Reduction	£20,000
NATS Schemes – Future Design and Implementation	£20,000
Total - Walking Schemes:	£20,000
Dropped Kerb Provision	£20,000
Total - Road Crossings:	,
Total - Cycling Schemes:	£120,000
Norwich NATS IP Cycle Network Implementation	£120,000
Total - Bus Infrastructure Schemes:	£45,000
NATS IP BRT – Dereham Road & Newmarket Road	£20,000
Norwich DDA Bus Stop Upgrades	£25,000

## Structural Maintenance (including fees)

Drainage			£60,000
C & U Surfacing		4	£ 150,000
Cat 3/4 Footways			£461,042 \ Sa4,723
Cat1/2 footways	•	•	£133,881 ) (7,12)
B Roads (surfacing)			£0
B Roads (Surface Dressing)			£34,729
A Roads (surfacing)			£999,017
A Roads (surface treatment)			£278,342
C & U Surface Dressing			£442,144
Total			£2,559,155

## **Schedule of Budgets and Programmes for Norwich City 2013-14**

## Improvement schemes – Approx works value only – fees removed

Norwich DDA Bus Stop Upgrades	£8,000
Total - Bus Infrastructure Schemes:	£8,000
Norwich - Thorpe Road, Magdalen St & Mile Cross Lane	No works
Cycle Signing – Orange Route	£22,000
Palace Street Cycle Lane	£8,000
Total - Cycling Schemes:	£30,000
Norwich – Bluebell Road Crossing facility	£45,000
Norwich – Hall Road Crossing Facility	£30,000
Total - Road Crossings:	£75,000
Total - Walking Schemes:	
NATS Schemes – Future Design and Implementation	No works
NATS IP Koblenz Avenue Congestion Reduction	No works
TO THE TREE PROPERTY OF THE CONTROL	
Total - Local Road Schemes:	93
•	£0
Total - Local Road Schemes:	<b>£0</b> £105,000
Total - Local Road Schemes: Total - SHJS: LSS Drayton Road/St Martins Road R'about (DfT match fund &	
Total - Local Road Schemes:  Total - SHJS:  LSS Drayton Road/St Martins Road R'about (DfT match fund & surfacing contribution)  LSS Constitution Hill/Wall Rd R'about (DfT match fund &	£105,000
Total - Local Road Schemes:  Total - SHJS:  LSS Drayton Road/St Martins Road R'about (DfT match fund & surfacing contribution)  LSS Constitution Hill/Wall Rd R'about (DfT match fund & surfacing contribution)	£105,000 £55,000
Total - Local Road Schemes:  Total - SHJS:  LSS Drayton Road/St Martins Road R'about (DfT match fund & surfacing contribution)  LSS Constitution Hill/Wall Rd R'about (DfT match fund & surfacing contribution)  LSS Bowthorpe R'about (DfT match fund)	£105,000 £55,000 £18,000
Total - Local Road Schemes:  Total - SHJS:  LSS Drayton Road/St Martins Road R'about (DfT match fund & surfacing contribution)  LSS Constitution Hill/Wall Rd R'about (DfT match fund & surfacing contribution)  LSS Bowthorpe R'about (DfT match fund)  LSS Drayton Road/Whiffler Road (DfT match fund)	£105,000 £55,000 £18,000 £15,000
Total - Local Road Schemes:  Total - SHJS:  LSS Drayton Road/St Martins Road R'about (DfT match fund & surfacing contribution)  LSS Constitution Hill/Wall Rd R'about (DfT match fund & surfacing contribution)  LSS Bowthorpe R'about (DfT match fund)  LSS Drayton Road/Whiffler Road (DfT match fund)  LSS Avenues/George Borrow Road (DfT match fund)	£105,000 £55,000 £18,000 £15,000 £10,000
Total - Local Road Schemes:  Total - SHJS:  LSS Drayton Road/St Martins Road R'about (DfT match fund & surfacing contribution)  LSS Constitution Hill/Wall Rd R'about (DfT match fund & surfacing contribution)  LSS Bowthorpe R'about (DfT match fund)  LSS Drayton Road/Whiffler Road (DfT match fund)  LSS Avenues/George Borrow Road (DfT match fund)  Total - Local Safety Schemes:	£105,000 £55,000 £18,000 £15,000 £10,000 £203,000

## Structural Maintenance – Approx works values only – fees removed

Total	£2,116,000
C & U Surface Dressing	£380,000
A Roads (surface treatment)	£159,000
A Roads (surfacing)	£734,000
B Roads (Surface Dressing)	£46,000
B Roads (surfacing)	£0
Footways	£586,000
C & U Surfacing	£187,000
Drainage	£24,000

## Schedule of Budgets and Programmes for Norwich City 2013-14

## **Routine Maintenance (Revenue)**

Cyclic	
Gully Emptying	£94,310
Emergency Cleaning	£30,600
Aids to movement	
Signs	£26,520
Road Marking	£71,245
Repairs	
Fencing	£63,240
Drainage	£71,196
Potholes	£71,400
Footways etc	£80,580
Patching carriageway	£530,400
Patching footway	£97,920
	£1,137,411
Other Expenditure	
Surveys	£0
Winter Maintenance	£65,000
Total City Routine Maintenance (Revenue)	£1,202,411

## Schedule of Budgets and Programmes for Norwich City 2014-2015

## Routine Maintenance (Revenue)

Cyclic	
Verges, Hedges, etc	£65,000
Grass Cutting	£220,000
Gully Emptying	£72,000
Weed Killing	£30,000
Emergency Cleaning	£27,000
Aids to movement	
Signs	£22,000
Road Marking	£50,000
Repairs	
Fencing	£50,000
Drainage	£63,000
Potholes	£63,000
Footways, etc	£67,000
Patching (Capital)	
Carriageway	
Footway	•
Other Expenditure	
Surveys	£24,442
Winter Maintenance	£24,442
Total City routine Maintenance (Revenue)	£777,884

#### Schedule of Budgets and Programmes for Norwich City 2014-2015

#### Improvement schemes (including fees)

	£30,000
Total - Traffic Management and Traffic Calming	
Norwich - Future Waiting Restrictions / Minor Traffic Management schemes	£10,000
Norwich- improvements to estate road corners to accommodate HGV over-run	£20,000
Total - Local Safety Schemes:	£54,000
Norwich B1150 Catton Grove Road Traffic Calming / Zebra Crossing	£25,000
Norwich Unthank Road further junction improvements LSS	£29,000
Total - Local Road Schemes:	£80,000
NATS IP Schemes - future design & implementation of schemes	£30,000
Total - Walking Schemes NATS IP- Chapelfield North & Westlegate Public Transport Improvements	£50,000
Crossings:	£60,000
Norwich- Aylsham Road by Buxton Rd pedestrian refuge  Total - Road	£30,000
Norwich- St Augustine's zebra crossing	£30,000
Total - Cycling Schemes:	£240,000
Norwich- Cycle City Ambition-Heathgate- Valley Drive	£25,000
Norwich- Cycle City Ambition- Tombland and Palace St	£25,000
Norwich- Cycle City Ambition-Eartham road (Gipsy Lane-Christchurch rd)	£90,000
Norwich- Cycle City Ambition- Magdalen Street contra flow	£100,000
Total - Bus Infrastructure Schemes:	£20,000
Norwich DDA Bus Stop Upgrades	£20,000

#### Structural Maintenance (including fees)

Drainage	£24,442
C & U Surfacing	£73,144
Cat 3/4 Footways	£346,328
Cat1/2 footways	£128,777
B Roads (surfacing)	£51,269
B Roads (Surface Dressing)	£0
A Roads (surfacing)	£726,140
A Roads (surface treatment)	£156,027
C & U Surface Dressing	£324,731
Total- Norwich area managers	£20,000
Total	£1,850,858



## Appendix K



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Mott MacDonald Internal Audit			Mott MacDonald
Revision	Originator	Checked By	Approved By
P0	S Sirivadidurage	M Shahkarami	C White

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MM filing ref: MM-233906 DP01-Doc-OH1

## **Table of Contents**

1	Introduction	4
1.1	Purpose and Layout of Report	4
2	Traffic Crossing the River Wensum	5
3	Traffic Management Plan	8
3.1	Details of TM plans	8
3.2	Traffic reassignments to account for Traffic Management plan	9
3.3	Traffic movements at junctions between new B Road and A1067 and A47(T)	11
4	Effect of TM on Network Performance and HRA	16
4.1	Junction Performance	16
4.2	Impacts on HRA after TM	18
5	Conclusion	19
6	Appendices	20
6.1	Appendix A – Extracts from Traffic Forecasting Report (Document Ref 5.6)	20
6.2	Appendix B – Major Movements in Wensum	25
6.3	Appendix C – Proposed TM Plan and its Impact	25
7	Abbreviations	32
8	Glossary	35

## **List of Tables**

Table 2.1:	Traffic Flows on western part of Screenline south of A1067	5
Table 2.2:	Traffic Flows on a Screenline North of A47(T)	6
Table 3.1:	Summary of Issues Identified and how Traffic is redistributed with the TM Plan	9
Table 3.2:	Traffic Flows on a Screenline north of A47(T) before and after TM	10
Table 3.3:	Traffic Flows on a Screenline south of A1067 before and after TM	10
Table 3.4:	Key Traffic Movement for Wood Lane Junction with TM	13
Table 3.5:	Key Traffic Movement for Weston Hall Junction after TM	13
Table 3.6:	Traffic Flows at Marl Hill Road and Weston Hall Road for HRA	14
Table 4.1:	Summary Wood Lane / A47(T) Priority Junction Operation with TM – DM	17
Table 4.2:	Summary Wood Lane/A47(T) Priority Junction Operation with TM - DS	17
Table 4.3:	Summary Signal Junction Operation with TM for Weston Hall - DS	18
List of F	igures	
Figure 6.1:	Two Major Movements in Wensum	25
Figure 6.2:	Proposed Traffic Management Plan	26
Figure 6.3:	Traffic in Wensum Valley after TM	28
Figure 6.4:	Wood Lane Junction Layout	30
Figure 6.5:	Weston Hall Road / A1067 Possible Signalised Junction Layout	31

#### 1 Introduction

#### 1.1 Purpose and Layout of Report

- 1.1.1 During the Open Hearings on 22/23 July 2014 the impact of the NDR on roads crossing the River Wensum west of Norwich was raised by a number of speakers. This has been addressed in a number of places in the submission material, in particular in the response to Question 10.2 of the First Written Questions from the Examining Authority and in responses to specific written representations. This report pulls together information already submitted with further additional information, but it does not repeat the explanation of the benefits and disbenefits of not including a full link to the A47(T) west of the city which is set out in the response to ExA Q10.2.
- 1.1.2 It was also suggested during the open hearings that if the NDR did not extend to the A47(T) west of the city then the section of NDR between A140 and A1067 should not be approved. The benefits of this section of NDR were set out in the response to ExA Q10.3. The Applicant is giving further consideration to the traffic implications of a NDR that terminated at the A140 in order to inform its response to the ExA's request for consideration to be given to a variant DCO which related only to a NDR from the A47 at Postwick to the A140. The Applicant will respond to this matter by Deadline 6.
- 1.1.3 This report shows the effects of the traffic management (TM) plan in the Lenwade to Hockering corridor and provides further detailed information including on junction operation.
- 1.1.4 The report contains the following sections after the current introductory section:
  - Section 2 provides model forecast traffic levels on routes crossing the River Wensum with the Scheme;
  - Section 3 contains details of the TM plan and traffic reassignments made to account for the plan;
  - Section 4 describes the effects of TM plan on network performance and the Habitats Regulation Assessment (HRA);
  - Section 5 presents the conclusions
- 1.1.5 Supporting information is included in Appendix A in Section 6.
- 1.1.6 Sections 7 and 8 contain Abbreviations and a Glossary.

#### 2 Traffic Crossing the River Wensum

- 2.1.1 The local highway network between the A1067 and the A47(T) west of Norwich is shown on Figure 6.2, which also identifies the road names and street classification numbers referred to below. The DCO modelling work examined traffic crossing an imaginary River Wensum screen line to the west of Norwich. The findings were published in the Traffic Forecasting Report (Document Ref. 5.6), the relevant section is attached at Appendix A. The screenline that was analysed was one running approximately along the line of the River Wensum, just to the south of the A1067. It showed that traffic crossing the screen line would reduce by 6% in 2017 and 4% in 2032. However it also showed that there would be increases across the western part of the screenline that were offset by reductions in the eastern part.
- 2.1.2 The table below shows the increase in traffic in the western part of the screenline with the Scheme. The scale of the increase in traffic amounts to around 1,700 AADT in 2017 and 2,700 AADT in 2032 which is a relatively modest increase in comparison with the traffic crossing River Wensum screen line, though of more significance in the Lenwade- Hockering corridor.

Table 2.1: Traffic Flows on western part of Screenline south of A1067

Site location	AADT				
	2012	2017		2032	
		DM	DS	DM	DS
C167 Weston Longville (A105)	1,400	1,700	3,300	3,100	5,500
C173 Lenwade to Hockering (A106)	3,000	3,400	3,500	3,300	3,600
Total in western part	4,400	5,100	6,800	6,400	9,100
Increase with Scheme			1,700		2,700

Note: DM=Do Minimum case Without NDR; DS=Do Something case With NDR

2.1.3 Traffic flows were also shown in the Traffic Forecasting Report Figure I.3 on roads to the north of the A47(T), but did not form a screenline that extended as far east as the one located south of the A1067 (and hence this latter one was used to analyse the change). Further traffic data has been extracted from the traffic model for a screenline north of A47(T) that extends further east to include Longwater Lane and Norwich Road. The traffic on the new imaginary corridor screenline to the north of the A47(T) in the Lenwade to Hockering corridor (see Figure I.3 of Appendix A for more details) are given in Table 2.2 on an AADT basis:

Table 2.2: Traffic Flows on a Screenline North of A47(T)

Site location			AADT		
	2012	20	17	20	32
		DM	DS	DM	DS
Longwater Lane	7,300	8,200	7,100	9,500	8,200
Norwich Road	7,000	7,100	6,900	6,700	6,300
Ringland Road	2,500	3,400	3,000	5,200	4,700
Taverham Road	500	800	300	1,100	500
Wood Lane	2,700	2,800	3,000	2,500	2,900
Sandy Lane	1,300	1,900	3,700	2,400	4,300
Heath Road	500	500	1,100	1,300	2,300
Stone Road	0	0	0	0	100
Total screenline	21,800	24,700	25,100	28,700	29,300

Note: DM=Do Minimum case Without NDR; DS=Do Something case With NDR

- 2.1.4 The table shows a small increase in traffic crossing this A47(T) screen line with the Scheme, 2% compared to DM in both 2017 and 2032, whereas the screenline south of A1067 quoted in the Traffic Forecasting Report showed a reduction of between 4% and 6%. Taking the results from both screenlines there are two key conclusions that can be drawn:
  - There is no significant change or increase in traffic crossing the River Wensum with the NDR Scheme
  - There is a traffic reduction on crossings in the eastern part of this area but an increase on crossings in the western part with the NDR Scheme.
- 2.1.5 There are two types of through traffic that have been determined from select link analyses of the model: a dog leg movement between A1067 east and A47(T) west, and one between A1067 west and A47(T) east. The first movement increases with the Scheme but the second one reduces slightly (see Figure 6.1 for more information).
- 2.1.6 Strategic traffic models of the type used for the DCO modelling are based on choosing the shortest and quickest route through the network accounting for network performance. As such they do not account for direction signing and therefore do not account for the full traffic management proposals in the Lenwade Hockering corridor. Traffic management measures will, however, influence driver behaviour and route choices. Consequently the model results have been reassessed to take the traffic management into account by reassigning through traffic between A1067 and A47(T) to the designated

improved route. The traffic management plan and the basis of the reassignment are detailed in the next section.

#### 3 Traffic Management Plan

#### 3.1 Details of TM plans

- 3.1.1 On the 9 November 2009 Norfolk County Council's Cabinet agreed to undertake works to progress a route improvement scheme that also included the introduction of HGV restrictions in Hockering and reclassification of the route to a B road. The route (from north to south) comprises the following sections of road and is shown on Figure 6.2: Weston Hall Road, Rectory Road (west) Weston Green Road (west), Sandy Lane (north), Walnut Tree Lane and Wood Lane (south).
- 3.1.2 The improved route between the A1067 and the A47(T) addresses previous HGV problems by diverting HGVs away from the villages of Weston Longville and Hockering. The route improvement works have been completed, with reclassification of the road to a B road and an accompanying HGV ban to be implemented in Hockering in 2014.
- 3.1.3 Marl Hill Road leads onto Church Street, which has a 6' 6" width restriction (restriction runs from Morton Lane/Ringland Lane through Weston Longville to Rectory Road) and a 7.5T Gross Vehicle Weight restriction (restriction runs from Morton Lane/Ringland Lane through Weston Longville to just north of Wood Lane/Walnut Tree Lane). This means HGVs should already use Weston Hall Road. The aim is to deter other vehicles and light goods vehicles from using Marl Hill Road and traffic will be signed to use the new B road from the A1067.
- 3.1.4 NCC has committed to monitor the A1067/Weston Hall Road (C173) junction following reclassification of the improved route to a B road.
- 3.1.5 NCC has also committed to monitor the A47(T)/Wood Lane (C167) junction following reclassification of the improved route to a B road.
- 3.1.6 An existing signing strategy is in place that assigns southbound HGV traffic to the route via Weston Hall Road (C173) and then via either Wood Lane for traffic to the A47(T) East or Stone Road for traffic to the A47(T) West. North bound HGV traffic is currently directed through Hockering.
- 3.1.7 With completion of the improved route and reclassification to a B road north bound traffic will be signed via Wood Lane for traffic from either A47(T) East or A47(T) West. South bound HGV traffic would still be signed via Weston Hall Road (C173) and via either Wood Lane for traffic to/ the A47(T) East or Stone Road for traffic to the A47(T) West. If found necessary, modifications to the signing strategy plan could be considered that would sign other traffic via Stone Road for traffic to A47(T) West.

- 3.1.8 Also Norfolk County Council's (NCC) cabinet at its meeting on 3 December 2012 agreed, that irrespective of whether the NDR proceeds, to progress the following schemes in principle, between the A1067 at Taverham/Drayton and the A47(T) at Costessey:
  - a scheme taken forward by NCC to review the enhancement of the existing traffic calming measures on West End, Costessey. Subject to a feasibility study and seeking views of key stakeholders, including the Norfolk Safety Camera Partnership, the use of average speed cameras may be possible,
  - a scheme taken forward by NCC to investigate ways to better enforce the
    existing weight restrictions on roads over the River Wensum between
    Costessey and Taverham / Drayton i.e. on Ringland Road, Taverham Lane,
    Costessey Lane. Norfolk County Council will examine the technical feasibility
    and stakeholder views, including the Norfolk Safety Camera Partnership, of
    using camera enforcement of the weight restrictions,
  - a scheme taken forward by NCC to undertake a speed limit assessment on Ringland Road through Ringland with a view to implementing a 30mph speed limit if found to be appropriate.
- 3.1.9 Design briefs for this work have been developed, with the feasibility work expected to commence this year.

#### 3.2 Traffic reassignments to account for Traffic Management plan

3.2.1 Table 3.1 below highlights how the Traffic Management (TM) plan described above is to be implemented to prevent through traffic using Marl Hill Road, Sandy Lane and Heath Road. The routes are indicated in Figure 6.2 which shows the signing strategy for HGVs. The management plan will extend this strategy to all through traffic.

Table 3.1: Summary of Issues Identified and how Traffic is redistributed with the TM Plan

Item	Issue	Solution
1	In the model through traffic is assigned to routes that would not be capable of carrying large increases in traffic. This applies to Marl Hill Road and Sandy lane	These routes are already subject to HGV restrictions and the traffic management solution will be to signpost traffic away from these routes. The routes will be monitored and if necessary further measures would be considered.
2.	Marl Hill Road through traffic	It is assumed that this will all be reassigned to Weston Hall Road
3.	Sandy Lane Traffic	This is all reassigned to Stone Road
4.	Wood Lane Junction is overcapacity	Reassignment of traffic with revised traffic management assumptions means that the only traffic emerging will turning left and thus much lower traffic level forecasts apply. These forecasts in the Do Something are lower than Do Minimum and although they conflict with very high A47(T) flows, they too are lower in DS than DM.

- 3.2.2 Through traffic between the A1067 and A47(T) from DCO model assignments was reallocated manually as described in Table 3.1 to take into account the effect of the proposed TM plan. A select link analysis was done on Marl Hill Road south of A1067 and on Wood Lane north of A47(T) to identify through traffic southbound from A1067 and northbound from A47(T) respectively. These through traffic movements were then allocated to Weston Hall Road.
- 3.2.3 Junction turning flows for Wood Lane junction are derived by reassigning right turn traffic from Wood Lane to A47(T) west to use Stone Road and also by adding left turn traffic from A47(T) west to Sandy Lane and Heath Road.
- 3.2.4 The resulting forecast traffic flows with the adjustments for TM on the roads crossing the two screenlines (the A1067 and A47(T) screenlines) are shown in the two tables below. The tables shows the increased traffic on the roads comprising the TM route (Weston Hall Road, Wood Lane and Stone Road) and traffic reductions on marl Hill Road and Heath Road.

Table 3.2: Traffic Flows on a Screenline north of A47(T) before and after TM

Site location	AADT								
	2012	2017				2032			
		DM before TM	DS before TM	DM after TM	DS after TM	DM before TM	DS before TM	DM after TM	DS after TM
Longwater Lane	7,300	8,200	7,100	8,200	7,100	9,500	8,200	9,500	8,200
Norwich Road	7,000	7,100	6,900	7,100	6,900	6,700	6,300	6,700	6,300
Ringland Road (A111)	2,500	3,400	3,000	3,400	3,000	5,200	4,700	5,200	4,700
Taverham Road (A110)	500	800	300	4,00	300	1,100	500	600	500
Wood Lane (A109)	2,700	2,800	3,000	4,000	4,300	2,500	2,900	5,200	6,000
Sandy Lane (A107)	1,300	1,900	3,700	0	0	2,400	4,300	100	100
Heath Road (A108)	500	500	1,100	<100	<100	1,300	2,300	<100	<100
Stone Road	0	0	0	1,600	3,500	0	100	1,400	3,500
Total screenline	21,800	24,700	25,100	24,700	25,100	28,700	29,300	28,700	29,300

Note: DM=Do Minimum case Without NDR; DS=Do Something case With NDR

Table 3.3: Traffic Flows on a Screenline south of A1067 before and after TM

Site location	AADT								
	2012	2017				2032			
		DM before TM	DS before TM	DM after TM	DS after TM	DM before TM	DS before TM	DM after TM	DS after TM
Low Road (A81)	4,000	4,600	4,000	4,600	4,000	4,900	4,100	4,900	4,100
Costessey Lane (A89)	3,300	4,000	3,800	4,000	3,800	4,800	4,900	4,800	4,900

Site location	AADT								
	2012	2017				2032			
		DM before TM	DS before TM	DM after TM	DS after TM	DM before TM	DS before TM	DM after TM	DS after TM
Taverham Lane (A25)	5,700	5,700	4,700	5,700	4,700	6,200	4,700	6,200	4,700
Ringland Road (A31)	3,600	4,900	3,500	4,900	3,500	8,000	6,300	8,000	6,300
C167 Weston Longville (A105)	1,400	1,700	3,300	300	300	3,100	5,500	300	400
C173 Lenwade to Hockering (A106)	3,000	3,400	3,500	4,800	6,500	3,300	3,600	6,100	8,700
Total screenline	21,000	24,300	22,800	24,300	22,800	30,300	29,100	30,300	29,100

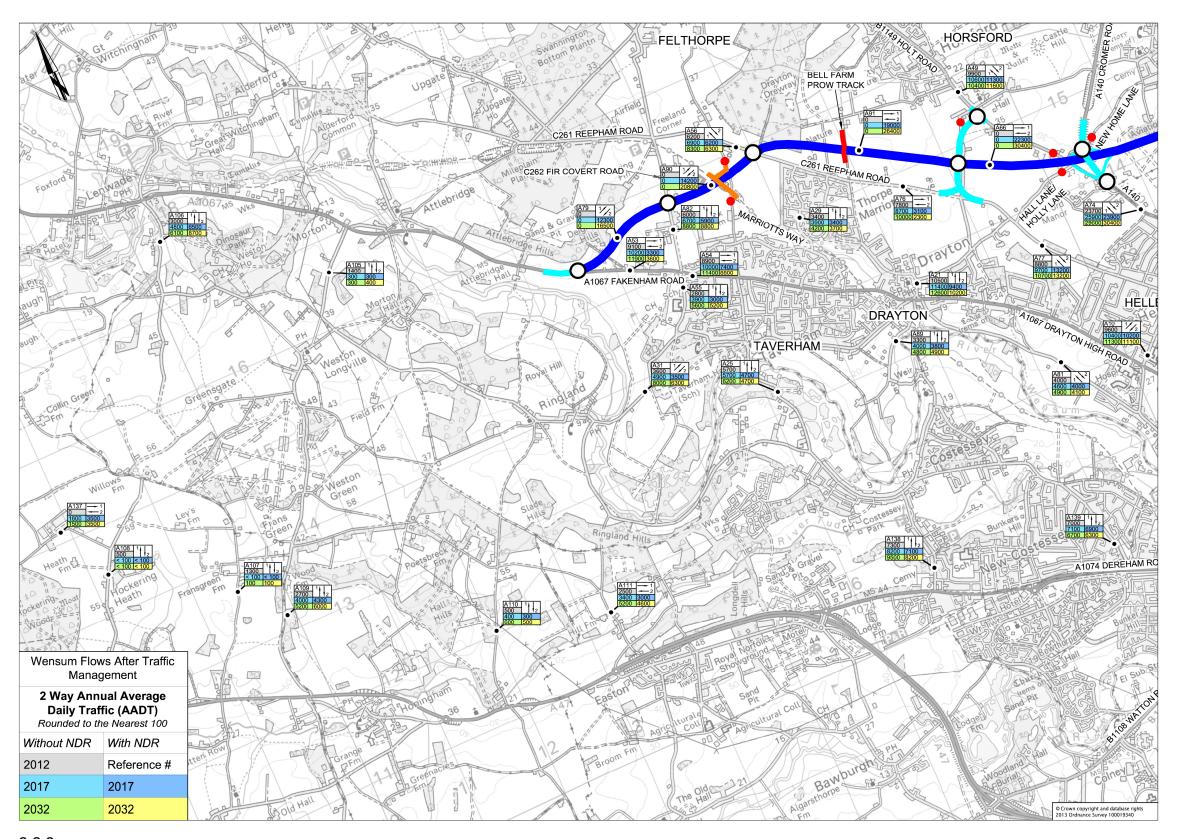
Note: DM=Do Minimum case Without NDR; DS=Do Something case With NDR

## 3.3 Traffic movements at junctions between new B Road and A1067 and A47(T)

3.3.1 With the TM plan implemented the resulting traffic flow conflict for emerging traffic at Wood Lane at the southern end of the B Road will be reduced with the Scheme compared with the Do Minimum. However there would be a substantial increase in traffic on Weston Hall Road at the northern end with the TM plan, with the transfer of through traffic from Marl Hill Road, removing traffic from the road through the village of Weston Longville to one with limited residential frontage access. The increase in traffic on Weston Hall Road would be increased further with the NDR Scheme.



## 3.3.2 Figure 6.3: Traffic in Wensum Valley after TM





- 3.3.4 contains traffic flows in AADT with TM.
- 3.3.5 The table below summarises the key traffic movements for Wood Lane junction with TM.

Table 3.4: Key Traffic Movement for Wood Lane Junction with TM

	Key	moveme	nts (pcu/h	ır)
	201	17	203	32
	DM	DS	DM	DS
Wood Lane out to A47(T) Eastbound				
AM	169	141	138	126
PM	123	140	161	136
Wood Lane out to Berrys Lane				
AM	22	18	33	31
PM	12	11	17	14
A47(T) Eastbound				
AM	1,570	1,502	1,538	1,480
PM	1,125	1,035	1,289	1,228
A47(T) Westbound				
AM	1,012	928	1,226	1,110
PM	1,430	1,345	1,593	1,544

3.3.6 The table below summarises the key traffic movements for Weston Hall Road junction after traffic management.

Table 3.5: Key Traffic Movement for Weston Hall Junction after TM

	Key r	novemen	ts (pcu/hr	)
	2017		2032	2
	DM	DS	DM	DS
Weston Hall Road out to A1067 Westbound (left-turn out)				
AM	136	74	188	98
PM	154	96	180	109
Weston Hall Road out to A1067 Eastbound (right turn out)				
AM	61	174	115	116
PM	52	199	127	289
Weston Hall Road out to Porter's Lane (straight out)				
AM	57	78	53	80
PM	27	39	32	49
A1067 Eastbound				



AM	615	738	695	929
PM	578	592	642	779
A1067 Westbound				
A1067 Westbound	512	734	635	1,01

# 3.3.7 The table below summarises traffic flows used in the Habitats Regulations Assessment (HRA) with the adjustment for the TM plan.

Table 3.6: Traffic Flows at Marl Hill Road and Weston Hall Road for HRA

	AADT 2017				AADT 2032		1	Number of HGVs 2017			Number of HGVs 2032		
Site	DM	DS	Diff (%)	DM	DS	Diff (%)	DM	DS	Diff (%)	DM	DS	Diff (%)	
Without TM													
Weston Hall	3383	3490	+107 (+3.2%)	3279	3556	+277 (+8.4%)	66	62	-4 (-6.1%)	92	86	-6 (-6.5%)	
Marl Hill	1674	3317	+1643 (+98.1%)	3146	5549	+ 2403 (+76.4%)	49	81	+32 (+65.3%)	102	187	+85 (+83.3%)	
With TM													
Weston Hall	4812	6477	+1664 (34.6%)	6150	8707	+2557 (41.6%)	115	143	+28 (+24.5%)	194	273	79 (+40.7%)	
Marl Hill	245	330	+86 (35%)	275	398	+123 (44.9%)	0	0	-81 (-100%)	0	0	-187 (-100%)	



#### 4 Effect of TM on Network Performance and HRA

#### **4.1 Junction Performance**

4.1.1 An assessment has been undertaken of the operational performance of the junctions at the ends of the improved C173 / C167 route where it connects with the A47(T) at Wood Lane and with the A1067 at Weston Hall Road. The TM plan would increase traffic via Stone Road to join the A47(T) at North Tuddenham where the road configuration provides grade separation of traffic movements to connect with a dual carriageway standard A47(T), thus reducing conflicts so that the increase would be accommodated.

With the TM plan implemented the resulting traffic flow conflict for emerging traffic at Wood Lane will be reduced with the Do Minimum. The following tables contain summary priority junction results for Wood Lane junction without (DM) and with(DS) the Scheme but with TM measures in both instances. The results indicate that Wood Lane junction (see



Arm C (Major)

Arm B (Minor)

Arm A (Major)

4.1.2 for junction layout) operates within desirable capacity limits with the Scheme and with the TM strategy in both 2017 and 2032.

Table 4.1: Summary Wood Lane / A47(T) Priority Junction Operation with TM – DM

	AM			PM		
	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)	RFC
Wood Lane Junction - DM						
	6	127	0.923	1	21	0.438
2017						
	3	77	0.779	2	44	0.689
2032						

Table 4.2: Summary Wood Lane/A47(T) Priority Junction Operation with TM - DS

	( )	,				
	АМ			РМ		
	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)	RFC
Wood Lane Junction - DS						



	АМ			PM		
	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)	RFC
	2	58	0.721	1	13	0.355
2017						
	2	56	0.689	1	32	0.571
2032						

4.1.3 On Weston Hall Road there will be a substantial increase in traffic with the TM strategy and with NDR and the existing junction capacity would be exceeded. A roundabout solution at this location would have an impact on the Wensum Special Area of Conservation. However, a scheme to introduce traffic signals at the junction at Weston Hall Road junction could be implemented within the limits of the existing highway if future monitoring suggests that it was necessary. A possible layout is shown in Figure 6.5 and this has been assessed using LINSIG. The results show that the junction would operate within the desirable capacity limit except in 2032 PM, but in this case the delays and queues are within acceptable limits. It is therefore expected that the existing junction would be monitored following implementation of NDR and signal control introduced if required.

Table 4.3: Summary Signal Junction Operation with TM for Weston Hall - DS

	AM					
	Queue (PCU)	Delay (sec)	RFC	Queue (PCU)	Delay (sec)	RFC
Weston Hall Road - DS						
	10.1	33	70.2%	11.2	36	74.3%
2017						
	16.6	54	86.3%	22.9	70	93.7%
2032						

#### 4.2 Impacts on HRA after TM

4.2.1 Norfolk County Council (NCC) anticipates that the efforts made to address comments on the Draft HRA Addendum, to the effect of the above, should satisfy Natural England and the Environment Agency that off-site mitigation measures will ensue that no additional sediment ingress into the River Wensum occurs. It is intended that this will be secured with NCC's Highways and Asset Management teams, and with landowners, as described in the forthcoming, finalised HRA Addendum, which NCC hopes to publish in the near future.



#### 5 Conclusion

- 5.1.1 The NDR Scheme will result in increased traffic in the Lenwade-Hockering corridor between the A47(T) and A1067 despite no significant change overall of traffic crossing the River Wensum to the west of Norwich. The scale of the increase in traffic amounts to around 1700 AADT in 2017 and 2700 AADT in 2032 which is a relatively modest increase in comparison with the traffic crossing River Wensum screen line, though of more significance in the Lenwade- Hockering corridor.
- 5.1.2 The traffic model forecasts did not allow for the traffic management (TM) proposals so a review and reassignment has been undertaken to account for them. The effect is to remove through traffic from unsuitable routes through the settlements of Weston Longville and Hockering as well as from Sandy Lane (south).
- 5.1.3 The reassignments result in sharing the traffic joining the A47(T) between two junctions, one for eastbound (at Wood Lane) and one for westbound traffic (at North Tuddenham). Analysis shows that the critical junction with Wood Lane would operate acceptably well. However traffic joining the A1067 will be focussed on Weston Hall Road
- 5.1.4 On Weston Hall Road there will be a substantial increase in traffic with the TM strategy and with NDR and the existing junction capacity would be exceeded. A roundabout solution at this location would have an impact on the Wensum Special Area of Conservation. Traffic signal control of the junction was assessed and this showed that the junction would operate acceptably well. A scheme to introduce traffic signals at the junction at Weston Hall Road junction could be introduced within the limits of the existing highway if future monitoring suggests that it was necessary.
- 5.1.5 The existing and proposed traffic management measures discussed in this report will be sufficient to accommodate the limited additional traffic associated with the NDR which uses the local highway network between the A1067 and the A47(T) without imposing unacceptable impacts on local communities.



#### 6 Appendices

#### 6.1 Appendix A – Extracts from Traffic Forecasting Report (Document Ref 5.6)

Wider Impacts to the West of Norwich

7.1.8 The model runs have been analysed to understand the impact of NDR on traffic levels on routes between the A1067 (Fakenham Road) and the A47(T) (see figure I.3 in Appendix I). The NDR runs between the A1067 west of Taverham and extends to the A47(T) at Postwick junction east of Norwich. Concern has been expressed that because the NDR does not extend to the A47(T) in the west, traffic will increase on routes between the A1067 and the A47(T).

7.1.9 To assess this, modelled traffic flows on an imaginary line running between the A1067 and the A47(T) have been investigated. The results are presented in Table 7.1.

Table 7.1:	Modelled Daily	Traffic Flows on	Routes Between the	A1067	' and the A47	(T)
					•••••	\ ' /

24 hour two-way	2012	2017	2017	2032	2032	NDR	NDR
flows		DM	DS	DM	DS	change	change
						2017	2032
Low Road (A81)	4000	4600	4000	4900	4100	-13%	-16%
Costessey Lane	3300	4000	3800	4800	4900	-5%	2%
(A89)							
Taverham Lane	5700	5700	4700	6200	4700	-18%	-24%
(A25)							
Ringland Road (A31)	3600	4900	3500	8000	6300	-29%	-21%
C167 Weston	1400	1700	3300	3100	5500	94%	77%
Longville (A105)							
C173 Lenwade to	3000	3400	3500	3300	3600	3%	9%
Hockering (A106)							
Total	21000	24300	22800	30300	29100	-6%	-4%

7.1.10 The above shows that the NDR leads to a decrease in daily traffic on the above routes that connect the A1067 with the A47(T) to the west of Norwich of 6% in 2017 and 4% in 2032.

7.1.11 Traffic levels on the three key routes between Taverham and Costessey (Costessey Lane, Taverham Lane and Ringland Road) are predicted to reduce significantly, except for Costessey Lane where the predicted reduction is relatively small in 2032 and traffic levels are predicted to increase by 2% in the DS scenario.

7.1.12 Low Road provides an alternative route into the west of Norwich that avoids the A1067. Traffic levels are predicted to significantly decrease on this route with the NDR in place.

7.1.13 Further out from Norwich however, traffic levels are predicted to increase significantly on the C167 through Weston Longville and slightly on the C173 between Lenwade and Hockering with the NDR in place. Presently the flows on this route are significantly lower than any of the parallel routes compared in Table 7.1 reflecting the character of this route through Weston Longville where it is a single file lane.

7.1.14 To address existing HGV problems on routes between the A1067 and the A47(T), a route is presently being upgraded to accommodate such traffic. This route runs from Lenwade and uses the C173 in the north and the C167 Wood Lane in the south. Additional traffic management and / or signage should be used to encourage all traffic onto this improved HGV route to avoid Weston Longville and Hockering in future years; the HGV improvements thereby also being a solution to any increase in traffic on these two routes due to NDR.



Figure I.3 AADT Traffic Flows Wensum Valley Section

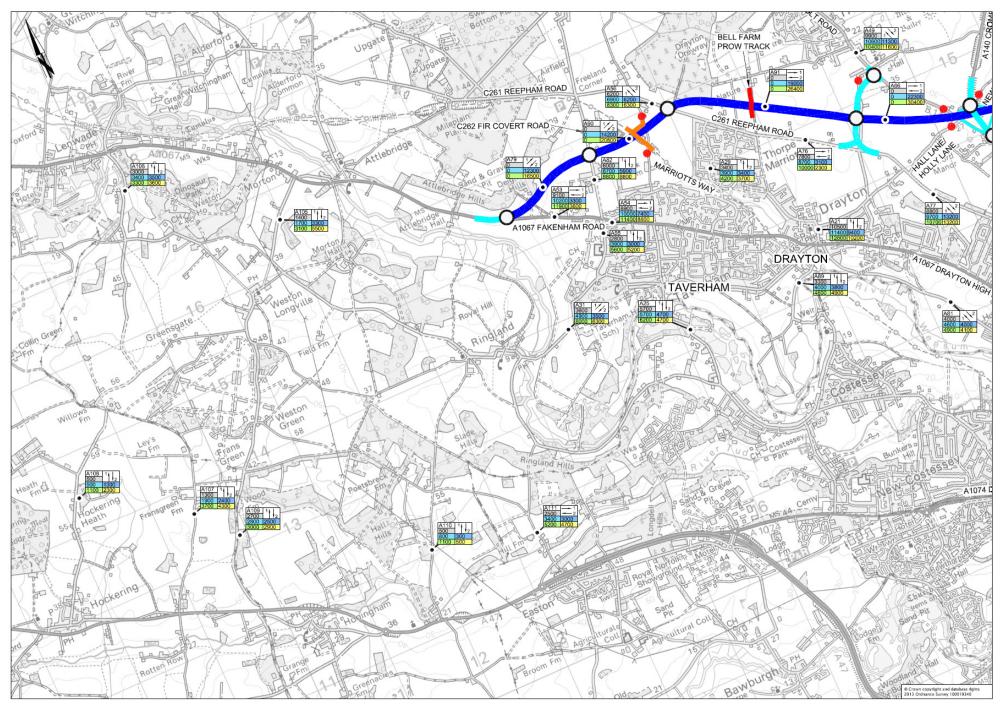




Table I.1: Base Year Peak Hour Flows (Vehicles) – Wensum area only

		Base					
Location	Movements (1/2)	AM	AM		IP		
		1	2	1	2	1	2
A25	NB/SB	210	380	180	170	370	230
A31	NEB/SWB	140	310	90	100	270	140
A55	NB/SB	100	240	80	80	210	100
A81	NWB/SEB	90	470	120	150	260	160
A89	NB/SB	170	160	110	110	140	200
A105	NB/SB	50	60	40	50	80	120
A106	NB/SB	140	160	100	90	180	150
A107	NB/SB	100	110	30	50	110	60
A108	NB/SB	40	10	10	10	20	40
A109	NB/SB	130	160	110	80	30	150
A110	NB/SB	20	0	0	30	10	30
A111	NB/SB	80	170	50	80	250	140

Table I.2: 2017 DM Peak Hour Flows (Vehicles) – Wensum area only

		2017 DM						
Location	Movements	AM		IP		PM		
	(1/2)							
		1	2	1	2	1	2	
A25	NB/SB	210	370	180	180	350	230	
A31	NEB/SWB	220	330	120	160	360	250	
A55	NB/SB	210	240	100	120	290	160	
A81	NWB/SEB	120	390	170	180	290	200	
A89	NB/SB	190	180	140	120	200	210	
A105	NB/SB	50	90	50	50	120	130	
A106	NB/SB	210	160	110	100	160	120	
A107	NB/SB	130	130	50	70	150	110	
A108	NB/SB	40	20	10	20	20	40	
A109	NB/SB	120	190	110	90	30	130	
A110	NB/SB	20	0	20	20	100	10	
A111	NB/SB	160	160	80	120	330	160	



Table I.3: 2017 DS Peak Hour Flows (Vehicles) – Wensum area only

		2017 DS						
Location	Movements	AM		IP		PM		
	(1/2)							
		1	2	1	2	1	2	
A25	NB/SB	170	280	150	150	290	190	
A31	NEB/SWB	130	240	90	110	260	170	
A55	NB/SB	110	210	70	100	220	140	
A81	NWB/SEB	60	400	130	170	260	180	
A89	NB/SB	240	150	130	100	220	200	
A105	NB/SB	180	180	120	110	150	190	
A106	NB/SB	200	160	110	110	180	170	
A107	NB/SB	50	160	90	100	140	70	
A108	NB/SB	160	40	30	20	80	120	
A109	NB/SB	130	160	80	80	60	150	
A110	NB/SB	20	0	0	20	0	20	
A111	NB/SB	120	160	70	110	250	140	

Table I.4: 2032 DM Peak Hour Flows (Vehicles) – Wensum area only

		2032 DM						
Location	Movements (1/2)	AM		IP		PM		
		1	2	1	2	1	2	
A25	NB/SB	230	390	200	190	350	240	
A31	NEB/SWB	380	500	230	290	460	430	
A55	NB/SB	280	280	170	200	360	250	
A81	NWB/SEB	170	380	170	200	320	240	
A89	NB/SB	180	230	170	150	210	250	
A105	NB/SB	70	170	90	110	110	230	
A106	NB/SB	200	160	130	90	200	120	
A107	NB/SB	230	270	120	130	200	240	
A108	NB/SB	90	70	20	20	110	60	
A109	NB/SB	120	170	70	100	40	180	
A110	NB/SB	10	10	80	0	50	0	



A111	NB/SB	260	210	210	160	420	230

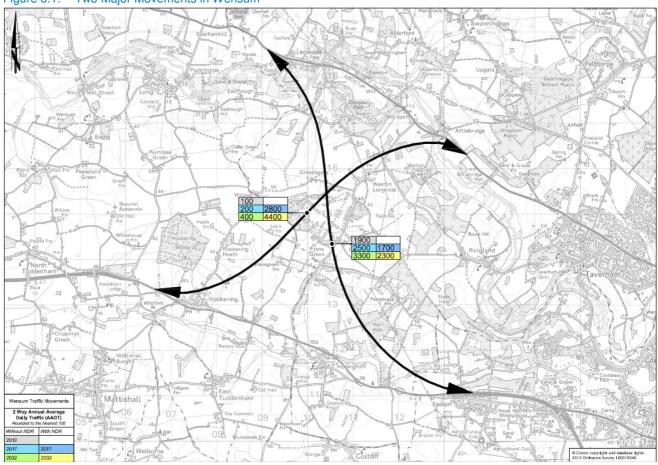
Table I.5: 2032 DS Peak Hour Flows (Vehicles) – Wensum area only

		2032 DS						
Location	Movements	AM		IP		PM		
	(1/2)							
		1	2	1	2	1	2	
A25	NB/SB	150	280	160	150	280	170	
A31	NEB/SWB	470	370	150	180	450	340	
A55	NB/SB	370	280	130	150	390	280	
A81	NWB/SEB	90	350	130	180	250	220	
A89	NB/SB	240	240	160	150	250	260	
A105	NB/SB	310	150	220	180	240	260	
A106	NB/SB	190	160	120	130	210	190	
A107	NB/SB	250	260	140	150	210	140	
A108	NB/SB	130	160	50	60	180	220	
A109	NB/SB	140	160	100	90	70	170	
A110	NB/SB	20	10	40	10	30	0	
A111	NB/SB	230	200	140	160	370	230	



## 6.2 Appendix B – Major Movements in Wensum

Figure 6.1: Two Major Movements in Wensum



## 6.3 Appendix C – Proposed TM Plan and its Impact



Figure 6.2: Proposed Traffic Management Plan

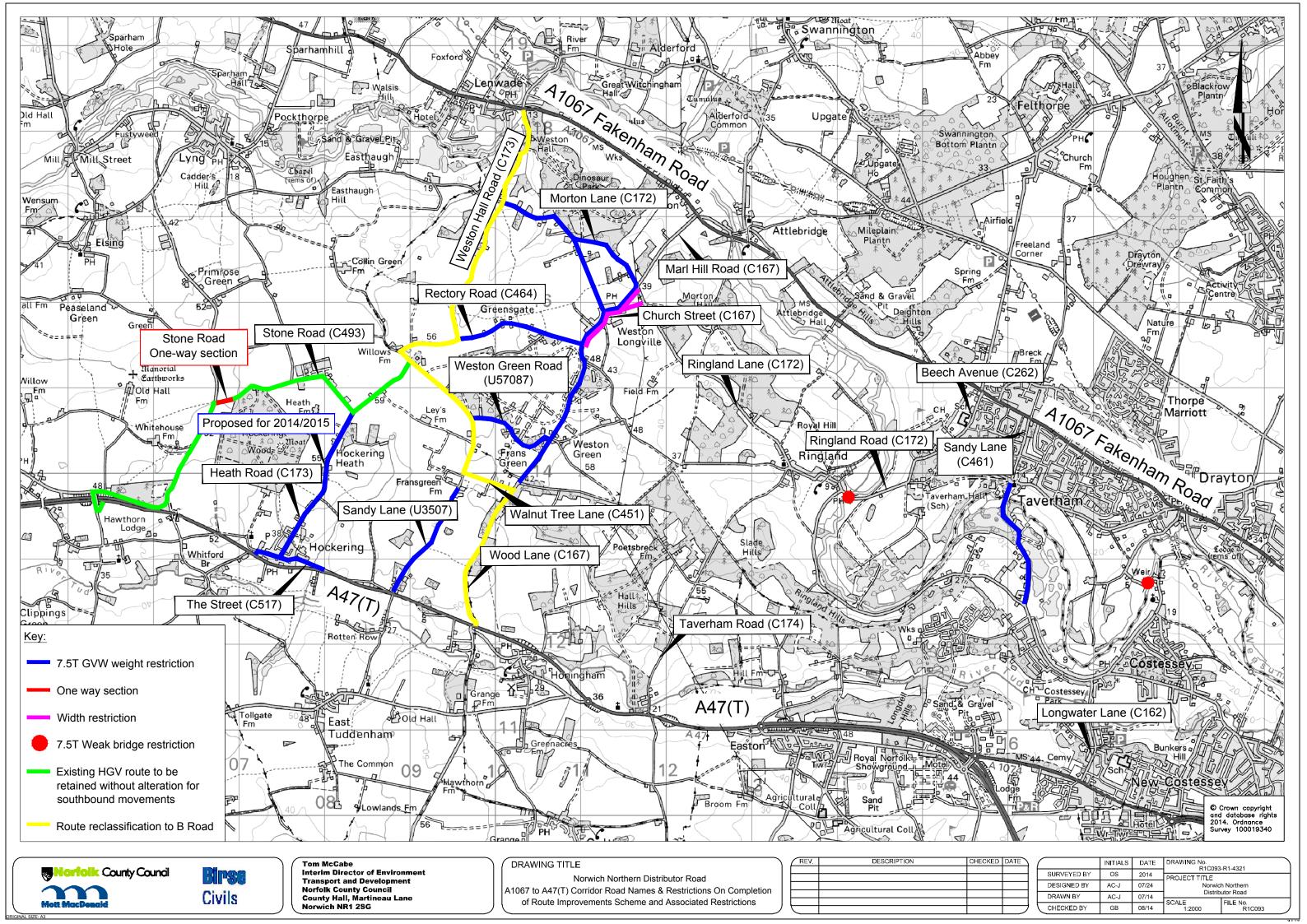




Figure 6.3: Traffic in Wensum Valley after TM

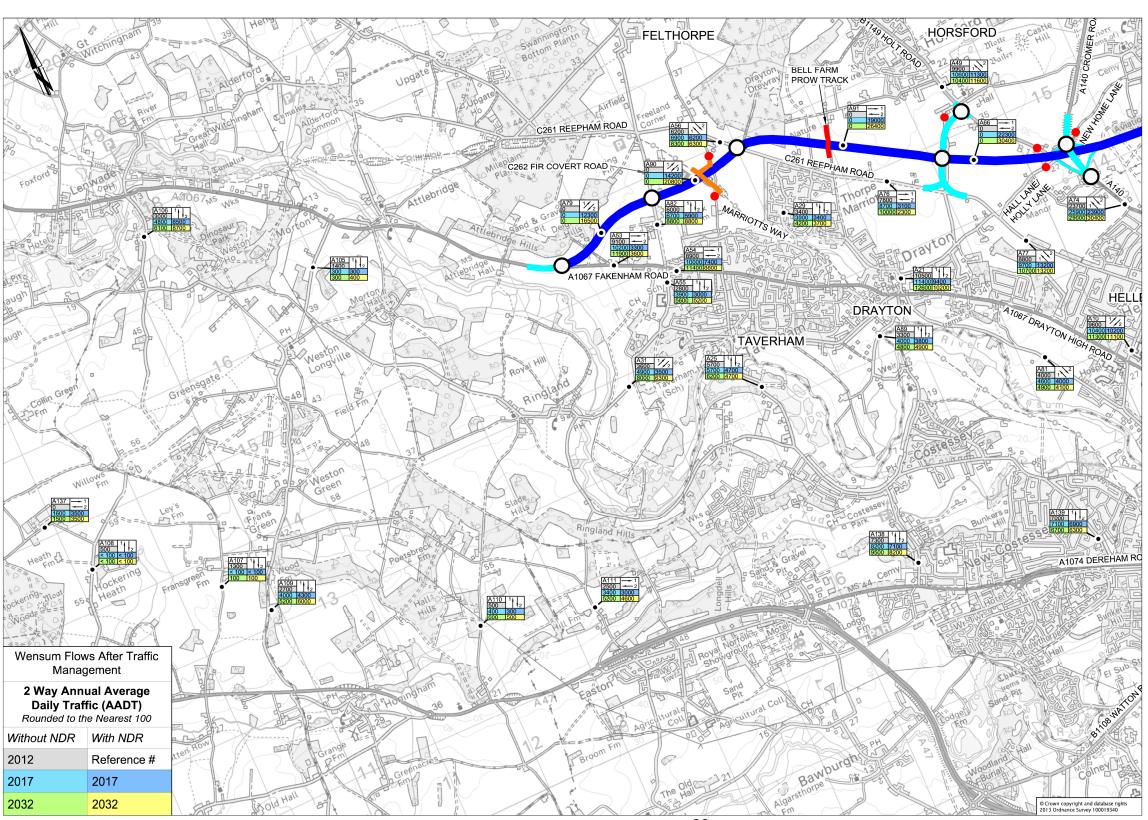
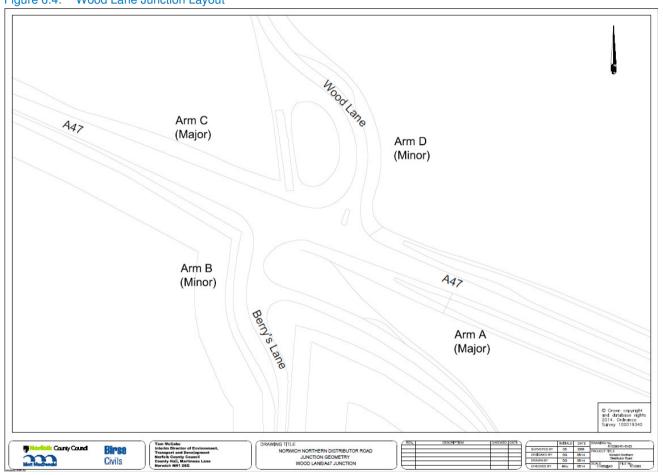


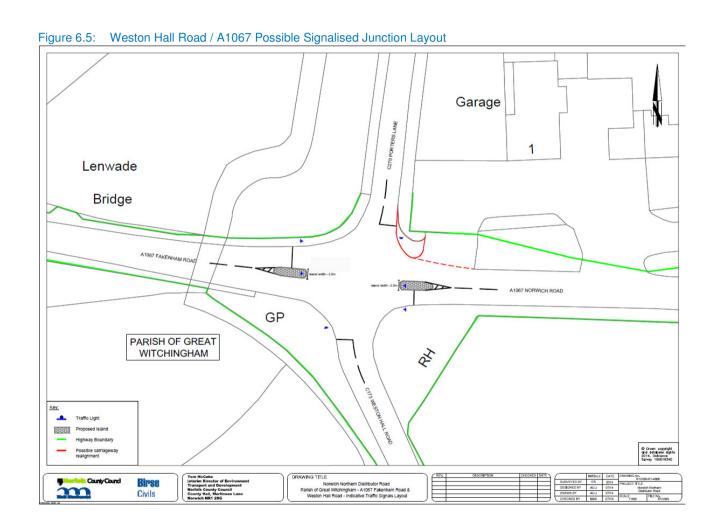




Figure 6.4: Wood Lane Junction Layout









#### 7 Abbreviations

AADT	Annual Average Daily Traffic
ARCADY	Assessment of Roundabout Capacity and Delay software
AST	Appraisal Summary Table
ATC	Automatic Traffic Count
B1/B2/B8	Development categories: business (including office) / general industrial / storage and distribution
BAFB	The Best And Final funding Bid submitted by Norfolk County Council to the Department for Transport in 2011 for the combined Postwick and NDR schemes
BCIS	Building Cost Information Service
BCR	Benefit Cost Ratio
BGBP	Broadland Gate Business Park development
COBA	Cost Benefit Appraisal – software released by the Department of Transport that has been used to undertake an accident appraisal
DfT	Department for Transport
DIADEM	Dynamic Integrated Assignment and Demand Modelling - software released by the Department for Transport
DM	Do Minimim
DMRB	Design Manual for Roads and Bridges – a Highways Agency publication setting out guidance and good practice for design and appraisal of road schemes
DS	Do Something
EB	Employer's Business
GAP	Minimum gap (in seconds) accepted by a vehicle which gives way at priority junctions or traffic signals. Also a measure of Wardrop equilibrium assignment convergence
GAPR	As GAP above in relation to junctions but for entry onto roundabouts
GDP	Gross Domestic Product
GEH	A comparison statistic named after GE Havers
GIS	Geographic Information System - designed to capture, store, manipulate, analyse, manage, and present all types of geographical data
GNDP	Greater Norwich Development Partnership
GPS	Global Positioning System
GVA	Gross Value Added
НА	Highways Agency
НВ	Home Based (trips)
HBEB	Home Based Employers' Business (trips)
НВО	Home Based Other (trips)
HBW	Home Based Work (commuter trips)
HGV	Heavy Goods Vehicle
IP	Inter-peak



## Norwich Northern Distributor Road Application for Development Consent Order

JT	Journey Time
JCS	Joint Core Strategy
JTR	Journey Time Reliability
LGV	Light Goods Vehicle
LINSIG	Traffic signal analysis software
LMVR	Local Model Validation Report
MCC	Manual Classified Count (for a link)
MCTC	Manual Classified Turning Counts
ME	Matrix Estimation
NATS	Norwich Area Transportation Strategy
NCC	Norfolk County Council
NDR	Norwich Northern Distributor Road
NHB	Non-Home Based (trips)
NHBEB	Non-home-based Employer's Business
NHBO	Non-home-based Other
NPV	Net Present Value – given by subtracting the Present Value Costs (PVC) from Present Value Benefits (PVB)
NTEM	National Trip End Model – a database containing trip-end, journey mileage, car ownership and population/workforce planning data
NTM	National Transport Model
NTS	National Travel Survey
OD	Origin Destination
OE	Other Externalities
OGV	Other Goods Vehicle (sometimes called HGV)
OGV1	A sub-category of OGV. Includes all rigid vehicles over 3.5 tonnes gross vehicle weight with two or three axles
OGV2	A sub-category of OGV. Includes all rigid vehicles with four or more axles and all articulated vehicles
OP	Off-peak
PA	Production Attraction
PCU	Passenger Car Unit
PDL	Previously Developed Land
PG	Planning Gain
PIA	Personal Injury Accident
PPK	Pence Per Kilometre
PPM	Pence Per Minute
PT	Public Transport
PVB	Present Value Benefits – the stream of benefits over the appraisal period (60 years) that are converted to 2010 prices and discounted to 2010 to give a 'present value'
PVC	Present Value Costs – the costs of the scheme over the construction period as well as maintenance and operational costs that are converted to 2010 prices and discounted to 2010 to give a 'present



## Norwich Northern Distributor Road Application for Development Consent Order

	value'
PYV	Present Year Validation
P&R	Park and Ride
QRA	Quantified Risk Assessment
RFC	Ratio of Flow to Capacity
RPI	Retail Price Index
RSI	Road Side Interview
RTF	Road Transport Forecasts
SATME2	Matrix estimation module of the SATURN software
SATURN	Simulation – Assignment model of Traffic on Urban Road Networks software
SRN	Strategic Road Network
TA	Transport Assessment
TEC	Transport Externality Cost
TRADS	Traffic flow Data System - the Highways Agency's database of traffic count data
TRICS	National Trip Generation database
TEMPRO	Trip End Model presentation Program is software released by the Department for Transport to allow detailed analysis of NTEM data
TUBA	Transport User Benefit Appraisal – software released by the Department for Transport that is used to assess transport user benefits of transport schemes
VDM	Variable Demand Modelling
VfM	Value for Money
VISUM	Transport modelling software used (in this case) for public transport modelling
VOC	Vehicle Operating Costs
VOT	Value Of Time
WEBs	Wider Economic Benefits
WebTAG	Web-based Transport Appraisal Guidance produced by the Department for Transport
WITA	Wider Impacts in Transport Appraisal
•	



## 8 Glossary

Assignment	A process of loading a trip matrix onto routes through a network that accounts for travel costs on the network in identifying the optimum route choice for every trip
Buffer network	The external part of a highway network in which travel is represented by speed/ flow relationships or cruise speeds
Calibration	A process of adjusting the model input data or model parameters to improve the model and its validation
Convergence	An equilibrium between model outputs, in assignment between the flows and travel costs and in demand models between the demand and the costs from the supply model
Cost matrix	A table of travel costs for journeys that may include travel time, operating costs and charges such as tolls or fares
Cruise speeds	Average travel speed along a network link
Demand model	See variable demand model
Demand segment	Travel demand is divided into a number of segments for the purposes of applying different demand modelling procedures. The division is usually by trip purpose and whether the trips are home-based or non-home-based
DMRB	Design Manual for Roads and Bridges – a Highways Agency publication setting out guidance and good practice for design and appraisal of road schemes
Dependent development	Housing or commercial development that can only proceed with the implementation of a transport intervention
Discounting	Discounting is a technique used to compare costs and benefits that occur in different time periods. It is based on the principle known as time preference that people prefer goods and services now rather than later. This preference for goods and services now rather than later applies to both individuals and society. By applying a discount rate, streams of costs and benefits are reduced to their present values.
Do Minimum	The forecast scenario without the proposed transport scheme, but that includes committed transport network improvements and developments
Do Something	The Do Minimum network but with the proposed transport scheme and developments added
Generalised cost	A combination of time and money costs (operating costs and charges) that are expressed in time or money units which are used to represent the total travel costs for a journey within the assignment or demand models
Journey purpose	Trips are divided into different travel purposes, usually work (or commute), employers' business and other. These trip purposes have different generalised costs applied and different demand model responses
Matrix estimation	A process used to adjust an initial or 'prior' matrix so that the resulting assignment of the adjusted matrix matches count data as closely as possible
Network	A mathematical representation of a transport network in a supply-side assignment model, either a highway network which represents vehicle travel, or a public transport network that represents bus and rail services
Speed / flow relationships	Relationship between traffic speed and traffic flow on a network link



## Norwich Northern Distributor Road Application for Development Consent Order

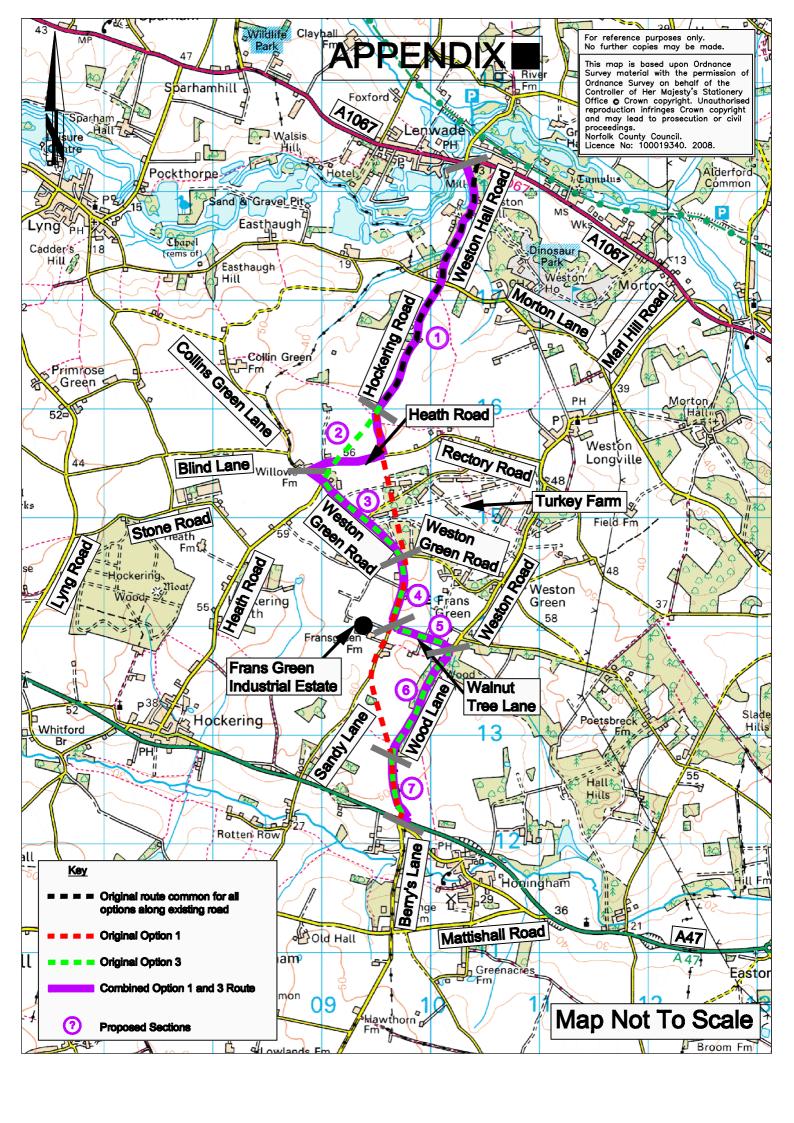
Reference trip matrix	A forecast reference matrix based on applying growth from national (or other) datasets, but before the application of adjustments due to the impact of how travel costs will change with growth in travel
User classes	Trips are aggregated into several user classes for the purposes of assignment. These usually represent different types of vehicle (e.g. car, HGV) and different trip purposes
Trip matrix	A table representing travel in a model area between land areas or zones
Validation	A process of comparing the model data with independent data
Variable demand modelling	A model that forecasts changes in travel behaviour such as trip frequency, choice of mode, time of travel and trip distribution
Zone	An area of land or development which is used in a transport model to aggregate individual households or commercial premises into a manageable number of units that can be used to represent journey patterns in the study area. Usually the zone size will be relatively small in the study area, but progressively larger further away from it.



## Appendix L



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## Appendix M



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# Norwich Area Transport... Have your say



The closing date for responding is 13 December 2003







www.norwichareatransport.org



## County Councillor Adrian Gunson Cabinet member for Planning and Transportation

Thank you for taking the trouble to read this consultation document.

Norfolk County Council is reviewing the existing Norwich Area Transportation Strategy (NATS), together with Broadland District Council, Norwich City Council and South Norfolk Council. We have already done some consultation with local organisations and others and they have given us useful comments. We now have a Preferred Strategy for the future and would like your views on it.

The new Strategy will be important for making future decisions about all aspects of transport in the city area, including a possible new Northern Distributor Road and improvements to the junctions on the inner and outer ring roads. The Strategy will be vital to sustaining the local economy and providing employment opportunities over a wide area of Norfolk.

I know that many of you, who live, work in or visit Norwich, have strong views about parking, congestion and passenger transport services. There are also many people living in the northern suburbs whose lives are affected by the volume of traffic there.

This is your chance to influence the difficult decisions your elected representatives have to make, so please do let us know what you would like to see happen.

This consultation document sets out issues for the future of transport in the Norwich area and asks for your views on a Preferred Strategy. There is questionnaire with this booklet and a freepost reply envelope is included.

The results of the consultation will be reported to Councillors in early 2004, when they will consider how the Strategy should be updated. The results of this consultation will be publicised at the same time.

There is much more information about transport in Norwich than we have been able to give in this booklet. You can find out more by coming to one of our meetings or exhibitions, by visiting our website <a href="https://www.norwichareatransport.org">www.norwichareatransport.org</a> calling the helpline or e-mailing us. Full details of the meetings are given on page 15.

If you have any questions about this consultation, or want more copies of this document, call our helpline on 01603 223113 or e-mail norwich.transport@norfolk.gov.uk.

Thank you for taking the time to read this booklet and respond to the consultation - your views are important to us.

Please read the booklet and then complete the enclosed questionnaire.

The closing date for responding is 13 December 2003

## A Transport Strategy for Norwich

We are consulting on a new Transport Strategy for the Norwich Area. This will be a framework for making decisions about transport in Norwich up to 2025, with more detailed proposals for the period up to 2016.

The current strategy was adopted in 1997. Since then, there have been many changes such as new government policies and priorities for transport and significant change and growth in the Norwich area. The strategy therefore needs updating, and we will build on the success we have achieved so far.

#### Some successes of the current strategy:

- The number of people travelling by bus has increased
- Park and Ride is growing more popular
- Fewer people are hurt or killed in road accidents
- There is a high level of walking and cycling, compared to national levels

#### The challenges we face

- · Congestion and slow journey times in built up areas
- Reliability and availability of bus services
- Problems caused by traffic including nuisance to residents, busy roads and poor air quality
- Population growth and new housing development there could be in the region of 30,000 new homes in the Norwich area by 2025
- Increasing economic growth and prosperity in the future
- Access to Norwich International Airport
- Making it easier for people to get around

#### Our proposals

We have set out a Preferred Strategy and are asking for your views on it. The strategy is set out in more detail on the following pages, but it includes:

- A new distributor road around the north of Norwich linking with the trunk road network
- A new bus station and improved links between the bus and rail stations
- Improving bus, rail and other passenger transport
- An additional Park and Ride site in either Drayton or Taverham
- Road safety measures, such as in residential areas of the city
- Addressing pollution in Air Quality Management Areas
- Greater education, encouragement and enforcement measures
- Giving priority where it is most needed (for example where there is high pedestrian / vehicle conflict)
- Improving the efficiency of the road network by making better use of the computerised urban traffic control system
- Traffic management measures to reduce through traffic in the city centre, residential side streets and on suburban and rural roads around the north of Norwich

We are also asking for your views on road user or workplace parking charges in the city centre.

All of these are closely linked and the transport strategy will be a complex document. You can read more about the links on our website.

## The Preferred Strategy

#### Northern Distributor Road - see pages 10-14

This is a new road to distribute traffic around the north of Norwich and link with the A47 and A11 trunk roads. This, together with enforcement measures where necessary, will help to stop traffic using unsuitable suburban and rural roads and reduce congestion on other main roads. There is more detail on these other measures on page 6.

A Northern Distributor Road will also help the economy by providing access to the main road network and key employment locations in North Norfolk, improving access to the airport (which will sustain it as a regional airport) and providing access to existing and potential housing developments in the north of Norwich. Balanced against this is the impact on the environment of any new road - particularly where it crosses the river valleys west of Norwich.

#### Question 1 - please answer on the questionnaire:

1 Would you like to see a Northern Distributor Road for Norwich?

We are also asking for your views on which combination of routes you would like (see Question 9 on page 13). To help you decide, we have given more information on the Northern Distributor Road in the second half of this booklet, after the map. We have also included a table showing the likely effect on traffic flows on page 14.

#### Greater education, encouragement and enforcement

These measures would help to tackle some of the current problems in the Norwich area and would include:

- Publicity to increase travel choice for example for those who cannot afford to drive or do not use a car
- Education measures to help people think about how they travel, and so reduce congestion and pollution
- Greater enforcement of parking and speeding laws to keep traffic moving and make the area safer

#### Question 2 - please answer on the questionnaire:

2 Do you support education, encouragement and enforcement measures?



#### **Changing priorities**

Under the existing strategy, the needs of pedestrians are given priority when we look at new schemes. The needs of non-essential traffic are considered last. This is shown below.

#### **Existing priorities**

- Walking
- Cycling
- Public Transport
- Taxis
- Essential motor vehicles (including goods vehicles) and motorbikes and scooters
- Non-essential motor vehicles



We could be more flexible, to help us make decisions about what is best in particular circumstances - for example, giving traffic priority on main roads, putting the needs of residents first in residential areas and giving pedestrians priority in the city centre.

Questions 3a and 3b - please answer on the questionnaire: 3a Do you support the current order of priorities? 3b If not, do you support a more flexible order of priorities?

#### Improving traffic flow on main roads

Congestion and slow journey times are major problems in the Norwich area, resulting in higher journey cost and increased air pollution. The Preferred Strategy includes measures to improve main roads. These measures could help keep traffic moving:

- Improving the inner and outer ring road junctions to improve traffic-flow
- Making better use of the computerised traffic light system

#### Improving bus, rail and other passenger transport in the Norwich area

The current availability and reliability of buses has been identified as a major problem. The Preferred Strategy includes measures to help, including a new bus station in the city centre and better bus links between the rail and bus stations. Our proposals for traffic management in the city centre will also help buses avoid being held up in congestion and we will look at how we can make bus travel more attractive and convenient.

An additional Park and Ride site along the Drayton/Taverham corridor is proposed. (Park and Ride is where car drivers park on the outskirts of the city and take a bus into the centre.)

We are also looking into the merits of a new train station and also light rail (trams). A new train station near Dussindale could serve existing and potential new housing. Studies show that light rail could also be a longer-term option for Norwich, although more work needs to be done on its feasibility, including looking at the cost and likely numbers of passengers.

Questions 4a, 4b, 4c and 4d - please answer on the questionnaire

4a Do you support improving traffic flow on the road network?

4b Do you support improving bus, rail and other passenger transport?

4c Do you support building a new Park and Ride site along the Drayton/Taverham corridor?

4d Do you support introducing trams in the longer term, if they are feasible?

#### Measures to reduce through traffic

In parts of the Norwich area, through traffic can cause many problems including noise, pollution and accidents. The Preferred Strategy recognises that there are localised severe problems and that access restrictions like closing roads to traffic may be appropriate. Access for residents and others, such as delivery vehicles, would be maintained.

The knock-on effect of these restrictions would be to displace traffic on to other, already congested roads. This means that access restrictions could only be introduced as other road improvements (particularly a Northern Distributor Road) are completed.

The Preferred Strategy therefore includes access restrictions in the following areas:

- Suburban and rural roads in the north of the city these would have to be co-ordinated with the phased introduction of other improvements under the overall strategy.
- Access restrictions on some residential side streets across the city.

Questions 5a and 5b - please answer on the questionnaire:
5a Do you support access restrictions on roads around the north of Norwich?
5b Do you support access restrictions on residential side streets?



#### Traffic management

In Norwich city centre, several busy roads split the main shopping area. The centre could be made more attractive to shoppers and other visitors if traffic was managed so that the area was better for pedestrians. These improvements would also make the city look more attractive - for example as Queen Street does, following the recent work there.

We suggest carrying out a limited number of road closures and other measures to begin with. In the longer term, the Preferred Strategy is to stop through traffic in the city centre. Studies show that 19,000 vehicles cross the centre of Norwich each day without stopping.

This traffic does not bring any benefit in terms of trade, but it adds to congestion and pollution for pedestrians and for drivers who do have business in the city.

Stopping through traffic could be achieved by a system called 'ring and loop'. This means that vehicles can come into the city centre to use car parks, pick up and put down, or make deliveries, but they must leave again at or near the point they came in. Vehicles will not be allowed to drive straight through the city centre.

Questions 6a and 6b - please answer on the questionnaire:

6a Do you support small-scale traffic management changes in Norwich city centre?
6b Do you support stopping traffic driving straight through the city centre?

#### Road user or workplace parking charging

We are asking for your views on introducing road user or workplace parking charges.

Congestion charging - where motorists pay a charge to enter the city - has recently been introduced in London. Many cities have been watching what happens with interest.

We would like to know if you support the idea of a similar system in Norwich. For example, vehicles could be charged to enter the city centre, inside the inner ring road.

Another option is charging for workplace parking. This is a charge for private non-residential spaces, like those used by businesses for their workers.

Any money made from charging would be used to help pay for implementing the Preferred Strategy.

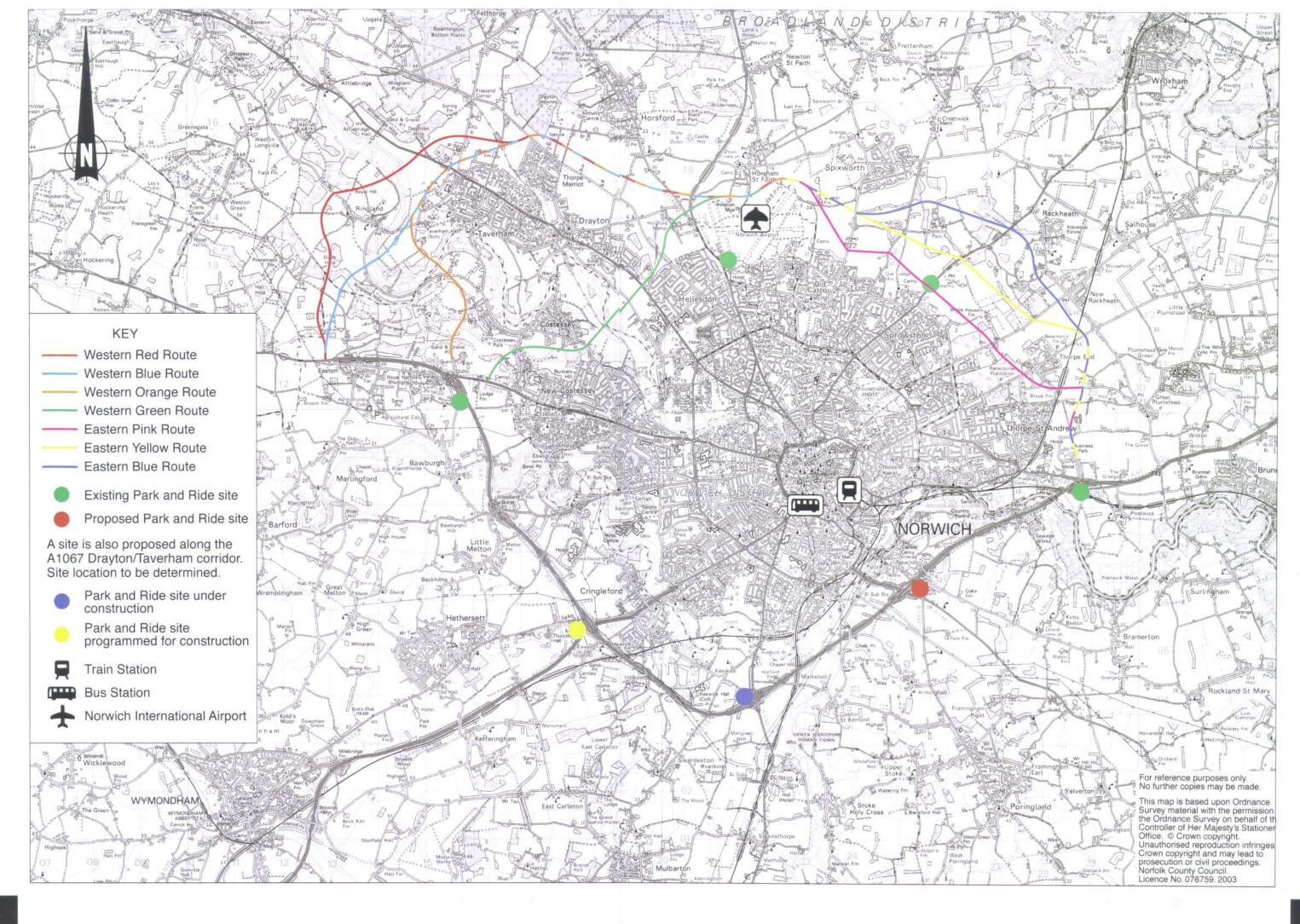
Questions 7a, 7b, 7c and 7d - please answer on the questionnaire:

7a Do you support road user charging within 5 years?

7b Do you support road user charging within 5 to 10 years?

7c Do you support charging for workplace parking within 5 years?

7d Do you support charging for workplace parking within 5 to 10 years?



## A Northern Distributor Road for Norwich

We need to know whether you support a Northern Distributor Road for Norwich.

If you do, we also need to know which route you prefer. There are four possible routes on the west, and three on the east.

#### The Options

#### Western Red Route

Leaves the A47 at a new junction to the west of the Easton roundabout, progressing northwards over the River Tud and then northeasterly over the River Wensum. Passes to the north of Taverham and Drayton, running easterly to join the A140 to the northeast of the airport to join any of the eastern routes.

#### Western Blue Route

Leaves the A47 at a new junction to the west of Easton roundabout and quickly runs northeasterly over the rivers Tud and Wensum. Joins the western red route just northwest of Fir Covert Road, running easterly to join the A140 to the northeast of the airport to join any of the eastern routes.

#### Western Orange Route

Goes north from the roundabout at Longwater Business Park. Crosses the River Tud and turns northwesterly towards Ringland Hills and the Wensum before joining the western blue route to the west of Taverham. Passes to the north of Taverham and Drayton, running easterly to join the A140 to the northeast of the airport to join any of the eastern routes.

#### Western Green Route

Leaves the A1074 at a new junction near Lodge Farm and then runs northeasterly to cross the River Tud. Continues northeast between Old and New Costessey to the A140, just north of its junction with the B1149, before joining the other western routes to the north of the airport to join any of the eastern routes.

#### **Eastern Blue Route**

Progresses north from the A47 Broadland Business Park. Passes historic parkland and the west of Rackheath before turning westerly to pass to the south of Spixworth to join any of the western routes to the north of the airport.

#### **Eastern Yellow Route**

Leaves the eastern blue route where it crosses the Plumstead Road northeast of Thorpe End. Carries on northwesterly to link with the eastern blue route at Spixworth road, south of Spixworth, to join any of the western routes to the north of the airport.

#### **Eastern Pink Route**

Leaves the eastern blue route at its intersection with Middle Road (which leads to Great Plumstead). Follows that road westerly to the west of Thorpe End, then northwest crossing the Wroxham Road next to the park and ride site, before joining any of the western routes to the north of the airport.

#### What would be the effects of a Northern Distributor Road?

A Northern Distributor Road is a major part of our Preferred Strategy, and would provide significant reductions in the amount of traffic using many city roads. It could be built in stages.

There will also be substantial road safety benefits as a result of transferring traffic from congested roads in the northern suburbs and surrounding rural lanes and villages, on to a modern purpose built road. There could be a reduction in the annual number of casualties of between 40 and 60, depending on the type of road built. There will also be significant benefits to residential properties - including reductions in noise and better air quality. A summary of the likely changes to traffic volumes on some existing roads is shown on page 14. However, any new road will have a significant impact on the environment. We carried out an Environmental Assessment, and used the results together with other considerations to select the routes for consultation.

All routes will affect properties and communities that they pass near to, for example, increased noise and visual impacts.

If a Northern Distributor Road is built, we will include measures to reduce the impact on the environment and on properties.

On the following page is a summary of factors to consider, and the environmental impacts of each route, to help you make your choice.



#### The Western Red Route

- Best route between A47 and A1067, avoiding country lanes and villages, e.g. Costessey
- Provides relief to A1067 through Taverham and Drayton
- Impact on the landscape
- Impact on Wensum Valley and floodplain
- Impact on River Tud

#### The Western Blue Route

- Good route between A47 and A1067, avoiding country lanes and villages, e.g. Costessey
- Provides relief to A1067 through Taverham and Drayton
- · Impact on ecology
- · Impact on Wensum Valley and floodplain
- Impact on River Tud

#### The Western Orange Route

- Provides relief to A1067 through Taverham and Drayton
- Impact on the landscape and ecology
- Impact on Wensum Valley and floodplain
- Impact on River Tud
- Complex link with A47 at Longwater junction.

#### The Western Green Route

- Impact on the landscape and ecology
- Impact on Wensum Valley and floodplain
- Impact on River Tud
- Divides New and Old Costessey
- Complex link with A47 at Longwater junction.

#### The Eastern Blue Route

- Impact on the landscape
- Impact on historic parkland

#### The Eastern Yellow Route

- Impact on the landscape
- Impact on historic parkland

#### The Eastern Pink Route

Impact on the landscape

For more information about the Environmental Assessment please contact the Norwich Area Transport helpline on 01603 223113, visit our web site at <a href="https://www.norwichareatransport.org">www.norwichareatransport.org</a> or e-mail us at norwich.transport@norfolk.gov.uk.

#### **Dual or Single carriageway?**

At this stage, we cannot say whether the road would be a dual or single carriageway. This will depend on the final strategy. Under the Preferred Strategy, it is likely that a dual carriageway will be justified.

We would aim to build any road close to existing ground level where possible. This will help to reduce environmental impacts and will reduce earth moving and construction costs.

Crossing the river valleys will be our biggest problem. We will need to build bridges over the rivers and may consider a viaduct over the Wensum Valley - the careful design of these features will be very important.

The number and type of junctions will also depend on the final strategy. At present, it is likely that we would build ground level junctions at most locations.

## Question 9 - please answer on the questionnaire:

9. Which route do you prefer? Choose one Western and one Eastern route.



# **Traffic Flow** .⊑ Changes

Key

This table shows the likely changes in traffic flows (morning peak flow) in	Increase in Traffic Flows 6 - 10%	fic Flows 6 - 1	%01	
2001) as a result of building a Northern Distributor Road as part of the	No significant change (ie within 5%)	hange (ie wit	thin 5%)	
preferred Strategy.	Reduction in Traffic Flows 6 - 10%	affic Flows 6	- 10%	
It shows the changes expected for each Western route combined with any	Reduction in Traffic Flows 10 - 25%	affic Flows 10	0 - 25%	
Eastern route (changes would be the same whichever eastern route is chosely the changes and the changes are all outside the Outer Ring Road.	Reduction in Traffic Flows 25 - 50%	affic Flows 25	2 - 50%	
For the A1067 Drayton Road, 2 locations are shown to indicate the different	Reduction in Traffic Flows over 50%	affic Flows or	ver 50%	
effects of the Western Green route				
	Western Red   We	Western Orange V	Western Green	Western Blue
Radial Routes				
A1074 Dereham Road Between Longwater Lane & Bowthorpe Roundabout				
A1067 Drayton Road (east of western green route) Between Middleton's Lane & Low Road				
A140 Cromer road Between Middleton's Lane and Holt Road				
B1150 North Walsham Road Between Allen's Lane & Barker's Lane				
A1151 Wroxham Road Between Blue Boar Lane & A47 Southern Bypass				
A1042 Yarmouth Road Between Old Chapel Way & Broadland Way				
A146 Trowse Bypass Between Martineau Lane & A47 Southern Bypass				
A140 Ipswich Road Between B1113 Norwich Road & Hall Road				
A11 Newmarket Road Between Thickthorn Roundabout & Cringleford				
B1108 Watton Road Between A47 & Hethersett Lane				
Inner Ring Road				
Grapes Hill Between Convent Road & Dereham Road				
Queen's Road Between All Saints Green & St Stephens Street				
Outer Ring Road				
Boundary Road Between Whiffler Road & City View Road				
Martineau Lane Between Trowse Bypass and Bracondale				
Northern Suburbs				
Hellesdon Road at Bridge over the River Wensum				
Middleton's Lane Between Reepham Road & Woodland Road				
White Woman lane Between Spixworth Road & North Walsham Road				
Church Lane Between Barker's Lane Roundabout and A1151 Wroxham Road				
Northern Rural				
Ringland Road Between Church Lane & Costessey Lane				
Spixworth Road Between Coltishall Lane & Buxton Road				
Church Road Between Great Plumstead & A47 Yarmouth Road				

## Here's how you can take part in this important consultation...

#### Read the booklet and return your completed questionnaire

Post it (no stamp needed) using the enclosed envelope, or to the address on the questionnaire. You may also hand it in at one of the public meetings or exhibitions (see below).

Visit our website, where you can also respond on-line

www.norwichareatransport.org to find out more.

#### Come to a public meeting - these are open to all

1. University of East Anglia, Earlham Road

2. County Hall, Martineau Lane

3. Hilton Hotel, (Norwich International Airport)

4. Horsford Village Hall, Horsford

5. Thorpe End Village Hall, Plumstead Road

6. Thorpe Marriott Village Hall, The Square

7. Costessey High School, Middleton Crescent

8. Thorpe St Andrew School, Laundry Lane

9. Norwich Rugby Football Club, North Walsham Road Thursday 13th November

10. The Assembly House, Theatre Street

All meetings begin at 7.30pm and are expected to finish by 9.30pm.

All venues are wheelchair accessible and there will be a loop system at meetings.

#### Visit our mobile exhibition

11. Tesco, Blue Boar Lane, Sprowston

12. Asda, Boundary Road, Hellesdon

13. Budgens, Fakenham Road, Drayton

14. Sainsbury's, Pound Lane, Thorpe St Andrew

15. Morrisson's, Koblenz Avenue, Riverside

16. Tesco, Ipswich Road

17. Waitrose, Eaton Street, Eaton

18. Roys, Bowthorpe

19. Sainsbury's Longwater

20. Homebase, Roundtree Way, Sprowston

21. B&Q, Boundary Road, Hellesdon

Thurs 9th October and Mon 10th November

Thursday 9th October

Tuesday 14th October

Wednesday 15th October

Wednesday 22nd October

Thursday 23rd October

Tuesday 28th October

Thursday 30th October

Monday 3rd November

Tuesday 25th November

Tues 14th October and Mon 3rd November

Wed 15th October and Thurs 13th November Thurs 16th October and Weds 12th November

Fri 10th October and Thurs 30th October

Mon 13th October and Tues 11th November

Wed 8th and Thurs 23rd October

Tues 7th October and Thurs 6th November Mon 20th October and Tues 4th November

Sat 18th October and Sat 8th November

Sat 11th October and Sat 25th October

All mobile exhibitions are staffed and can be visited between 10.00am - 7.00pm (Sat 4.00pm)

#### Visit our static exhibitions

22. The Forum

23. Norwich City Hall

24. County Hall, Martineau Lane

25. Broadland District Council South Norfolk District Council 6th October to 11th October

13th October to 14th November 6th October to 14th November

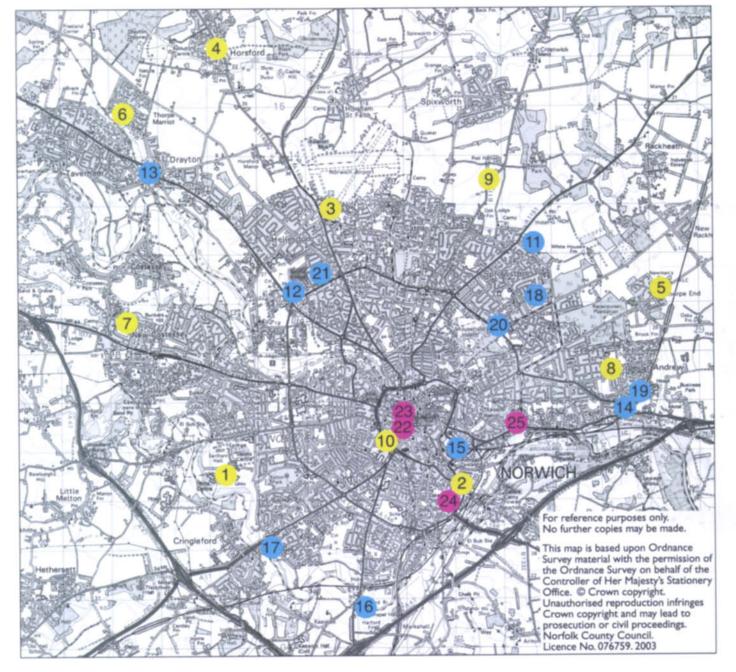
6th October to 14th November

6th October to 14th November

Council staff will be at The Forum on the 6th October to answer your questions.

See map on back page for location of venues.

The closing date for responding is 13 December 2003



Map showing where you can find out more about the Norwich Area Transport Strategy Consultation



Each venue is numbered. For details of the venue, see page 15 of this booklet.

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If you would like this document in large print, audio, Braille, alternative format or in a different language please contact communication for all the helpline on 01603 223113.

## **Norwich Area Transport Consultation Questionnaire**

1	Would you like to see a Northern  Distributor Road for Norwich?	
2	Do you support education, encourage- ment and enforcement measures?	
3a	Do you support the current order of priorities?	
3b	If not, do you support a more flexible order of priorities?	
4a	Do you support improving traffic flow on the main road network?	
4b	Do you support improving bus, rail and other passenger transport?	
4c	Do you support building a new park and ride site along the Drayton/Taverham corridor?	
4d	Do you support introducing trams, in the long term, if they are feasible?	
5a	Do you support access restrictions on roads around the north of Norwich?	
5b	Do you support access restrictions on residential side streets?	
6a	Do you support small scale traffic management measures in the city centre?	
6b	Do you support stopping traffic driving straight through the city centre?	
7a	Do you support road user charging within 5 years?	
7b	Do you support road user charging within 5 to 10 years?	
7c	Do you support workplace parking charging within 5 years?	
7d	Do you support workplace parking charging within 5 to 10 years?	

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Norfolk County Council

9 Looking at the route options for the Northern Distributor Road, which route do you prefer? Choose one Western and one Eastern route.

	Red	Blue	Orange	Green
Western route				

	Blue	Yellow	Pink
Eastern route			

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Post this questionnaire to us in the envelope provided, or freepost (no stamp needed) to:

Norfolk County Council Norwich Area Transport Strategy Planning and Transportation Freepost NC22093/8 NORWICH NB1 2BR

Remember: you can also respond online at www.norwichareatransport.org

The closing date for responding is 13 December 2003



## Appendix N



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## NORWICH AREA TRANSPORTATION STRATEGY PUBLIC CONSULTATION ANALYSIS

May 2004



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## NORWICH AREA TRANSPORTATION STRATEGY

## PUBLIC CONSULTATION ANALYSIS

#### **Issue and Revision Record**

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List	of Cor	ntents	Page
Exe	cutive S	Summary	1
Cha	pters a	nd Appendices	
1	Introd	duction	3
•	1.1	Aims	3
	1.2	The Consultation Exercise	3
	1.3	Questionnaire Distribution	3
	1.4	Questionnaire Content	3
	1.5	Limitations of Postal Questionnaire Method	4
	1.6	Meetings and Exhibitions	4
	1.7	The NATS Website	4
	1.8	Dedicated Helpline	4
2	Back	Background Information	
	2.1	Existing Strategy	5
	2.2	Challenges	5
	2.3	Preferred Strategy	5
3	Gene	ral Analysis of Returns	7
	3.1	Questionnaire returns	7
	3.2	Q.1 Northern distributor road	8
	3.3	Q.2 Education, encouragement and enforcement	9
	3.4	Q.3a-3b Order of priorities	10
	3.5 trans <sub>l</sub>	Q.4a-4d Traffic flow on the main road network and improvin	g passenger 12
	3.6	Q.5a-5b Measures to reduce through traffic	16
	3.7	Q.6a-6b Traffic management	18
	3.8	Q.7a-7d Road user or workplace charging	20
	3.9	Q.8 Comments	23
	3.10	Q.9 Preferred NDR routes	24
	3.11	Q.10, Q.11 and Q.12 Demographics of respondents	27
	3.12	Q.13 Comments	28

4	Analy	sis of Additional Comments	29
	4.1	Introduction	29
	4.2	Q.8 Comment Analysis – Main issues 4.2.1 Q.8 Main Comment Groups 4.2.2 Q.8 Specific Comments	29 29 31
	4.3	Q.13 Comment Analysis – Main Issues 4.3.1 Q.13 Comment Categories 4.3.2 Q.13 Specific Comments	33 33 35
5	Analy	sis of Letters and Emails	39
	5.1	Introduction	39
	5.2	Analysis of Letters and Emails 5.2.1 Letters and Emails – Comment Categories 5.2.2 Letters and Emails – Specific Comments	39 39 41
6	Analy	sis by Postcode	43
	6.1	Principal Findings	43
7	Analy	sis of Organisation Responses	45
	7.1	Principal Findings	45
	7.2	Q.1 Northern Distributor Road	46
	7.3	Q.2 Education, encouragement and enforcement	46
	7.4	Q.3a-3b Order of priorities	46
	7.5 transp	Q.4a-4d Traffic flow on the main road network and improving passer port	nger 47
	7.6	Q.5a-5b Measures to reduce through traffic	47
	7.7	Q.6a-6b Traffic management	47
	7.8	Q.7a-7d Road user or workplace charging	47
	7.9	Q.8 Comments	48
	7.10	Q.9 Preferred NDR Routes	49
	7.11	Q.10, Q.11 and Q.12 Demographics of respondents	50
	7.12	Q.13 Comments	50
8	Analysis of Local Council Responses		
	8.1	Principle Findings	51
	8.2	Q.1 Northern Distributor Road	52
	8.3	Q.2. Education, encouragement and enforcement measures	52
	8.4	Q.3a-3b Order of priorities	53
	8.5 transp	Q.4a-4d Traffic flow on the main road network and improving passer port	nger 53

8.6	Q5a - 5b Measures to reduce through traffic	53
8.7	Q.6a-6b Traffic management	53
8.8	Q.7a-7d Road user or workplace charging	54
8.9	Q.8 Comments	54
8.10	Q.9 Preferred NDR routes	55
8.11	Q.10, Q.11 and Q.12 Demographics of respondents	56
8.12	Q.13 Comments	56
Appendix A:	Leaflet and Questionnaire	A-1
Appendix B:	Map of Questionnaire Distribution Area	B-1
Appendix C:	Principal Analysis – Data For All Returns	C-1
Appendix D: Responses	Principal Analysis – Data Excluding Organisation and Council D-1	
Appendix E:	Questionnaire Comments Analysis – Data For All Returns	E-1
Appendix F:	Letter and Email Analysis – Data For All Returns	F-1
Appendix G:	Analysis by Postcode – Data Tables and Plots for All Returns	G-1
Appendix H:	Analysis of Organisation Responses – Data Tables	H-1
Appendix I:	Analysis of Local Council Responses – Data Tables	I-1
Figures		
•	.1 NDR Support and Opposition	8 9
•	.2 Education, Encouragement and Enforcement .3a The Current Order of Priorities	10
Figure 3.4 Q	.3b A more Flexible Order of Priorities	11
•	.4a Improving Traffic on the Main Road Network .4b Improving Passenger Transport	12 13
	.4c A new Park and Ride site along the Drayton/Taverham corridor	14
0	.4d Introducing Trams	15
•	.5a Access Restrictions around the North of Norwich  Q.5b Access Restrictions on Residential Side Streets	16 17
Figure 3.11 (	Q.6a Small Scale Traffic Management Measures in the City Centre	18
_	Q.6b Stopping Traffic Driving Straight Through the City Centre	19
•	Q.7a Road User Charging within 5 Years Q.7b Road User Charging within 5 to 10 Years	20 21
Figure 3.15	Q.7c Workplace parking charging within 5 Years	22
•	Q.7d Workplace Parking Charging within 5 to 10 Years	23 24
1 19u1 & 3.17 1	NDR Western Route Preferences	24

Figure 3.18 NDR Eastern Route Preferences	25
Figure 3.19 Q.9 NDR Combined Route Preferences	26
Figure 3.20 Q.12 Age Groups	27
Figure 4.1 Q.8 Comments Grouped in Main Categories	30
Figure 4.2 Q.8 Top Twenty Comment Code	32
Figure 4.3 Q.13 Comments Grouped in Main Categories	34
Figure 4.4 Q.13 Top Twenty Comment Codes	36
Figure 5.1 Main Comment Categories for Letter and Email Responses	40
Figure 5.2 Top Twenty Codes for Letter and Email Response	42
Figure 7.1 NDR – Organisation Responses	46
Figure 7.2 Q.9 NDR Western Route Preferences – Organisation Responses	49
Figure 7.3 Q.9 NDR Eastern Route Preferences – Organisation Responses	50
Figure 8.1 Q.1 NDR – Local Council Responses	52
Figure 8.2 NDR Western Route Preferences – Local Council Responses	55
Figure 8.3 NDR Eastern Route Preferences – Local Council Responses	56
Tables	
Table 4-1 Q.8 NDR Comments – Top Twenty Named Locations with Reference	
	33
Table 4-2 Q.13 NDR Comments – Top Twenty Named Locations with Referen	
the NDR	
Table 5-1 Letter and Email – Top Named Locations with Reference to the NDF	
Table C-1 Data for Q.1-7 - All Responses	
Table C-2 Q.9 NDR Western Route Preferences – All Responses	
Table C-3 Q.9 NDR Eastern Route Preferences – All Responses	
Table C-4 Q.8 and Q.13 Comment Size and Number – All Responses	
Table C-5 Q.11 Individual and Organisation Responses – All Responses	
Table C-6 Q.12 Age Groups – All Responses	C-5
Table D-1 Data for Q.1-7 - Excluding Organisation and Local Council Respons	
Table D-2 Q.9 NDR Western Route Preferences – Excluding Organisation/Cou	
Responses	
Table D-3 Q.9 NDR Eastern Route Preferences – Excluding Organisation/Cou	ncil
Responses	D-4
Table D-4 Q.8 and Q.13 Comment Size and Number – Excluding	
Organisation/Council Responses	
Table D-5 Q.12 Age Groups – Excluding Organisation/Council Responses	
Table E-1 List of Comment Codes for Question 8	
Table E-2 List of Comment Codes for Question 13	E-5
Table E-3 Q.8 Specific Locations with Reference to the NDR	
Table E-4 Q.13 Specific Locations with Reference to the NDR	
Table F-1 Letters and Emails – List of Comment Codes Assigned	
Table F-2 Letters and Emails – Specific Locations with Reference to the NDR.	F-5
Table G-1 Data Table for Results Displayed on Plots 4 to 7 – Responses to Q.	
Q.5b Grouped by Parish	
Table G-2 Data Table for Results Displayed on Plots 8-11 – NDR Route Prefer	ences
Grouped by Parish	G-18
Table H-1 List of Organisations	H-1
Table H-2 Data for Q.1-7 – Organisation Responses (Excluding Council Responses)	
	H-18

Table H-3 Q.9 NDR Western Route Preferences – Organisation Responses	H-21
Table H-4 Q.9 NDR Eastern Route Preferences - Organisation Responses	H-21
Table H-5 Q.12 Age Groups – Organisation Responses	H-21
Table H-6 Q.8 and Q.13 Comments – Organisation Responses	H-21
Table I-1 List of Individual Local Council Responses (Key on page I-1)	I-2
Table I-2 Data for Q.1-7 – Local Council Responses	I-7
Table I-3 Q.9 NDR Western Route Preferences – Local Council Responses	
Table I-4 Q.9 NDR Eastern Route Preferences – Local Council Responses	I-10

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#### **Executive Summary**

In September 2003, 143,019 information brochures and questionnaires were distributed to residents and stakeholders around Norwich, highlighting the preferred strategy for the Norwich Area Transportation Strategy (NATS) and consulting upon route options for a Northern Distributor Road (NDR). The questionnaire and related information was also available for viewing and completion on the Internet. A number of exhibitions and public meetings were held.

This report highlights the findings from the questionnaire and letter responses. Separate analysis has been carried out to determine responses based upon postcode area, organisation responses and local council responses.

The consultation exercise had a high response rate; 15% of postal questionnaires were returned (21,073 postal responses received out of 143,019 distributed). In addition there were 343 online responses.

394 letters and 41 emails were received as part of the NATS consultation.

From the questionnaire results it was found that 77.6% of respondents support or strongly support a NDR for Norwich, and 13.9% oppose or strongly oppose this proposal.

Responses were highly divided with reference to which NDR route was preferred; overall for the western side the Red route was marginally more popular than the other options, and on the eastern side the Pink route was favoured.

Responses indicate a high degree of support for many of the proposed strategy measures, such as improving traffic flow and improving passenger transport.

Other proposals, such as introducing access restrictions and stopping traffic driving through the city centre, received a much more mixed reaction.

There was a high degree of opposition to the suggestion of both road user charging and workplace parking charging.

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### 1 Introduction

### 1.1 Aims

A Preferred Strategy is to be consulted on for transportation issues around Norwich, updating the earlier Norwich Area Transportation Strategy adopted in 1997. The new strategy is to include policies and programmes for transport investment and management in the Norwich Area to 2016, and give an indication of transport options to 2025.

### 1.2 The Consultation Exercise

Against this background a consultation exercise was carried out to obtain the views of the public and local stakeholders on a number of transportation strategy options for the Norwich Area and on a number of route options for a NDR. Individuals and organisations within and around the NATS area were to be consulted.

This report is based upon the information gathered from the questionnaire and letter responses received. Norfolk County Council in partnership with Norwich City Council, Broadland District Council, South Norfolk District Council and Mott MacDonald conducted the consultation.

### 1.3 Questionnaire Distribution

143,019 information brochures and questionnaires were prepared and distributed in September 2003 within the Norwich area. The consultation brochures provided information on the preferred strategy to assist the respondents in completing the questionnaire.

A copy of the questionnaire and accompanying information brochure are included in Appendix A.

A map illustrating the distribution area is included in Appendix B.

### 1.4 Questionnaire Content

Responses were gathered through a large-scale questionnaire survey. The questionnaire focused on the proposed NDR, education, encouragement and enforcement, changing priorities, improving traffic flow, improving passenger transport, measures to reduce through traffic, traffic management and road user or workplace parking charging.

The majority of questions required a response of 'strongly support', 'support', 'oppose', 'strongly oppose', or 'no strong view'. With reference to route options for the NDR, respondents were asked to select one western route and one eastern route from the options given. There were opportunities on the questionnaire for the respondent to add their own comments about the Preferred Strategy and any other comments. Additional information of postcode, whether acting as an individual or an organisation and age group were also recorded.

### 1.5 Limitations of Postal Questionnaire Method

The questionnaires give the respondents the opportunity to add additional comments and many also attached letters. In order for statistical analysis to be carried out it was necessary to interpret these texts and use a series of codes to record the respondents' comment. There is room for error in the interpretation of the comments, and also problems of illegibility.

It was noted by many respondents that each household only received one questionnaire and thus did not allow for responses to be gathered from more than one person at each location. This would be a significant issue at addresses where numerous independent individuals cohabit, for example a nursing home. Further copies of the questionnaire were however available upon request.

# 1.6 Meetings and Exhibitions

Ten public meetings were held during October and November 2003, and there were 22 staffed mobile exhibitions held at 11 different locations. In addition there were static exhibitions in place at The Forum, Norwich City Hall, County Hall, Broadland District Council, and South Norfolk District Council and also in six North Norfolk towns. Questionnaires were available at meetings and exhibitions.

Details of the meetings and exhibition locations are printed in the consultation leaflet, included in Appendix A.

### 1.7 The NATS Website

A website, http://www.norwichareatransport.org, was developed to provide information on the strategy and to allow for online completion of the consultation questionnaire. The website was designed by the Business Support Unit of the Planning and Transportation Department. Questionnaires completed via this online source were combined with the main postal responses.

### 1.8 Dedicated Helpline

A dedicated helpline was set up to deal with requests for information and comments. The helpline received over 350 calls.

## 2 Background Information

### 2.1 Existing Strategy

The Norwich Area Transportation Strategy was last reviewed in 1996/1997, which led to the adoption of the current strategy in 1997.

## 2.2 Challenges

Key challenges of the NATS project in 2004 include:

- Provision of adequate transport modelling tools to enable future year forecasts and alternative policy scenarios to be developed.
- Detail the progress of the review including following statutory procedures and government guidance, as well as Member involvement, in decision-making and the stages of public involvement and consultation required obtaining consensus on the way forward.
- Investigate the feasibility of a NDR for Norwich
- Review the transport strategy and policies for the Norwich Area in light of the Government objectives and guidance, the emerging Regional Transport Strategy and County Council objectives. This will include the use of the updated overall aim and objectives developed for the strategy.

# 2.3 Preferred Strategy

The preferred strategy includes the following key points:

• A new distributor road around the north of Norwich to link with the A47 trunk road is a potential scheme within the new strategy.

The aim is to reduce congestion on other main roads, limit traffic using unsuitable suburban and rural roads, and to provide improved access to the main road network thus benefiting the local economy and both existing and potential housing development in the area. Additional benefits would include a reduction in the number of road collisions, and reduction in noise and air pollution to certain residential areas.

Negative aspects of the potential NDR include the detrimental impact on the environment, in particular the Wensum Valley and River Tud areas, and visual and noise pollution for local communities.

Four possible routes on the west and three on the east have been suggested as part of the preferred strategy.

- Greater education, encouragement and enforcement measures which would include publicity to increase travel choice, education measures to try and reduce congestion and pollution through less car use, greater enforcement of parking and speeding laws.
- Potentially changing the order of priorities. At present the order is as follows, from
  first to last: walking, cycling, public transport, taxis, essential motor vehicles, nonessential motor vehicles. There is the possibility that this order of priorities could be
  more flexible to allow for the different needs and different users in different planning
  situations.
- The strategy is to include measures to improve traffic flow on the main roads through schemes such as improving the inner and outer ring road junctions to improve traffic-flow, and making better use of the computerised traffic signal system.
- Bus, rail and other passenger transport in the Norwich area is a central area of focus. The buses have been highlighted as a particular area for concern, and an additional Park and Ride site along the Drayton/Taverham corridor is proposed.
- There is also the possibility that the new strategy could include the building of a new railway station near Dussindale and the introduction of light rail (trams).
- The strategy may include access restrictions on roads round the north of the city and on residential side streets, with the aim of reducing noise, pollution and accidents. Such restrictions would have to take place in unison with improvements to other road networks, thus avoiding simply moving the traffic to other congested areas.
- The strategy considers traffic management of Norwich city centre as an important area for improvement. The long-term aim is to cut traffic out of the area, possibly through a 'ring and loop' system whereby vehicles will be stopped from driving straight through the city centre.
- A further issue consulted on is the introduction of road user or workplace parking charging, although such measures are not part of the preferred strategy. Money made from the charging would be used to help pay for implementing the preferred strategy.

# 3 General Analysis of Returns

### 3.1 Questionnaire returns

- A total of 21,073 postal replies were received out of a total of 143,019 questionnaires distributed. This represents a very high return of 15%.
- An additional 343 questionnaire responses were received via the website www.norwichareatransport.org. These responses were combined with the postal questionnaires and included in this analysis.
- The results below are for a total of 21,416 questionnaires/online questionnaires received from all respondents, but do not account for opinions expressed in letters. Data tables for these questionnaire results are displayed in Appendix C.
- If responses from organisations and local councils are excluded from the data set, there are a remaining 20,849 questionnaires from individuals. Analysis has been performed on this data set and the results are displayed, in tabular form only, in Appendix D.

### 3.2 Q.1 Northern distributor road

- The proposed NDR is supported or strongly supported by 77.6% of all respondents
- 13.9% of respondents oppose or strongly oppose a NDR for Norwich.
- 6.1% of respondents expressed no strong view and 2.4% did not answer the question.

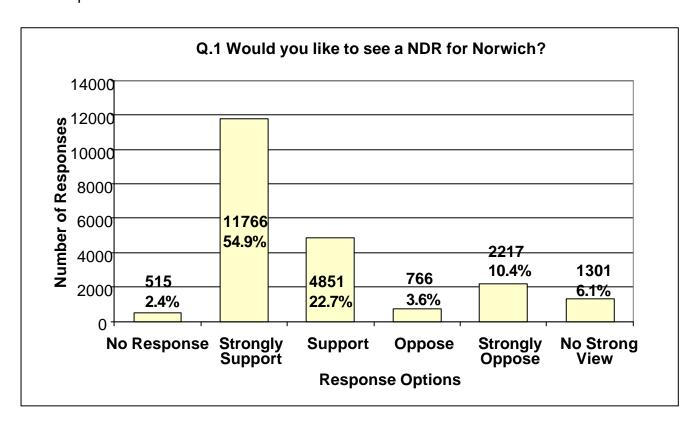


Figure 3.1 Q.1 NDR Support and Opposition

## 3.3 Q.2 Education, encouragement and enforcement

- 74.9% of respondents support or strongly support 'education, encouragement and enforcement measures'.
- 11.5% of respondents strongly oppose or oppose this measure, and a further 13.6% of respondents either expressed no strong view or did not answer the question.

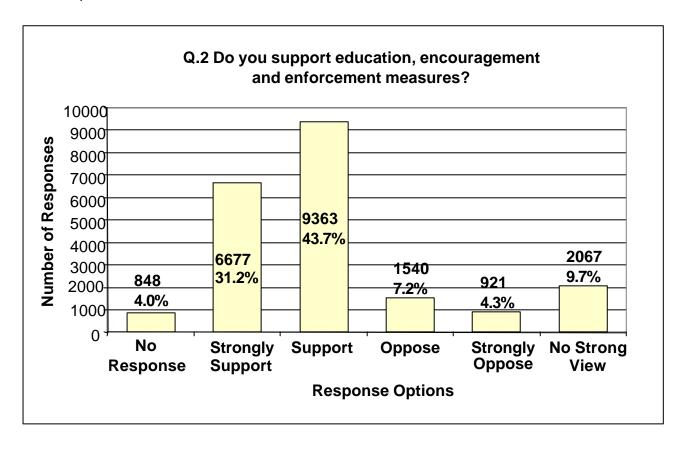


Figure 3.2 Q.2 Education, Encouragement and Enforcement

## 3.4 Q.3a-3b Order of priorities

- The current order of priorities, which is walking, cycling, public transport, taxis, essential motor vehicles and non-essential motor vehicles, is supported or strongly supported by 46.7% of the respondents (Q.3a).
- The order of priorities is opposed or strongly opposed by 33.3% of respondents.

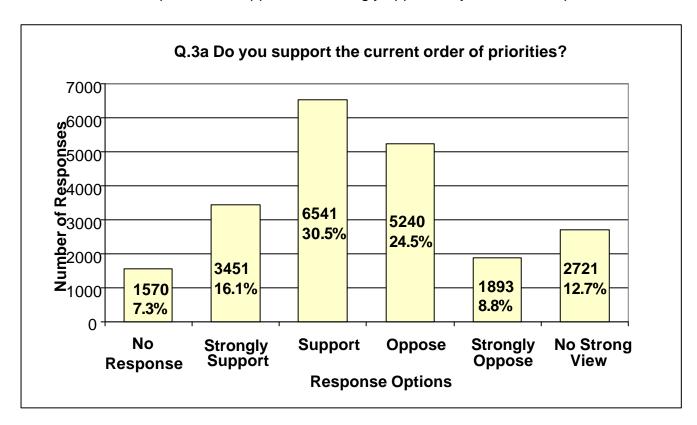


Figure 3.3 Q.3a The Current Order of Priorities

- 46.1% of respondents support or strongly support a more flexible order of priorities (Q.3b), and 5.9% of respondents oppose or strongly oppose a more flexible order.
   48.0% of respondents either expressed no strong view or did not answer the question.
- Of those who were in opposition to the current order of priorities (from Q.3a), 91.4% of respondents support or strongly support a more flexible order.

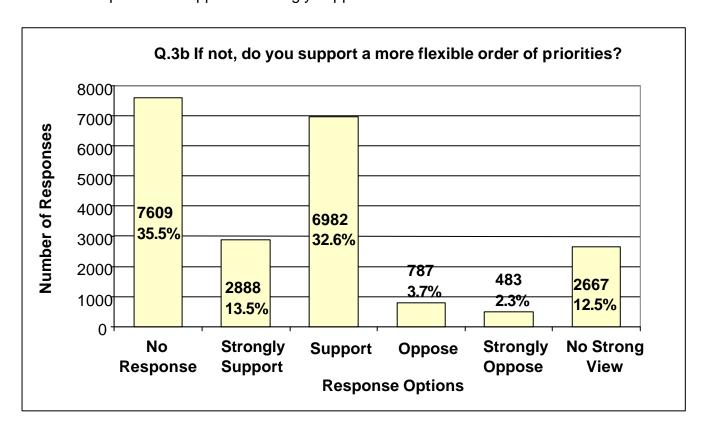


Figure 3.4 Q.3b A more Flexible Order of Priorities

# 3.5 Q.4a-4d Traffic flow on the main road network and improving passenger transport

- A large majority of 90.8% of respondents support or strongly support improving traffic flow on the main road network.
- 2.8% of respondents were opposed or strongly opposed to this measure.

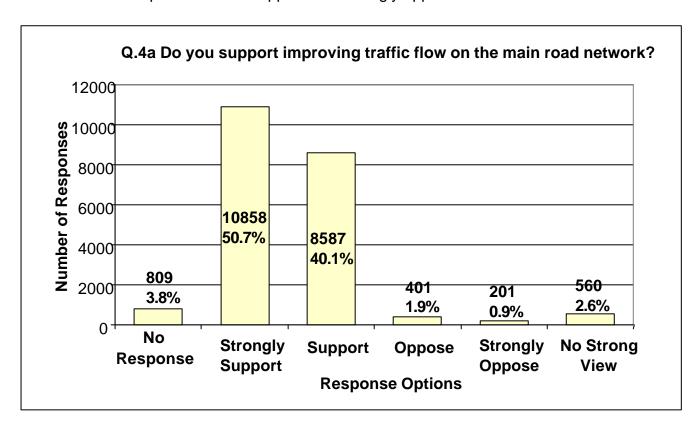


Figure 3.5 Q.4a Improving Traffic on the Main Road Network

- A strong majority, 91.3% of respondents, support or strongly support improving bus, rail and other passenger transport (Q.4b).
- 2.6% of respondents oppose or strongly oppose improving passenger transport

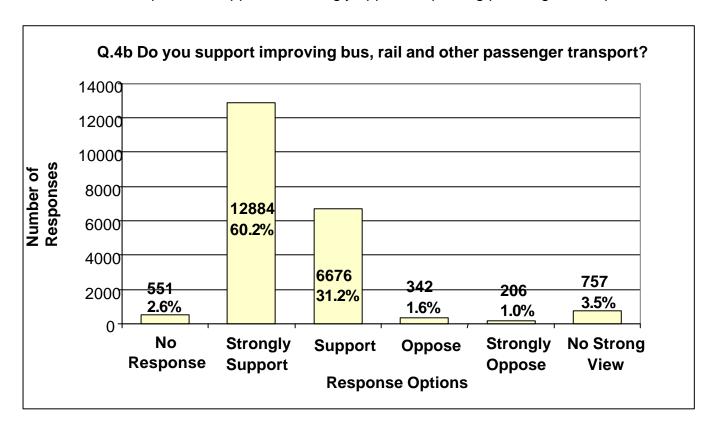


Figure 3.6 Q.4b Improving Passenger Transport

- 66.4% of respondents were in support of the proposed Park and Ride site at Drayton/Taverham, and a total of 9.2% of respondents were opposed (Q.4c).
- 24.4% of respondents held no strong view or did not answer this question.

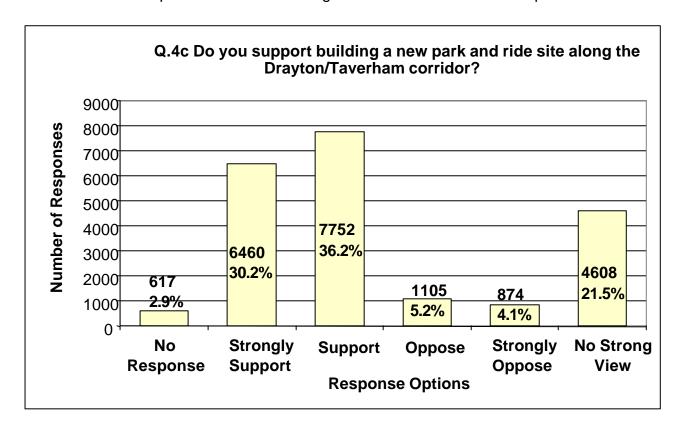


Figure 3.7 Q.4c A new Park and Ride site along the Drayton/Taverham corridor

- 65.5% of respondents support or strongly support the introduction of trams (Q.4d).
- 17.8% of respondents oppose or strongly oppose introducing trams.

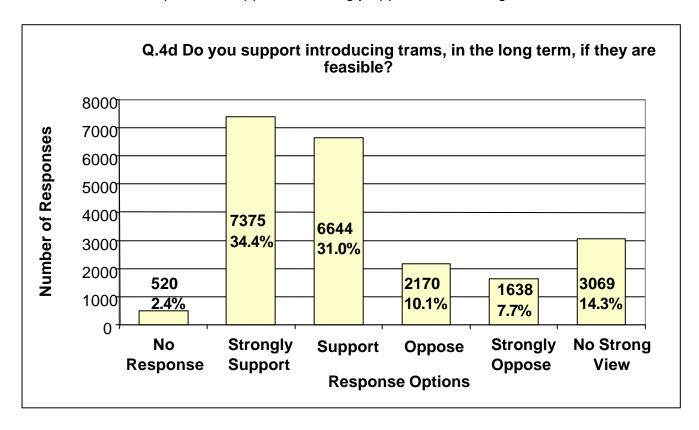


Figure 3.8 Q.4d Introducing Trams

# 3.6 Q.5a-5b Measures to reduce through traffic

 Opinion was divided on the issue of access restrictions on roads around the north of Norwich, with 39.4% of respondents supporting or strongly supporting the measure, and a total of 39.6% of respondents in opposition (Q.5a).

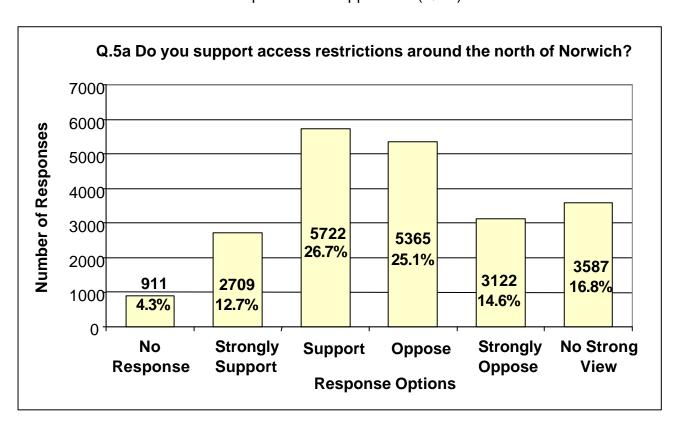


Figure 3.9 Q.5a Access Restrictions around the North of Norwich

 A total of 54.5% of respondents expressed support for access restrictions on residential side streets, but 30.9% of respondents were opposed or strongly opposed to this idea (Q.5b).

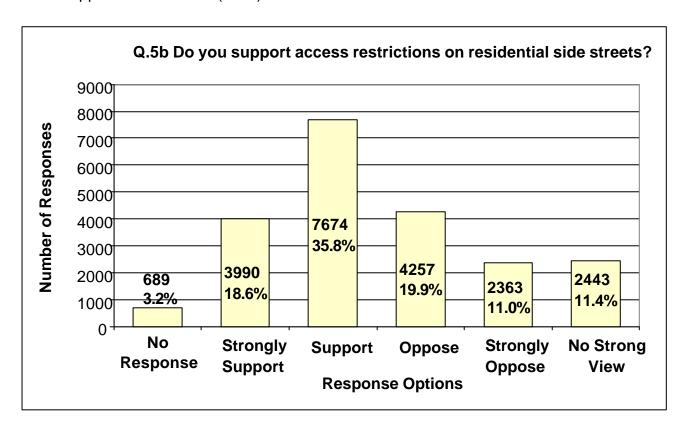


Figure 3.10 Q.5b Access Restrictions on Residential Side Streets

# 3.7 Q.6a-6b Traffic management

- Small-scale traffic measures in the city centre were supported/strongly supported by 65.3% of respondents (Q.6a)
- Small-scale traffic measures were opposed or strongly opposed by a total of 21.6% of respondents.
- 13.1% of respondents either did not answer question 6a or they held no strong view.

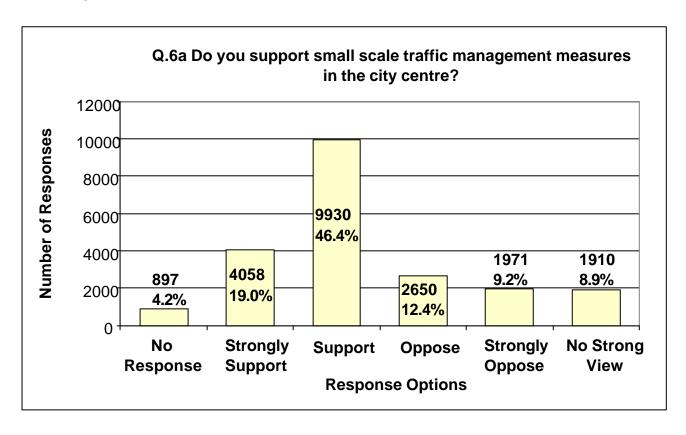


Figure 3.11 Q.6a Small Scale Traffic Management Measures in the City Centre

- Over half the respondents (52.2%) were in favour of stopping traffic driving straight through the city centre, but a total of 38.7% of respondents were opposed or strongly opposed to this measure (Q.6b).
- 9.1% of respondents either held no strong view or did not answer this question.

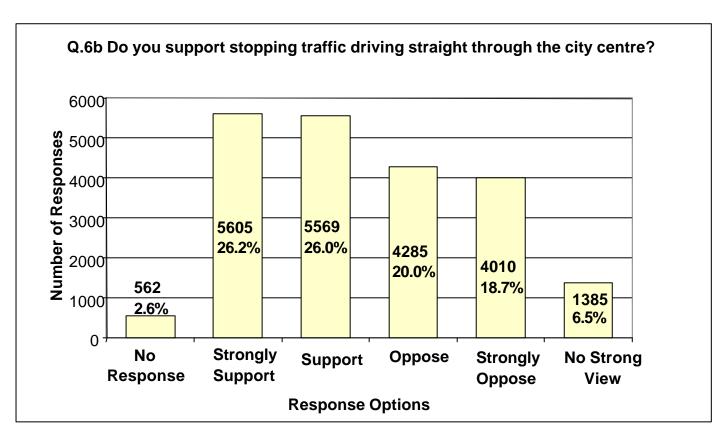


Figure 3.12 Q.6b Stopping Traffic Driving Straight Through the City Centre

# 3.8 Q.7a-7d Road user or workplace charging

 Road user charging within 5 years was supported or strongly supported by a total of 15.9% of respondents, and opposed or strongly opposed by 73.6% of respondents (Q.7a).

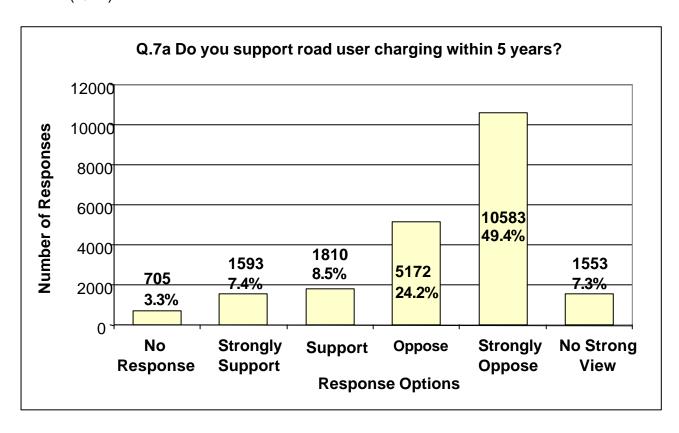


Figure 3.13 Q.7a Road User Charging within 5 Years

 With reference to introducing road user charging within 5 to 10 years; 14.3% of respondents were in favour and a total of 70.7% of respondents were in opposition (Q.7b).

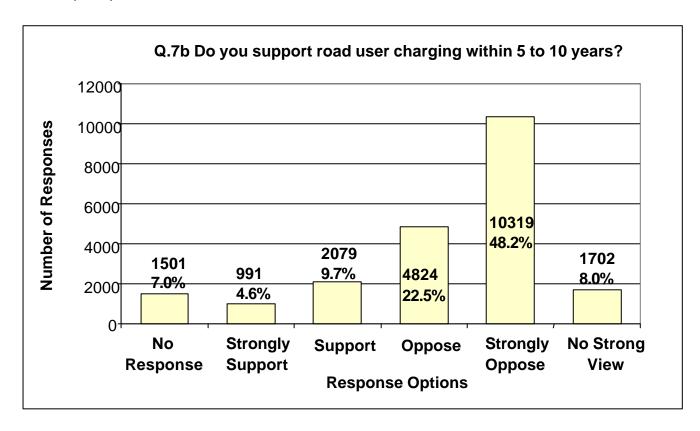


Figure 3.14 Q.7b Road User Charging within 5 to 10 Years

- Introducing workplace charging within 5 years had the support/strong support of 23.3% of respondents (Q.7c).
- 61.7% of respondents were opposed or strongly opposed to introducing workplace parking charging within 5 years.

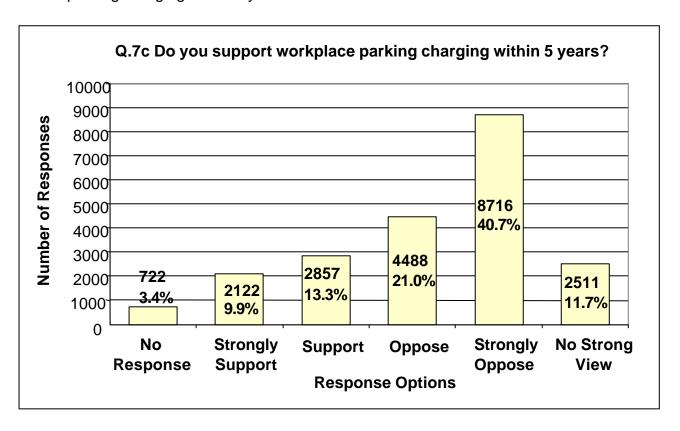


Figure 3.15 Q.7c Workplace parking charging within 5 Years

- Workplace charging within 5 to 10 years was supported or strongly supported by 19.9% of the respondents and opposed by a total of 60.0% of respondents (Q.7d).
- Of the respondents who expressed opposition to road user charging, 77.3% were also opposed or strongly opposed to workplace charging (both within 5 years).

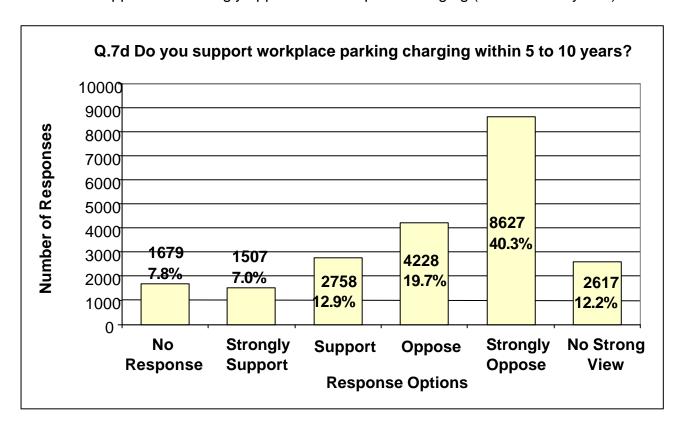


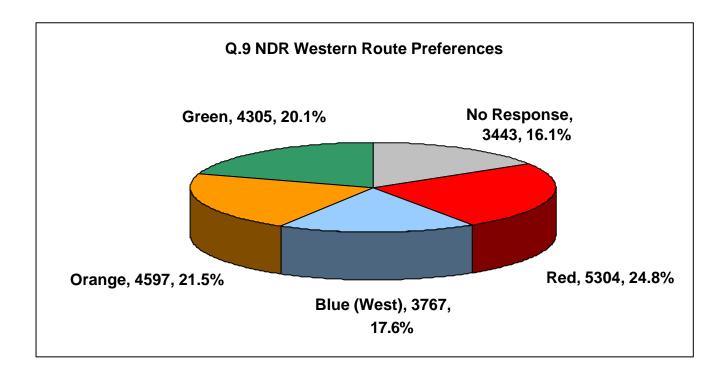
Figure 3.16 Q.7d Workplace Parking Charging within 5 to 10 Years

### 3.9 Q.8 Comments

- 30.5 % of respondents made some comment for question 8.
- Comment analysis is detailed in Chapter 4 and Appendix E.

### 3.10 Q.9 Preferred NDR routes

- Question 9 asked respondents to choose a preferred western route and a preferred eastern route for the NDR. Those who did not select a preferred route, those who were opposed to all routes and those who selected multiple routes for either the western or eastern route are counted as 'No Response'.
- For the NDR western route, a total of 83.9% of respondents selected one of the suggested routes as their preferred option. The most popular option was the Red route (24.8%), followed by Orange (21.5%), Green (20.1%) and lastly Blue (17.6%).



**Figure 3.17 NDR Western Route Preferences** 

• With reference to the eastern route, 82.4% of respondents selected one suggested route. The Pink route was the most popular (32.6%), and the Blue and Yellow routes were both similarly popular with 24.8% and 25.0% of votes respectively.

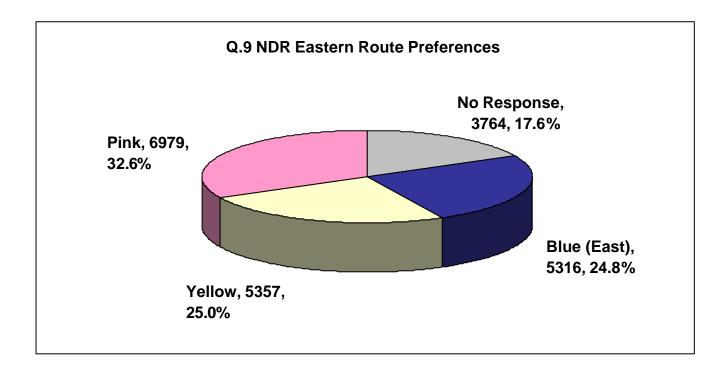


Figure 3.18 NDR Eastern Route Preferences

- Figure 3.19 overleaf illustrates the combinations of NDR routes that were chosen by respondents for question nine; for example it illustrates how many respondents chose both the western Red route and the eastern Yellow route.
- A consideration of the combinations of routes chosen reveals that the most popular combination is western Green and eastern Pink (12.4% of all respondents), followed by western Red and eastern Blue (12.0% of all respondents). Notably these combinations are the two routes closest to the city and the two routes furthest out respectively.

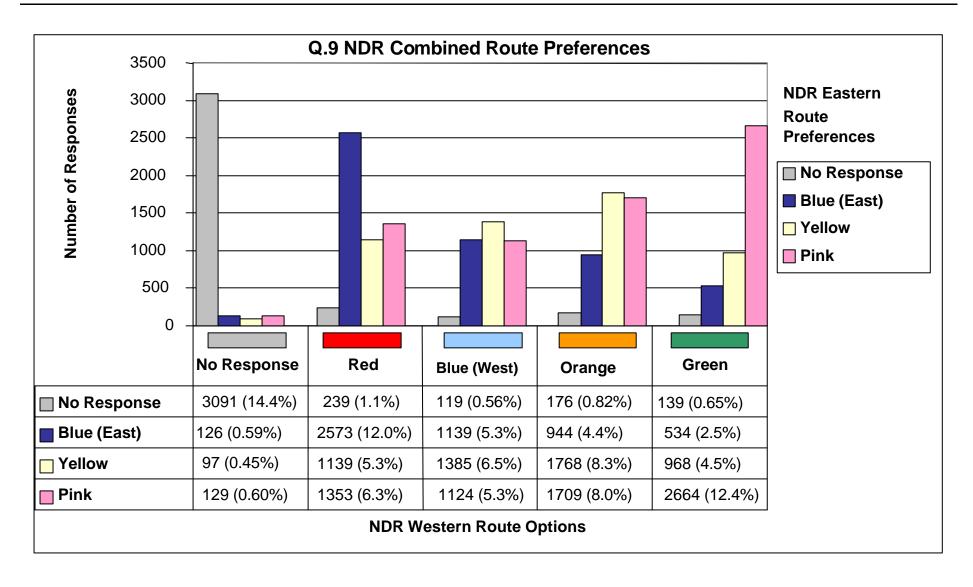


Figure 3.19 Q.9 NDR Combined Route Preferences

# 3.11 Q.10, Q.11 and Q.12 Demographics of respondents

- Details of the geographical positioning of responses from given postcodes are shown by Plot 2 and Plot 3 in Appendix G. Plot 1 in Appendix G illustrates the number of responses received as a percentage of actual population (within Census Area Statistic (CAS) Parish boundaries), to indicate where the highest proportions of respondents were from.
- Question 11a asked whether the respondent was replying as an individual or on behalf of an organisation. The majority of responses were from individuals (95.8%), and 2.6% were filled in on behalf of organisations (including local councils). 1.6% of respondents did not answer this question. Chapter 7 and Appendix H include details of responses by organisations (excluding local councils). Chapter 8 and Appendix I include details of responses from local councils.
- The highest proportions of responses were from those in the '36-60 years' category (48.3%), followed by those 'over 60 years' (33.2%) and '18-35' (15.8%). Only 0.4% of responses were from people 'under 18 years'.

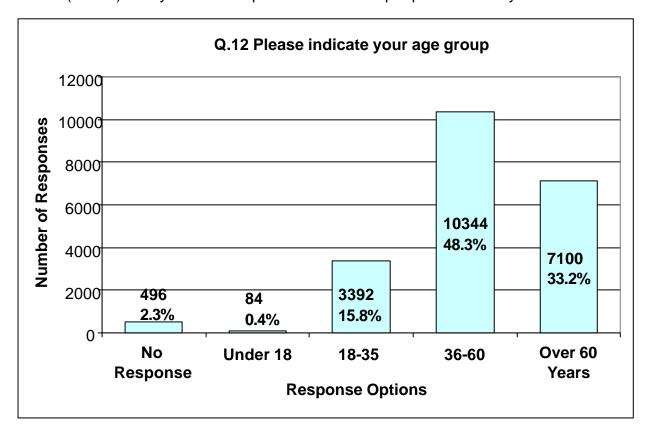


Figure 3.20 Q.12 Age Groups

• Plots 12-13 in Appendix G illustrate the number of responses from each age group as a percentage on the actual population in each age group (within CAS Parish boundaries).

## 3.12 Q.13 Comments

- 35.4% of respondents made some comment for question 13.
- Comment analysis is detailed in Chapter 4 and Appendix E.
- There were a total of 435 letters, maps, other attachments and emails received as part of the NATS Consultation. The letters and emails are analysed in Chapter 5 and Appendix F.

# 4 Analysis of Additional Comments

### 4.1 Introduction

- Questions 8 and 13 on the NATS questionnaire invited respondents to 'add comments about the Preferred Strategy' and to 'add any other comments' respectively. The comments given for question 8 and question 13 are studied separately.
- 30.5% of questionnaires included some comment for question 8, and 35.4% included some comment for question 13.
- Appendix E includes a full list of the comment codes used and the results
  obtained from the responses. It should be noted that there are main groups of
  comment codes such as 'buses' and 'the NDR', and within these groups there
  are specific codes such as 'complaint about bus services' and 'support for the
  NDR'. Analysis is carried out firstly using the broad groups to give an
  overview of the issues raised, and secondly using the specific codes to give
  more detail.
- As more than one point was often made within a single comment, numerous codes may have been assigned per comment. Percentages given below are percentages of the total number of codes used, not percentages of the number of questionnaires with some comment on.
- Letters and emails received are analysed in Chapter 5.

## 4.2 Q.8 Comment Analysis – Main issues

## 4.2.1 Q.8 Main Comment Groups

- Comments given for question 8 were grouped in to main comment categories (Figure 4.1) to give an overview of the general issues raised.
- The highest number of comments fell within the category of charging and restriction issues (24.6% of comments). This was followed by comments on the NDR (12.6% of comments), buses (9.2% of comments) and public transport in general (9.2% of comments).

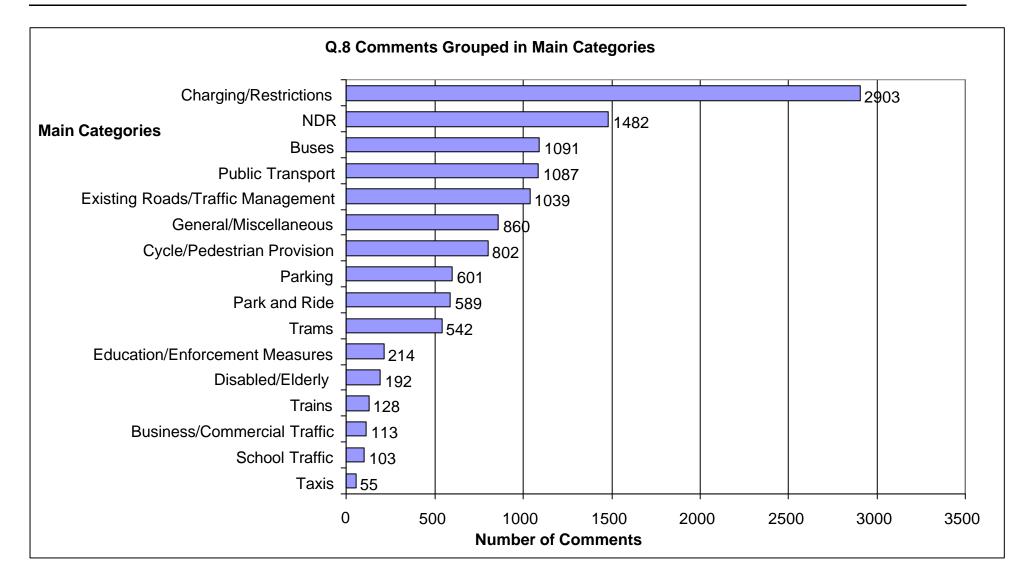


Figure 4.1 Q.8 Comments Grouped in Main Categories

# 4.2.2 Q.8 Specific Comments

- The comment codes applied for question 8 were also studied individually. The top twenty specific codes applied to comments for question 8 are displayed in Figure 4.2.
- The most recurring comments were firstly those in opposition to charging, restrictions and anti-car measures (6.5% of comments), followed by requests for public transport to be a priority for the strategy (6.0% of comments), and specific comments on issues of charging, restrictions and motorists (5.4% of comments).
- With regard to the NDR, there were many comments for question 8 in general opposition to the proposed road or that questioned whether it was needed or would help the situation (3.1% of comments). In total 5.5% of comments made some negative remark about the NDR.

These negative comments included concern for the environment were the road to be built, concern about noise pollution and the effect on villages, and concern that the road would lead to infill development around Norwich. There were also a further 0.8% of comments that were generally against any new road building.

- There were 2.5% of comments that expressed general support for the road, and in total 3.5% of comments that expressed a positive opinion on the NDR proposal. Comments broadly included support for a specific route, support for the NDR because of congestion problems, and support for the road because of city growth and business needs. 0.8% of comments directly suggested the road should be dual carriageway
- 2.7% of comments included some suggestion or specific detail about the proposed NDR. Further data is available on these comments in Table 4 -1.
- Other comments for question 8 relating to the strategy included a request for improved and increased cycle facilities (3.5% of comments), criticisms of the bus services or a request for services to be improved (3.4% of comments), and comments against the introduction of road user charging (3.2% of comments).

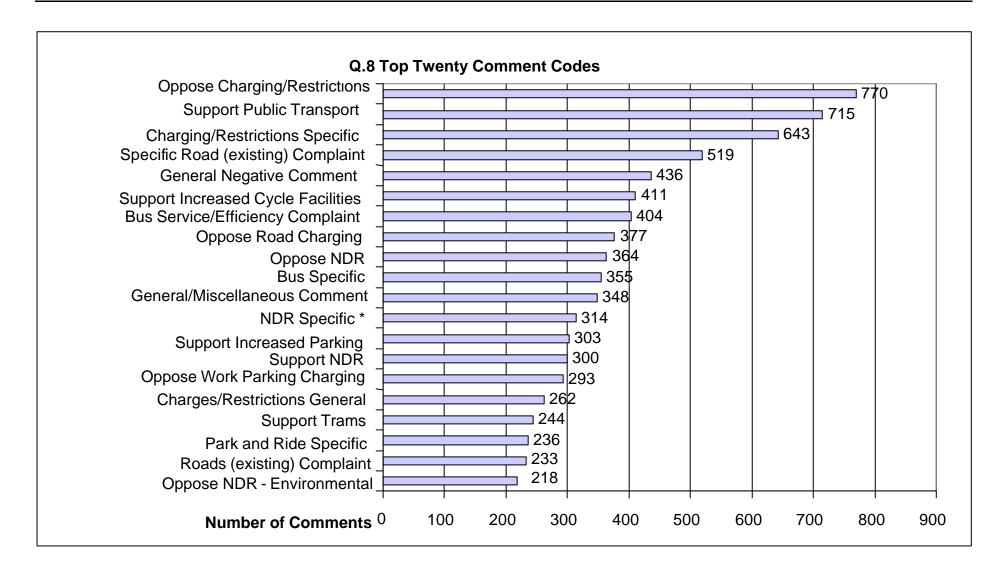


Figure 4.2 Q.8 Top Twenty Comment Code

Many comments included 'NDR Specific' issues. If a specific location was mentioned with reference to the proposed NDR it was recorded. A full list of named locations is included in Appendix E. Table 4-1 illustrates the top twenty locations that were commented on with reference to the NDR.

Table 4-1 Q.8 NDR Comments – Top Twenty Named Locations with Reference to the NDR

Named Location	Number of Comments
Taverham	26
Norwich Airport	21
Drayton	21
Wensum Valley	20
Thorpe Marriott	13
A47	13
Costessey	9
Hellesdon	9
Ringland Hills	7
Tud Valley	7
Ringland	6
Reepham Road	5
Cromer Road	5
Sprowston	4
Horsham St Faith	4
A1067	4
Fakenham Road	3
Spixworth	3 3 3
St Stephens	3
Rackheath	3

## 4.3 Q.13 Comment Analysis – Main Issues

## 4.3.1 Q.13 Comment Categories

- Comments given for question 13 were grouped in to main comment categories (Figure 4.3) to give an overview of the general issues raised.
- For question 13 there were a significantly large number of comments relating to the NDR (32.7% of comments). Other important categories of comments were charging, restrictions and motorists (11.3% of comments) and issues with existing roads (10.9% of comments).

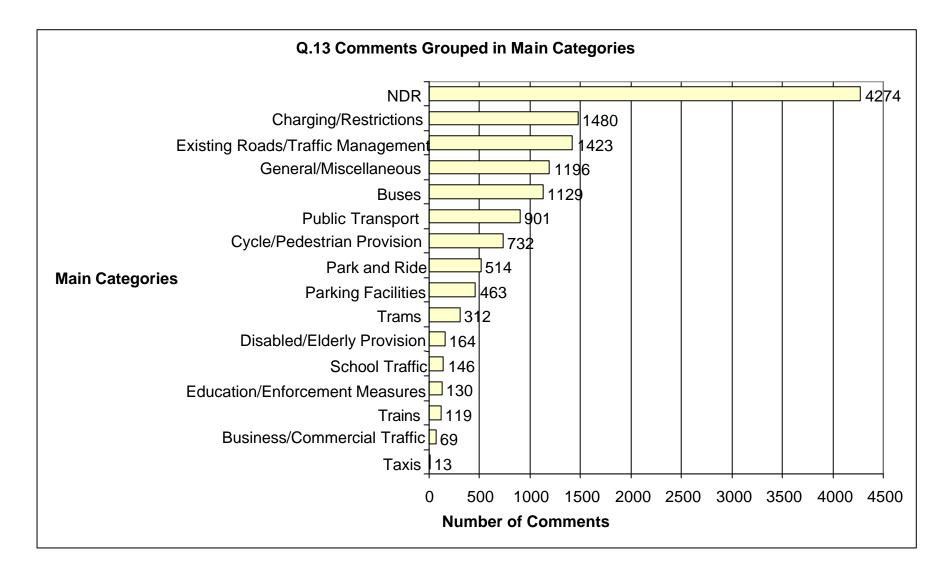


Figure 4.3 Q.13 Comments Grouped in Main Categories

## 4.3.2 Q.13 Specific Comments

- The comment codes applied for question 13 were also studied individually.
   The top twenty codes applied to comments for question 13 are displayed in Figure 4.4.
- Repeated comments raised in question 13 were suggestions/specific issues about the NDR (8.5% of comments), complaints about specific roads (6.4% of comments) and general support of the NDR (5.2% of comments).
- With regard to the NDR there were a total of 9.2% of comments in support of the proposal, either in general, for a specific route, or for the road to be built due to congestion or economic reasons. 3.2% of comments included the direct suggestion that the NDR should be a dual carriageway.
- There were a total of 11.7% of comments opposed to the NDR in some way.
  The majority of these comments related to environmental concerns such as
  the effect on the river valleys and increased pollution (4.0% of all comments
  for question 13). Other concerns were for the effects on safety and noise
  levels in villages, and opposition to specific routes.
- Specific locations mentioned with regard to the proposed NDR are detailed in Table 4-2.
- 3.8% of comments relating to the strategy include specific remarks on issues of charging and restrictions, for example a comment on the effect of restricting access in a particular location. Other main comments included criticisms of the bus services (3.2% of comments) and specific comments about the buses (3.1% of comments), for example giving information on a particular bus service or route. 2.9% of all comments for question 13 included a request for cycle facilities to be a priority in the NATS strategy.

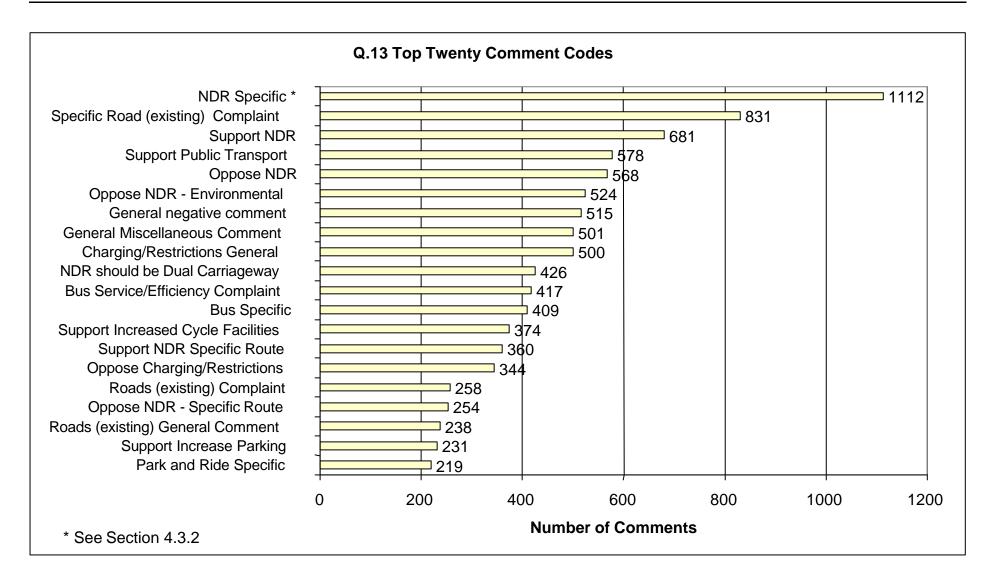


Figure 4.4 Q.13 Top Twenty Comment Codes

Many comments for Q.13 included 'NDR Specific' issues (8.5% of comments included some specific suggestion or note on a location in relation to the NDR). If a specific location was mentioned with reference to the proposed NDR it was recorded. A full list of named locations is included in Appendix E. Table 4-2 illustrates the top twenty locations that were commented on with reference to the NDR.

Table 4-2 Q.13 NDR Comments – Top Twenty Named Locations with Reference to the NDR

Named Location	Number of Comments
Costessey	97
Taverham	93
Norwich Airport	92
A47	89
Drayton	68
Wensum valley	65
Thorpe Marriott	50
Ringland	41
Sprowston	34
Hellesdon	32
Old Costessey	32
Spixworth	28
Horsham St Faith	27
New Costessey	27
A1067	26
Tud Valley	23
Dussindale	21
A140	18
Thorpe End	18
Rackheath	18

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# 5 Analysis of Letters and Emails

## 5.1 Introduction

- 394 letters and 41 emails were received as part of the NATS consultation.
- The letters and emails were analysed using the same coding as used for analysing comments on the questionnaires.
- Letters from statutory consultees were studied separately in further detail.
- A full list of the codes applied to the letters and emails is included in Appendix
   F. It should be noted that more than one code could be applied per letter/email, and so the total number of codes does not total the number of letters/emails.

# 5.2 Analysis of Letters and Emails

# 5.2.1 Letters and Emails – Comment Categories

 Grouping the comment codes in to main categories (Figure 5.1) reveals that 50.3% of all letters and emails included some comment on the proposed NDR. Other important groups of comments were 'comments on buses', 'charging and restrictions comments' and 'general/miscellaneous comments'.

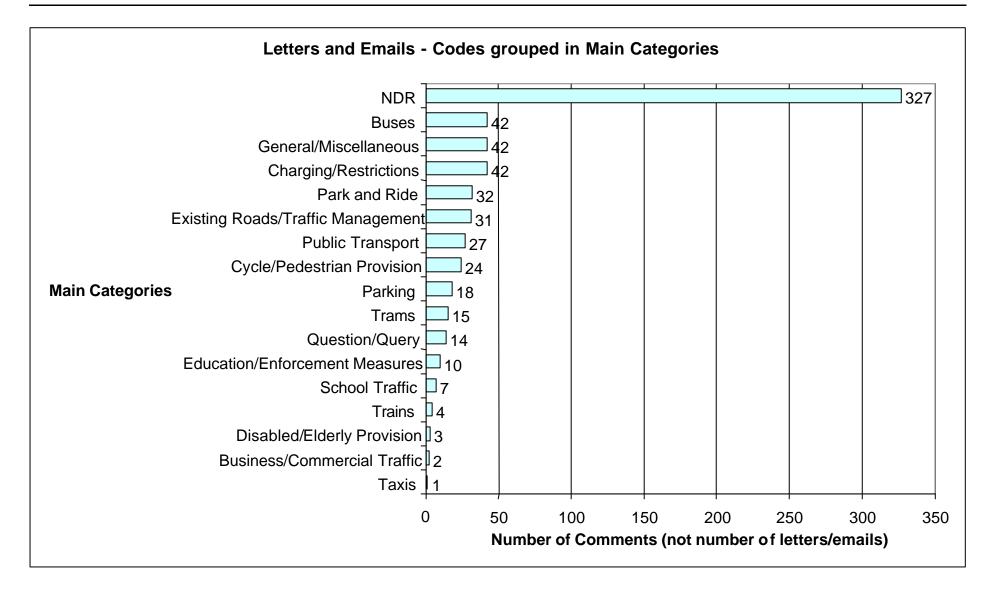


Figure 5.1 Main Comment Categories for Letter and Email Responses

# 5.2.2 Letters and Emails – Specific Comments

- Considering the comments in more detail, Figure 5.2 overleaf illustrates the top twenty codes applied to the comments on letters and emails received.
- 10.8% of letters and emails expressed general support of the NDR. A further 2.7% of responses included support for a specific NDR route.
- 14.7% of letters and emails made some comment expressing general opposition to the proposed NDR. 8.7% of the responses expressed opposition to a specific NDR route and 5.8% made some comment against the proposed NDR on environmental grounds.
- 3.4% of all letters and emails included some specific suggestion or route comment with regard to the proposed NDR. If a specific location was mentioned with reference to the proposed NDR it was recorded. A full list of named locations is included in Appendix F. Table 5-1 illustrates the top twenty locations mentioned with regard to the NDR in letters and email.

Table 5-1 Letter and Email – Top Named Locations with Reference to the NDR

Named Location	Number of Comments
Horsham St Faith	14
Taverham	13
Wensum Valley	8
Drayton	7
Costessey	7
Ringland	6
Thorpe End	5
Thorpe St Andrew	5
Tud Valley	4
Great Plumstead	4
Norwich Airport	3
Reepham Road	3
Jordan Close, Thorpe Marriott	3
Thorpe Marriott	3
Cromer	3
Mile Cross	2
Sprowston	2
Grange Farm	2
Hellesdon	2
Felthorpe	2

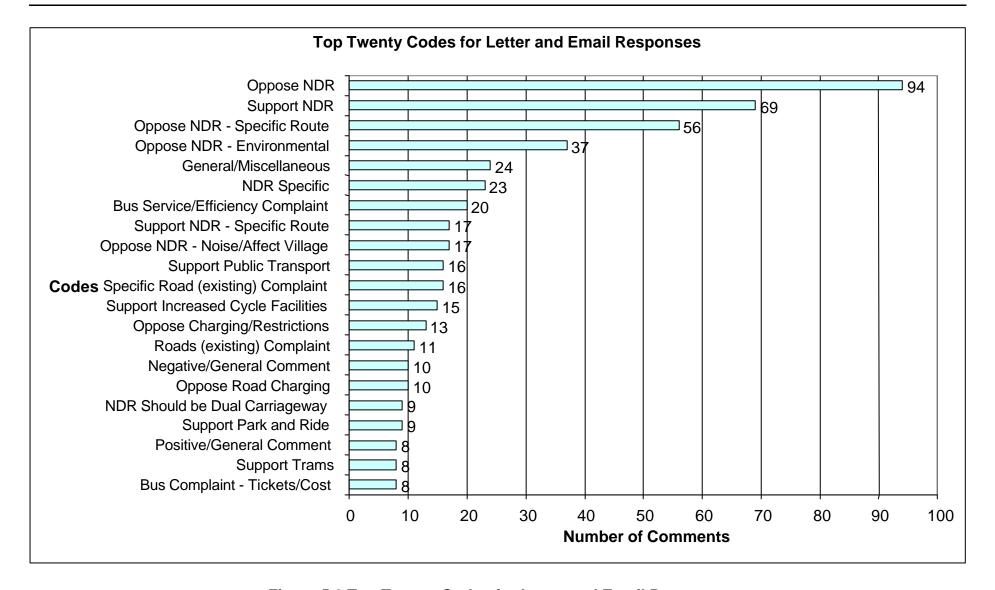


Figure 5.2 Top Twenty Codes for Letter and Email Response

# 6 Analysis by Postcode

# 6.1 Principal Findings

- Responses were geocoded by postcode, and plotted on various scale maps.
   Due to some respondents supplying incomplete postcode data, out of the total of 21,416 questionnaire received only 19,819 records could be geocoded. All data and plots are included in Appendix G.
- The total population of each parish in Norfolk was compared with the number of questionnaires received from each parish, to indicate how representative the data is of the population as a whole. The results are displayed as percentages on Plot 1, Appendix G.
- Responses to question 1, 'Would you like to see a Northern Distributor Road for Norwich', were plotted by postcode. Plot 2 and Plot 3 in Appendix G illustrate the results. The maps indicate the geographical spread of respondents and the high density of support for the proposed NDR across much of the Norwich Area.
- Responses to question 5a, 'Do you support access restrictions on roads around the north of Norwich?' and question 5b, 'Do you support access restrictions on residential side streets?' were plotted by postcode and the results grouped by parish. Plot 4 and Plot 5 illustrate the results of Q.5a, Plot 6 and Plot 7 illustrate the results of Q.5b. These plots are included in Appendix G.
- Responses to question 9, which asks for a preference for one western and one eastern NDR route, were plotted by postcode and grouped in parish areas. Plots 8 to 11, located in Appendix G and in the document folders at the back of this report, illustrate these results.
- Age group data for each parish in Norfolk was compared with age group data from the questionnaires received. Plot 12 and Plot 13 in Appendix G displays the age group responses as a percentage of the actual number of people in each age group.
- It should be noted that Plot 1, Plot 12 and Plot 13 and rely on 2001 Census Data for the population figures. Due to the fact that the 2001 Census uses Census Area Statistic (CAS) Parishes and these areas differ slightly to the previous parish boundaries, there may be some inaccuracies on the maps. Where CAS Parishes have been created by amalgamation this is accounted for on the map, but where parish boundaries have altered or new parishes added it has not been accounted for. The error this may cause in the display of data is marginal.
- Answers to other questions were not plotted as it was found there was not a strong geographical pattern to the results.

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# 7 Analysis of Organisation Responses

# 7.1 Principal Findings

- 474 (2.2% of all questionnaires/online questionnaires received) of responses received were filled in on behalf of organisations, excluding any responses from local council bodies. A detailed summary of these organisation responses and a list of all named organisations are given in Appendix H.
- Responses from local council bodies are not included in this analysis. They are analysed separately in Chapter 8 and Appendix I.
- The results analysed below are for questionnaire responses only, so do not account for opinions expressed in letters.

#### 7.2 Q.1 Northern Distributor Road

- 82.7% of organisation responses support or strongly support a NDR for Norwich.
- A total of 12.2% of organisations oppose or strongly oppose the NDR proposal.

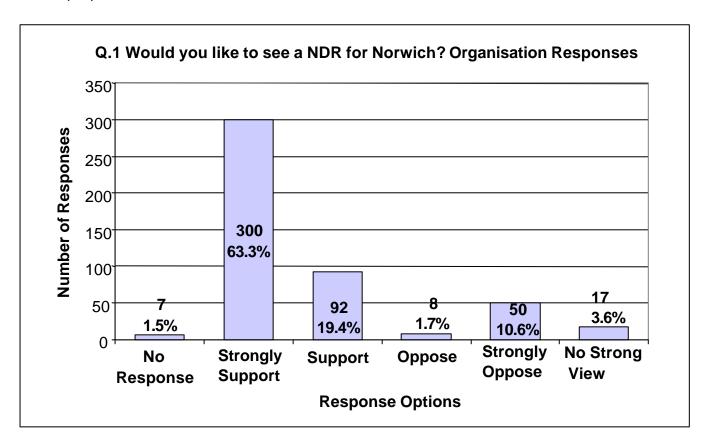


Figure 7.1 NDR – Organisation Responses

# 7.3 Q.2 Education, encouragement and enforcement

- The majority of organisations were in favour of education, encouragement and enforcement measures (72.4% support/strongly support).
- 15.8% of organisation responses were opposed or strongly opposed to the suggestion, and 11.8% did not respond or had no strong view.

# 7.4 Q.3a-3b Order of priorities

 Response to the current order of priorities was divided; 40.1% of organisation responses supported or strongly supported the order, and 43.5% were opposed or strongly opposed.  Of those organisations that were opposed, 92.2% were in favour of a more flexible order.

# 7.5 Q.4a-4d Traffic flow on the main road network and improving passenger transport

- Most organisations (90.9% support/strongly support) were in support of improving traffic flow on the main road network. 3.6% of responses from organisations were opposed or strongly opposed to improving traffic flow.
- The majority of responses from organisations were also in favour of improving passenger transport (89.2% support/strongly support), and 4.4% were opposed or strongly opposed.
- With regard to the new park and ride proposal, 69.6% of organisations support or strongly support the idea and 10.1% are opposed or strongly opposed. 20.3% of organisation responses did not respond to the question or held no strong view.
- The introduction of trams was backed by 65.8% of organisations, and opposed or strongly opposed by 20.3%.

# 7.6 Q.5a-5b Measures to reduce through traffic

- 30.6% of response from organisations support or strongly support access restrictions on roads around the north of Norwich, and 50.4% of organisations oppose or strongly oppose this measure. 19.0% did not answer or held no strong view.
- 50.2% of organisation responses support or strongly support access restrictions on residential side streets, and 36.7% of organisation responses oppose or strongly oppose this measure.

# 7.7 Q.6a-6b Traffic management

- 56.5% of organisation responses were in favour of small-scale traffic management measures in the city centre, 30.2% oppose or strongly oppose this measure.
- With regard to stopping traffic driving straight through the city centre 38.8% of organisation responses support or strongly support the measure and 52.3% oppose or strongly oppose the measure.

# 7.8 Q.7a-7d Road user or workplace charging

- Introducing road user charging within five years was supported or strongly supported by 14.1% of organisation responses, and opposed or strongly opposed by 78.1%.
- Road user charging within five to ten years was supported by a total of 12.0% of the organisations, and opposed by a total of 76.6% of organisation responses.
- Workplace parking charging within five years was supported or strongly supported by 16.7% of organisation responses and opposed or strongly opposed by 73.8%
- Introducing workplace parking charging within five to ten years was supported or strongly supported by 15.0% of organisation responses, and opposed or strongly opposed by 72.8% of organisation responses.

## 7.9 Q.8 Comments

• Comments for question 8 are analysed in Chapter 4. Comments on questionnaires from organisations are not analysed separately.

#### 7.10 Q.9 Preferred NDR Routes

- Question 9 asked respondents to choose a preferred western route and a preferred eastern route for the NDR. Those who did not select a preferred route, were opposed to all routes and those who selected multiple routes for either the western or eastern route are counted as 'No Response'.
- With regard to the western route options given in question nine, the most popular route was Orange (25.1%), followed by Red (22.2%), Green (18.8%) and lastly Blue (16.5%). 17.5% of organisation responses did not select a preferred western route or selected more than one route.

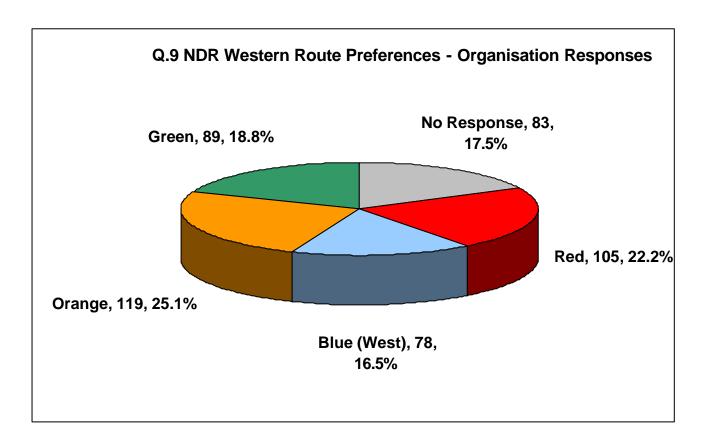


Figure 7.2 Q.9 NDR Western Route Preferences – Organisation Responses

 Organisation responses to the NDR eastern route options revealed Pink to be the most preferred route (33.5% of responses), followed by Blue (25.3%) and Yellow (23.4%). 17.7% of organisation responses did not select a preferred eastern route or selected more than one preferred route.

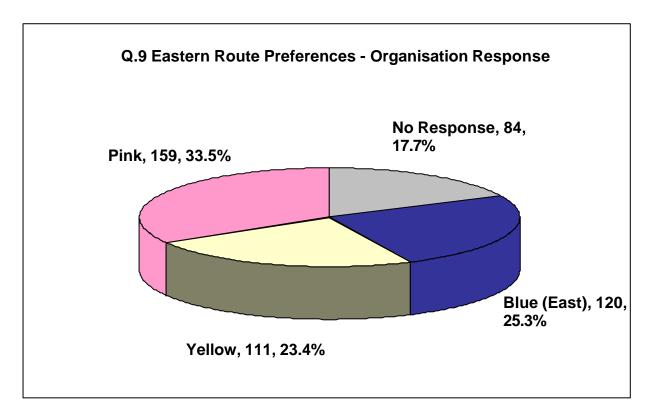


Figure 7.3 Q.9 NDR Eastern Route Preferences – Organisation Responses

# 7.11 Q.10, Q.11 and Q.12 Demographics of respondents

Demographic analysis of organisation responses was not carried out.
 Appendix H contains information on postcode locations of all named organisations that replied, and on age group data for organisation responses.

# **7.12 Q.13 Comments**

- Comments for question 13 are analysed in Chapter 4. Comments by organisations are not analysed separately.
- Letters and emails received from organisations are included in the general analysis of letters and emails in Chapter 5.

# 8 Analysis of Local Council Responses

# 8.1 Principle Findings

- There were 116 responses, including questionnaires, letters and emails, from 111 separate local council bodies (there were multiple responses from four councils). Local council bodies were taken to include parish, town, borough, district and county councils, but do not include responses from individual councillors (unless replying on behalf of the council).
- The following analysis is for the 93 questionnaire responses from local councils only. Letter responses are included in analysis in Chapter 5.
- A full data set of responses from local councils is included in Appendix I.

#### 8.2 Q.1 Northern Distributor Road

- A strong majority of 90.3% of local councils support or strongly support a NDR for Norwich (Figure 8.1).
- Only 1.1% of the councils that responded oppose or strongly oppose the NDR proposition.
- 8.6% of council respondents held no strong view or did not answer the question.

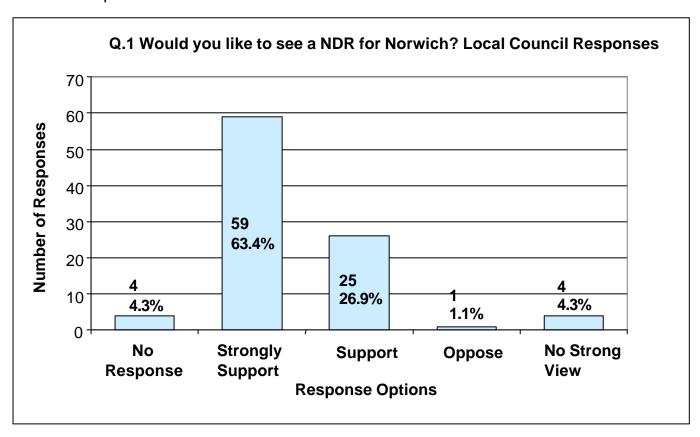


Figure 8.1 Q.1 NDR – Local Council Responses

# 8.3 Q.2. Education, encouragement and enforcement measures

- With regard to education, encouragement and enforcement measures, 79.6% of local council responses support or strongly support the suggestion.
- 5.4% of councils oppose or strongly oppose education, encouragement and enforcement.
- 15.1% of responses indicated no strong view or there was no answer given.

# 8.4 Q.3a-3b Order of priorities

- 47.3% of council responses support or strongly support the current order of priorities, and 28.0% oppose or strongly oppose the order. 24.7% of respondents did not answer the question or held no strong view.
- All of those who are in opposition to the current order of priorities support or strongly support a more flexible order (Q.3b).

# 8.5 Q.4a-4d Traffic flow on the main road network and improving passenger transport

- 92.5% of council responses support or strongly support improving traffic flow on the main road network, and only 1.1% of responses indicated opposition to this measure. 6.5% held no strong view or did not answer the question.
- 90.3% of local council responses support or strongly support improving passenger transport. There were no council responses who stated opposition to improving public transport. 9.7% of respondents held no strong view or did not answer the question.
- The proposed Park and Ride along the Drayton/Taverham corridor is favoured by 74.2% of local council's responses, opposed by only 1.1% and 24.7% did not answer the question or held no strong view.
- 51.6% of responses from councils indicated support or strong support for the introduction of trams, 21.5% were opposed or strongly opposed. 26.9% of respondents held no strong view or did not answer the question.

# 8.6 Q5a - 5b Measures to reduce through traffic

- Responses to access restrictions around the north of Norwich were mixed;
   35.5% of local councils that responded were in support, and 41.9% of local councils were in opposition.
- 65.6% of council's responses support or strongly support access restrictions on residential side streets and 16.1% oppose or strongly oppose the measure.

# 8.7 Q.6a-6b Traffic management

- With regard to small scale traffic management measures in the city centre,
   60.2% of council's responses are in support and 17.2% are in opposition.
   22.6% of local councils did not answer this question or held no strong view.
- 50.5% of councils that responded support or strongly support stopping traffic driving straight through the city centre, and 31.2% are opposed or strongly opposed. 18.3% did not answer this question or held no strong view.

# 8.8 Q.7a-7d Road user or workplace charging

- 7.5% of local councils that responded indicated support for road user charging within five years, and 73.1% were opposed or strongly opposed to this measure. 19.4% did not answer or held no strong view.
- With regard to road user charging within five to ten years, 11.8% of responses were in support/strong support of the measure and 69.9% were opposed.
   18.3% of the council responses held no strong view or did not supply an answer to this question.
- 15.1% of council responses support or strongly support the introduction of workplace parking charging within five years, 65.6% oppose or strongly oppose this measure. 19.4% of responses stated the council held no strong view or no answer was given.
- 8.6% of responses indicate support/strong support for workplace parking charging within five to ten year, and 66.7% of local council responses oppose or strongly oppose this proposition. 24.7% of councils that responded held no strong view or did not answer this question.

#### 8.9 Q.8 Comments

Analysis of comments given for question 8 is included in Chapter 4.

## 8.10 Q.9 Preferred NDR routes

77.4% of council responses selected a preferred western NDR route. The
most favoured route was Orange (24.7%), followed by Blue (20.4%), Red
(18.3%) and Green (14.0%).

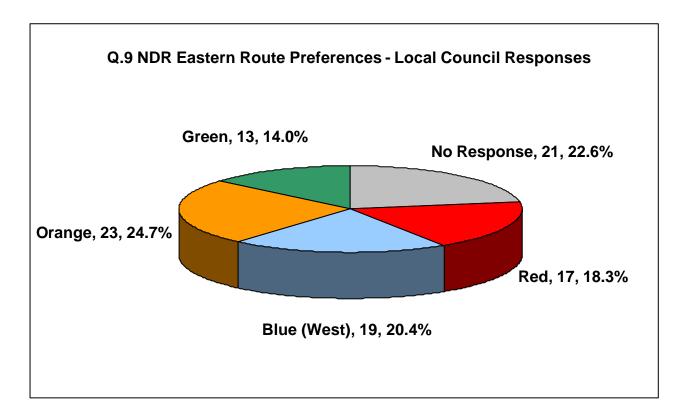


Figure 8.2 NDR Western Route Preferences – Local Council Responses

• 74.2% of council responses selected a preferred eastern NDR route. The Blue route was the most favoured (26.9%), followed by the Pink route (25.8%) and the Yellow route (21.5%).

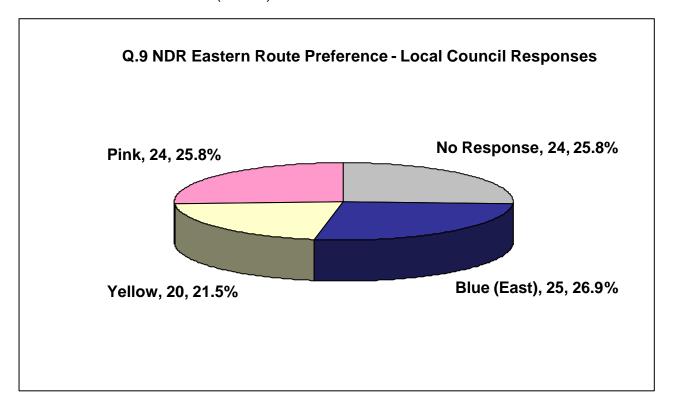


Figure 8.3 NDR Eastern Route Preferences – Local Council Responses

# 8.11 Q.10, Q.11 and Q.12 Demographics of respondents

 Demographic information from local council responses is not analysed. Age group data is not relevant, and location of responses is indicated by the name of the councils.

## 8.12 Q.13 Comments

 Comments given for question 13 are included in general analysis of comments in Chapter 4. Letters and emails received are in included in general analysis of letters in Chapter 5 Appendix A: Leaflet and Questionnaire

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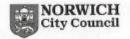


# Norwich Area Transport... Have your say



The closing date for responding is 13 December 2003







www.norwichareatransport.org



# County Councillor Adrian Gunson Cabinet member for Planning and Transportation

Thank you for taking the trouble to read this consultation document.

Norfolk County Council is reviewing the existing Norwich Area Transportation Strategy (NATS), together with Broadland District Council, Norwich City Council and South Norfolk Council. We have already done some consultation with local organisations and others and they have given us useful comments. We now have a Preferred Strategy for the future and would like your views on it.

The new Strategy will be important for making future decisions about all aspects of transport in the city area, including a possible new Northern Distributor Road and improvements to the junctions on the inner and outer ring roads. The Strategy will be vital to sustaining the local economy and providing employment opportunities over a wide area of Norfolk.

I know that many of you, who live, work in or visit Norwich, have strong views about parking, congestion and passenger transport services. There are also many people living in the northern suburbs whose lives are affected by the volume of traffic there.

This is your chance to influence the difficult decisions your elected representatives have to make, so please do let us know what you would like to see happen.

This consultation document sets out issues for the future of transport in the Norwich area and asks for your views on a Preferred Strategy. There is questionnaire with this booklet and a freepost reply envelope is included.

The results of the consultation will be reported to Councillors in early 2004, when they will consider how the Strategy should be updated. The results of this consultation will be publicised at the same time.

There is much more information about transport in Norwich than we have been able to give in this booklet. You can find out more by coming to one of our meetings or exhibitions, by visiting our website <a href="https://www.norwichareatransport.org">www.norwichareatransport.org</a> calling the helpline or e-mailing us. Full details of the meetings are given on page 15.

If you have any questions about this consultation, or want more copies of this document, call our helpline on 01603 223113 or e-mail norwich.transport@norfolk.gov.uk.

Thank you for taking the time to read this booklet and respond to the consultation - your views are important to us.

Please read the booklet and then complete the enclosed questionnaire.

The closing date for responding is 13 December 2003

# A Transport Strategy for Norwich

We are consulting on a new Transport Strategy for the Norwich Area. This will be a framework for making decisions about transport in Norwich up to 2025, with more detailed proposals for the period up to 2016.

The current strategy was adopted in 1997. Since then, there have been many changes such as new government policies and priorities for transport and significant change and growth in the Norwich area. The strategy therefore needs updating, and we will build on the success we have achieved so far.

## Some successes of the current strategy:

- · The number of people travelling by bus has increased
- Park and Ride is growing more popular
- · Fewer people are hurt or killed in road accidents
- . There is a high level of walking and cycling, compared to national levels

#### The challenges we face

- · Congestion and slow journey times in built up areas
- Reliability and availability of bus services
- Problems caused by traffic including nuisance to residents, busy roads and poor air quality
- Population growth and new housing development there could be in the region of 30,000 new homes in the Norwich area by 2025
- Increasing economic growth and prosperity in the future
- Access to Norwich International Airport
- Making it easier for people to get around

#### Our proposals

We have set out a Preferred Strategy and are asking for your views on it. The strategy is set out in more detail on the following pages, but it includes:

- A new distributor road around the north of Norwich linking with the trunk road network
- · A new bus station and improved links between the bus and rail stations
- Improving bus, rail and other passenger transport
- · An additional Park and Ride site in either Drayton or Taverham
- Road safety measures, such as in residential areas of the city
- Addressing pollution in Air Quality Management Areas
- Greater education, encouragement and enforcement measures
- Giving priority where it is most needed (for example where there is high pedestrian / vehicle conflict)
- Improving the efficiency of the road network by making better use of the computerised urban traffic control system
- Traffic management measures to reduce through traffic in the city centre, residential side streets and on suburban and rural roads around the north of Norwich

We are also asking for your views on road user or workplace parking charges in the city centre.

All of these are closely linked and the transport strategy will be a complex document. You can read more about the links on our website.

# The Preferred Strategy

#### Northern Distributor Road - see pages 10-14

This is a new road to distribute traffic around the north of Norwich and link with the A47 and A11 trunk roads. This, together with enforcement measures where necessary, will help to stop traffic using unsuitable suburban and rural roads and reduce congestion on other main roads. There is more detail on these other measures on page 6.

A Northern Distributor Road will also help the economy by providing access to the main road network and key employment locations in North Norfolk, improving access to the airport (which will sustain it as a regional airport) and providing access to existing and potential housing developments in the north of Norwich. Balanced against this is the impact on the environment of any new road - particularly where it crosses the river valleys west of Norwich.

#### Question 1 - please answer on the questionnaire:

1 Would you like to see a Northern Distributor Road for Norwich?

We are also asking for your views on which combination of routes you would like (see Question 9 on page 13). To help you decide, we have given more information on the Northern Distributor Road in the second half of this booklet, after the map. We have also included a table showing the likely effect on traffic flows on page 14.

#### Greater education, encouragement and enforcement

These measures would help to tackle some of the current problems in the Norwich area and would include:

- Publicity to increase travel choice for example for those who cannot afford to drive or do not use a car
- Education measures to help people think about how they travel, and so reduce congestion and pollution
- Greater enforcement of parking and speeding laws to keep traffic moving and make the area safer

#### Question 2 - please answer on the questionnaire:

2 Do you support education, encouragement and enforcement measures?



#### Changing priorities

Under the existing strategy, the needs of pedestrians are given priority when we look at new schemes. The needs of non-essential traffic are considered last. This is shown below.

#### **Existing priorities**

- Walking
- Cycling
- Public Transport
- Taxis
- Essential motor vehicles (including goods vehicles) and motorbikes and scooters
- Non-essential motor vehicles



We could be more flexible, to help us make decisions about what is best in particular circumstances - for example, giving traffic priority on main roads, putting the needs of residents first in residential areas and giving pedestrians priority in the city centre.

Questions 3a and 3b - please answer on the questionnaire: 3a Do you support the current order of priorities? 3b If not, do you support a more flexible order of priorities?

#### Improving traffic flow on main roads

Congestion and slow journey times are major problems in the Norwich area, resulting in higher journey cost and increased air pollution. The Preferred Strategy includes measures to improve main roads. These measures could help keep traffic moving:

- Improving the inner and outer ring road junctions to improve traffic-flow
- · Making better use of the computerised traffic light system

#### Improving bus, rail and other passenger transport in the Norwich area

The current availability and reliability of buses has been identified as a major problem. The Preferred Strategy includes measures to help, including a new bus station in the city centre and better bus links between the rail and bus stations. Our proposals for traffic management in the city centre will also help buses avoid being held up in congestion and we will look at how we can make bus travel more attractive and convenient.

An additional Park and Ride site along the Drayton/Taverham corridor is proposed. (Park and Ride is where car drivers park on the outskirts of the city and take a bus into the centre.)

We are also looking into the merits of a new train station and also light rail (trams). A new

train station near Dussindale could serve existing and potential new housing. Studies show that light rail could also be a longer-term option for Norwich, although more work needs to be done on its feasibility, including looking at the cost and likely numbers of passengers.

Questions 4a, 4b, 4c and 4d - please answer on the questionnaire

4a Do you support improving traffic flow on the road network?

4b Do you support improving bus, rail and other passenger transport?

4c Do you support building a new Park and Ride site along the Drayton/Taverham corridor?

4d Do you support introducing trams in the longer term, if they are feasible?

# Measures to reduce through traffic

In parts of the Norwich area, through traffic can cause many problems including noise, pollution and accidents. The Preferred Strategy recognises that there are localised severe problems and that access restrictions like closing roads to traffic may be appropriate. Access for residents and others, such as delivery vehicles, would be maintained.

The knock-on effect of these restrictions would be to displace traffic on to other, already congested roads. This means that access restrictions could only be introduced as other road improvements (particularly a Northern Distributor Road) are completed.

The Preferred Strategy therefore includes access restrictions in the following areas:

- Suburban and rural roads in the north of the city these would have to be co-ordinated with the phased introduction of other improvements under the overall strategy.
- Access restrictions on some residential side streets across the city.

Questions 5a and 5b - please answer on the questionnaire: 5a Do you support access restrictions on roads around the north of Norwich? 5b Do you support access restrictions on residential side streets?



#### Traffic management

In Norwich city centre, several busy roads split the main shopping area. The centre could be made more attractive to shoppers and other visitors if traffic was managed so that the area was better for pedestrians. These improvements would also make the city look more attractive - for example as Queen Street does, following the recent work there.

We suggest carrying out a limited number of road closures and other measures to begin with. In the longer term, the Preferred Strategy is to stop through traffic in the city centre.

Studies show that 19,000 vehicles cross the centre of Norwich each day without stopping. This traffic does not bring any benefit in terms of trade, but it adds to congestion and pollution for pedestrians and for drivers who do have business in the city.

Stopping through traffic could be achieved by a system called 'ring and loop'. This means that vehicles can come into the city centre to use car parks, pick up and put down, or make deliveries, but they must leave again at or near the point they came in. Vehicles will not be allowed to drive straight through the city centre.

Questions 6a and 6b - please answer on the questionnaire: 6a Do you support small-scale traffic management changes in Norwich city centre? 6b Do you support stopping traffic driving straight through the city centre?

#### Road user or workplace parking charging

We are asking for your views on introducing road user or workplace parking charges.

Congestion charging - where motorists pay a charge to enter the city - has recently been introduced in London. Many cities have been watching what happens with interest.

We would like to know if you support the idea of a similar system in Norwich. For example, vehicles could be charged to enter the city centre, inside the inner ring road.

Another option is charging for workplace parking. This is a charge for private nonresidential spaces, like those used by businesses for their workers.

Any money made from charging would be used to help pay for implementing the Preferred Strategy.

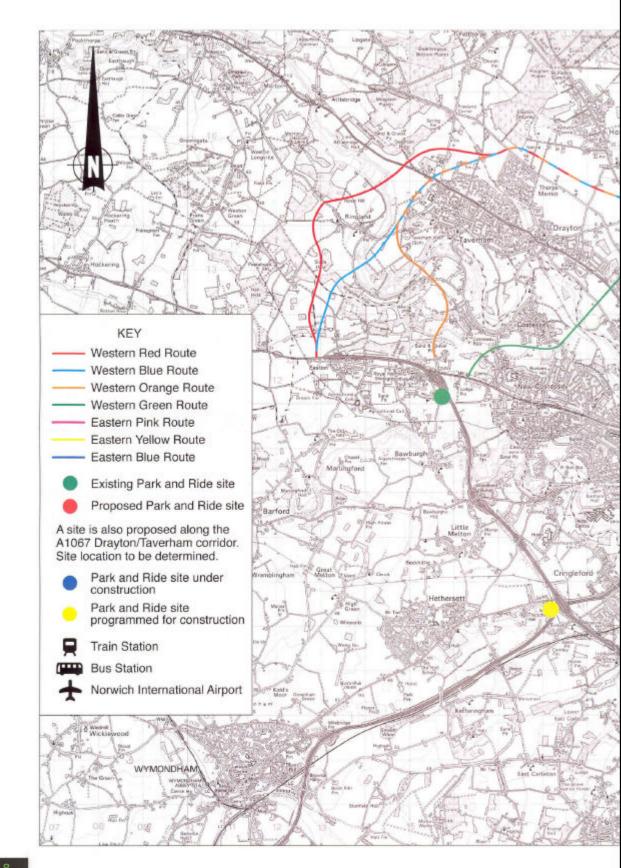
Questions 7a, 7b, 7c and 7d - please answer on the questionnaire:

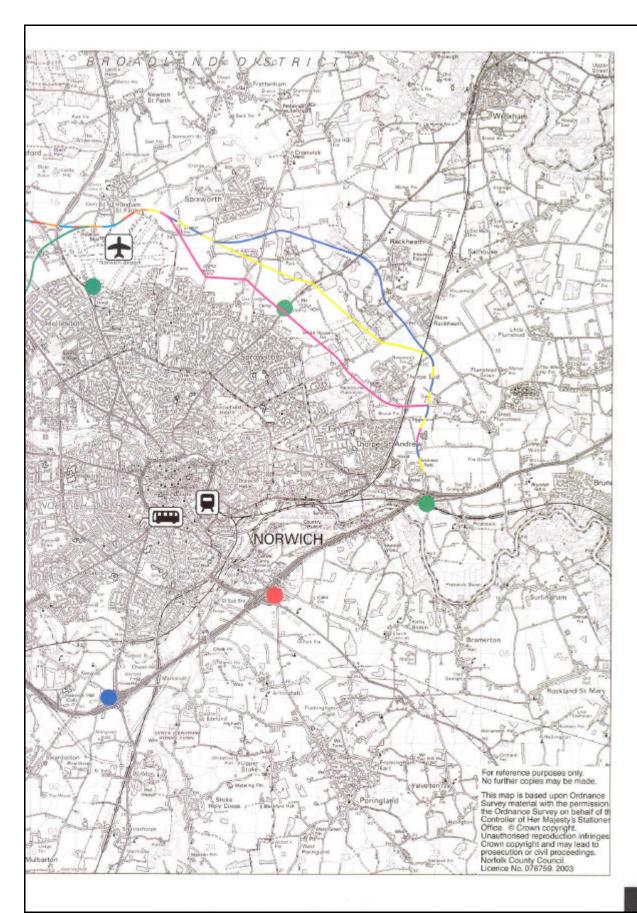
7a Do you support road user charging within 5 years?

7b Do you support road user charging within 5 to 10 years?

7c Do you support charging for workplace parking within 5 years?

7d Do you support charging for workplace parking within 5 to 10 years?





# A Northern Distributor Road for Norwich

We need to know whether you support a Northern Distributor Road for Norwich.

If you do, we also need to know which route you prefer. There are four possible routes on the west, and three on the east.

#### The Options

#### Western Red Route

Leaves the A47 at a new junction to the west of the Easton roundabout, progressing northwards over the River Tud and then northeasterly over the River Wensum. Passes to the north of Taverham and Drayton, running easterly to join the A140 to the northeast of the airport to join any of the eastern routes.

#### Western Blue Route

Leaves the A47 at a new junction to the west of Easton roundabout and quickly runs northeasterly over the rivers Tud and Wensum. Joins the western red route just northwest of Fir Covert Road, running easterly to join the A140 to the northeast of the airport to join any of the eastern routes.

#### Western Orange Route

Goes north from the roundabout at Longwater Business Park. Crosses the River Tud and turns northwesterly towards Ringland Hills and the Wensum before joining the western blue route to the west of Taverham. Passes to the north of Taverham and Drayton, running easterly to join the A140 to the northeast of the airport to join any of the eastern routes.

#### Western Green Route

Leaves the A1074 at a new junction near Lodge Farm and then runs northeasterly to cross the River Tud. Continues northeast between Old and New Costessey to the A140, just north of its junction with the B1149, before joining the other western routes to the north of the airport to join any of the eastern routes.

## Eastern Blue Route

Progresses north from the A47 Broadland Business Park. Passes historic parkland and the west of Rackheath before turning westerly to pass to the south of Spixworth to join any of the western routes to the north of the airport.

#### Eastern Yellow Route

Leaves the eastern blue route where it crosses the Plumstead Road northeast of Thorpe End. Carries on northwesterly to link with the eastern blue route at Spixworth road, south of Spixworth, to join any of the western routes to the north of the airport.

# Eastern Pink Route

Leaves the eastern blue route at its intersection with Middle Road (which leads to Great Plumstead). Follows that road westerly to the west of Thorpe End, then northwest crossing the Wroxham Road next to the park and ride site, before joining any of the western routes to the north of the airport.

# What would be the effects of a Northern Distributor Road?

A Northern Distributor Road is a major part of our Preferred Strategy, and would provide significant reductions in the amount of traffic using many city roads. It could be built in stages.

There will also be substantial road safety benefits as a result of transferring traffic from congested roads in the northern suburbs and surrounding rural lanes and villages, on to a modern purpose built road. There could be a reduction in the annual number of casualties of between 40 and 60, depending on the type of road built. There will also be significant benefits to residential properties - including reductions in noise and better air quality. A summary of the likely changes to traffic volumes on some existing roads is shown on page 14. However, any new road will have a significant impact on the environment. We carried out an Environmental Assessment, and used the results together with other considerations to select the routes for consultation.

All routes will affect properties and communities that they pass near to, for example, increased noise and visual impacts.

If a Northern Distributor Road is built, we will include measures to reduce the impact on the environment and on properties.

On the following page is a summary of factors to consider, and the environmental impacts of each route, to help you make your choice.



#### The Western Red Route

- Best route between A47 and A1067, avoiding country lanes and villages, e.g. Costessey
- Provides relief to A1067 through Taverham and Drayton
- · Impact on the landscape
- · Impact on Wensum Valley and floodplain
- · Impact on River Tud

#### The Western Blue Route

- Good route between A47 and A1067, avoiding country lanes and villages, e.g. Costessey
- Provides relief to A1067 through Taverham and Drayton
- · Impact on ecology
- · Impact on Wensum Valley and floodplain
- · Impact on River Tud

## The Western Orange Route

- · Provides relief to A1067 through Taverham and Drayton
- · Impact on the landscape and ecology
- Impact on Wensum Valley and floodplain
- · Impact on River Tud
- · Complex link with A47 at Longwater junction.

#### The Western Green Route

- Impact on the landscape and ecology
- Impact on Wensum Valley and floodplain
- Impact on River Tud
- Divides New and Old Costessey
- Complex link with A47 at Longwater junction.

# The Eastern Blue Route

- · Impact on the landscape
- Impact on historic parkland

#### The Eastern Yellow Route

- · Impact on the landscape
- · Impact on historic parkland

# The Eastern Pink Route

· Impact on the landscape

For more information about the Environmental Assessment please contact the Norwich Area Transport helpline on 01603 223113, visit our web site at <a href="https://www.norwichareatransport.org">www.norwichareatransport.org</a> or e-mail us at norwich.transport@norfolk.gov.uk.

# **Dual or Single carriageway?**

At this stage, we cannot say whether the road would be a dual or single carriageway. This will depend on the final strategy. Under the Preferred Strategy, it is likely that a dual carriageway will be justified.

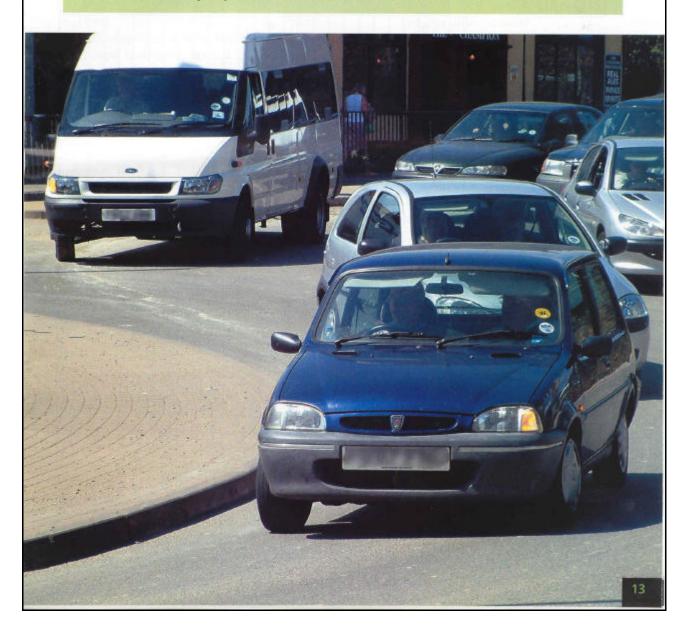
We would aim to build any road close to existing ground level where possible. This will help to reduce environmental impacts and will reduce earth moving and construction costs.

Crossing the river valleys will be our biggest problem. We will need to build bridges over the rivers and may consider a viaduct over the Wensum Valley - the careful design of these features will be very important.

The number and type of junctions will also depend on the final strategy. At present, it is likely that we would build ground level junctions at most locations.

# Question 9 - please answer on the questionnaire:

9. Which route do you prefer? Choose one Western and one Eastern route.



Changes In Irattic Flow  This table shows the likely changes in traffic flows (morning peak hour in 2001) as a result of building a Northern Distributor Road as part of the preferred Strategy.  It shows the changes expected for each Western route combined with any Eastern route (changes would be the same whichever eastern route is chosen)				600
his table shows the likely changes in traffic flows (morning peak hour in 001) as a result of building a Northern Distributor Road as part of the referred Strategy. shows the changes expected for each Western route combined with any astern route (changes would be the same whichever eastern route is chosen)				
1001) as a result of building a Northern Distributor Road as part of the referred Strategy.  Shows the changes expected for each Western route combined with any astern route (changes would be the same whichever eastern route is chosen)	Increase in Tr	Increase in Traffic Flows 10 - 25%	- 25%	
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astern route (changes would be the same whichever eastern route is chosen)	Reduction in	Reduction in Traffic Flows 6 - 10% Reduction in Traffic Flows 10 - 25%	6-10%	
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For the A1067 Drayton Road, 2 locations are shown to indicate the different	Reduction in	Reduction in Traffic Flows over 50%	over 50%	
effects of the Western Green route			6	
Parlial Routes	Western Red	Western Orange	Western Orange Western Green	Western Blue
A 1074 Dereham Road Retween Longwater Lane & Bowthorpe Roundabout				
A 1067 Drayton Road (east of western green route) Between Middleton's Lane & Low Road	þ			
A1067 Drayton Road (west of western green route) Between Low Road & School Road				
A140 Cromer road Between Middleton's Lane and Holt Road				
B1150 North Walsham Road Between Allen's Lane & Barker's Lane				
A1151 Wroxham Road Between Blue Boar Lane & A47 Southern Bypass				
A1042 Yarmouth Road Between Old Chapel Way & Broadland Way				
A146 Trowse Bypass Between Martineau Lane & A47 Southern Bypass				
A140 Ipswich Road Between B1113 Norwich Road & Hall Road				
A11 Newmarket Road Between Thickthorn Roundabout & Cringleford				
B1108 Watton Road Between A47 & Hethersett Lane				
Inner Ring Road				
Grapes Hill Between Convent Road & Dereham Road				
Queen's Road Between All Saints Green & St Stephens Street				
Outer Ring Road				
Boundary Road Between Whiffler Road & City View Road				
Martineau Lane Between Trowse Bypass and Bracondale				
Northern Suburbs				
Hellesdon Road at Bridge over the River Wensum				
Middleton's Lane Between Reepham Road & Woodland Road				
White Woman lane Between Spixworth Road & North Walsham Road				
Church Lane Between Barker's Lane Roundabout and A1151 Wroxham Road				
Northern Rural				
Ringland Road Between Church Lane & Costessey Lane				
Spinorarth Board Retween Coltishall Lane & Buxton Road				
Sprive of the Second Second Directors & A47 Varmouth Road				

# Here's how you can take part in this important consultation...

## Read the booklet and return your completed questionnaire

Post it (no stamp needed) using the enclosed envelope, or to the address on the questionnaire. You may also hand it in at one of the public meetings or exhibitions (see below).

Visit our website, where you can also respond on-line

www.norwichareatransport.org to find out more.

#### Come to a public meeting - these are open to all

1. University of East Anglia, Earlham Road

County Hall, Martineau Lane

3. Hilton Hotel, (Norwich International Airport)

4. Horsford Village Hall, Horsford

Thorpe End Village Hall, Plumstead Road

6. Thorpe Marriott Village Hall, The Square 7. Costessey High School, Middleton Crescent

8. Thorpe St Andrew School, Laundry Lane

9. Norwich Rugby Football Club, North Walsham Road Thursday 13th November

10. The Assembly House, Theatre Street

Tuesday 25th November All meetings begin at 7.30pm and are expected to finish by 9.30pm.

All venues are wheelchair accessible and there will be a loop system at meetings.

#### Visit our mobile exhibition

11. Tesco, Blue Boar Lane, Sprowston

12. Asda, Boundary Road, Hellesdon

13. Budgens, Fakenham Road, Drayton

14. Sainsbury's, Pound Lane, Thorpe St Andrew

15. Morrisson's, Koblenz Avenue, Riverside

16. Tesco, Ipswich Road

17. Waitrose, Eaton Street, Eaton

18. Roys, Bowthorpe

19. Sainsbury's Longwater

20. Homebase, Roundtree Way, Sprowston

21. B&Q, Boundary Road, Hellesdon

All mobile exhibitions are staffed and can be visited between 10.00am - 7.00pm (Sat 4.00pm)

Tues 14th October and Mon 3rd November Wed 15th October and Thurs 13th November Thurs 16th October and Weds 12th November Fri 10th October and Thurs 30th October Mon 13th October and Tues 11th November Wed 8th and Thurs 23rd October Tues 7th October and Thurs 6th November Mon 20th October and Tues 4th November Sat 18th October and Sat 8th November Sat 11th October and Sat 25th October

Thurs 9th October and Mon 10th November

Thursday 9th October

Tuesday 14th October

Wednesday 15th October

Wednesday 22nd October

Thursday 23rd October

Tuesday 28th October

Thursday 30th October

Monday 3rd November

#### Visit our static exhibitions

22. The Forum

23. Norwich City Hall

24. County Hall, Martineau Lane

25. Broadland District Council

South Norfolk District Council

6th October to 11th October

13th October to 14th November

6th October to 14th November

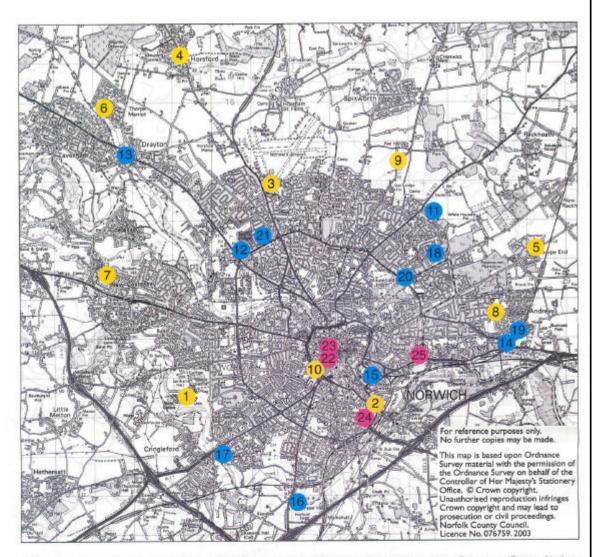
6th October to 14th November

6th October to 14th November

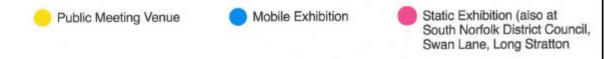
Council staff will be at The Forum on the 6th October to answer your questions.

See map on back page for location of venues.

# The closing date for responding is 13 December 2003



Map showing where you can find out more about the Norwich Area Transport Strategy Consultation



Each venue is numbered. For details of the venue, see page 15 of this booklet.

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If you would like this document in large print, audio, Braille, alternative format or in a different language please contact communication for all the helpline on 01603 223113.

### **Norwich Area Transport Consultation Questionnaire**

1	Would you like to see a Northern Distributor Road for Norwich?
2	Do you support education, encourage- ment and enforcement measures?
3a	Do you support the current order of priorities?
3b	If not, do you support a more flexible order of priorities?
4a	Do you support improving traffic flow on the main road network?
4b	Do you support improving bus, rail and other passenger transport?
4c	Do you support building a new park and ride site along the Drayton/Taverham corridor?
4d	Do you support introducing trams, in the long term, if they are feasible?
5a	Do you support access restrictions on roads around the north of Norwich?
5b	Do you support access restrictions on residential side streets?
6a	Do you support small scale traffic management measures in the city centre?
6b	Do you support stopping traffic driving straight through the city centre?
7a	Do you support road user charging within 5 years?
7b	Do you support road user charging within 5 to 10 years?
7c	Do you support workplace parking charging within 5 years?
7d	Do you support workplace parking charging within 5 to 10 years?

Support	Oppose	Strongly Oppose	No Strong View
0,			
	Support	Support	Support Oppose Strongly Oppose

8	Please use this space for any other comments about the Preferred Strategy						



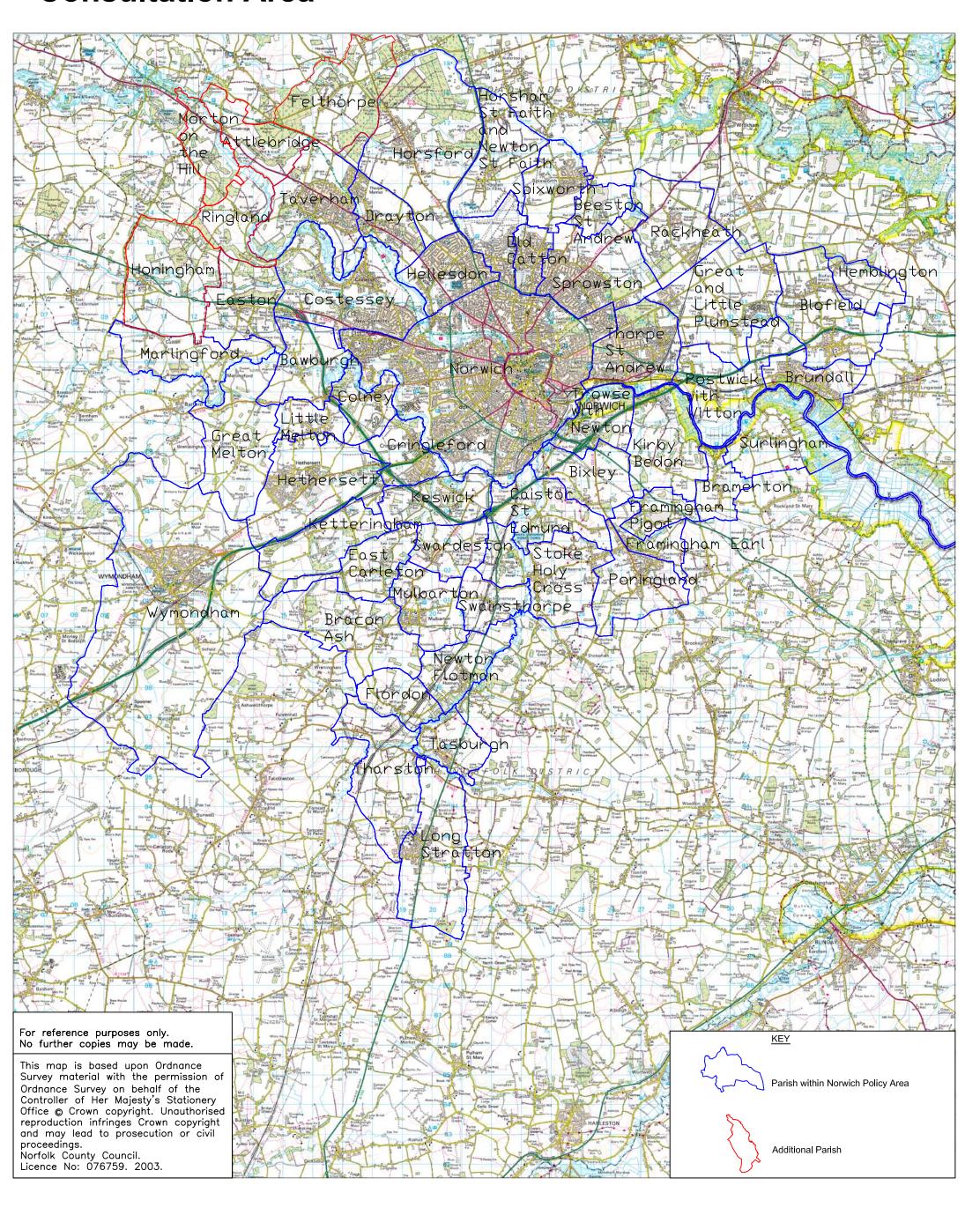
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		Blue	Yellow	Pink			
	Eastern route						
nera	al Questions						
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Appendix B: Map of Questionnaire Distribution Area

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## **Norwich Area Transport Strategy**

## **Consultation Area**



### Appendix C: Principal Analysis - Data For All Returns

For a total of 21,416 questionnaire responses.

Table C-1 Data for Q.1-7 - All Responses

Question	No Response	%	Strongly Support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
1. Would you like to see a Northern Distributor Road for Norwich?	515	2.40	11766	54.94	4851	22.65	766	3.58	2217	10.35	1301	6.07
2. Do you support education, encouragem ent and enforcement measures?	848	3.96	6677	31.18	9363	43.72	1540	7.19	921	4.30	2067	9.65
3a. Do you support the current order of priorities?	1570	7.33	3451	16.11	6541	30.54	5240	24.47	1893	8.84	2721	12.71
3b. If not, do you support a more flexible order of priorities?		35.53	2888	13.49	6982	32.60	787	3.67	483	2.26	2667	12.45
4a. Do you support improving traffic flow on the main road network?	809	3.78	10858	50.70	8587	40.10	401	1.87	201	0.94	560	2.61

Question	No Response	%	Strongly Support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
4b. Do you support improving bus, rail and other passenger transport?	551	2.57	12884	60.16	6676	31.17	342	1.60	206	0.96	757	3.53
4c. Do you support a new park and ride site along the Drayton/Tav erham corridor?	617	2.88	6460	30.16	7752	36.20	1105	5.16	874	4.08	4608	21.52
4d. Do you support introducing trams?	520	2.43	7375	34.44	6644	31.02	2170	10.13	1638	7.65	3069	14.33
5a. Do you support access restrictions on roads around the north of Norwich?	911	4.25	2709	12.65	5722	26.72	5365	25.05	3122	14.58	3587	16.75
5b. Do you support access restrictions on residential side streets?	689	3.22	3990	18.63	7674	35.83	4257	19.88	2363	11.03	2443	11.41
6a. Do you support small scale traffic measures in the city centre?	897	4.19	4058	18.95	9930	46.37	2650	12.37	1971	9.20	1910	8.92

Question	No Response	%	Strongly Support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
6b. Do you support stopping traffic driving straight through the city centre?	562	2.62	5605	26.17	5569	26.00	4285	20.01	4010	18.72	1385	6.47
7a. Do you support road user charging within 5 years?	705	3.29	1593	7.44	1810	8.45	5172	24.15	10583	49.42	1553	7.25
7b. Do you support road user charging within 5 to 10 years?	1501	7.01	991	4.63	2079	9.71	4824	22.53	10319	48.18	1702	7.95
7c. Do you support workplace charging within 5 years?	722	3.37	2122	9.91	2857	13.34	4488	20.96	8716	40.70	2511	11.72
7d. Do you support workplace charging within 5 to 10 years?	1679	7.84	1507	7.04	2758	12.88	4228	19.74	8627	40.28	2617	12.22

Table C-2 Q.9 NDR Western Route Preferences – All Responses

	Responses	%
No		
Response	3443	16.08
Red	5304	24.77
Blue	3767	17.59
Orange	4597	21.47
Green	4305	20.10

**Table C-3 Q.9 NDR Eastern Route Preferences – All Responses** 

	Responses	%
No		
Response	3764	17.58
Blue	5316	24.82
Yellow	5357	25.01
Pink	6979	32.59

Table C-4 Q.8 and Q.13 Comment Size and Number – All Responses

Q.8	Comment Size	Comments	%
	1-3 lines	2300	10.74
	4-6 lines	3234	15.10
	7+ lines	1005	4.69
	Total comments	6539	30.53
Q.13	Comment Size	Comments	%
Q.13		Comments 2160	% 10.09
Q.13	Size		
Q.13	Size 1-3 lines	2160	10.09

Table C-5 Q.11 Individual and Organisation Responses – All Responses

	Responses	%
No Response	339	1.59
Individual	20510	95.77
Organisation	567	2.64

Table C-6 Q.12 Age Groups – All Responses

	Responses	%
No		
Response	496	2.32
Under 18	84	0.39
18-35	3392	15.84
36-60	10344	48.30
Over 60	7100	33.15

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# Appendix D: Principal Analysis – Data Excluding Organisation and Council Responses

For a total of 20,849 questionnaire responses.

Table D-1 Data for Q.1-7 - Excluding Organisation and Local Council Responses

Question	No Response	%	Strongly Support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
1. Would you like to see a Northern Distributor Road for Norwich?	504	2.42	11407	54.71	4734	22.71	757	3.63	2167	10.39	1280	6.14
2. Do you support education, encouragem ent and enforcement measures?	827	3.97	6504	31.20	9119	43.74	1496	7.18	885	4.24	2018	9.68
3a. Do you support the current order of priorities?	1529	7.33	3380	16.21	6378	30.59	5087	24.40	1814	8.70	2661	12.76
3b. If not, do you support a more flexible order of priorities?		35.64	2786	13.36	6784	32.54	773	3.71	464	2.23	2611	12.52
4a. Do you support improving traffic flow on the main road network?	788	3.78	10558	50.64	8370	40.15	387	1.86	197	0.94	549	2.63

Question	No Response	%	Strongly Support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
4b. Do you support improving bus, rail and other passenger transport?	533	2.56	12583	60.35	6470	31.03	330	1.58	197	0.94	736	3.53
4c. Do you support a new park and ride site along the Drayton/Tav erham corridor?	599	2.87	6272	30.08	7541	36.17	1075	5.16	855	4.10	4507	21.62
4d. Do you support introducing trams?	503	2.41	7205	34.56	6454	30.96	2104	10.09	1588	7.62	2995	14.37
5a. Do you support access restrictions on roads around the north of Norwich?	887	4.25	2661	12.76	5592	26.82	5202	24.95	3007	14.42	3500	16.79
5b. Do you support access restrictions on residential side streets?	669	3.21	3913	18.77	7452	35.74	4139	19.85	2292	10.99	2384	11.43
6a. Do you support small scale traffic measures in the city centre?	868	4.16	3981	19.09	9683	46.44	2565	12.30	1897	9.10	1855	8.90

Question	No Response	%	Strongly Support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
6b. Do you support stopping traffic driving straight through the city centre?	544	2.61	5503	26.39	5440	26.09	4160	19.95	3858	18.50	1344	6.45
7a. Do you support road user charging within 5 years?	688	3.30	1567	7.52	1762	8.45	5062	24.28	10255	49.19	1515	7.27
7b. Do you support road user charging within 5 to 10 years?	1468	7.04	974	4.67	2028	9.73	4714	22.61	10001	47.97	1664	7.98
7c. Do you support workplace charging within 5 years?	705	3.38	2079	9.97	2807	13.46	4384	21.03	8409	40.33	2465	11.82
7d. Do you support workplace charging within 5 to 10 years?	1646	7.89	1472	7.06	2713	13.01	4121	19.77	8327	39.94	2570	12.33

Table D-2 Q.9 NDR Western Route Preferences – Excluding Organisation/Council Responses

	Responses	%
No Response	3339	16.02
Red	5182	24.85
Blue	3670	17.60
Orange	4455	21.37
Green	4203	20.16

Table D-3 Q.9 NDR Eastern Route Preferences – Excluding Organisation/Council Responses

	Responses	%
No Response	3656	17.54
Blue	5171	24.80
Yellow	5226	25.07
Pink	6796	32.60

Table D-4 Q.8 and Q.13 Comment Size and Number – Excluding Organisation/Council Responses

Q.8	Comment Size	Comments	%
	1-3 lines	2234	10.72
	4-6 lines	3159	15.15
	7+ lines	975	4.68
	Total comments	6368	30.54
Q.13	Comment Size	Comments	%
Q.13	Comment Size 1-3 lines	Comments 2087	% 10.01
Q.13			
Q.13	1-3 lines	2087	10.01

Table D-5 Q.12 Age Groups – Excluding Organisation/Council Responses

	Responses	%
No		
Response	411	1.97
Under 18	84	0.40
18-35	3302	15.84
36-60	10031	48.11
Over 60	7021	33.68

### Appendix E: Questionnaire Comments Analysis – Data For All Returns

Full data table of codes ascribed for both question 8 and question 13 are given below. The percentages given are with reference to the total number of codes assigned for each separate question. Percentages are also given as totals for main groups of codes.

Table E-1 List of Comment Codes for Question 8

Q.8	Codes		%of
Comment Descriptions	used	Total	comments
Public Transport General - Total		1087	9.2%
Complaint about public transport general	A1	93	0.79
Public transport should be priority / should be improved	A2	715	6.04
Public transport is too expensive / should be cheaper	A3	111	0.94
Public transport general suggestion	A4	40	0.34
Public transport specific comment	A5	128	1.08
Buses - Total		1091	9.2%
Complaint about bus services/efficiency / should be improved	B1	404	3.41
Buses too expensive / should be cheaper / ticket style comment	B2	118	1.00
Bus routes / stops should be improved / not convenient	В3	111	0.94
Buses cause problems on road / bus lanes a problem / should be restricted	B4	72	0.61
Buses general comment or suggestion	B5	31	0.26
Buses specific comment	B6	355	3.00
Trains - Total		128	1.1%
Complaint about trains / should be improved	C1	37	0.31
Trains general comment or suggestion	C2	14	0.12
Trains specific comment	C3	77	0.65
Trams – Total		542	4.6%
In favour of trams in Norwich area	D1	244	2.06
Against introduction of trams	D2	99	0.84
Trams specific comment / suggestion	D3	199	1.68
Park and Ride – Total		589	5.0%
Park and Ride is too expensive to use/ should be cheaper	E1	67	0.57
Complaint about Park and Ride service/efficiency/routes	E2	32	0.27

Q.8	Codes		%of
Comment Descriptions	used	Total	comments
Park and Ride should be improved/ expanded	E3	168	1.42
Park and Ride general comment	E4	11	0.09
Park and Ride specific comment	E5	236	1.99
Park and Ride not useful / not convenient to use	E6	75	0.63
Restrictions/Charging/Car Use - Total		2903	24.6%
Motorists should not be targeted / already pay road tax / should be priority / don't be anti-car	F1	770	6.51
Opposed to road charging	F2	377	3.19
Opposed to work based charging	F3	293	2.48
Opposed to restraints and access restrictions general	F4	173	1.46
Motorists / private vehicles are the main problem / should not be priority	F5	66	0.56
General comment / suggestion about motorists / cars / charging /restrictions	F6	262	2.21
Specific comment about motorists / private vehicles / restrictions	F7	643	5.43
Not support restrictions unless improve public transport	F8	136	1.15
Support for charging / restrictions	F9	140	1.18
Not support unless build NDR	F10	43	0.36
Parking - Total		601	5.1%
Parking in centre should be improved/increased	G1	303	2.56
Parking in centre should be free/cheap for short period	G2	36	0.30
Parking in centre should be limited	G3	35	0.30
Parking in residential areas should be limited / roadside parking should be limited	G4	21	0.18
Parking general comment/suggestion	G5	40	0.34
Specific comment/suggestion about parking	G6	166	1.40
Disabled/Elderly Provision - Total		192	1.6%
Disabled / elderly road users should have better facilities / should be considered	H1	184	1.56
Disabled road users should have restrictions / they cause	'''	107	1.00
problems	H3	4	0.03
Disabled road users general comment	H4	4	0.03
Disabled road users specific comment	H5	30	0.25

Q.8 Comment DescriptionsCodes used% 6 commSchool Traffic - Total1030.9School traffic is problemI1750.6School access needs improving / need car accessI220.0School traffic specific commentII	% 63 02
School Traffic - Total1030.9School traffic is problemI1750.6School access needs improving / need car accessI220.6	% 63 02 05
School traffic is problem  School access needs improving / need car access  11 75 0.6 2 2 0.0	63 02 05
School access needs improving / need car access     2   2   0.0	)2
	)5
School traffic specific comment	
Borroof traine specific comment	
School traffic suggestion / general comment  4 20 0.1	1
Business/Commercial Traffic- Total 113 1.0	%
Business / work traffic is problem J1 10 0.0	)8
Business / work traffic should be priority / shouldn't be	
restricted / need to have access J2 90 0.7	<b>7</b> 6
Business / work access general comment	10
Business / work specific comment  J3 10 0.0  J4 3 0.0	
Business / work specific comment J4 3 0.0	)3
Cycle/Pedestrian Provision - Total 802 6.8	%
Cyclists are a problem on the roads / pavements or cycle	
lanes are a problem K1 50 0.4	12
Cyclists need better cycle routes/ improved routes / facilities K2 411 3.4	17
Cyclists/ pedestrians should not be priority  K3 15 0.1	
Pedestrians need better provision / centre should be	
pedestrianised K4 121 1.0	)2
General comment / suggestion on cycle or pedestrian issues K5 11 0.0	9
Specific comment on cycle or pedestrian issues  K6 192 1.6	
Pedestrians are a problem  K7 2 0.0	
	) <u>C</u>
NDR – Total 1482 12.6	6%
General support of NDR L1 300 2.5	54
Support of NDR SPECIFIC ROUTE / LOCATION L2 66 0.5	6
Support an NDR route because of congestion / traffic	
problems L3 41 0.3	35
Support of NDR because of business / economy / city growth L4 8 0.0	)7
General against NDR / will not solve problems / why	•
needed? L5 364 3.0	)8
Against NDR SPECIFIC ROUTE / LOCATION L6 25 0.2	21
Against NDR route for environmental reasons / pollution /	- 1
affect river valley /encourage development L7 218 1.8	34
Against NDR because of noise / safety / increased traffic in	
area L8 48 0.4	11

Q.8	Codes	Total	% of
Comment Descriptions	used	Total	comments
General comment / <u>suggestion</u> about NDR	L9	314	2.65
NDR must be dualled	L10	98	0.83
Existing Roads/Traffic Management - Total		1039	8.8%
Need improvements to roads / complaint about roads			
general	M1	233	1.97
Specific road needs improving / complaint about road	M2	519	4.39
Should not build more roads	M3	93	0.79
General comment about roads	M4	194	1.64
Advice/Education – Total		214	1.8%
Advice / education should be improved	N1	60	0.51
Advice / education should not priority / should not be in			
strategy / negative comment	N2	37	0.31
General comment on advice / education	N3	63	0.53
Specific comment / suggestion on advice / education	N4	54	0.46
General/Miscellaneous Comments - Total		860	7.3%
Survey / questionnaire / strategy comment NEGATIVE	O1	436	3.69
Survey / questionnaire / strategy comment POSITIVE	O2	76	0.64
Miscellaneous / irrelevant comment	O3	348	2.94
Taxis - Total		55	0.5%
Taxis should not get priority access	R1	41	0.35
Taxis should get priority access	R2	12	0.10
Taxis Other Comment	R3	2	0.02
	Grand Total	11831	

**Table E-2 List of Comment Codes for Question 13** 

Q.13	Codes		% of
Comment Descriptions	used	Total	
Public Transport General - Total		901	6.9%
Complaint about public transport general	A1	78	0.60
Public transport should be priority / should be improved	A2	578	4.42
Public transport is too expensive / should be cheaper	A3	97	0.74
Public transport general suggestion	A4	47	0.36
Public transport specific comment	A5	101	0.77
Buses - Total		1129	8.6%
Complaint about bus services/efficiency / should be improved	B1	417	3.19
Buses too expensive / should be cheaper / ticket style comment	B2	119	0.91
Bus routes / stops should be improved / not convenient	В3	105	0.80
Buses cause problems on road / bus lanes a problem / should be restricted	B4	56	0.43
Buses general comment or suggestion	B5	23	0.18
Buses specific comment	B6	409	3.13
Trains - Total		119	0.91%
Complaint about trains / should be improved	C1	36	0.28
Trains general comment or suggestion	C2	15	0.11
Trains specific comment	C3	68	0.52
Trams – Total		312	2.45
In favour of trams in Norwich area	D1	179	1.37
Against introduction of trams	D2	30	0.23
Trams specific comment / suggestion	D3	103	0.79
Park and Ride – Total		514	3.9%
Park and Ride is too expensive to use/ should be cheaper	E1	57	0.44
Complaint about Park and Ride service/efficiency/routes	E2	27	0.21
Park and Ride should be improved/ expanded	E3	134	1.03
Park and Ride general comment	E4	12	0.09
Park and Ride specific comment	E5	219	1.68
Park and Ride not useful / not convenient to use	E6	65	0.50
Restrictions/Charging/Car Use - Total		1480	11.3%

Q.13	Codes		%of
Comment Descriptions	used	Total	comments
Motorists should not be targeted / already pay road tax /			
should be priority / don't be anti-car			
, ,	<u>F1</u>	344	2.63
Opposed to road charging	F2	131	1.00
Opposed to work based charging	F3	90	0.69
Opposed to restraints and access restrictions general	F4	100	0.77
Motorists / private vehicles are the main problem / should			
not be priority	F5	59	0.45
General comment / suggestion about motorists / cars /			
charging /restrictions	F6	99	0.76
Specific comment about motorists / private vehicles /			
restrictions	F7	500	3.83
Not support restrictions unless improve public transport			
	F8	29	0.22
Support for charging / restrictions	Ε0	111	0.05
Nich and the state of the state	F9	111	0.85
Not support unless build NDR	F10	17	0.13
	1 10	17	0.10
Parking - Total		463	3.5%
•	G1	231	
Parking in centre should be improved/increased	Gi	231	1.77
Parking in centre should be free/cheap for short period	G2	26	0.20
Parking in centre should be limited			0.20
arking in centre should be inflited	G3	25	0.19
Parking in residential areas should be limited / roadside			
parking should be limited	G4	21	0.16
Parking general comment/suggestion			
	G5	37	0.28
Specific comment/suggestion about parking	G6	123	0.94
Disabled/Elderly Provision - Total		164	1.3%
Disabled / elderly road users should have better facilities /			
should be considered	H1	140	1.07
Disabled road users should have restrictions / they cause			
problems	H3	4	0.03
Disabled road users general comment			
	H4	19	0.15
Disabled road users specific comment	H5	1	0.01
School Traffic - Total		146	1.1%
School traffic is problem	<b>I</b> 1	90	0.69
School access needs improving / need car access	12	4	0.03
School traffic specific comment			
·	13	11	0.08
School traffic suggestion / general comment	14	14	0.24
	14	41	0.31
Pusingsa/Commercial Troffic Total		60	0.50/
Business/Commercial Traffic- Total		69	0.5%

Q.13	Codes		%of
Comment Descriptions		Total	
Business / work traffic is problem	J1	6	0.05
Business / work traffic should be priority / shouldn't be	<del></del>	-	
restricted / need to have access	J2	52	0.40
Business / work access general comment	10	_	0.05
Duning and Associate and artists are artists and artists and artists are artists and artists and artists are artists are artists and artists are artis	J3	7	0.05
Business / work specific comment	J4	4	0.03
Cycle/Pedestrian Provision - Total		732	5.6%
Cyclists are a problem on the roads / pavements or cycle	1.6.4		
lanes are a problem	K1	43	0.33
Cyclists need better cycle routes/ improved routes / facilities	K2	374	2.86
Cyclists/ pedestrians should not be priority	K3	7	0.05
Pedestrians need better provision / centre should be			
pedestrianised	K4	95	0.73
General comment / suggestion on cycle or pedestrian issues	K5	10	0.08
Specific comment on cycle or pedestrian issues	K6	201	1.54
Pedestrians are a problem	K7	2	0.02
NDR – Total		4274	32.7%
General support of NDR	L1	681	5.21
Support of NDR SPECIFIC ROUTE / LOCATION	L2	360	2.76
Support an NDR route because of congestion / traffic			
problems	L3	117	0.90
Support of NDR because of business / economy / city			
growth	L4	45	0.34
General against NDR / will not solve problems / why	1.5	F60	4.25
needed? Against NDR SPECIFIC ROUTE / LOCATION	<u>L5</u>	568	4.35
Against NDR SI ECII IC ROOTE / ECCATION	L6	254	1.94
Against NDR route for environmental reasons / pollution /			
affect river valley /encourage development	L7	524	4.01
Against NDR because of noise / safety / increased traffic in			
area	L8	187	1.43
General comment / <u>suggestion</u> about NDR	L9	1112	8.51
NDR must be dualled	L10	426	3.26
Existing Roads/Traffic Management - Total		1423	10.9%
Need improvements to roads / complaint about roads		1423	10.370
general	M1	258	1.97
Specific road needs improving / complaint about road			
	M2	831	6.36

Q.13	Codes		%of
Comment Descriptions	used	Total	comments
Should not build more roads	1.40	00	0.70
	M3	96	0.73
General comment about roads	M4	238	1.82
Advice/Education – Total		130	1.0%
Advice / education should be improved	N1	62	0.47
Advice / education should not priority / should not be in			
strategy / negative comment	N2	11	0.08
General comment on advice / education	N3	22	0.17
Specific comment / suggestion on advice / education	N4	35	0.27
General/Miscellaneous Comments - Total		1196	9.1%
Survey / questionnaire / strategy comment NEGATIVE	O1	515	3.94
Survey / questionnaire / strategy comment POSITIVE	O2	180	1.38
Miscellaneous / irrelevant comment	O3	501	3.83
Taxis - Total		13	0.1%
Taxis should not get priority access	R1	7	0.05
Taxis should get priority access	R2	4	0.03
Taxis Other Comment	R3	2	0.02
	Grand Total	1 <b>30</b> 65	

### Table E-3 Q.8 Specific Locations with Reference to the NDR

List NDR Specific 8	List NDR Specific 8
A1067	4
A1067 Reepham Road	1
A1067 Taverham/Drayton area	1
A1067/Middletons Lane	1
A1074	2
A11	1
A11 Thetford/Elvedon	1
A140	1
A140/B1149	1
A146 Lowestoft Road	1
A146 River/Rail Bridge	1
A47	13
A47/A17	1
Aylsham Road	1
Barrack Street	1
Blue Route - west of golf course and back of Taverham garden centre	1
Boundary Lights	1
Bowthorpe	2
Broadland	1
Broadland Business Park	1
Broadland Parks	1
Brook Farm	1
Brundall	1
Bus Station	1
Castle Mall Car Park	2
Cattlemarket Street	1
Catton	1
Chestnut Hill	1
Colman Road	1
Colney hospital, Brunswick Road	1
Costessey	9
Costessey Street	1
Cromer Road	5
Cycle/walkway between Hellesdon and Drayton	1
Dereham Road	2
Drayton	21

List NDR Specific 8	List NDR Specific 8
Drayton High Road	2
Drayton Road	2
Drayton Wood	1
E Twiddenham	1
Earlham Road	2
Earlham Road North to the Yarmouth Road	1
Easton - Horsham St Faith	1
Fakenham	1
Fakenham Rd/Beach Av	1
Fakenham Road	3
Fifers Lane	1
Fir Court Road	1
Folgate Lane	1
Full Cromer District Hospital	1
Gentlemans Walk	1
Great Plumstead	1
Harford	1
Harvey Lane - Martineau Lane	1
Hellesdon	9
Historic parkland	1
Hockering	1
Honingham	1
Honingham junction	1
Horsfield	1
Horsford	2
Horsham St Faith	4
Horsham St Faith - Postwick	1
Horsham St Faith, south of crematorium at Newton, between Spixworth & Crostwick.	1
Horsham St Faiths	3
Ipswich Road	1
Kings Lynn	1
Lakenham	1
Little Plumstead	1
London Street	1
Longwater Lane	1
Low Road between Drayton & Hospital Lane	1
Marriotts Lane	1
Marriotts Way	2

List NDR Specific 8	List NDR Specific 8
Martineau Lane - Plumstead	1
Matishall	1
Middleton Lane	1
Middletons Lane Thorpe Marriot	1
Middletons Road	1
Mile Road	1
Muntergate	1
Newmarket Road	1
North Dussindale	1
North of the Airfield	1
Norwich - Ipswich	1
Norwich & Norfolk Hospital	1
Norwich Airport	21
Norwich and Norfolk Hospital	1
Oak Farm & Plumstead	1
Old & New Costessey	1
Old Catton	2
Old Costessey	3
Plumstead Road	2
Queen Street	2
Racecourse Plantation in Thorpe and Drayton Drewery	1
Rackheath	3
Rail Station	1
Rail Station in Dussindale	1
Red Lion Street	1
Reepham Road	5
Ringland	6
Ringland Hills	7
Ringland Road	2
Rinlgand river valleys	1
Rose Lane	1
Salhouse Road	2
Sandy Lane, Taverham	1
Silver Road	1
South of Horsford Manor	1
Spixworth	3
Sprowston	4
Sprowston - Church Lane/ Barker Lane/ Blue Boar Lane complex	1
St Andrews	2

List NDR Specific 8	List NDR Specific 8
St Stephens	3
Sweetbriar Broadland Estates	1
Taverham	26
Taverham Hall School	1
Taverham High School	1
Taverham Road	1
The Street	1
Thickthorn roundabout	1
Thorpe End	2
Thorpe Marriott	13
Thorpe Marriott to Bath Road	1
Thorpe Road	1
Tud Valley	7
Unthank Road	1
Wensum Valley	20
West of Costessey	1
West of Rackheath to join Wroxham Road at the Sprowston Park & Ride etc.	1
Westwick Street	1
Whiffler Road	1
Whittingham	1
Wroxham	1
Wroxham Road	2
Wroxham via Plumstead	1
Wymondham	2
Wymondham Road	1
Yarmouth	1

### Table E-4 Q.13 Specific Locations with Reference to the NDR

Q.13 Named Location	Number of Times in Q.13
A1	1
A1047	3
A1067	26
A1067 between Attlebridge and Taverham	1
A1067 Pottlebridge	1
A1067 Taverham	2
A1067/A140	2
A1074	13
A1074 North of Taverham	1
A1074 South of Costessey Park & Ride	1
A11	13
A1151	3
A1161	1
A140	18
A140/A146	1
A142	1
A146	3
A146/B1332	1
A147	1
A17	1
A47	89
A47 Brundall	3
A47 Costessey	1
A47 Hockering	2
A47 Honingham	2
A47 Thorpe Business Park	1
A47/A11	3
A47/A140	1
A47/A140/A146	1
A47/Dereham Road	16
Asda	1
Aylsham	6
Aylsham Road	1
B&Q warehouse	1
B1108	3
B1140	1

Q.13 Named Location	Number of Times in Q.13
B1149	3
B1149 north of Horsford	2
B1150	2
Barkers Lane	1
Barnham Broom	1
Beech Avenue	2
Beeston	1
Beeston Park	2
Blofield/Brundall roundabout	7
Blue Boar Lane	4
Blue Boar Lane - Tesco's	1
Boundary Road	5
Boundry Road	1
Bowfield Hall across Dowlings Farm	1
Bowthorpe	6
Breck Farm	1
Broadland Business Park	3
Broads	1
Brock Farm	1
Brundall	3
Brundall Gardens	1
Bus Station	3
Business Park	2
Buxton	1
Cantley	1
Carrow Road	1
Castle Hill area towards Hainford	1
Castle Mall	1
Castle Meadow	4
Catton	5
Catton Grove	1
Church Lane	2
Church Road	2
Colman Road	2
Colney Hospital	1
Colney Lane	1
Coltishall	3
Constitution Hill	1

Q.13 Named Location	Number of Times in Q.13
Costessey	97
Costessey junction	1
Costessey Lane	1
County Hall	2
Cromer	10
Cromer railway line	1
Cromer Road	8
Cross Lane	1
Cucumber Lane	1
Dereham	4
Dereham Road	16
Dereham Road bus lane	1
Drayton	68
Drayton Centre	1
Drayton High Road	3
Drayton Low Road	1
Drayton Road	7
Drayton wood	3
Drayton Wood Residential Home	2
Drayton Wood Road	1
Drewery Drive	1
Duke Street	1
Dussindale	21
Dussindale - Thorpe Road	1
Dussindale station	1
Earlham Park	1
Earlham Road	5
East Plumstead	1
Easton	7
Easton & Bowtang	1
Easton & Ringland	1
Easton junction with flyover/slip road onto A47 North & Thorpe Business Park slip roads	1
Easton roundabout	3
Eaton	1
Eaton park	1
Edgefield Close	1
Fakenham	8

Q.13 Named Location	Number of Times in Q.13
Fakenham & Aylsham Roads in the West	1
Fakenham Road	10
Fakenham Road - through Taverham & Drayton	1
Felthorpe	8
Fifers Lane	5
Fifers Lane/Cromer Road	1
Fransham	1
Fyths Lane	1
Grange Farm, Spixworth	1
Great Plumstead	14
Great Plumstead at Green Lane	1
Great Plumstead Middle Road Junction	1
Great Yarmouth	3
Green Lane South	1
Guardian Road	1
Hainford	1
Harford Bridge	1
Hellesdon	32
Hellesdon Hospital	1
Hellesdon Station	1
Historic parkland	1
Hockering	1
Hockering - Dereham side	1
Holly Lane	1
Holt	8
Holt Road	5
Holt, Cromer Road junction	1
Honingham	2
Horning	1
Horsford	12
Horsham	3
Horsham St Faith	27
Horsham St Faith - A140 N	1
Horsham St Faith - suggestion on Red Route	1
Horsham St Faith, south of Crematorium, between Spixworth & Crostwick, & west of Rackheath to join Wroxham Road & to the A47	1
Horsham St Faiths (north of)	1
Hospital	5

Q.13 Named Location	Number of Times in Q.13
Hurricane way	1
Ipswich - Cromer	1
Jordan Close, Thorpe marriott	1
Keswick	1
Kings Lynn	1
Lakenham	3
Laurel Farm	1
Lenwade - Hockering	1
Little Plumstead	2
Little Plumstead Hospital	1
Lodge Farm - Connect the green route to the A47 over Lodge Farm	1
London - Cromer	1
Long Stratton	1
Longwater	8
Longwater Business Park/Industrial Estate	5
Longwater Junction area via/between New and Old Costessey	1
Longwater Lane	1
Longwater Lane in Costessey	1
Longwater/Dereham Road	13
Low road	7
Lower Hellesdon	1
Lowestoft	1
Magdalen Road	1
Magdalen Street	2
Magdalene Street car park	1
Marl Pit Lane	1
Marriotts Way	4
Marriotts way path	1
Mattishall	1
Merryhill Leisure	1
Middle Road	5
Middleton's Lane	8
Mile Cross	1
Mile Cross Lane	1
Millcroft Close	1
Morton - Horingham	1
Morton near Attlebridge	1
Mousehold Lane	2

Q.13 Named Location	Number of Times in Q.13
Mousehold Lane - Tesco's on Wroxham Road	1
New Costessey	27
New Rackheath	1
New Sprowston Park	1
Newton St Faith	2
Norfolk Showground	2
North of airport	1
North Tuddenham to Easton	1
North Walsham	8
North Walsham Road	2
Norwich Airport	92
Norwich Airport and RAF Coltishall	2
Norwich Airport/Vulcan Road	1
Norwich and Norfolk Hospital	10
Norwich High School for Girls	1
Norwich Railway Station	4
Oaks Farm	1
Old Catton	6
Old Catton - Lodge Lane, Church Street & St Faith's Road	1
Old Costessey	32
Old Costessey routes	1
Parkland	1
Plough/Boundary Road	1
Plumstead	2
Plumstead hospital	1
Plumstead Road	7
Plumstead Road (Bridge)	1
Plumstead Road East	1
Plumstead Road near Thorpe End	1
Poringland - Hellesdon	1
Postwick	10
Postwick - Wroxham	1
Postwick Business Park	2
Postwick interchange Yarmouth Road	1
Postwick interchange. Brundall roundabout	1
Postwick junction	2
Postwick Roundabout	1
Quaker Lane	1

Q.13 Named Location	Number of Times in Q.13
Queen Street	1
Rackheath	18
Rackheath Industrial Estate	3
Rackheath Road	1
Red Hall	1
Red Lion Street	1
Reepham	1
Reepham Road	15
Research Park	1
Ring Road	1
Ringland	41
Ringland - Freeland corner	1
Ringland Avenue	1
Ringland Hills	14
Ringland in Wensum Valley	1
Ringland Lane	4
Riverside Road	2
Sainsbury's	3
Sainsbury's junction	2
Salhouse	2
Salhouse Road	1
School Road	1
South Coltishall	1
Spixworth	28
Spixworth (north of)	1
Spixworth Road	4
Sprowston	34
Sprowston (Blue Boar Lane & White Woman Lane)	1
Sprowston Bus 21/22	1
Sprowston Golf Course	1
Sprowston Park	1
Sprowston Park & Ride	1
Sprowston Road	1
Sprowston/Thorpe	1
St Augustines junction	1
St Crispins roundabout	1
St Faiths	3
St Faiths Common - Thorpe Marriott	1

Q.13 Named Location	Number of Times in Q.13
St Faiths Lane	1
St Faith's Road	2
St Giles Street	2
St Stephens Road	1
St Williams Way	3
Stalham	2
Stalham Bypass	1
Station Halts at Rackheath	1
Swafham	1
Sweet Briar Road	2
Sweetbriar - Sprowston Road	1
Taverham	93
Taverham - Existing bypass	1
Taverham - before Beech Avenue/Fir Covent Road/Fakenham Road junction	1
Taverham - north of Fakenham Road	1
Taverham and Drayton Park & Ride	1
Taverham area	1
Taverham Garden Centre	1
Taverham High School	5
Taverham junction of A1067 with Felthorpe Road	1
Taverham Lane	1
Taverham Road	1
Taverham School	1
Taverham Schools	2
Taverham/Ringland Hill	1
Tesco's	1
The Street	1
Thetford	1
Thorpe	7
Thorpe - Thunder Lane & Woodside Road	1
Thorpe Business Park	1
Thorpe End	18
Thorpe End Garden Village	1
Thorpe High School	1
Thorpe Marriott	50
Thorpe Marriott estate	1
Thorpe Railway Station	1

Q.13 Named Location	Number of Times in Q.13
Thorpe Road	1
Thorpe St Andrew	12
Thunder Lane	1
Tombland	1
Town House Road	1
Train Station	1
Tud Valley	23
Tuddenham	1
University	4
Vulcan Road	4
Wall Road	1
Watton Road	1
Wells via Fakenham	1
Wensum valley	65
Wensum Valley at Costessey	1
Wensum Valley at Drayton	1
Wensum Valley Golf Course	1
West Costessey	1
West Croyden Station	1
West End at Costessey, passing west of Brickfield Farm	1
Western Red - 1 mile west	1
Weston Longville	4
White House Farm, Sprowston	2
White Woman Lane, Sprowston	1
Whitlingham	1
Woods at Greenery	1
Wroxham	7
Wroxham - Aylsham Road	1
Wroxham & Cromer to Heathersett	1
Wroxham Road	7
Wymondham	8
Wymondham - Horsford via Dereham Road	1
Wymondham Bypass	1
Yarmouth	3
Yarmouth Road	4

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## Appendix F: Letter and Email Analysis - Data For All Returns

Table F-1 Letters and Emails – List of Comment Codes Assigned

	Codes		%of
Comment Descriptions	used	Total	comments
Public Transport General - Total		27	4.21%
Complaint about public transport general	A1	3	0.47
Public transport should be priority / should be improved	A2	16	2.50
Public transport general suggestion	A4	5	0.78
Public transport specific comment	A5	3	0.47
Buses - Total		42	6.55%
Complaint about bus services/efficiency / should be improved	B1	20	3.12
Buses too expensive / should be cheaper / ticket style comment	B2	8	1.25
Bus routes / stops should be improved / not convenient	B3	2	0.31
Buses cause problems on road / bus lanes a problem / should be restricted	B4	3	0.47
Buses general comment or suggestion	B5	5	0.78
Buses specific comment	B6	4	0.62
Trains - Total		4	0.62%
Complaint about trains / should be improved	C1	1	0.16
Trains general comment or suggestion	C2	2	0.31
Trains specific comment	C3	1	0.16
Trams – Total		15	2.34%
In favour of trams in Norwich area	D1	8	1.25
Against introduction of trams	D2	4	0.62
Trams specific comment / suggestion	D3	3	0.47
Park and Ride – Total		32	4.99%
Park and Ride is too expensive to use/ should be cheaper	E1	6	0.94
Complaint about Park and Ride service/efficiency/routes	E2	9	1.40
Park and Ride general comment	E4	4	0.62
Park and Ride specific comment	E5	6	0.94
Park and Ride not useful / not convenient to use	E6	7	1.09

	Codes		%of	
Comment Descriptions	used	Total	comments	
Restrictions/Charging/Car Use - Total		42	6.55%	
Motorists should not be targeted / already pay road tax / should be priority / don't be anti-car	F1	13	2.03	
Opposed to road charging	F2	10	1.56	
Opposed to work based charging	F3	4	0.62	
Opposed to restraints and access restrictions general	F4	5	0.78	
Motorists / private vehicles are the main problem / should not be priority	F5	2	0.31	
General comment / suggestion about motorists / cars / charging /restrictions	F6	1	0.16	
Not support restrictions unless improve public transport	F8	1	0.16	
Support for charging / restrictions	F9	4	0.62	
Not support unless build NDR	F10	2	0.31	
Parking - Total		18	2.81%	
Parking in centre should be improved/increased	G1	6	0.94	
Parking in centre should be free/cheap for short period	G2	1	0.16	
Parking in centre should be limited	G3	3	0.47	
Parking in residential areas should be limited / roadside parking should be limited	G4	4	0.62	
Parking general comment/suggestion	G5	3	0.47	
Specific comment/suggestion about parking	G6	1	0.16	
Disabled/Elderly Provision - Total		3	0.47%	
Disabled / elderly road users should have better facilities / should be considered	H1	2	0.31	
Disabled road users should have restrictions / they cause problems	H3	1	0.16	
School Traffic - Total		7	1.09%	
School traffic is problem	l1	5	0.78	
School traffic suggestion / general comment	14	2	0.31	
Business/Commercial Traffic- Total		2	0.31%	
Business / work traffic is problem	J1	1	0.16	
Business / work traffic should be priority / shouldn't be				
restricted / need to have access	J2	1	0.16	
Cycle/Pedestrian Provision - Total		24	3.74%	

	Codes		%of		
Comment Descriptions	used	Total	comments		
Cyclists need better cycle routes/ improved routes / facilities					
, ,	K2	15	2.34		
Pedestrians need better provision / centre should be					
pedestrianised	K4	4	0.62		
Specific comment on cycle or pedestrian issues	K6	5	0.78		
NDR – Total		327	51.01%		
General support of NDR	L1	69	10.76		
Support of NDR SPECIFIC ROUTE / LOCATION	L2	17	2.65		
Support an NDR route because of congestion / traffic					
problems	L3	4	0.62		
Support of NDR because of business / economy / city					
growth	L4	1	0.16		
General against NDR / will not solve problems / why					
needed?	L5	94	14.66		
Against NDR SPECIFIC ROUTE / LOCATION	L6	56	8.74		
Against NDR route for environmental reasons / pollution /		- 00	0.74		
affect river valley /encourage development	L7	37	5.77		
Against NDR because of noise / safety / increased traffic in		07	0.11		
area					
area	L8	17	2.65		
General comment / <u>suggestion</u> about NDR	L9	23	3.59		
NDR must be dualled	L10	9	1.40		
	LIU	9	1.40		
Existing Roads/Traffic Management - Total		31	4.84%		
Need improvements to roads / complaint about roads		01	4.0470		
general	M1	11	1.72		
Specific road needs improving / complaint about road	IVII	- ' '	1.72		
opecine road needs improving / complaint about road	M2	16	2.50		
Should not build more roads	MO	_	0.24		
Canaval aammant ahaut vaada	M3	2	0.31		
General comment about roads	M4		0.31		
Advice/Education – Total		10	1.56%		
Advice / education should be improved	N1	6	0.94		
Advice / education should not priority / should not be in					
strategy / negative comment	N2	1	0.16		
General comment on advice / education					
	N3	2	0.31		
Specific comment / suggestion on advice / education	N4	1	0.16		
General/Miscellaneous Comments - Total		42	6.55%		
		44	0.55 /0		
Survey / questionnaire / strategy comment NEGATIVE	O1	10	1.56		

Comment Descriptions	Codes used	Total	% of comments
Survey / questionnaire / strategy comment POSITIVE	O2	8	1.25
Miscellaneous / irrelevant comment	O3	24	3.74
Query or Question	Q	7	1.09%
Taxis - Total		1	0.16%
Taxis Other Comment	R3	1	0.16
	Grand Total	641	

Table F-2 Letters and Emails – Specific Locations with Reference to the NDR

Named Location	Number of times in Letters
A140 Cromer Road	1
14 The Street, Ringland	1
241 Drayton High Road	1
253 The Paddocks	1
88 - 100 The Paddocks, Old Catton	1
A47	1
A47 at Easton	1
A47, Brundall - Cucumber Lane	1
Aylsham Road	1
B1150 Crostwick Lane & Rackheath Lane at Spixworth	1
Bawburgh Parish	1
Beeston Estate	1
Beeston Hyrne, North Walsham Road	1
Beeston Park	1
Blind Lane	1
Blofield, Salhouse, and Wroxham Parishes	1
Boundry Road	1
Bowthorpe	1
Breck Farm Lane	1
Breck Farm, Taverham	1
Breckland	1
Broad Lane, Reeves Corner	1
Broadland	1
Broadland Business Park	1
Brook Farm.	1
Bull Close Road	1
Bury St Edmonds	1
Castle Mall	2
Castle Mall car park	1
Castle Meadow	1
Catton	1
Church Lane, Sprowston	1
Costessey	7
Cromer	3
Deighton Hills	1
Denmark Road, Dussindale Housing Estate	1

Named Location	Number of times in Letters
Drayton	7
Drayton Road	2
Drayton Woods	1
Earlham Road	1
Fakenham	1
Felthorpe	2
Gertrude Road	1
Grange Farm	2
Grange Farm, Spixworth	1
Great & Little Plumstead	1
Great Plumstead	4
Heigham Street/Barn Road	1
Hellesdon	2
Hempstead	1
High Kelling Parish Council	1
Honingham	1
Horsford	2
Horsham St Faith	14
Horsham St Faith through Rackheath	1
Jordan Close, Thorpe Marriott	3
Jordon Close, Thorpe Marriott	1
King Street	1
King Street, St Augustines	1
Koblenz Road	1
Lakenham	1
Longwater Interchange	1
Longwater Lane, Costessey	1
Magdalen Street	1
Marriott Sprowston Manor Hotel & Country Club	1
Marriotts Way	1
Middle Road, Great Plumstead	1
Mile Cross	2
Mile Cross Road	1
Mulbarton	1
N & N Hospital	1
New Costessey	1
Newmarket Road	1
Norwich Airport	3
Oak Farm, Great Plumstead	1

Old Catton Old Costessey Old Palace Road/Orchard Street	in Letters 2 1
Old Costessey Old Palace Road/Orchard Street	
Old Palace Road/Orchard Street	1
	•
	1
Ollands Farm, Heydon	1
Postwick	1
Postwick Lane	1
Prince of Wales Road	1
Quaker Farm	1
Quaker Grange Farm	1
Rackheath	1
Reepham Road	3
Ringland	6
Ringland Hills	2
Riverside/Thorpe Road	1
Salhouse Road	1
Sandy Lane along Lakenham Way, under Queens Road	1
Sheringham	1
Showground	1
Spixworth Parish Council	1
Sprowston	2
Sprowston Green/Chenery Drive/Wroxham Road	1
St Benedicts Street	1
St Clements Hill	1
St Faiths Road	1
St Stephens	1
St Stephens Road	2
St Williams Way	1
Taverham	13
The Sole and Heel Public House	1
The Street, Old Costessey	1
Thorpe	1
Thorpe and Felthorpe Trust	1
Thorpe End	5
Thorpe Marriott	3
Thorpe St Andrew	5
Tols Hill	1
Tud Valley	4
Verbury Road	1
Waterloo Road	1

Named Location	Number of times in Letters
Wensum Valley	8
West Farm, Horsham St Faith	1
Whitbread Hotel Co	1
White House Farm, Sprowston	1
White Woman Lane	1
Wroxham	1
Wymondham	1
Yare Valley	1

## Appendix G: Analysis by Postcode – Data Tables and Plots for All Returns

Plots of responses to Q.1, Q.5a, Q.5b and Q.9, plots relating to location of responses and plots relating to age groups of respondents are illustrated on the following pages and in the attached document folder. All data is from questionnaire responses only and includes responses from individuals, organisations and local councils.

Plot 1	Questionnaire Responses as a Percentage of Actual Population, by CAS Parish area
Plot 2	Q.1 Would you like to see a Northern Distributor Road for Norwich? Responses from Norfolk
Plot 3	Q.1 Would you like to see a Northern Distributor Road for Norwich? Responses from Norwich and Surrounding Area
Plot 4	Q.5a Do you support access restrictions on roads around the north of Norwich? Responses from Norfolk
Plot 5	Q.5a Do you support access restrictions on roads around the north of Norwich? Responses from Norwich and Surrounding Area
Plot 6	Q.5b Do you support access restrictions on residential side streets? Responses from Norfolk
Plot 7	Q.5b Do you support access restrictions on residential side streets? Responses from Norwich and Surrounding Area
Plot 8	NDR Western Route Preferences – Responses from Norfolk (in document folder at end of report)
Plot 9	NDR Western Route Preferences – Responses from Norwich and Surrounding Area
Plot 10	NDR Eastern Route Preferences – Responses from Norfolk (in document folder at end of report)
Plot 11	NDR Eastern Route Preferences – Responses from Norwich and Surrounding Area
Plot 12	Percentage of Respondents from selected Age Groups, by CAS Parish area. Responses from Norfolk
Plot 13	Percentage of Respondents from selected Age Groups, by CAS Parish area. Responses from Norwich and Surrounding Area

The data for Plots 4 to 11, where responses are grouped by parish, is displayed in Table G-1 and Table G-2.

Table G-1 Data Table for Results Displayed on Plots 4-7

Key	
1 Strongly Support	3 Strongly Oppose
2 Support	5 No Strong View
3 Oppose	0 No Response

Q5a. 'Do you support access restrictions on roads around the north of Norwich?'

Q5b. 'Do you support access restrictions on residential side streets?'

Table G-1 Data Table for Results Displayed on Plots 4 to 7 – Responses to Q.5a and Q.5b Grouped by Parish

	Q.5a							Q.5b				
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Acle	0	2	4	2	3	0	1	5	3	0	2	0
Alburgh	0	1	0	0	0	0	0	1	0	0	0	0
Alby With	0	0	0	0	0	0	0	0	0	0	0	0
Thwaite												
Aldborough	1	0	1	0	1	0	1	0	1	0	1	0
Aldeby	0	0	0	0	0	0	0	0	0	0	0	0
Alderford	1	0	1	0	0	0	1	1	0	0	0	0
Alpington	0	0	0	0	0	0	0	0	0	0	0	0
Anmer	0	0	0	0	0	0	0	0	0	0	0	0
Antingham	0	0	0	1	0	0	0	0	1	0	0	0
Ashby St Mary	0	1	0	1	1	1	0	1	1	0	1	1
Ashby With	0	0	0	0	0	1	0	0	0	0	0	1
Oby												
Ashill	0	0	0	0	0	0	0	0	0	0	0	0
Ashmanhaugh	0	0	0	0	1	0	0	1	0	0	0	0
Ashwellthorpe	0	1	3	0	0	0	0	1	3	0	0	0
Aslacton	0	0	0	0	1	0	0	0	0	0	1	0
Attleborough	0	2	1	2	0	0	0	1	2	2	0	0
Attlebridge	2	4	5	1	0	1	3	4	3	1	0	2
Aylmerton	0	1	0	0	0	0	0	1	0	0	0	0
Aylsham	2	8	5	8	4	3	6	10	8	2	2	2
Baconsthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Bacton	0	1	0	0	1	0	0	1	0	0	1	0
Bagthorpe	0	0	0	0	0	0	0	0	0	0	0	0
With Barmer												
Banham	0	1	0	0	0	0	0	1	0	0	0	0
Barford	0	0	0	2	0	0	0	1	0	1	0	0

			Q.5	а					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Barnham	0	0	1	0	2	0	0	3	0	0	0	0
Broom												
Barsham	0	0	0	0	0	0	0	0	0	0	0	0
Barton	0	0	0	0	0	0	0	0	0	0	0	0
Bendish												
Barton Turf	2	0	1	1	2	2	2	1	0	1	2	2
Barwick	0	0	0	0	0	0	0	0	0	0	0	0
Bawburgh	5	10	11	3	9	2	9	11	8	3	7	2
Bawdeswell	0	1	2	0	0	0	0	0	3	0	0	0
Bawsey	0	0	0	0	0	0	0	0	0	0	0	0
Beachamwell	0	0	0	0	0	0	0	0	0	0	0	0
Bedingham	0	0	0	0	1	0	0	1	0	0	0	0
Beeston Regis	0	0	0	0	0	1	0	0	0	0	1	0
Beeston St	0	0	0	0	1	0	0	1	0	0	0	0
Andrew	0	0	0	_	0	_	_	0	0	_	0	
Beeston With Bittering	0	0	0	0	0	0	0	0	0	0	0	0
Beetley	0	0	1	0	0	0	0	0	1	0	0	0
Beighton	0	1	0	3	0	0	0	2	1	1	0	0
Belaugh	0	1	0	1	0	0	0	1	0	1	0	0
Belton	0	0	1	0	0	0	0	1	0	0	0	0
Bergh Apton	0	2	0	1	1	0	0	3	0	0	1	0
Besthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Billingford	1	0	0	0	0	0	1	0	0	0	0	0
Binham	0	0	0	0	0	0	0	0	0	0	0	0
Bintree	0	1	0	0	0	0	0	1	0	0	0	0
Bircham	0	0	0	0	0	0	0	0	0	0	0	0
Bixley	1	3	2	1	2	1	2	4	1	1	1	1
Blakeney	0	0	0	0	0	0	0	0	0	0	0	0
Blickling	0	0	0	0	0	0	0	0	0	0	0	0
Blo' Norton	0	0	0	0	1	0	1	0	0	0	0	0
Blofield	23	81	58	40	56	9	31	109	56	26	42	3
Bodham	0	0	0	0	0	0	0	0	0	0	0	0
Booton	0	0	0	0	0	0	0	0	0	0	0	0
Boughton	0	0	0	0	0	0	0	0	0	0	0	0
Bracon Ash	4	5	3	6	6	1	4	9	3	5	3	1
Bradenham	0	0	0	1	0	0	0	0	1	0	0	0
Bradwell	1	0	0	1	0	0	1	0	0	1	0	0
Bramerton	3	11	9	5	6	0	5	12	9	2	6	0
Brampton	0	0	1	0	0	0	0	1	0	0	0	0
Brancaster	0	0	0	0	0	0	0	0	0	0	0	0
Brandiston	0	1	0	0	0	0	0	1	0	0	0	0

			Q.5a	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Bressingham	0	0	0	0	0	0	0	0	0	0	0	0
Brettenham	0	0	0	0	0	0	0	0	0	0	0	0
Bridgham	0	0	0	0	0	0	0	0	0	0	0	0
Briningham	0	0	0	0	0	0	0	0	0	0	0	0
Brinton	0	0	0	0	0	0	0	0	0	0	0	0
Brisley	0	0	0	0	0	0	0	0	0	0	0	0
Briston	0	2	2	0	0	0	1	2	1	0	0	0
Brockdish	0	0	0	0	0	0	0	0	0	0	0	0
Brooke	2	2	1	0	3	0	2	4	0	0	2	0
Broome	1	0	0	0	0	0	1	0	0	0	0	0
Brumstead	0	0	0	0	0	0	0	0	0	0	0	0
Brundall	35	111	90	58	70	10	57	144	70	39	56	8
Bunwell	0	0	0	0	1	0	1	0	0	0	0	0
Burgh And Tuttington	0	0	0	0	0	0	0	0	0	0	0	0
Burgh Castle	0	0	0	0	0	0	0	0	0	0	0	0
Burgh St Peter	0	0	0	0	0	0	0	0	0	0	0	0
Burnham Market	0	1	0	0	0	0	1	0	0	0	0	0
Burnham Norton	0	1	0	0	0	0	0	1	0	0	0	0
Burnham Overy	0	0	0	0	0	0	0	0	0	0	0	0
Burnham Thorpe	0	0	0	0	0	0	0	0	0	0	0	0
Burston And Shimpling	0	0	0	0	0	0	0	0	0	0	0	0
Buxton With Lammas	0	3	1	0	3	0	0	4	1	0	2	0
Bylaugh	0	0	0	0	0	0	0	0	0	0	0	0
Caister-On- Sea	0	0	1	1	1	0	0	2	0	0	1	0
Caistor St Edmund	1	8	3	0	3	3	1	10	3	0	2	2
Cantley	0	2	0	0	0	1	0	2	0	0	0	1
Carbrooke	0	0	2	0	0	0	0	2	0	0	0	0
Carleton Rode	0	0	0	0	0	0	0	0	0	0	0	0
Carleton St Peter	0	0	0	0	1	0	0	0	0	0	1	0
Castle Acre	0	0	0	0	0	0	0	0	0	0	0	0
Castle Rising	0	0	0	0	0	0	0	0	0	0	0	0
Caston	0	0	0	2	0	0	0	1	0	1	0	0
Catfield	0	0	0	1	3	0	0	0	1	0	3	0
Cawston	0	0	0	3	1	0	0	1	1	1	1	0

			Q.5a	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Chedgrave	0	1	0	0	0	0	0	1	0	0	0	0
Choseley	0	0	0	0	0	0	0	0	0	0	0	0
Claxton	0	0	2	0	0	0	0	0	1	0	1	0
Clenchwarton	0	0	0	0	0	0	0	0	0	0	0	0
Cley Next The Sea	0	0	0	0	0	0	0	0	0	0	0	0
Cockley Cley	0	0	0	0	0	0	0	0	0	0	0	0
Colby	0	1	2	0	0	0	0	2	1	0	0	0
Colkirk	0	0	0	1	1	0	0	1	0	1	0	0
Colney	1	1	5	0	4	5	2	1	6	0	2	5
Coltishall	0	2	3	8	1	0	1	8	2	3	0	0
Congham	0	0	0	0	0	1	0	0	0	0	0	1
Corpusty	0	0	0	1	0	0	0	0	1	0	0	0
Costessey	133	323	284	167	195	47	204	405	253	126	129	32
Cranwich	0	0	0	0	0	0	0	0	0	0	0	0
Cranworth	0	0	0	0	0	0	0	0	0	0	0	0
Crimplesham	0	0	0	0	0	0	0	0	0	0	0	0
Cringleford	19	52	45	20	45	2	32	71	35	18	24	3
Cromer	4	3	5	1	8	0	5	5	3	1	6	1
Crostwick	0	0	0	0	0	0	0	0	0	0	0	0
Croxton	0	1	0	0	0	0	0	1	0	0	0	0
Denton	0	1	0	0	0	0	0	0	1	0	0	0
Denver	0	0	0	0	0	0	0	0	0	0	0	0
Deopham	0	0	1	0	0	0	0	0	1	0	0	0
Dereham	0	1	5	1	2	1	0	3	4	0	2	1
Dersingham	0	0	0	0	1	0	0	0	0	0	1	0
Dickleburgh And Rushall	0	0	0	0	0	0	0	0	0	0	0	0
Didlington	0	0	0	0	0	0	0	0	0	0	0	0
Dilham	0	0	0	0	0	1	0	0	0	0	0	1
Diss	1	1	1	0	2	0	2	1	2	0	0	0
Ditchingham	0	0	0	0	0	1	0	1	0	0	0	0
Docking	0	0	0	0	0	0	0	0	0	0	0	0
Downham Market	0	1	0	0	0	0	0	1	0	0	0	0
Downham West	0	0	0	0	0	0	0	0	0	0	0	0
Drayton	64	132	150	97	73	16	96	197	99	68	63	9
Dunton	0	0	0	0	0	0	0	0	0	0	0	0
Earsham	1	1	0	0	0	0	1	1	0	0	0	0
East Beckham	0	0	0	0	0	0	0	0	0	0	0	0
East Carleton	3	4	2	1	3	0	2	6	3	1	1	0

			Q.5	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
East Rudham	0	0	0	0	0	0	0	0	0	0	0	0
East Ruston	0	0	0	0	0	0	0	0	0	0	0	0
East	0	0	1	2	0	1	0	1	2	0	0	1
Tuddenham												
East Walton	0	0	0	0	0	0	0	0	0	0	0	0
East Winch	0	0	0	0	0	0	0	0	0	0	0	0
Easton	8	22	32	16	19	3	8	34	29	12	15	2
Edgefield	0	2	1	0	0	0	1	2	0	0	0	0
Ellingham	0	0	1	0	0	0	0	0	1	0	0	0
Elsing	0	0	0	0	0	0	0	0	0	0	0	0
Emneth	0	0	0	0	0	0	0	0	0	0	0	0
Erpingham	0	1	0	0	2	0	0	0	0	0	3	0
Fakenham	0	10	4	2	5	0	1	9	3	1	6	1
Felbrigg	0	0	0	0	0	0	0	0	0	0	0	0
Felmingham	0	0	0	1	1	0	0	0	1	0	1	0
Felthorpe	17	22	15	13	5	2	11	32	10	11	7	3
Feltwell	0	0	0	0	0	0	0	0	0	0	0	0
Field Dalling	0	0	0	0	0	0	0	0	0	0	0	0
Filby	1	1	0	0	0	0	2	0	0	0	0	0
Fincham	0	0	0	0	0	0	0	0	0	0	0	0
Fleggburgh	0	0	1	0	0	0	0	0	1	0	0	0
Flitcham With	0	0	0	0	0	0	0	0	0	0	0	0
Appleton												
Flordon	0	3	2	2	4	0	1	5	2	2	1	0
Fordham	0	0	0	0	0	0	0	0	0	0	0	0
Forncett	0	1	1	1	0	0	0	0	3	0	0	0
Foulden	0	0	0	0	0	0	0	0	0	0	0	0
Foulsham	1	0	0	0	1	0	1	0	0	0	1	0
Foxley	0	0	0	0	0	0	0	0	0	0	0	0
Framingham Earl	8	19	13	16	15	2	6	25	18	14	9	1
Framingham Pigot	3	2	3	0	0	0	3	3	1	1	0	0
Fransham	0	0	0	0	0	0	0	0	0	0	0	0
Freethorpe	0	0	1	0	0	0	0	0	1	0	0	0
Frettenham	4	18	25	11	7	2	8	33	17	5	4	0
Fring	0	0	0	0	0	0	0	0	0	0	0	0
Fritton And St	0	0	0	0	0	0	0	0	0	0	0	0
Olaves												
Fulmodeston	0	0	0	3	0	0	0	0	1	2	0	0
Garboldisham	0	0	0	0	0	0	0	0	0	0	0	0
Garvestone	0	0	0	2	0	0	0	1	0	1	0	0
Gateley	0	1	0	0	0	0	0	1	0	0	0	0

			Q.5	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Gayton	0	0	0	0	0	0	0	0	0	0	0	0
Geldeston	0	0	0	0	0	0	0	0	0	0	0	0
Gillingham	0	0	0	0	0	0	0	0	0	0	0	0
Gimingham	0	0	0	0	0	0	0	0	0	0	0	0
Gissing	0	0	0	0	0	0	0	0	0	0	0	0
Gooderstone	0	0	0	0	0	0	0	0	0	0	0	0
Great And	36	90	86	49	44	7	53	127	53	34	39	6
Little Plumstead												
Great	0	0	0	0	0	0	0	0	0	0	0	0
Cressingham												
Great Dunham	0	0	0	0	0	0	0	0	0	0	0	0
Great Ellingham	0	0	0	0	0	0	0	0	0	0	0	0
Great Massingham	1	0	0	0	0	0	1	0	0	0	0	0
Great Melton	2	0	2	2	2	1	3	0	2	2	2	0
Great Moulton	0	2	0	0	0	0	0	1	0	0	1	0
Great Snoring	0	0	0	0	0	0	0	0	0	0	0	0
Great Witchingham	2	0	0	1	0	0	2	0	0	1	0	0
Great Yarmouth	2	6	5	0	3	2	2	9	3	0	3	1
Gresham	0	0	0	0	0	0	0	0	0	0	0	0
Gressenhall	0	0	1	0	0	0	0	0	0	0	1	0
Grimston	0	0	0	0	0	0	0	0	0	0	0	0
Griston	0	0	0	0	0	0	0	0	0	0	0	0
Guestwick	0	0	0	0	0	0	0	0	0	0	0	0
Guist	0	0	0	0	0	0	0	0	0	0	0	0
Gunthorpe	0	2	0	3	0	0	0	2	0	3	0	0
Haddiscoe	0	0	0	0	0	0	0	0	0	0	0	0
Hainford	3	3	6	1	1	0	2	7	4	1	0	0
Hales	0	1	0	0	0	0	0	1	0	0	0	0
Halvergate	0	0	1	1	0	0	0	0	1	1	0	0
Hanworth	0	1	0	0	0	0	0	1	0	0	0	0
Happisburgh	1	2	1	0	0	0	1	1	1	0	1	0
Hardingham	0	0	0	0	0	0	0	0	0	0	0	0
Harling	0	0	0	0	0	0	0	0	0	0	0	0
Harpley	0	0	0	0	0	0	0	0	0	0	0	0
Haveringland	0	1	2	1	1	0	0	3	0	1	1	0
Heacham	0	0	1	0	0	0	0	1	0	0	0	0
Heckingham	0	0	0	0	0	0	0	0	0	0	0	0
Hedenham	0	0	0	0	0	0	0	0	0	0	0	0

			Q.5	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Helhoughton	0	0	0	0	0	0	0	0	0	0	0	0
Hellesdon	214	309	269	183	104	25	245	369	234	145	92	19
Hellington	0	0	0	1	0	0	0	0	0	1	0	0
Hemblington	1	3	13	4	7	1	1	9	7	3	9	0
Hempnall	0	0	1	0	0	0	0	0	1	0	0	0
Hempstead	0	0	1	0	0	1	0	0	1	0	0	1
Hempton	0	0	0	1	0	0	0	0	0	1	0	0
Hemsby	0	0	1	1	0	0	0	0	1	1	0	0
Hethersett	33	101	104	68	87	9	49	136	98	50	59	10
Hevingham	0	1	2	2	0	0	0	1	3	0	1	0
Heydon	0	0	0	0	0	0	0	0	0	0	0	0
Hickling	1	0	0	0	0	0	0	1	0	0	0	0
High Kelling	0	3	1	0	0	2	1	2	1	0	0	2
Hilborough	0	0	0	0	0	0	0	0	0	0	0	0
Hilgay	0	0	0	0	0	0	0	0	0	0	0	0
Hillington	0	0	0	0	0	0	0	0	0	0	0	0
Hindolveston	0	0	0	0	0	0	0	0	0	0	0	0
Hindringham	0	0	0	0	0	0	0	0	0	0	0	0
Hingham	3	1	0	0	1	0	2	2	1	0	0	0
Hockering	3	16	7	6	6	2	2	19	5	7	6	1
Hockham	1	0	0	1	0	0	2	0	0	0	0	0
Hockwold-	0	0	0	0	0	0	0	0	0	0	0	0
Cum-Wilton												
Hoe	0	0	0	0	0	0	0	0	0	0	0	0
Holkham	0	0	0	0	0	0	0	0	0	0	0	0
Holme Hale	0	0	1	1	0	0	0	1	1	0	0	0
Holme-Next-	1	0	0	0	0	0	1	0	0	0	0	0
The-Sea		4	0		4		4	7	_		4	4
Holt	1	4	2	0	1	2	1	7	0	0	1	1
Holverston	0	0	0	0	0	0	0	0	0	0	0	0
Honing	2	0	1	1	0	0	3	1	0	0	0	0
Honingham	4	8	10	4	2	1	2	12	7	2	5	1
Hopton-On- Sea	0	0	0	0	0	0	0	0	0	0	0	0
Horning	0	0	1	1	1	0	0	1	0	1	1	0
Horningtoft	0	0	0	0	0	0	0	0	0	0	0	0
Horsey	0	0	0	0	0	0	0	0	0	0	0	0
Horsford	34	77	99	50	42	10	49	123	61	31	40	8
Horsham St Faith And Newton St	22	65	58	51	19	8	31	100	41	30	15	6
Faith	1	1	2		2		0	2	2		1	0
Horstead With	1	1	2	0	2	0	0	2	3	0	1	0

			Q.5a	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Stanninghall												
Houghton	0	0	0	0	0	0	0	0	0	0	0	0
Hoveton	0	4	2	1	1	0	0	4	2	1	1	0
Howe	0	1	0	1	0	0	0	1	0	1	0	0
Hunstanton	0	0	1	0	0	0	0	0	1	0	0	0
Ickburgh	0	0	0	0	0	0	0	0	0	0	0	0
Ingham	0	0	0	0	0	0	0	0	0	0	0	0
Ingoldisthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Ingworth	0	0	0	0	0	0	0	0	0	0	0	0
Itteringham	0	0	0	0	0	0	0	0	0	0	0	0
Kelling	0	0	0	0	0	0	0	0	0	0	0	0
Kempstone	0	0	0	0	0	0	0	0	0	0	0	0
Kenninghall	0	0	0	0	0	0	0	0	0	0	0	0
Keswick	5	8	12	6	8	0	5	13	7	6	8	0
Ketteringham	1	6	1	2	4	0	1	5	2	2	4	0
Kettlestone	1	1	0	0	0	0	1	0	0	0	0	1
Kilverstone	0	0	0	0	0	0	0	0	0	0	0	0
Kimberley	0	0	0	0	0	0	0	0	0	0	0	0
King's Lynn	0	1	2	0	1	0	0	1	1	1	1	0
Kirby Bedon	0	2	7	2	6	1	0	4	5	1	7	1
Kirby Cane	0	1	0	0	0	0	1	0	0	0	0	0
Kirstead	0	1	0	0	0	0	0	1	0	0	0	0
Knapton	0	0	0	0	0	1	0	0	0	0	0	1
Langham	0	0	0	0	0	0	0	0	0	0	0	0
Langley With Hardley	0	0	0	1	0	0	0	0	0	1	0	0
Lessingham	0	1	0	0	0	0	0	1	0	0	0	0
Letheringsett With Glandford	0	0	0	0	0	0	0	0	0	0	0	0
Lexham	0	2	0	0	0	0	0	2	0	0	0	0
Leziate	0	0	0	0	0	0	0	0	0	0	0	0
Lingwood And Burlingham	2	1	1	1	1	1	4	0	1	1	1	0
Litcham	0	0	0	0	0	0	0	0	0	0	0	0
Little Barningham	0	0	0	0	0	0	0	0	0	0	0	0
Little Cressingham	0	0	0	0	0	0	0	0	0	0	0	0
Little Dunham	0	0	0	0	0	0	0	0	0	0	0	0
Little Ellingham	0	0	0	0	0	0	0	0	0	0	0	0
Little Massingham	0	0	0	0	0	0	0	0	0	0	0	0

			Q.5	<b>a</b>					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Little Melton	4	19	21	12	18	5	6	24	19	9	16	5
Little Snoring	0	1	0	0	0	0	0	1	0	0	0	0
Little	0	0	1	0	0	0	0	0	1	0	0	0
Witchingham												
Loddon	0	2	1	1	1	0	1	3	0	1	0	0
Long Stratton	17	54	33	16	57	8	28	72	29	8	44	4
Longham	0	0	0	0	0	0	0	0	0	0	0	0
Ludham	0	1	0	0	2	0	1	2	0	0	0	0
Lynford	0	0	0	0	0	0	0	0	0	0	0	0
Lyng	0	0	1	0	0	0	0	1	0	0	0	0
Marham	0	0	0	0	0	0	0	0	0	0	0	0
Marlingford	2	13	10	6	8	2	5	18	5	7	5	1
Marsham	0	0	2	0	0	0	0	2	0	0	0	0
Marshland St	0	0	1	0	0	0	0	0	1	0	0	0
James	0	0	0	4	0	0	0	0		_	4	0
Martham	0	0	0	0	0	0	0	0	0	0	0	0
Matlask	0		_		_	0			0		_	
Mattishall	1	1	0	1	0	0	1	1	0	1	0	0
Mautby	0	0	0	0	0	0	0	0	0	0	0	0
Melton Constable	0	0	0	0	0	0	0	0	0	0	0	0
Merton	0	0	0	0	0	0	0	0	0	0	0	0
Methwold	0	0	0	0	0	0	0	0	0	0	0	0
Middleton	1	0	0	0	0	0	1	0	0	0	0	0
Mileham	0	0	1	0	0	0	0	1	0	0	0	0
Morley	0	0	1	0	0	0	0	0	0	0	1	0
Morningthorpe	0	0	2	0	0	0	0	0	1	0	0	1
Morston	0	0	0	0	0	0	0	0	0	0	0	0
Morton On The	0	5	5	3	1	0	0	8	5	1	0	0
Hill	O		J	J	•					'	O	U
Mulbarton	11	40	37	34	32	3	15	62	31	23	24	2
Mundesley	0	1	1	1	0	0	0	2	0	1	0	0
Mundford	0	0	0	0	0	0	0	0	0	0	0	0
Mundham	0	0	0	0	0	0	0	0	0	0	0	0
Narborough	0	0	2	0	0	0	0	0	2	0	0	0
Narford	0	0	0	0	0	0	0	0	0	0	0	0
Neatishead	0	2	1	0	0	1	0	2	0	1	0	1
Necton	0	1	0	0	0	0	0	1	0	0	0	0
Needham	0	0	0	0	0	0	0	0	0	0	0	0
New	0	0	0	0	1	0	0	1	0	0	0	0
Buckenham												
Newton By	0	0	0	0	0	0	0	0	0	0	0	0
Castle Acre												

			Q.5a	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Newton	5	16	21	10	13	2	12	22	13	8	10	2
Flotman												
Nordelph	0	0	0	0	0	0	0	0	0	0	0	0
North Creake	0	1	0	0	1	0	0	2	0	0	0	0
North Elmham	0	1	0	0	0	0	0	1	0	0	0	0
North Lopham	0	0	0	0	0	0	0	0	0	0	0	0
North	0	0	0	0	0	0	0	0	0	0	0	0
Pickenham	<u> </u>		-									
North Runcton	0	0	0	0	0	0	0	0	0	0	0	0
North Tuddenham	0	0	0	0	0	0	0	0	0	0	0	0
North Walsham	0	5	3	5	2	1	4	4	2	3	2	1
North Wootton	0	0	0	0	0	0	0	0	0	0	0	0
Northrepps	0	0	1	0	1	0	1	0	0	0	1	0
Northwold	0	0	0	0	0	0	0	0	0	0	0	0
Norto n	0	0	0	0	0	0	0	0	0	0	0	0
Subcourse												
Norwich	1052	1806	1522	780	1280	306	1719	2268	1215	651	686	207
Old Buckenham	0	0	2	0	1	0	0	0	2	0	1	0
Old Catton	98	163	159	105	57	12	107	216	112	79	65	15
Old	0	0	0	0	0	0	0	0	0	0	0	0
Hunstanton												
Ormesby St	0	1	0	0	1	0	0	1	0	0	1	0
Margaret With												
Scratby Ormesby St	0	0	0	0	0	0	0	0	0	0	0	0
Michael												
Oulton	0	0	0	0	2	0	0	2	0	0	0	0
Outwell	0	0	0	0	0	0	0	0	0	0	0	0
Overstrand	0	0	2	0	0	0	0	2	0	0	0	0
Ovington	0	0	0	0	0	0	0	0	0	0	0	0
Oxborough	0	0	0	0	0	0	0	0	0	0	0	0
Paston	0	0	1	0	0	0	0	0	1	0	0	0
Pentney	0	0	0	0	0	0	0	0	0	0	0	0
Plumstead	0	1	0	0	0	0	0	1	0	0	0	0
Poringland	20	64	74	37	57	11	39	99	54	31	36	4
Postwick	2	11	5	4	6	1	4	13	5	3	4	0
Potter	0	0	1	0	1	0	0	1	1	0	0	0
Heigham												
Pudding	0	0	0	0	0	0	0	0	0	0	0	0
Norton	0	1	0	0	0	0	1	0	0	0	0	0
Pulham Market	U	1	U	U	0	U	1	U	0	U	0	0

			Q.5	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Pulham St	0	0	0	0	0	0	0	0	0	0	0	0
Mary												
Quidenham	0	0	0	0	0	0	0	0	0	0	0	0
Rackheath	26	64	82	43	43	6	31	104	48	35	41	5
Raveningham	0	0	0	0	0	0	0	0	0	0	0	0
Raynham	0	0	0	0	0	0	0	0	0	0	0	0
Redenhall	0	1	1	0	1	0	0	2	0	0	1	0
With Harleston				_		_				_		_
Reedham	0	1	0	0	2	0	0	1	0	0	2	0
Reepham	0	5	2	3	0	0	2	4	2	1	1	0
Repps With	0	0	1	0	0	0	0	0	1	0	0	0
Bastwick	0	_	0		0		0	0	0			
Riddlesworth	0	0	0	0	0	0	0	0	0	0	0	0
Ringland	1	8	14	7	10	10	1	16	11	5	8	9
Ringstead	0	0	0	0	0	0	0	0	0	0	0	0
Rockland St Mary	0	1	2	2	2	1	0	3	1	2	1	1
Rocklands	0	0	0	0	0	0	0	0	0	0	0	0
Rollesby	0	0	0	0	0	0	0	0	0	0	0	0
Roudham	0	0	0	0	0	0	0	0	0	0	0	0
Rougham	0	0	0	0	0	0	0	0	0	0	0	0
Roughton	0	1	1	0	0	0	0	2	0	0	0	0
Roydon	0	0	0	0	0	0	0	0	0	0	0	0
Roydon	0	0	1	0	0	0	1	0	0	0	0	0
Runcton	0	0	0	0	0	0	0	0	0	0	0	0
Holme												
Runhall	1	1	1	0	0	0	1	1	1	0	0	0
Runton	0	1	2	0	0	0	0	2	0	0	1	0
Ryburgh	1	1	1	0	2	0	2	2	0	0	1	0
Ryston	0	0	0	0	0	0	0	0	0	0	0	0
Saham Toney	0	0	0	0	0	0	0	0	0	0	0	0
Salhouse	2	4	4	4	2	0	1	6	3	3	3	0
Sall	0	1	0	0	0	0	1	0	0	0	0	0
Salthouse	0	0	0	0	0	0	0	0	0	0	0	0
Sandringham	0	0	0	0	0	0	0	0	0	0	0	0
Saxlingham	0	1	0	0	0	0	0	1	0	0	0	0
Nethergate	4		0	4		_	4	0	0	_		
Scarning	4	0	0	1	0	0	4	0	0	1	0	0
Scole	0	0	0	1	0	0	0	0	1	0	0	0
Scottow	0	0	1	1	0	1	0	2	0	0	0	1
Scoulton	0	0	0	0	0	0	0	0	0	0	0	0
Sculthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Sea Palling	0	0	0	0	0	0	0	0	0	0	0	0

			Q.5	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Sedgeford	0	0	0	0	0	0	0	0	0	0	0	0
Seething	0	0	1	0	0	0	0	0	1	0	0	0
Shelfanger	0	0	0	0	0	0	0	0	0	0	0	0
Shelton	0	0	0	0	0	0	0	0	0	0	0	0
Sheringham	2	4	4	0	3	0	2	7	2	0	2	0
Shernborne	0	0	0	0	0	0	0	0	0	0	0	0
Shipdham	0	0	0	0	0	0	0	0	0	0	0	0
Shotesham	0	4	0	1	0	0	1	3	0	1	0	0
Shouldham	0	0	0	0	0	0	0	0	0	0	0	0
Shouldham	0	0	0	0	0	0	0	0	0	0	0	0
Thorpe												
Shropham	0	0	0	0	0	0	0	0	0	0	0	0
Sidestrand	0	0	0	0	0	0	0	0	0	0	0	0
Sisland	0	0	0	1	0	0	0	0	1	0	0	0
Skeyton	0	0	0	0	0	0	0	0	0	0	0	0
Sloley	0	0	0	0	0	0	0	0	0	0	0	0
Smallburgh	0	0	0	0	0	0	0	0	0	0	0	0
Snetterton	0	0	0	0	0	0	0	0	0	0	0	0
Snettisham	0	0	0	0	0	0	0	0	0	0	0	0
Somerton	0	0	0	0	0	0	0	0	0	0	0	0
South Acre	0	0	0	0	0	0	0	0	0	0	0	0
South Creake	1	0	0	0	0	0	1	0	0	0	0	0
South Lopham	0	0	0	0	0	0	0	0	0	0	0	0
South	0	0	0	0	0	0	0	0	0	0	0	0
Pickenham		1	0	4	0						_	_
South	0	1	0	1	0	0	1	0	1	0	0	0
Walsham South Wootton	0	0	0	0	0	0	0	0	0	0	0	0
Southery	0	0	0	0	0	0	0	0	0	0	0	0
Southrepps	0	0	0	1	0	0	0	0	0	1	0	0
Sparham	0	1	0	0	0	0	0	1	0	0	0	0
Spixworth	32	80	111	68	42	12	42	124	93	38	41	7
Sporle With	0	0	1	0	0	0	0	0	1	0	0	0
Palgrave	U		'		U				'			U
Sprowston	161	373	381	214	145	59	214	489	295	166	127	42
Stalham	4	0	1	0	1	0	4	1	0	0	1	0
Stanfield	0	0	0	0	0	0	0	0	0	0	0	0
Stanford	0	0	0	0	0	0	0	0	0	0	0	0
Stanhoe	0	0	0	0	0	0	0	0	0	0	0	0
Starston	0	0	0	0	0	0	0	0	0	0	0	0
Stibbard	0	0	1	0	0	0	0	0	1	0	0	0
Stiffkey	0	0	0	0	0	0	0	0	0	0	0	0

			Q.5	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Stockton	0	0	0	0	0	0	0	0	0	0	0	0
Stody	0	0	0	0	0	0	0	0	0	0	0	0
Stoke Ferry	0	0	0	0	1	0	1	0	0	0	0	0
Stoke Holy	9	32	22	13	24	3	15	44	17	9	16	2
Cross												
Stokesby With Herringby	0	0	0	0	0	0	0	0	0	0	0	0
Stow Bardolph	0	0	0	0	0	0	0	0	0	0	0	0
Stow Bedon	0	0	0	0	0	0	0	0	0	0	0	0
Stradsett	0	0	0	0	0	0	0	0	0	0	0	0
Stratton	0	1	0	0	1	0	0	2	0	0	0	0
Strawless								_				Ŭ
Strumpshaw	0	3	0	0	0	0	0	3	0	0	0	0
Sturston	0	0	0	0	0	0	0	0	0	0	0	0
Suffield	0	0	0	0	0	0	0	0	0	0	0	0
Surlingham	3	10	9	7	14	1	5	16	10	3	8	2
Sustead	0	0	0	0	0	0	0	0	0	0	0	0
Sutton	0	1	1	0	0	0	0	1	1	0	0	0
Swaffham	0	1	1	0	2	0	0	1	1	0	1	1
Swafield	0	1	0	0	0	0	0	1	0	0	0	0
Swainsthorpe	5	9	8	6	5	1	6	8	8	7	4	1
Swannington	0	1	4	1	0	0	0	2	4	0	0	0
Swanton	0	0	0	0	0	0	0	0	0	0	0	0
Abbott												
Swanton	0	0	0	0	0	0	0	0	0	0	0	0
Morley												
Swanton	0	1	0	0	0	0	0	1	0	0	0	0
Novers						_			_			_
Swardeston	3	11	11	5	7	0	6	13	9	5	4	0
Syderstone	0	0	0	0	0	0	0	0	0	0	0	0
Tacolneston	1	0	1	0	0	0	1	1	0	0	0	0
Tasburgh	4	21	14	7	24	3	9	28	15	5	16	0
Tattersett	0	0	0	0	0	0	0	0	0	0	0	0
Taverham	109	312	328	196	151	28	151	432	260	135	126	20
Terrington St Clement	0	0	1	0	0	0	0	1	0	0	0	0
Terrington St	0	0	0	0	0	0	0	0	0	0	0	0
John												
Tharston	3	10	10	4	10	2	10	15	8	4	2	0
Themelthorpe	0	0	0	0	0	1	0	1	0	0	0	0
Thetford	0	0	1	0	0	0	0	0	0	0	1	0
Thompson	0	0	0	0	0	0	0	0	0	0	0	0
Thornage	0	0	0	0	0	0	0	0	0	0	0	0

			Q.5	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Thornham	0	0	0	1	0	0	0	1	0	0	0	0
Thorpe Market	1	1	0	0	1	0	1	2	0	0	0	0
Thorpe St	138	350	333	187	186	32	190	477	250	152	128	29
Andrew												
Thurlton	0	0	0	0	0	0	0	0	0	0	0	0
Thurne	0	0	0	0	0	0	0	0	0	0	0	0
Thurning	0	0	0	0	0	0	0	0	0	0	0	0
Thursford	0	0	1	0	0	0	0	1	0	0	0	0
Thurton	0	1	0	0	0	0	0	1	0	0	0	0
Thwaite	0	0	0	0	0	0	0	0	0	0	0	0
Tibenham	0	1	0	0	0	0	0	1	0	0	0	0
Tilney All Saints	0	0	0	0	0	0	0	0	0	0	0	0
Tilney St Lawrence	0	0	0	0	0	0	0	0	0	0	0	0
Titchwell	0	0	0	0	0	0	0	0	0	0	0	0
Tittleshall	0	0	0	0	0	0	0	0	0	0	0	0
Tivetshall St	0	0	0	0	1	0	0	1	0	0	0	0
Margaret												
Tivetshall St	0	0	0	0	1	0	0	1	0	0	0	0
Mary												
Toft Monks	0	0	0	0	0	0	0	0	0	0	0	0
Topcroft	0	1	1	0	0	0	2	0	0	0	0	0
Tottenhill	0	0	0	0	0	0	0	0	0	0	0	0
Tottington	0	0	0	0	0	0	0	0	0	0	0	0
Trimingham	0	0	0	0	0	0	0	0	0	0	0	0
Trowse With	1	18	10	1	6	2	5	21	11	0	1	0
Newton					_							
Trunch	0	1	1	0	0	0	0	1	1	0	0	0
Tunstead	2	0	0	1	0	0	2	1	0	0	0	0
Twyford	0	0	0	0	0	0	0	0	0	0	0	0
Upper	0	0	0	0	0	0	0	0	0	0	0	0
Sheringham				_		_			4		-	_
Upton With	0	1	1	0	0	0	0	1	1	0	0	0
Fishley Upwell	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	1	0	0	0	0
Walton	0		0		0		0	0			0	0
Walpole Cross	0	0	0	0	0	0	0	0	0	0	0	0
Walpole Cross Keys											_	
Walpole Highway	0	0	0	0	0	0	0	0	0	0	0	0
Walsingham	0	0	0	0	0	0	0	0	0	0	0	0

			Q.5	a					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Walsoken	0	0	0	0	0	0	0	0	0	0	0	0
Warham	0	0	0	0	0	0	0	0	0	0	0	0
Watlington	0	1	0	0	0	0	0	1	0	0	0	0
Watton	0	2	1	0	2	0	0	3	1	0	1	0
Weasenham All Saints	0	0	0	0	0	0	0	0	0	0	0	0
Weasenham St Peter	0	0	0	0	0	0	0	0	0	0	0	0
Weeting-With- Broomhill	0	1	0	0	0	0	1	0	0	0	0	0
Wellingham	0	0	0	0	0	0	0	0	0	0	0	0
Wells-Next- The-Sea	0	2	2	1	0	0	1	3	1	0	0	0
Welney	0	0	0	0	0	0	0	0	0	0	0	0
Wendling	0	0	0	0	0	0	0	0	0	0	0	0
Wereham	0	0	0	0	0	0	0	0	0	0	0	0
West Acre	0	0	0	0	0	0	0	0	0	0	0	0
West Beckham	0	0	1	0	0	0	0	1	0	0	0	0
West Caister	0	0	0	0	0	0	0	0	0	0	0	0
West Dereham	0	0	0	0	0	0	0	0	0	0	0	0
West Rudham	0	1	1	0	0	0	0	2	0	0	0	0
West Walton	0	0	0	0	0	0	0	0	0	0	0	0
West Winch	0	0	0	0	0	0	0	0	0	0	0	0
Weston Longville	3	2	4	0	2	2	4	4	2	0	1	2
Westwick	0	0	0	0	0	0	0	0	0	0	0	0
Weybourne	0	0	0	0	1	0	0	0	0	0	1	0
Wheatacre	0	0	0	0	0	0	0	0	0	0	0	0
Whinburgh	0	0	0	0	0	0	0	0	0	0	0	0
Whissonsett	0	1	1	0	0	0	0	1	1	0	0	0
Wicklewood	0	2	1	0	0	0	0	3	0	0	0	0
Wickmere	0	0	1	0	0	0	0	1	0	0	0	0
Wiggenhall St Germans	0	0	0	0	0	0	0	0	0	0	0	0
Wiggenhall St Mary Magdalen	0	0	0	0	0	0	0	0	0	0	0	0
Wighton	0	1	0	0	0	0	0	1	0	0	0	0
Wimbotsham	0	0	0	0	0	0	0	0	0	0	0	0
Winfarthing	0	1	0	0	0	0	0	1	0	0	0	0
Winterton-On- Sea	0	0	0	0	0	0	0	0	0	0	0	0
Witton	0	1	0	0	0	0	0	1	0	0	0	0

			Q.5a	<b>a</b>					Q.5	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Wiveton	0	0	0	0	0	0	0	0	0	0	0	0
Wood Dalling	0	0	1	0	0	0	0	0	1	0	0	0
Wood Norton	2	0	0	1	0	0	2	0	0	1	0	0
Woodbastwick	0	1	0	1	0	1	0	1	0	1	0	1
Woodton	0	0	0	0	0	0	0	0	0	0	0	0
Wormegay	0	0	0	0	0	0	0	0	0	0	0	0
Worstead	0	0	1	2	0	0	0	2	0	1	0	0
Wortwell	0	0	0	0	0	0	0	0	0	0	0	0
Wramplingham	0	0	1	0	0	0	0	0	1	0	0	0
Wreningham	0	0	1	0	0	0	0	0	1	0	0	0
Wretham	0	0	0	0	0	0	0	0	0	0	0	0
Wretton	0	0	0	0	0	0	0	0	0	0	0	0
Wroxham	3	6	8	2	3	0	3	11	4	0	4	0
Wymondham	63	208	157	89	156	21	87	285	141	60	105	16
Yaxham	0	1	0	0	0	0	0	1	0	0	0	0
Yelverton	1	0	0	1	1	0	1	0	0	1	1	0

## Table G-2 Data table for results displayed on Plots 8-11

Results for Q9, 'Choose one Western and one Eastern NDR Route', grouped by parish and displayed on Plots 8 to 11. Where 'NR' is stated as a response this stands for 'No Response' and includes all responses that did not select a preferred route or selected more than one.

Table G-2 Data Table for Results Displayed on Plots 8-11 – NDR Route Preferences Grouped by Parish

		NDR	West -	ND	R East	- Cou	nt		
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
Acle	3	1	3	2	2	3	4	1	3
Alburgh	0	0	1	0	0	1	0	0	0
Alby With Thwaite	0	0	0	0	0	0	0	0	0
Aldborough	2	0	1	0	0	2	1	0	0
Aldeby	0	0	0	0	0	0	0	0	0
Alderford	0	1	0	1	0	0	0	2	0
Alpington	0	0	0	0	0	0	0	0	0
Anmer	0	0	0	0	0	0	0	0	0
Antingham	0	1	0	0	0	1	0	0	0
Ashby St Mary	0	1	2	0	1	1	1	1	1
Ashby With Oby	0	0	0	0	1	0	0	0	1
Ashill	0	0	0	0	0	0	0	0	0
Ashmanhaugh	0	1	0	0	0	1	0	0	0
Ashwellthorpe	1	0	2	0	1	0	1	2	1
Aslacton	1	0	0	0	0	0	1	0	0
Attleborough	1	0	1	1	2	0	2	1	2
Attlebridge	3	2	1	6	1	2	6	3	2
Aylmerton	0	1	0	0	0	0	0	1	0
Aylsham	6	2	7	14	1	5	5	18	2
Baconsthorpe	0	0	0	0	0	0	0	0	0
Bacton	0	0	0	1	1	0	1	0	1
Bagthorpe With Barmer	0	0	0	0	0	0	0	0	0
Banham	0	0	1	0	0	0	1	0	0
Barford	1	0	0	0	1	1	0	0	1
Barnham Broom	2	0	1	0	0	0	3	0	0
Barsham	0	0	0	0	0	0	0	0	0
Barton Bendish	0	0	0	0	0	0	0	0	0
Barton Turf	1	0	0	1	6	0	1	1	6
Barwick	0	0	0	0	0	0	0	0	0
Bawburgh	13	7	9	7	4	9	14	13	4

		NDR	West -	Count		ND	R East	- Cou	nt
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
Bawdeswell	3	0	0	0	0	2	0	1	0
Bawsey	0	0	0	0	0	0	0	0	0
Beachamwell	0	0	0	0	0	0	0	0	0
Bedingham	0	0	0	0	1	0	0	0	1
Beeston Regis	0	0	0	1	0	0	0	1	0
Beeston St Andrew	1	0	0	0	0	1	0	0	0
Beeston With Bittering	0	0	0	0	0	0	0	0	0
Beetley	0	0	0	1	0	0	0	1	0
Beighton	1	1	1	1	0	2	0	2	0
Belaugh	1	0	0	1	0	0	2	0	0
Belton	0	0	1	0	0	0	0	1	0
Bergh Apton	3	0	0	1	0	2	1	1	0
Besthorpe	0	0	0	0	0	0	0	0	0
Billingford	0	0	0	1	0	0	0	1	0
Binham	0	0	0	0	0	0	0	0	0
Bintree	0	0	1	0	0	0	0	1	0
Bircham	0	0	0	0	0	0	0	0	0
Bixley	0	2	2	4	2	0	3	5	2
Blakeney	0	0	0	0	0	0	0	0	0
Blickling	0	0	0	0	0	0	0	0	0
Blo' Norton	0	0	0	0	1	0	0	0	1
Blofield	55	71	54	62	25	67	67	105	28
Bodham	0	0	0	0	0	0	0	0	0
Booton	0	0	0	0	0	0	0	0	0
Boughton	0	0	0	0	0	0	0	0	0
Bracon Ash	5	3	4	10	3	2	11	11	1
Bradenham	0	0	0	0	1	0	0	0	1
Bradwell	2	0	0	0	0	0	2	0	0
Bramerton	6	6	11	11	0	5	12	17	0
Brampton	0	0	0	0	1	0	0	0	1
Brancaster	0	0	0	0	0	0	0	0	0
Brandiston	1	0	0	0	0	0	0	1	0
Bressingham	0	0	0	0	0	0	0	0	0
Brettenham	0	0	0	0	0	0	0	0	0
Bridgham	0	0	0	0	0	0	0	0	0
Briningham	0	0	0	0	0	0	0	0	0
Brinton	0	0	0	0	0	0	0	0	0
Brisley	0	0	0	0	0	0	0	0	0

		NDR	West -	Count		ND	R East	- Cou	nt
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
Briston	1	0	0	3	0	0	0	4	0
Brockdish	0	0	0	0	0	0	0	0	0
Brooke	0	0	5	1	2	2	2	4	0
Broome	0	0	0	1	0	0	1	0	0
Brumstead	0	0	0	0	0	0	0	0	0
Brundall	82	94	85	79	34	96	102	140	36
Bunwell	0	0	0	0	1	0	0	0	1
Burgh And Tuttington	0	0	0	0	0	0	0	0	0
Burgh Castle	0	0	0	0	0	0	0	0	0
Burgh St Peter	0	0	0	0	0	0	0	0	0
Burnham Market	0	0	1	0	0	0	0	1	0
Burnham Norton	0	1	0	0	0	1	0	0	0
Burnham Overy	0	0	0	0	0	0	0	0	0
Burnham Thorpe	0	0	0	0	0	0	0	0	0
Burston And Shimpling	0	0	0	0	0	0	0	0	0
Buxton With Lammas	1	3	0	2	1	1	1	4	1
Bylaugh	0	0	0	0	0	0	0	0	0
Caister-On-Sea	1	1	0	1	0	1	0	2	0
Caistor St Edmund	5	6	2	4	1	6	3	8	1
Cantley	0	1	0	0	2	0	0	1	2
Carbrooke	1	1	0	0	0	1	0	1	0
Carleton Rode	0	0	0	0	0	0	0	0	0
Carleton St Peter	0	0	0	1	0	0	0	1	0
Castle Acre	0	0	0	0	0	0	0	0	0
Castle Rising	0	0	0	0	0	0	0	0	0
Caston	0	0	1	1	0	0	0	2	0
Catfield	1	1	0	0	2	1	0	1	2
Cawston	0	1	3	0	0	0	2	2	0
Chedgrave	0	0	0	1	0	0	0	1	0
Choseley	0	0	0	0	0	0	0	0	0
Claxton	1	0	1	0	0	1	0	1	0
Clenchwarton	0	0	0	0	0	0	0	0	0
Cley Next The Sea	0	0	0	0	0	0	0	0	0
Cockley Cley	0	0	0	0	0	0	0	0	0
Colby	0	1	1	0	1	0	1	0	2
Colkirk	1	0	0	1	0	0	0	2	0
Colney	1	2	3	1	9	3	3	1	9
Coltishall	6	3	1	3	1	7	3	4	0

		NDR	West -	Count		ND	R East	- Cou	nt
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
Congham	0	0	0	0	1	0	0	0	1
Corpusty	0	0	0	1	0	0	0	1	0
Costessey	362	192	489	48	58	300	348	344	157
Cranwich	0	0	0	0	0	0	0	0	0
Cranworth	0	0	0	0	0	0	0	0	0
Crimplesham	0	0	0	0	0	0	0	0	0
Cringleford	33	31	44	50	25	38	45	75	25
Cromer	5	2	1	6	7	1	1	10	9
Crostwick	0	0	0	0	0	0	0	0	0
Croxton	0	0	0	0	1	0	1	0	0
Denton	0	1	0	0	0	0	0	1	0
Denver	0	0	0	0	0	0	0	0	0
Deopham	0	0	1	0	0	1	0	0	0
Dereham	2	3	1	1	3	4	1	1	4
Dersingham	0	0	0	0	1	0	0	0	1
Dickleburgh And Rushall	0	0	0	0	0	0	0	0	0
Didlington	0	0	0	0	0	0	0	0	0
Dilham	0	0	0	0	1	0	0	0	1
Diss	1	0	1	0	3	1	1	0	3
Ditchingham	0	0	0	0	1	0	0	0	1
Docking	0	0	0	0	0	0	0	0	0
Downham Market	0	0	0	1	0	0	0	1	0
Downham West	0	0	0	0	0	0	0	0	0
Drayton	196	62	130	79	65	157	154	148	73
Dunton	0	0	0	0	0	0	0	0	0
Earsham	1	0	0	1	0	0	0	2	0
East Beckham	0	0	0	0	0	0	0	0	0
East Carleton	3	3	3	3	1	5	1	5	2
East Rudham	0	0	0	0	0	0	0	0	0
East Ruston	0	0	0	0	0	0	0	0	0
East Tuddenham	3	0	0	0	1	0	2	0	2
East Walton	0	0	0	0	0	0	0	0	0
East Winch	0	0	0	0	0	0	0	0	0
Easton	23	24	37	12	4	20	37	34	9
Edgefield	0	0	0	1	2	0	0	1	2
Ellingham	0	0	1	0	0	0	1	0	0
Elsing	0	0	0	0	0	0	0	0	0
Emneth	0	0	0	0	0	0	0	0	0

		NDR	West -	Count		ND	R East	- Cou	nt
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
Erpingham	2	0	0	1	0	0	1	2	0
Fakenham	9	2	7	2	1	4	4	12	1
Felbrigg	0	0	0	0	0	0	0	0	0
Felmingham	0	0	0	2	0	1	1	0	0
Felthorpe	30	12	18	11	3	18	27	22	7
Feltwell	0	0	0	0	0	0	0	0	0
Field Dalling	0	0	0	0	0	0	0	0	0
Filby	2	0	0	0	0	0	1	1	0
Fincham	0	0	0	0	0	0	0	0	0
Fleggburgh	1	0	0	0	0	1	0	0	0
Flitcham With Appleton	0	0	0	0	0	0	0	0	0
Flordon	2	2	1	4	2	4	0	5	2
Fordham	0	0	0	0	0	0	0	0	0
Forncett	0	1	1	1	0	0	0	3	0
Foulden	0	0	0	0	0	0	0	0	0
Foulsham	0	0	1	0	1	0	0	0	2
Foxley	0	0	0	0	0	0	0	0	0
Framingham Earl	15	19	15	18	6	21	17	30	5
Framingham Pigot	2	0	4	1	1	2	2	3	1
Fransham	0	0	0	0	0	0	0	0	0
Freethorpe	0	0	1	0	0	0	1	0	0
Frettenham	11	19	14	12	11	17	16	21	13
Fring	0	0	0	0	0	0	0	0	0
Fritton And St Olaves	0	0	0	0	0	0	0	0	0
Fulmodeston	1	1	0	1	0	1	0	1	1
Garboldisham	0	0	0	0	0	0	0	0	0
Garvestone	1	0	1	0	0	0	1	1	0
Gateley	1	0	0	0	0	0	0	1	0
Gayton	0	0	0	0	0	0	0	0	0
Geldeston	0	0	0	0	0	0	0	0	0
Gillingham	0	0	0	0	0	0	0	0	0
Gimingham	0	0	0	0	0	0	0	0	0
Gissing	0	0	0	0	0	0	0	0	0
Gooderstone	0	0	0	0	0	0	0	0	0
Great And Little Plumstead	68	76	55	59	54	135	56	73	48
Great Cressingham	0	0	0	0	0	0	0	0	0
Great Dunham	0	0	0	0	0	0	0	0	0
Great Ellingham	0	0	0	0	0	0	0	0	0

		NDR	West -	Count		ND	R East	- Cou	nt
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
Great Massingham	0	0	0	1	0	0	0	1	0
Great Melton	3	0	3	3	0	1	5	2	1
Great Moulton	2	0	0	0	0	2	0	0	0
Great Snoring	0	0	0	0	0	0	0	0	0
Great Witchingham	1	0	0	1	1	0	0	2	1
Great Yarmouth	5	5	3	3	2	4	4	7	3
Gresham	0	0	0	0	0	0	0	0	0
Gressenhall	0	0	0	0	1	0	0	0	1
Grimston	0	0	0	0	0	0	0	0	0
Griston	0	0	0	0	0	0	0	0	0
Guestwick	0	0	0	0	0	0	0	0	0
Guist	0	0	0	0	0	0	0	0	0
Gunthorpe	2	0	3	0	0	1	0	2	2
Haddiscoe	0	0	0	0	0	0	0	0	0
Hainford	2	4	3	5	0	3	3	8	0
Hales	0	0	0	0	1	0	0	0	1
Halvergate	1	1	0	0	0	0	1	1	0
Hanworth	0	0	0	0	1	0	0	0	1
Happisburgh	0	0	1	0	3	1	0	0	3
Hardingham	0	0	0	0	0	0	0	0	0
Harling	0	0	0	0	0	0	0	0	0
Harpley	0	0	0	0	0	0	0	0	0
Haveringland	1	2	1	1	0	0	3	2	0
Heacham	1	0	0	0	0	0	0	1	0
Heckingham	0	0	0	0	0	0	0	0	0
Hedenham	0	0	0	0	0	0	0	0	0
Helhoughton	0	0	0	0	0	0	0	0	0
Hellesdon	339	213	242	205	105	314	312	345	133
Hellington	0	0	0	0	1	0	0	0	1
Hemblington	7	5	9	7	1	4	14	9	2
Hempnall	0	0	0	1	0	0	0	1	0
Hempstead	0	1	0	0	1	0	1	0	1
Hempton	0	0	0	1	0	0	1	0	0
Hemsby	0	1	0	1	0	0	0	1	1
Hethersett	75	67	104	108	48	66	116	169	51
Hevingham	1	4	0	0	0	0	3	2	0
Heydon	0	0	0	0	0	0	0	0	0
Hickling	0	0	0	1	0	0	1	0	0

		NDR	West -	Count		ND	R East	- Cou	nt
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
High Kelling	1	1	2	1	1	2	0	3	1
Hilborough	0	0	0	0	0	0	0	0	0
Hilgay	0	0	0	0	0	0	0	0	0
Hillington	0	0	0	0	0	0	0	0	0
Hindolveston	0	0	0	0	0	0	0	0	0
Hindringham	0	0	0	0	0	0	0	0	0
Hingham	0	1	3	1	0	1	2	0	2
Hockering	10	9	6	11	4	10	7	15	8
Hockham	0	1	1	0	0	0	0	2	0
Hockwold-Cum-Wilton	0	0	0	0	0	0	0	0	0
Hoe	0	0	0	0	0	0	0	0	0
Holkham	0	0	0	0	0	0	0	0	0
Holme Hale	1	0	1	0	0	0	1	1	0
Holme-Next-The-Sea	1	0	0	0	0	0	0	1	0
Holt	0	1	1	5	3	0	2	6	2
Holverston	0	0	0	0	0	0	0	0	0
Honing	0	0	0	1	3	1	0	0	3
Honingham	4	7	4	11	3	2	4	18	5
Hopton-On-Sea	0	0	0	0	0	0	0	0	0
Horning	1	0	0	0	2	2	0	0	1
Horningtoft	0	0	0	0	0	0	0	0	0
Horsey	0	0	0	0	0	0	0	0	0
Horsford	72	53	63	92	32	80	97	98	37
Horsham St Faith And Newton St Faith	47	26	34	44	72	35	48	62	78
Horstead With Stanninghall	1	1	1	1	2	2	1	1	2
Houghton	0	0	0	0	0	0	0	0	0
Hoveton	2	4	0	0	2	3	1	2	2
Howe	1	0	1	0	0	1	1	0	0
Hunstanton	1	0	0	0	0	1	0	0	0
lckburgh	0	0	0	0	0	0	0	0	0
Ingham	0	0	0	0	0	0	0	0	0
Ingoldisthorpe	0	0	0	0	0	0	0	0	0
Ingworth	0	0	0	0	0	0	0	0	0
Itteringham	0	0	0	0	0	0	0	0	0
Kelling	0	0	0	0	0	0	0	0	0
Kempstone	0	0	0	0	0	0	0	0	0
Kenninghall	0	0	0	0	0	0	0	0	0

		NDR	West -	Count		ND	R East	- Cou	nt
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
Keswick	14	4	10	9	2	13	8	15	3
Ketteringham	2	0	9	3	0	2	7	5	0
Kettlestone	0	0	1	0	1	0	0	0	2
Kilverstone	0	0	0	0	0	0	0	0	0
Kimberley	0	0	0	0	0	0	0	0	0
King's Lynn	1	2	0	1	0	0	0	3	1
Kirby Bedon	4	2	4	6	2	6	5	5	2
Kirby Cane	0	0	1	0	0	1	0	0	0
Kirstead	0	1	0	0	0	0	1	0	0
Knapton	1	0	0	0	0	1	0	0	0
Langham	0	0	0	0	0	0	0	0	0
Langley With Hardley	0	0	1	0	0	1	0	0	0
Lessingham	0	0	0	1	0	1	0	0	0
Letheringsett With Glandford	0	0	0	0	0	0	0	0	0
Lexham	0	1	1	0	0	0	1	1	0
Leziate	0	0	0	0	0	0	0	0	0
Lingwood And Burlingham	1	2	0	0	4	1	0	2	4
Litcham	0	0	0	0	0	0	0	0	0
Little Barningham	0	0	0	0	0	0	0	0	0
Little Cressingham	0	0	0	0	0	0	0	0	0
Little Dunham	0	0	0	0	0	0	0	0	0
Little Ellingham	0	0	0	0	0	0	0	0	0
Little Massingham	0	0	0	0	0	0	0	0	0
Little Melton	14	10	27	22	6	15	22	34	8
Little Snoring	0	0	0	1	0	0	0	0	1
Little Witchingham	0	0	1	0	0	0	0	1	0
Loddon	0	2	1	1	1	2	2	1	0
Long Stratton	47	40	37	34	27	46	52	58	29
Longham	0	0	0	0	0	0	0	0	0
Ludham	1	0	0	1	1	1	1	0	1
Lynford	0	0	0	0	0	0	0	0	0
Lyng	0	0	0	1	0	1	0	0	0
Marham	0	0	0	0	0	0	0	0	0
Marlingford	11	4	12	12	2	4	14	20	3
Marsham	0	0	0	2	0	0	1	1	0
Marshland St James	0	0	0	1	0	0	1	0	0
Martham	0	0	0	1	0	0	0	1	0
Matlask	0	0	0	0	0	0	0	0	0

		NDR	West -	Count		ND	R East	- Cou	nt
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
Mattishall	3	0	0	0	0	1	1	1	0
Mautby	0	0	0	0	0	0	0	0	0
Melton Constable	0	0	0	0	0	0	0	0	0
Merton	0	0	0	0	0	0	0	0	0
Methwold	0	0	0	0	0	0	0	0	0
Middleton	0	0	0	1	0	1	0	0	0
Mileham	0	0	0	1	0	0	0	1	0
Morley	0	0	1	0	0	0	0	1	0
Morningthorpe	1	0	0	0	1	0	1	0	1
Morston	0	0	0	0	0	0	0	0	0
Morton On The Hill	6	1	2	3	2	4	5	1	4
Mulbarton	34	38	33	35	17	35	46	55	21
Mundesley	0	1	2	0	0	2	0	1	0
Mundford	0	0	0	0	0	0	0	0	0
Mundham	0	0	0	0	0	0	0	0	0
Narborough	0	1	1	0	0	0	0	2	0
Narford	0	0	0	0	0	0	0	0	0
Neatishead	1	0	0	1	2	1	0	1	2
Necton	1	0	0	0	0	1	0	0	0
Needham	0	0	0	0	0	0	0	0	0
New Buckenham	0	1	0	0	0	0	0	1	0
Newton By Castle Acre	0	0	0	0	0	0	0	0	0
Newton Flotman	13	15	14	17	8	12	20	26	9
Nordelph	0	0	0	0	0	0	0	0	0
North Creake	0	0	0	1	1	0	1	0	1
North Elmham	0	0	1	0	0	0	1	0	0
North Lopham	0	0	0	0	0	0	0	0	0
North Pickenham	0	0	0	0	0	0	0	0	0
North Runcton	0	0	0	0	0	0	0	0	0
North Tuddenham	0	0	0	0	0	0	0	0	0
North Walsham	2	3	8	2	1	2	4	9	1
North Wootton	0	0	0	0	0	0	0	0	0
Northrepps	1	0	1	0	0	0	0	1	1
Northwold	0	0	0	0	0	0	0	0	0
Norton Subcourse	0	0	0	0	0	0	0	0	0
Norwich	1523	1119	1310	1456	1338	1466	1477	2397	1406
Old Buckenham	0	0	1	2	0	0	1	2	0
Old Catton	145	114	125	136	74	209	175	140	70

	NDR West - Count				NDR East - Count				
Parish Name	Red	Red Blue Orange Green NR			BlueE	Yellow	Pink	NR	
Old Hunstanton	0	0	0	0	0	0	0	0	0
Ormesby St Margaret With Scratby	0	1	0	0	1	2	0	0	0
Ormesby St Michael	0	0	0	0	0	0	0	0	0
Oulton	0	2	0	0	0	0	0	2	0
Outwell	0	0	0	0	0	0	0	0	0
Overstrand	1	1	0	0	0	2	0	0	0
Ovington	0	0	0	0	0	0	0	0	0
Oxborough	0	0	0	0	0	0	0	0	0
Paston	0	0	0	1	0	0	0	1	0
Pentney	0	0	0	0	0	0	0	0	0
Plumstead	0	0	0	1	0	0	0	1	0
Poringland	61	60	56	58	28	55	78	96	34
Postwick	5	4	10	7	3	9	8	11	1
Potter Heigham	1	0	1	0	0	1	0	1	0
Pudding Norton	0	0	0	0	0	0	0	0	0
Pulham Market	0	0	0	0	1	0	0	0	1
Pulham St Mary	0	0	0	0	0	0	0	0	0
Quidenham	0	0	0	0	0	0	0	0	0
Rackheath	77	46	49	58	34	45	63	137	19
Raveningham	0	0	0	0	0	0	0	0	0
Raynham	0	0	0	0	0	0	0	0	0
Redenhall With Harleston	0	0	2	1	0	1	2	0	0
Reedham	0	0	1	0	2	0	1	0	2
Reepham	2	0	3	3	2	3	2	3	2
Repps With Bastwick	0	0	1	0	0	0	0	1	0
Riddlesworth	0	0	0	0	0	0	0	0	0
Ringland	4	0	9	13	24	4	8	9	29
Ringstead	0	0	0	0	0	0	0	0	0
Rockland St Mary	2	0	2	1	3	1	1	3	3
Rocklands	0	0	0	0	0	0	0	0	0
Rollesby	0	0	0	0	0	0	0	0	0
Roudham	0	0	0	0	0	0	0	0	0
Rougham	0	0	0	0	0	0	0	0	0
Roughton	0	0	1	1	0	1	0	1	0
Roydon	0	0	0	0	0	0	0	0	0
Roydon	0	0	0	0	1	0	0	0	1
Runcton Holme	0	0	0	0	0	0	0	0	0
Runhall	0	1	0	1	1	1	1	0	1

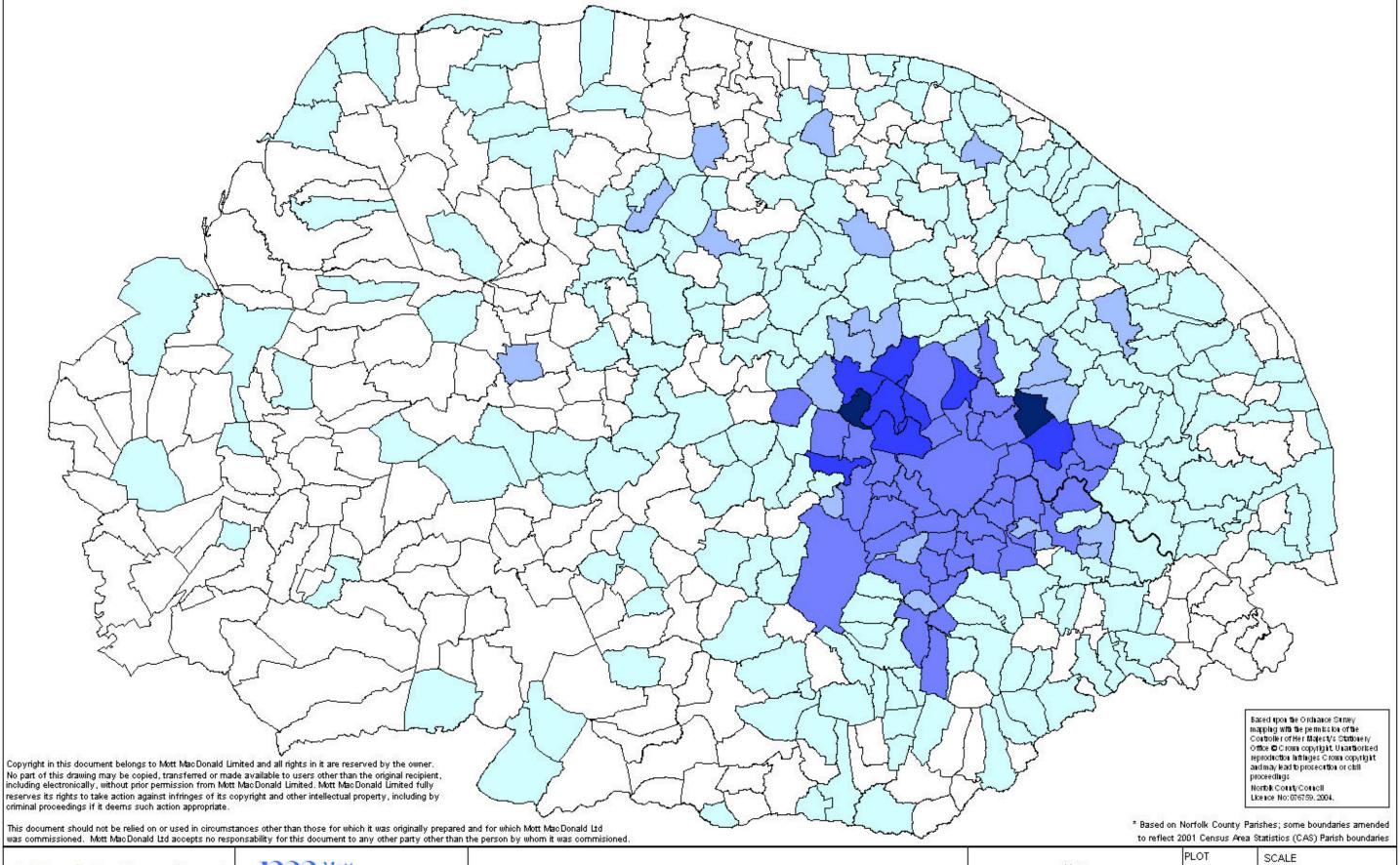
	NDR West - Count					ND	R East	- Cou	nt
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
Runton	0	0	1	2	0	0	1	2	0
Ryburgh	0	0	3	2	0	1	2	1	1
Ryston	0	0	0	0	0	0	0	0	0
Saham Toney	0	0	0	0	0	0	0	0	0
Salhouse	3	2	4	6	1	4	3	7	2
Sall	0	1	0	0	0	0	0	1	0
Salthouse	0	0	0	0	0	0	0	0	0
Sandringham	0	0	0	0	0	0	0	0	0
Saxlingham Nethergate	1	0	0	0	0	0	1	0	0
Scarning	1	2	0	0	2	0	0	3	2
Scole	0	0	1	0	0	0	1	0	0
Scottow	1	0	0	0	2	1	0	0	2
Scoulton	0	0	0	0	0	0	0	0	0
Sculthorpe	0	0	0	0	0	0	0	0	0
Sea Palling	0	0	0	0	0	0	0	0	0
Sedgeford	0	0	0	0	0	0	0	0	0
Seething	0	1	0	0	0	0	1	0	0
Shelfanger	0	0	0	0	0	0	0	0	0
Shelton	0	0	0	0	0	0	0	0	0
Sheringham	5	1	4	2	1	3	4	4	2
Shernborne	0	0	0	0	0	0	0	0	0
Shipdham	0	0	0	0	0	0	0	0	0
Shotesham	1	2	1	0	1	0	1	2	2
Shouldham	0	0	0	0	0	0	0	0	0
Shouldham Thorpe	0	0	0	0	0	0	0	0	0
Shropham	0	0	0	0	0	0	0	0	0
Sidestrand	0	0	0	0	0	0	0	0	0
Sisland	0	1	0	0	0	1	0	0	0
Skeyton	0	0	0	0	0	0	0	0	0
Sloley	0	0	0	0	0	0	0	0	0
Smallburgh	0	0	0	0	0	0	0	0	0
Snetterton	0	0	0	0	0	0	0	0	0
Snettisham	0	0	0	0	0	0	0	0	0
Somerton	0	0	0	0	0	0	0	0	0
South Acre	0	0	0	0	0	0	0	0	0
South Creake	0	0	1	0	0	1	0	0	0
South Lopham	0	0	0	0	0	0	0	0	0
South Pickenham	0	0	0	0	0	0	0	0	0

		NDR	West -	Count N			NDR East - Count		
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
South Walsham	1	0	0	0	1	0	1	0	1
South Wootton	0	0	0	0	0	0	0	0	0
Southery	0	0	0	0	0	0	0	0	0
Southrepps	0	0	0	0	1	0	0	0	1
Sparham	0	0	1	0	0	0	1	0	0
Spixworth	67	65	71	80	62	70	75	140	60
Sporle With Palgrave	1	0	0	0	0	1	0	0	0
Sprowston	336	301	230	276	190	451	390	310	182
Stalham	1	4	0	0	1	3	1	0	2
Stanfield	0	0	0	0	0	0	0	0	0
Stanford	0	0	0	0	0	0	0	0	0
Stanhoe	0	0	0	0	0	0	0	0	0
Starston	0	0	0	0	0	0	0	0	0
Stibbard	0	0	0	0	1	0	0	0	1
Stiffkey	0	0	0	0	0	0	0	0	0
Stockton	0	0	0	0	0	0	0	0	0
Stody	0	0	0	0	0	0	0	0	0
Stoke Ferry	0	0	0	1	0	0	1	0	0
Stoke Holy Cross	28	22	23	18	12	28	27	36	12
Stokesby With Herringby	0	0	0	0	0	0	0	0	0
Stow Bardolph	0	0	0	0	0	0	0	0	0
Stow Bedon	0	0	0	0	0	0	0	0	0
Stradsett	0	0	0	0	0	0	0	0	0
Stratton Strawless	1	1	0	0	0	2	0	0	0
Strumpshaw	0	0	2	1	0	0	1	2	0
Sturston	0	0	0	0	0	0	0	0	0
Suffield	0	0	0	0	0	0	0	0	0
Surlingham	11	10	9	7	7	10	16	11	7
Sustead	0	0	0	0	0	0	0	0	0
Sutton	0	1	0	0	1	1	0	1	0
Swaffham	1	1	0	0	2	1	0	1	2
Swafield	0	0	0	1	0	0	0	1	0
Swainsthorpe	3	8	14	7	2	4	11	15	4
Swannington	2	2	1	0	1	0	2	3	1
Swanton Abbott	0	0	0	0	0	0	0	0	0
Swanton Morley	0	0	0	0	0	0	0	0	0
Swanton Novers	0	0	0	0	1	0	0	0	1
Swardeston	7	5	10	10	5	4	15	13	5

		NDR	West -	Count	t NDR East - Count					
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR	
Syderstone	0	0	0	0	0	0	0	0	0	
Tacolneston	0	0	2	0	0	1	0	1	0	
Tasburgh	11	19	22	16	5	14	19	35	5	
Tattersett	0	0	0	0	0	0	0	0	0	
Taverham	528	123	217	155	101	320	307	339	158	
Terrington St Clement	0	1	0	0	0	1	0	0	0	
Terrington St John	0	0	0	0	0	0	0	0	0	
Tharston	12	7	7	11	2	8	12	13	6	
Themelthorpe	0	0	0	1	0	0	0	1	0	
Thetford	0	0	0	1	0	0	1	0	0	
Thompson	0	0	0	0	0	0	0	0	0	
Thornage	0	0	0	0	0	0	0	0	0	
Thornham	0	0	0	0	1	0	0	0	1	
Thorpe Market	1	0	0	1	1	1	0	0	2	
Thorpe St Andrew	302	288	250	248	138	433	382	284	127	
Thurlton	0	0	0	0	0	0	0	0	0	
Thurne	0	0	0	0	0	0	0	0	0	
Thurning	0	0	0	0	0	0	0	0	0	
Thursford	0	1	0	0	0	0	0	1	0	
Thurton	0	1	0	0	0	1	0	0	0	
Thwaite	0	0	0	0	0	0	0	0	0	
Tibenham	0	1	0	0	0	0	1	0	0	
Tilney All Saints	0	0	0	0	0	0	0	0	0	
Tilney St Lawrence	0	0	0	0	0	0	0	0	0	
Titchwell	0	0	0	0	0	0	0	0	0	
Tittleshall	0	0	0	0	0	0	0	0	0	
Tivetshall St Margaret	0	1	0	0	0	0	0	1	0	
Tivetshall St Mary	0	0	1	0	0	0	1	0	0	
Toft Monks	0	0	0	0	0	0	0	0	0	
Topcroft	1	1	0	0	0	0	1	1	0	
Tottenhill	0	0	0	0	0	0	0	0	0	
Tottington	0	0	0	0	0	0	0	0	0	
Trimingham	0	0	0	0	0	0	0	0	0	
Trowse With Newton	3	6	11	13	5	7	6	18	7	
Trunch	0	0	0	1	1	1	0	0	1	
Tunstead	0	0	1	1	1	1	2	0	0	
Twyford	0	0	0	0	0	0	0	0	0	
Upper Sheringham	0	0	0	0	0	0	0	0	0	

	NDR West - Count						NDR East - Count			
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR	
Upton With Fishley	0	1	0	1	0	0	1	1	0	
Upwell	0	0	0	0	0	0	0	0	0	
Wacton	0	0	0	1	0	0	0	1	0	
Walpole	0	0	0	0	0	0	0	0	0	
Walpole Cross Keys	0	0	0	0	0	0	0	0	0	
Walpole Highway	0	0	0	0	0	0	0	0	0	
Walsingham	0	0	0	0	0	0	0	0	0	
Walsoken	0	0	0	0	0	0	0	0	0	
Warham	0	0	0	0	0	0	0	0	0	
Watlington	0	0	1	0	0	0	0	1	0	
Watton	1	1	0	1	2	0	0	3	2	
Weasenham All Saints	0	0	0	0	0	0	0	0	0	
Weasenham St Peter	0	0	0	0	0	0	0	0	0	
Weeting-With-Broomhill	0	0	1	0	0	0	0	1	0	
Wellingham	0	0	0	0	0	0	0	0	0	
Wells-Next-The-Sea	1	2	1	1	0	1	0	4	0	
Welney	0	0	0	0	0	0	0	0	0	
Wendling	0	0	0	0	0	0	0	0	0	
Wereham	0	0	0	0	0	0	0	0	0	
West Acre	0	0	0	0	0	0	0	0	0	
West Beckham	0	0	0	1	0	0	0	1	0	
West Caister	0	0	0	0	0	0	0	0	0	
West Dereham	0	0	0	0	0	0	0	0	0	
West Rudham	0	1	0	0	1	0	0	1	1	
West Walton	0	0	0	0	0	0	0	0	0	
West Winch	0	0	0	0	0	0	0	0	0	
Weston Longville	1	1	6	4	1	4	3	4	2	
Westwick	0	0	0	0	0	0	0	0	0	
Weybourne	1	0	0	0	0	0	1	0	0	
Wheatacre	0	0	0	0	0	0	0	0	0	
Whinburgh	0	0	0	0	0	0	0	0	0	
Whissonsett	1	0	0	1	0	0	0	2	0	
Wicklewood	0	0	1	2	0	0	0	3	0	
Wickmere	0	0	0	1	0	0	1	0	0	
Wiggenhall St Germans	0	0	0	0	0	0	0	0	0	
Wiggenhall St Mary Magdalen	0	0	0	0	0	0	0	0	0	
Wighton	1	0	0	0	0	0	0	0	1	
Wimbotsham	0	0	0	0	0	0	0	0	0	

		NDR	West -	NDR East - Count					
Parish Name	Red	Blue	Orange	Green	NR	BlueE	Yellow	Pink	NR
Winfarthing	0	0	0	1	0	0	1	0	0
Winterton-On-Sea	0	0	0	0	0	0	0	0	0
Witton	0	0	1	0	0	0	0	1	0
Wiveton	0	0	0	0	0	0	0	0	0
Wood Dalling	1	0	0	0	0	1	0	0	0
Wood Norton	0	1	1	1	0	0	1	2	0
Woodbastwick	0	1	1	0	1	0	1	1	1
Woodton	0	0	0	0	0	0	0	0	0
Wormegay	0	0	0	0	0	0	0	0	0
Worstead	0	0	1	2	0	1	2	0	0
Wortwell	0	0	0	0	0	0	0	0	0
Wramplingham	1	0	0	0	0	0	0	1	0
Wreningham	0	1	0	0	0	1	0	0	0
Wretham	0	0	0	0	0	0	0	0	0
Wretton	0	0	0	0	0	0	0	0	0
Wroxham	5	3	2	8	4	8	2	8	4
Wymondham	149	119	167	195	64	166	175	285	68
Yaxham	0	0	0	1	0	0	1	0	0
Yelverton	0	0	0	3	0	0	0	3	0





Sam Ralph C.Eng, MICE, MIHT Director of Planning and Transportation Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG



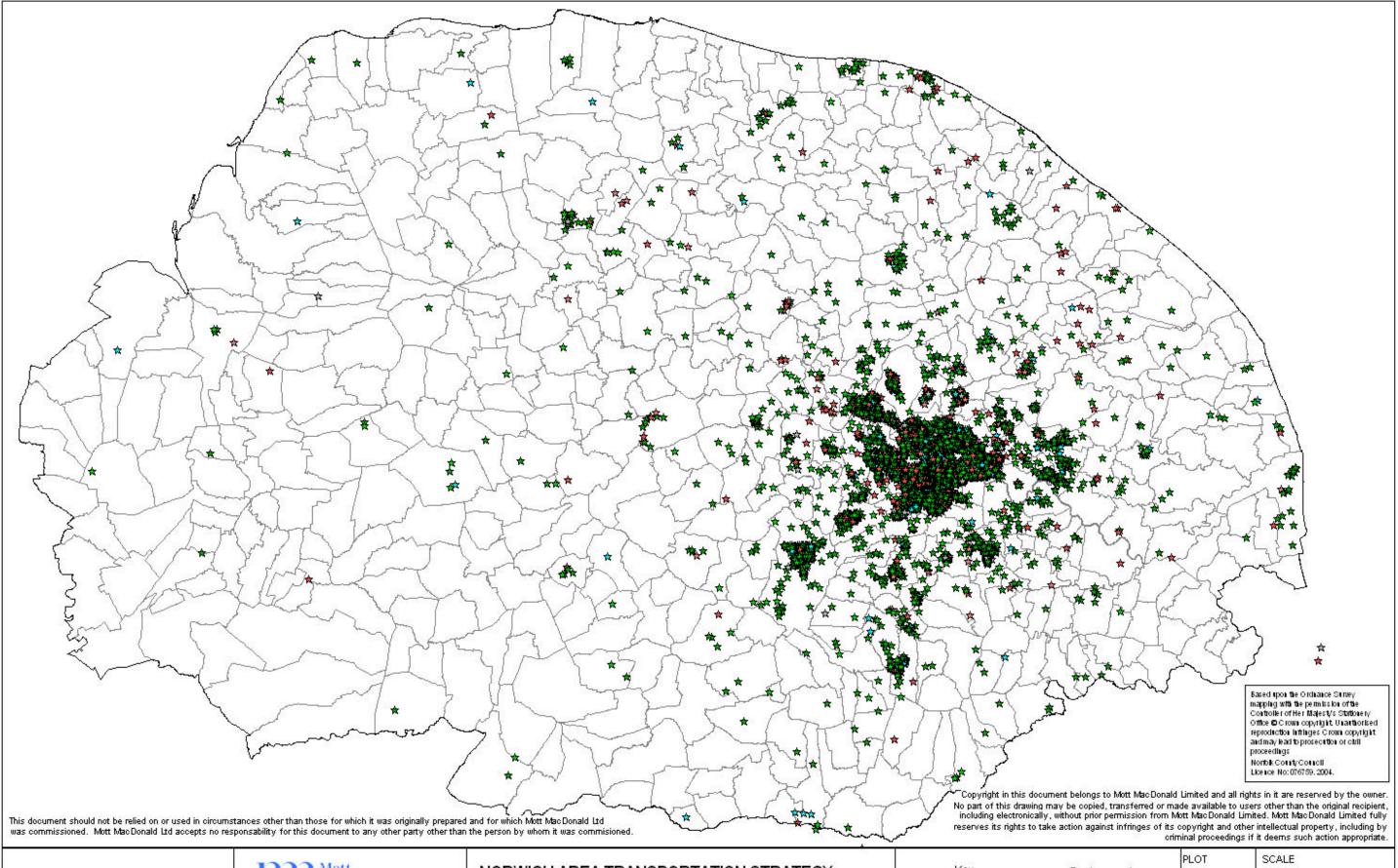
Moore Hotse 75 Prince of Wales Road Notwick NR 1 1DG

Tel 01603 767530 Fax 01603 767463 Web www.mottmac.com

## NORWICH AREA TRANSPORTATION STRATEGY PUBLIC CONSULTATION ANALYSIS

Questionnaire Responses as percentage of Actual Population

to n	eflect 2001 Census Area	Statistics (CAS) Parish boundaries
Key	PLOT	SCALE
15 to 22.8 % 10 to 15 % 5 to 10 %	1	1:300,000
1 to 5 %	DATE	15 March 2004
0.1 to 1 %	PROJECT	202049 BA17
⟨↑⟩ CAS Parishes *	CREATED	A2C
	WORKSPACE	Q12.wor





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### Mott MacDonald

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# NORWICH AREA TRANSPORTATION STRATEGY PUBLIC CONSULTATION ANALYSIS

Northern Distributor Road - Responses to Q1
"Would you like to see a Northen Distributor Road
for Norwich?"

#### Key

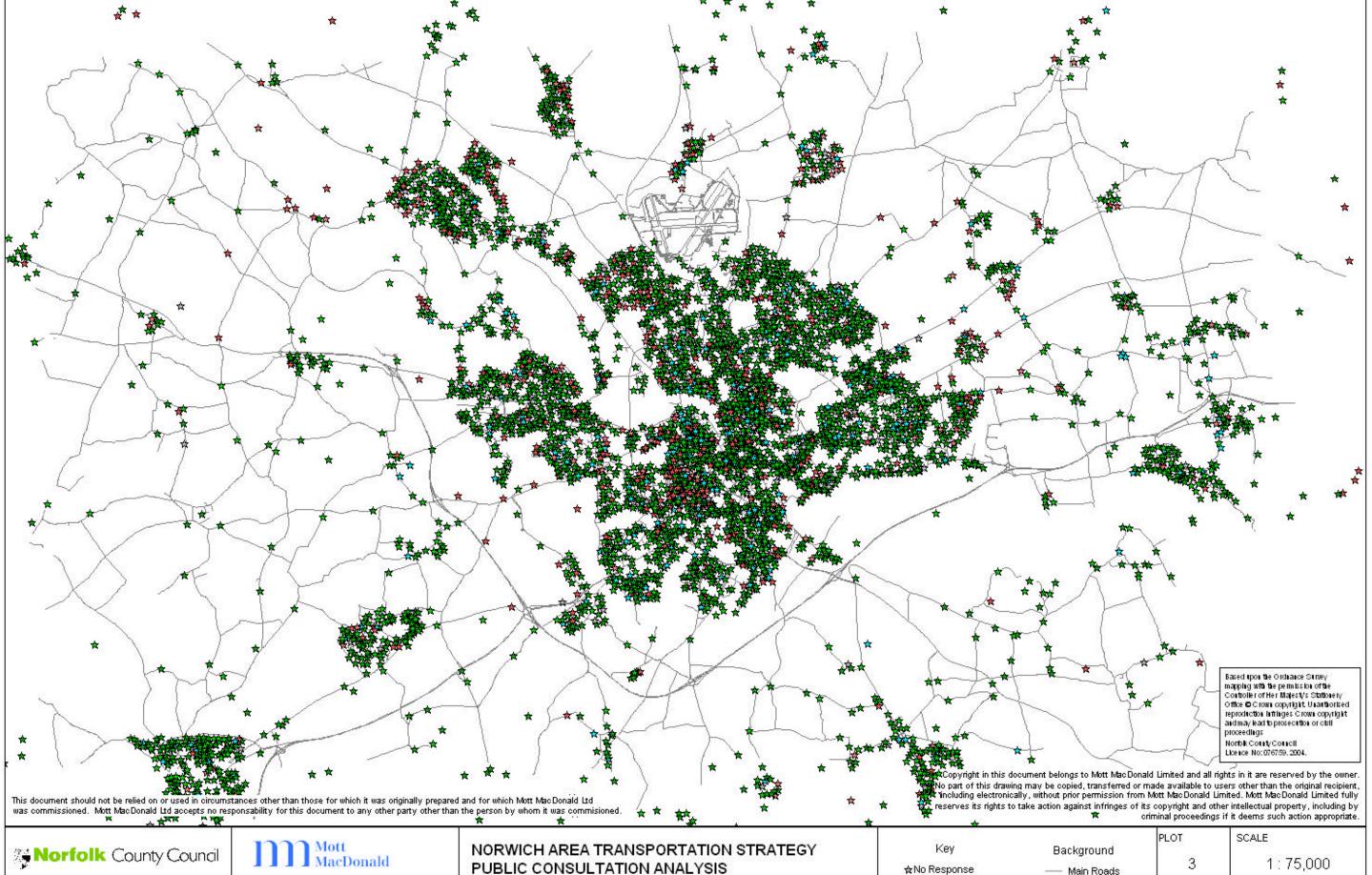
**☆**No Response

- ★Strongly Support
- **★**Support
- ★Oppose
  ★Strongly Oppose

#### Background

Norfolk parish boundaries

11-01	3000
2	1:300,000
DATE	15 March 2004
PROJECT	202049 BA17
CREATED	A2C
WORKSPACE	Q1.wor



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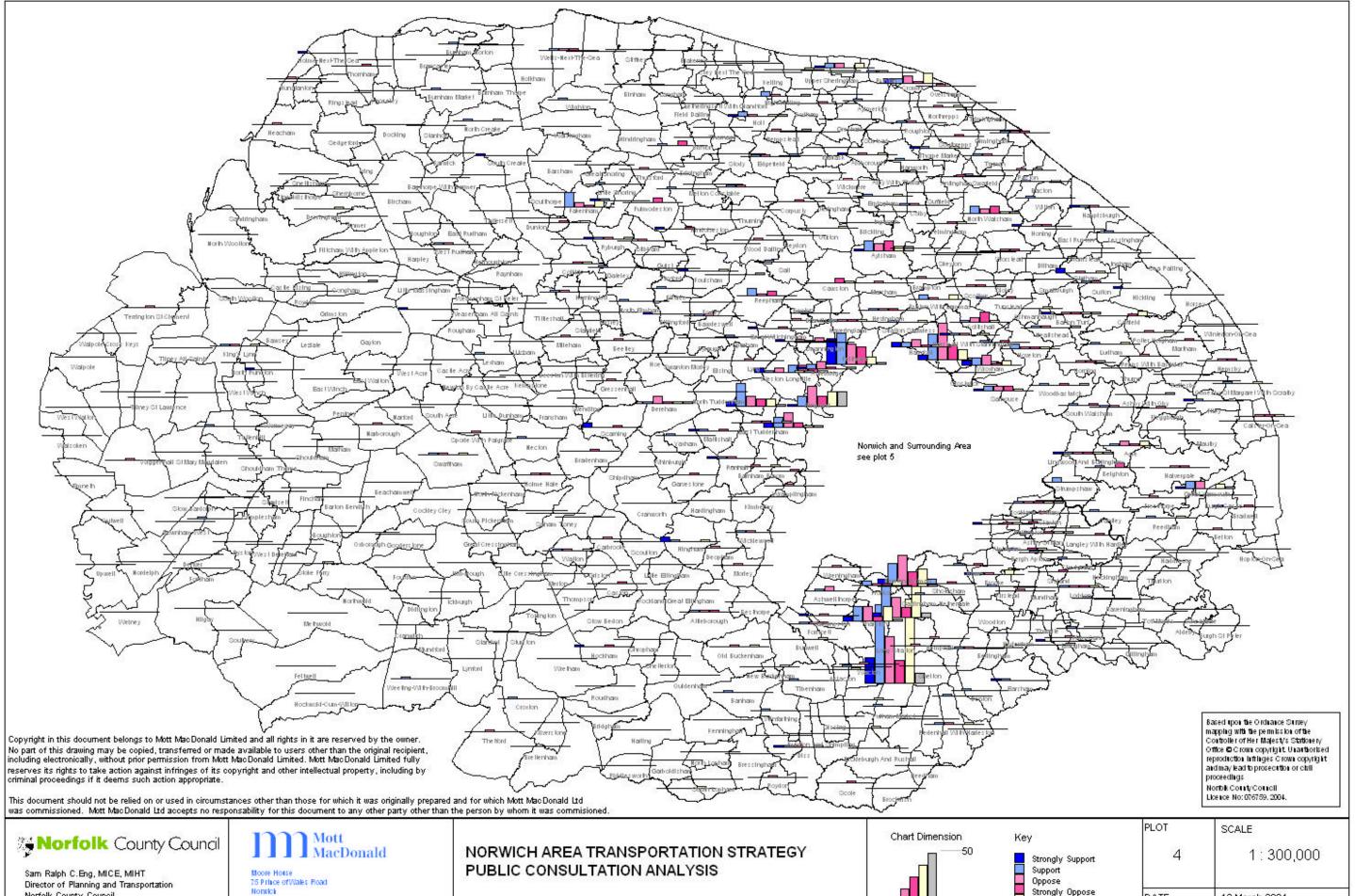
Moore House 75 Prince of Wales Road Norwick NR1 1DG

Tel 01603 767530 Fax 01603 767 463 Web www.mottmac.com Northern Distributor Road - Responses to Q1 "Would you like to see a Northen Distributor Road for Norwich?"

200	1117411
Key	Background
☆No Response  ☆Strongly Support	Main Roads
<b>★</b> Support	
★Oppose	

★Strongly Oppose

PLOT	SCALE
3	1:75,000
DATE	15 March 2004
PROJECT	202049 BA17
CREATED	A2C
WORKSPACE	Q1.wor

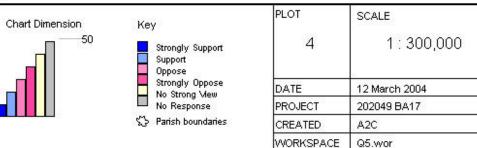


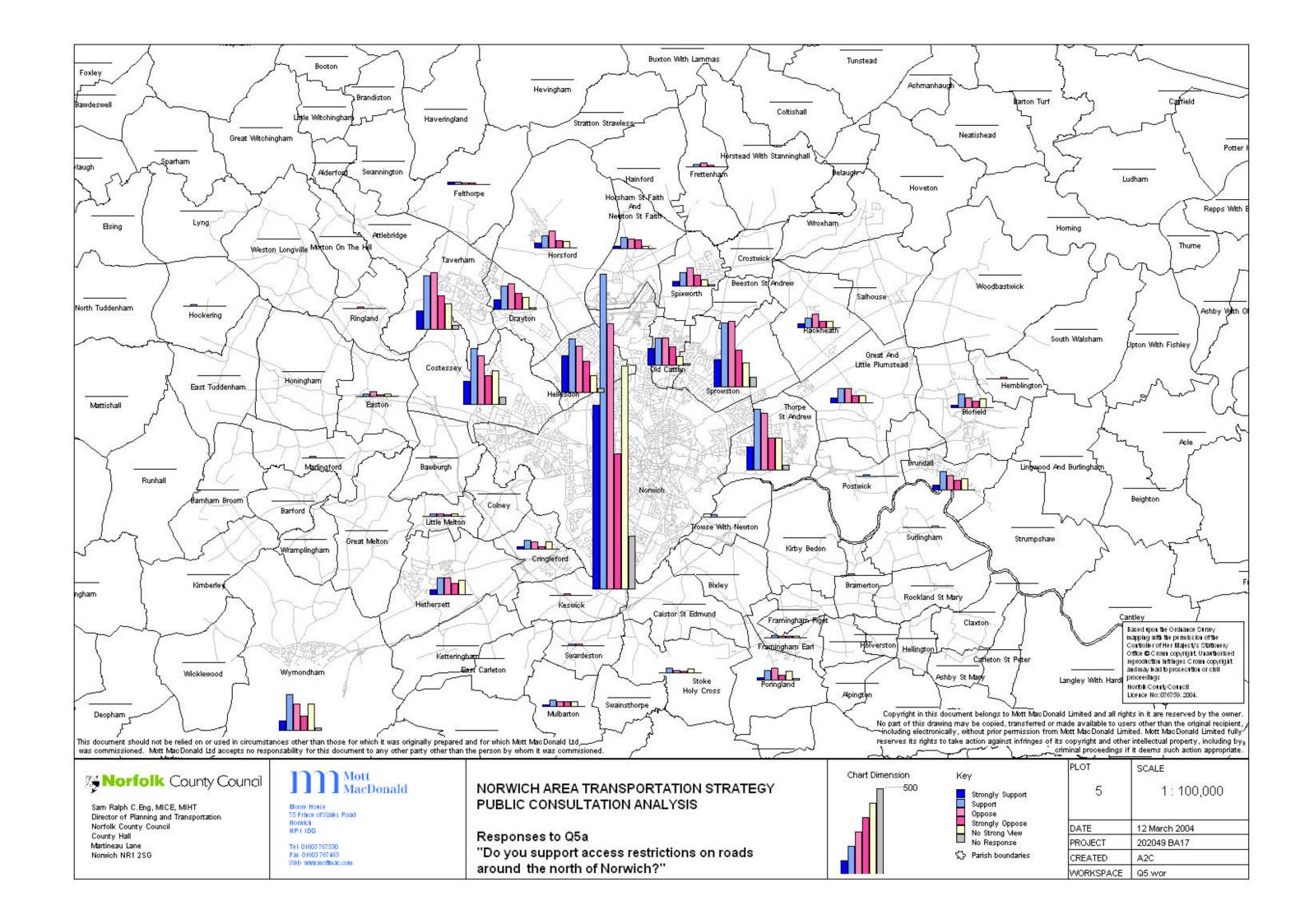
Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG

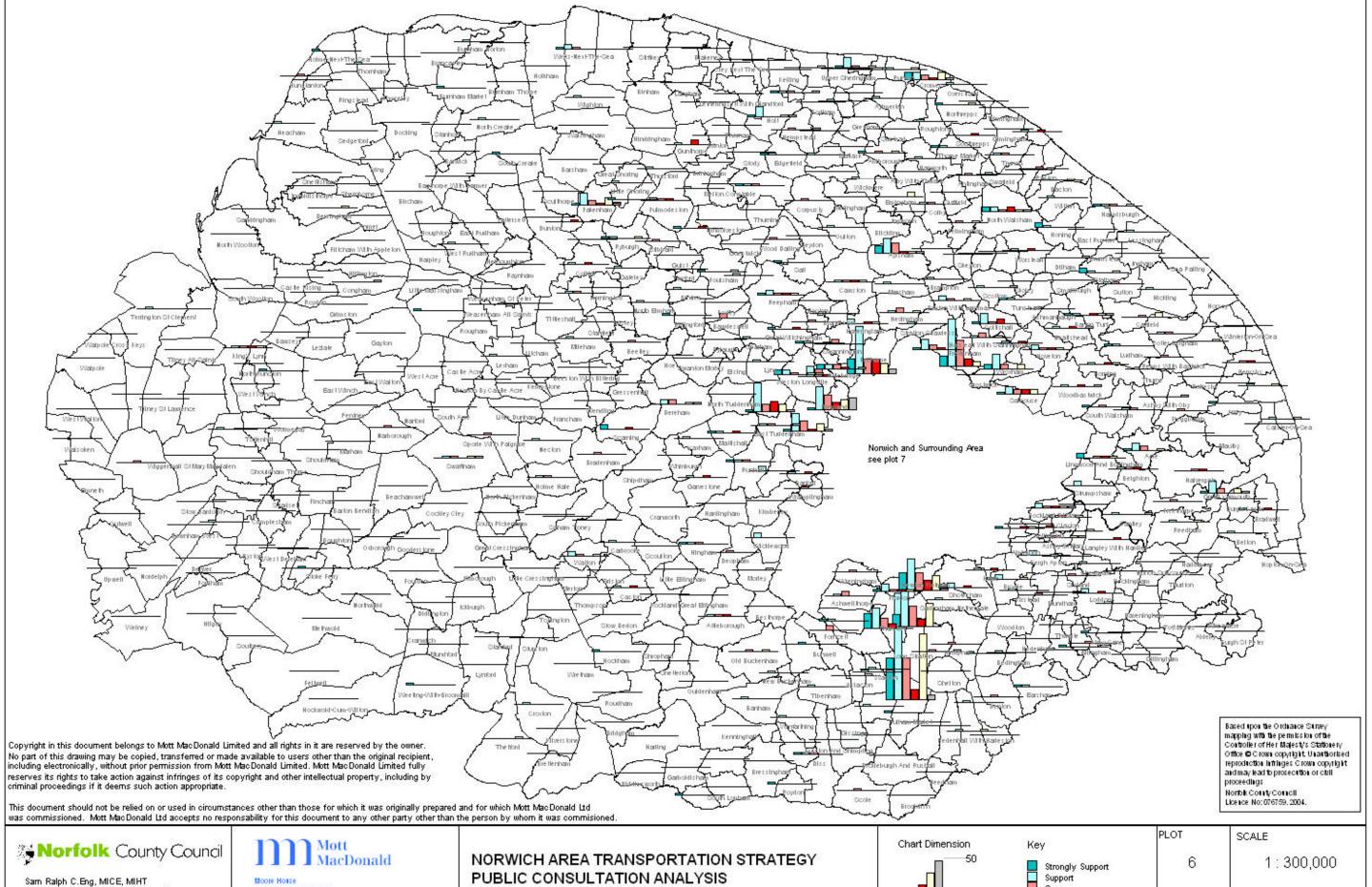
Norwick NR1 1DG

Tel 01603 767530 Fax 01603 767 463 Web www.mottmac.com Responses to Q5a

"Do you support access restrictions on roads around the north of Norwich?"



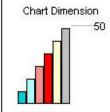




Director of Planning and Transportation Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG

Moore House 75 Prince of Wales Road Norwick NR1 1DG

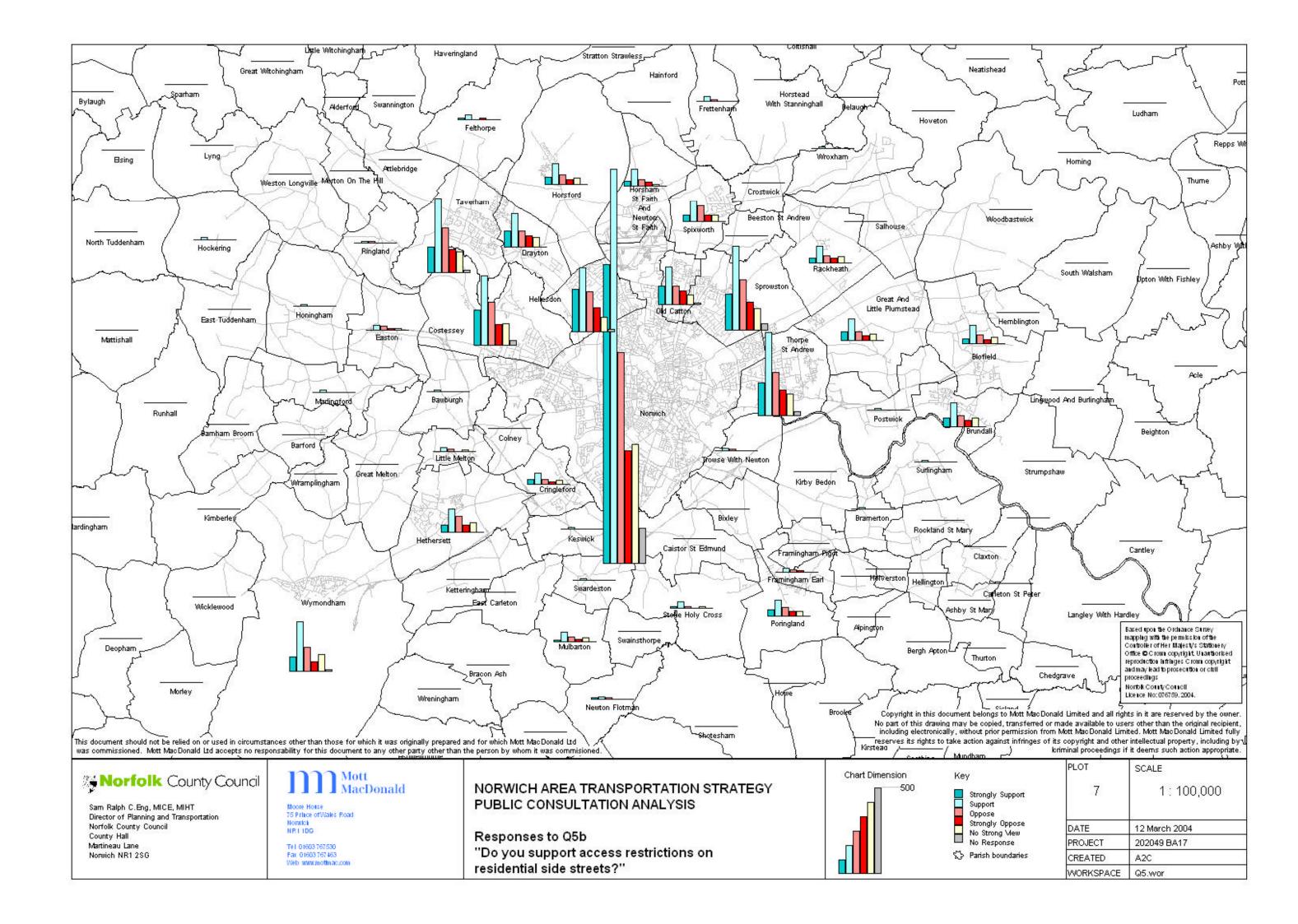
Tel 01603 767530 Fax 01603 767 463 Web www.mottmac.com Responses to Q5b "Do you support access restrictions on residential side streets?"

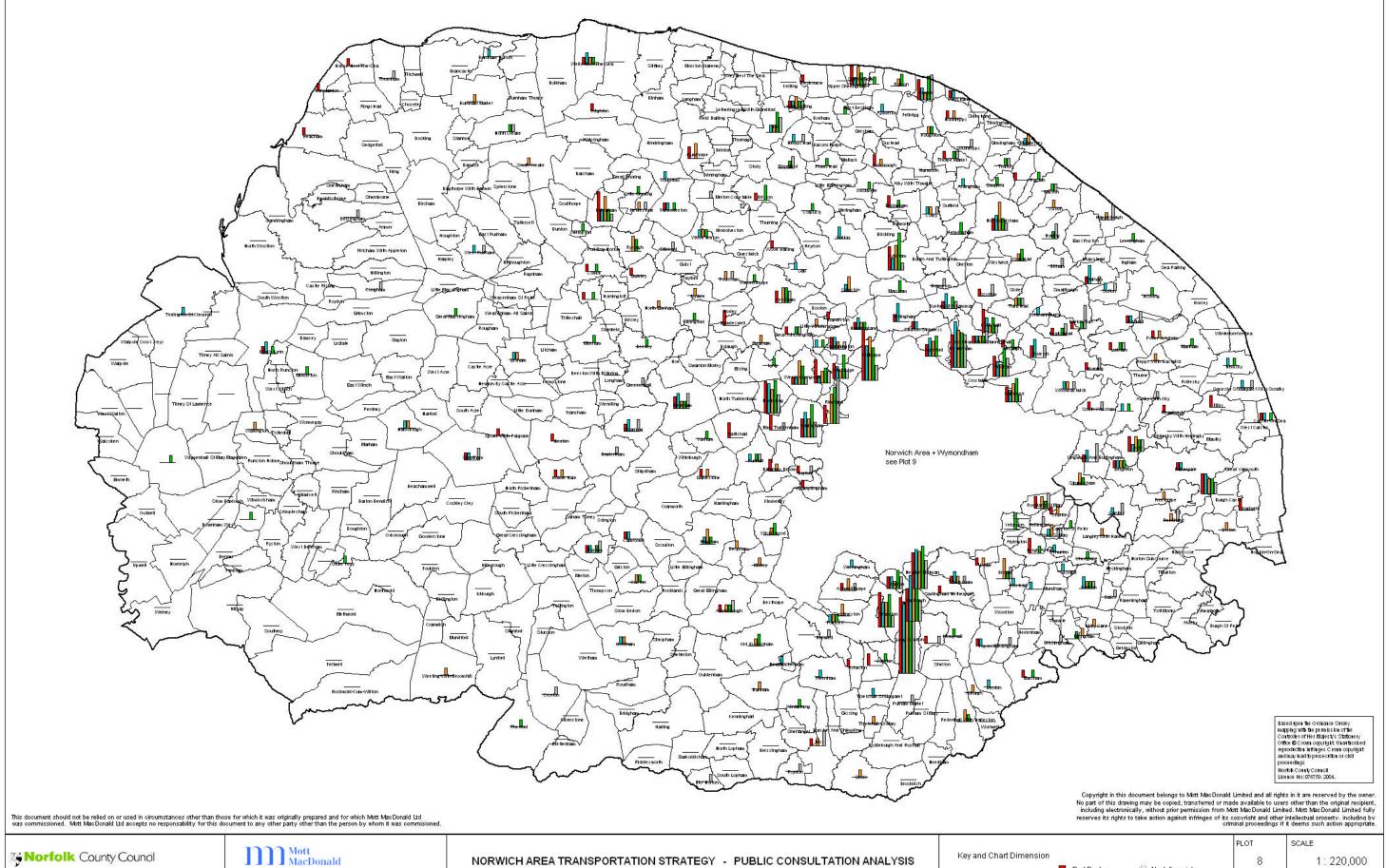


Ke	У
	Strongly Support
	Support
	Oppose
	Strongly Oppose
	No Strong Mew
	No Response
	AND STATE OF THE PARTY OF THE P

Parish boundaries

PLOT	SCALE
6	1:300,000
DATE	12 March 2004
PROJECT	202049 BA17
CREATED	A2C
WORKSPACE	Q5.wor





Sam Ralph C. Eng. MICE, MIHT Director of Planning and Transportation Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG Mott MacDonald

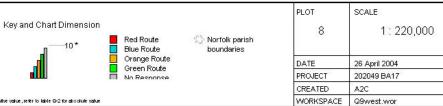
Moore Hotse
75 Pilice of Wales Road

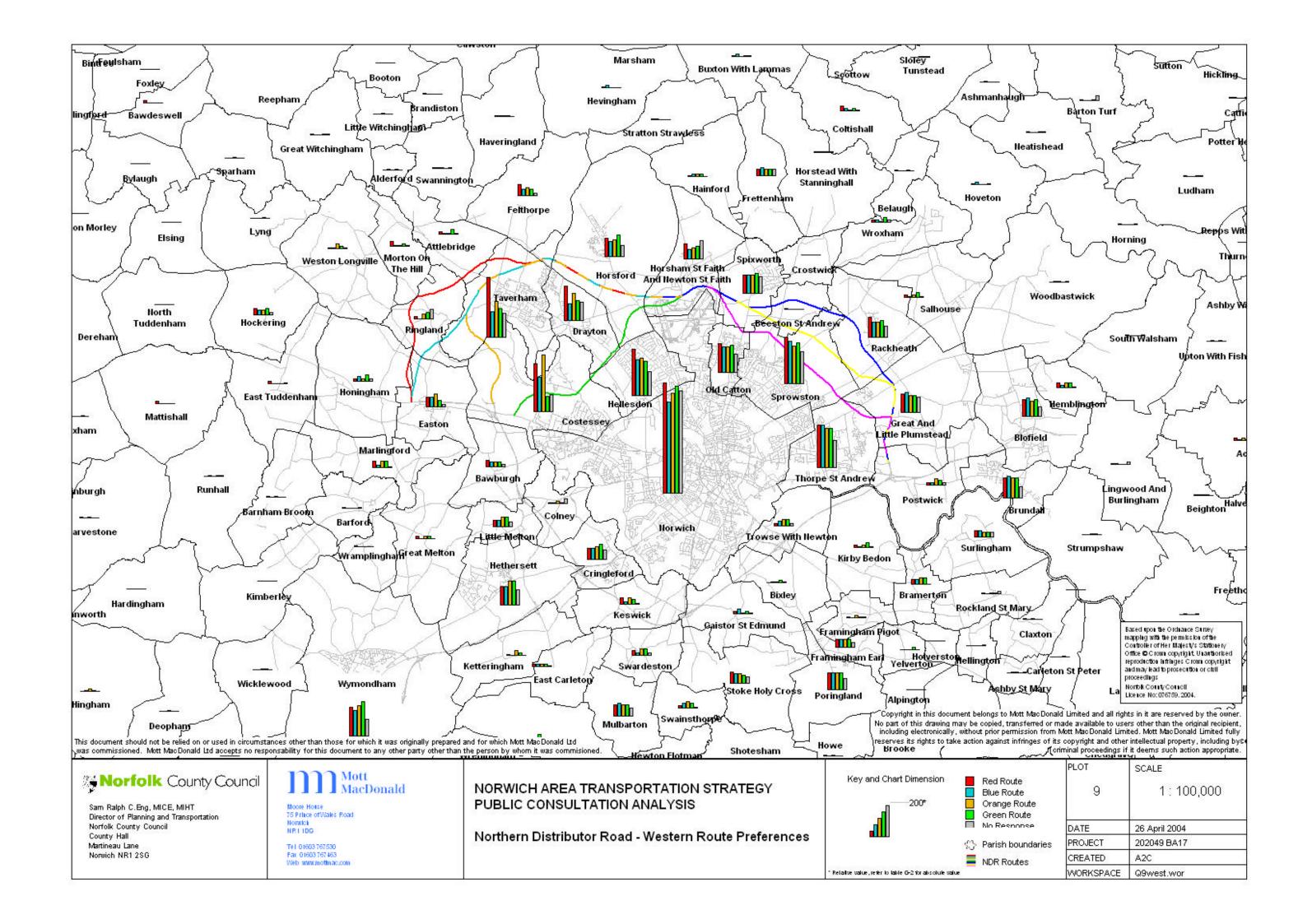
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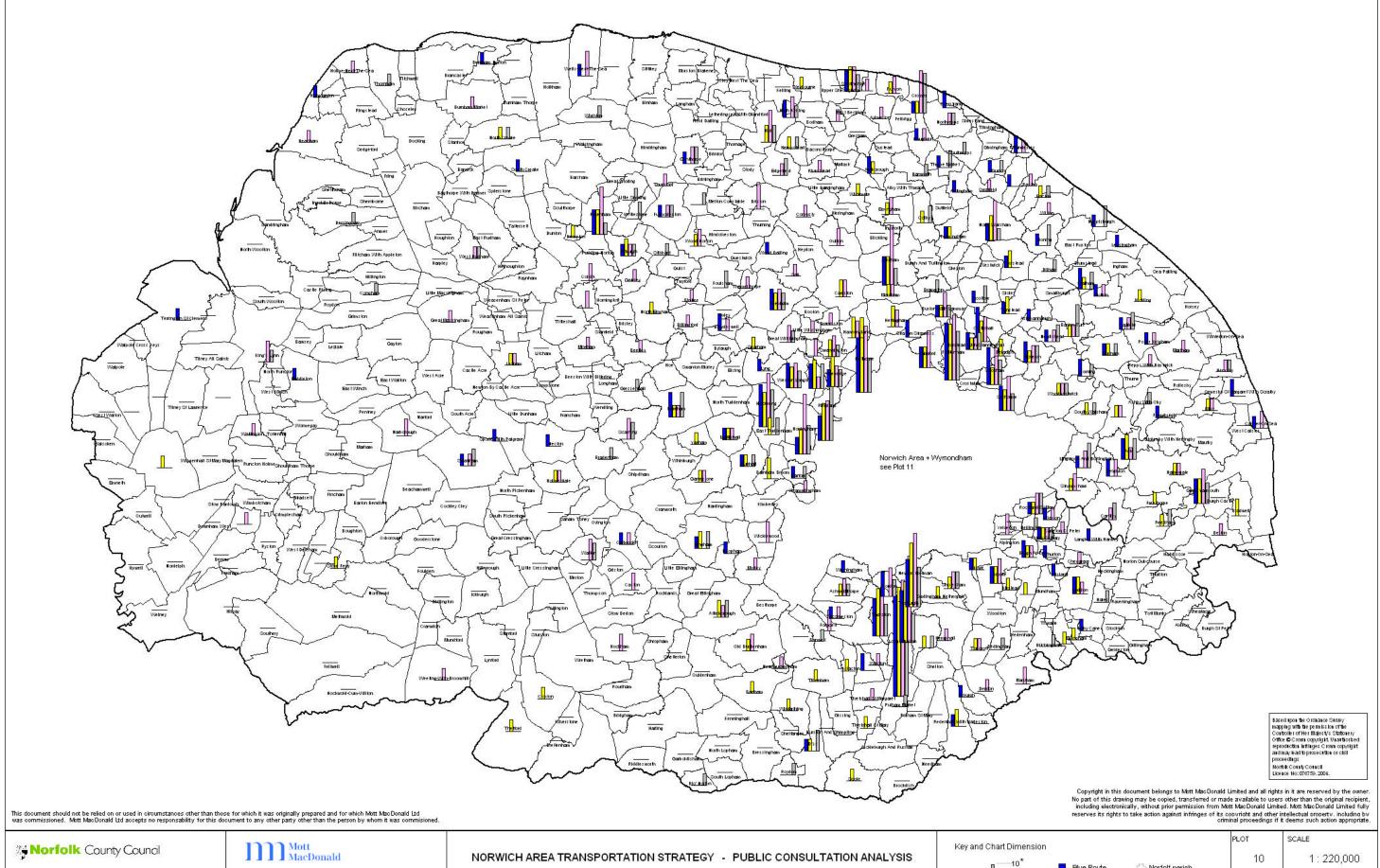
NRT 106

NORWICH AREA TRANSPORTATION STRATEGY - PUBLIC CONSULTATION ANALYSI

Northern Distributor Road - Western Route Preferences



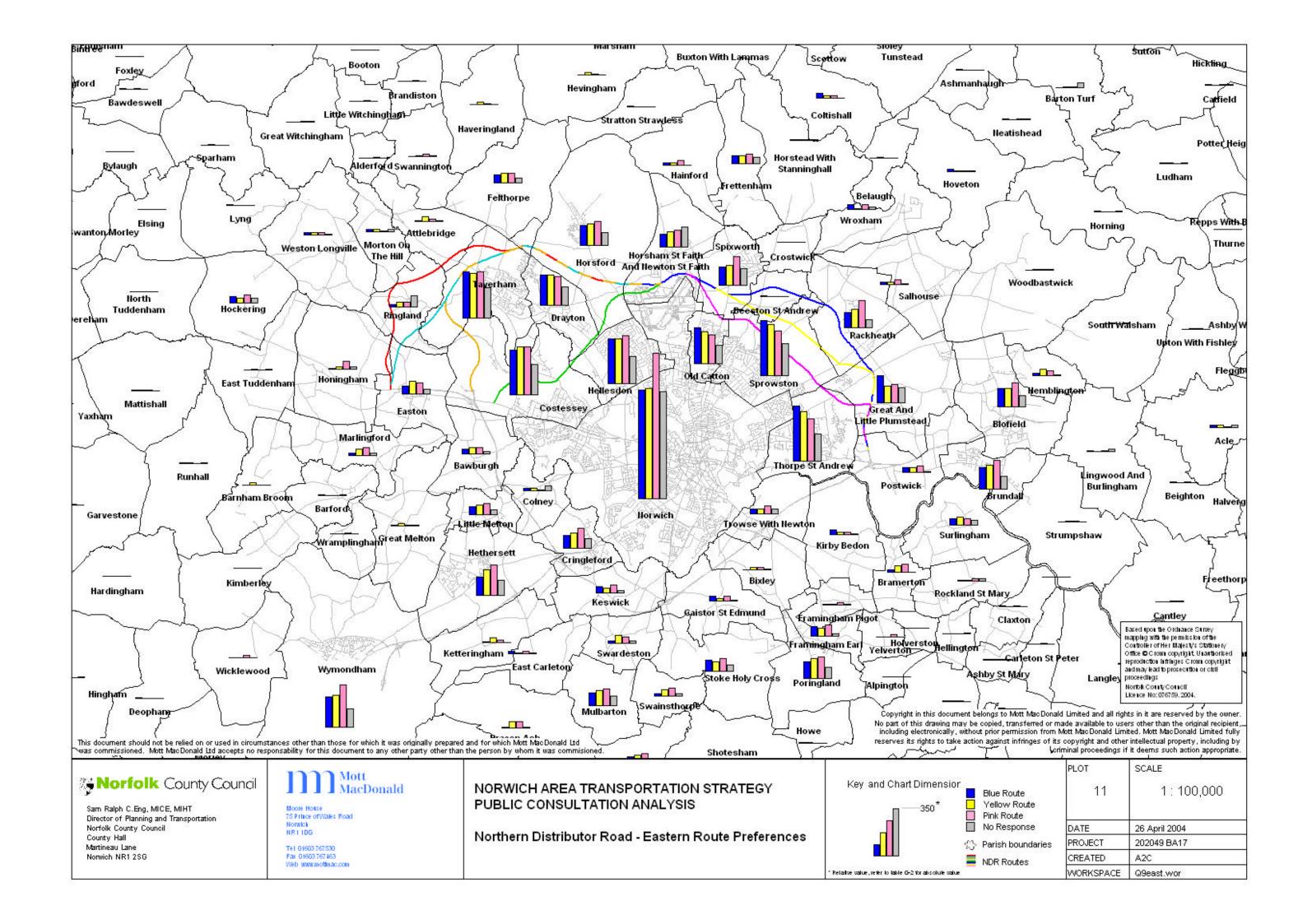


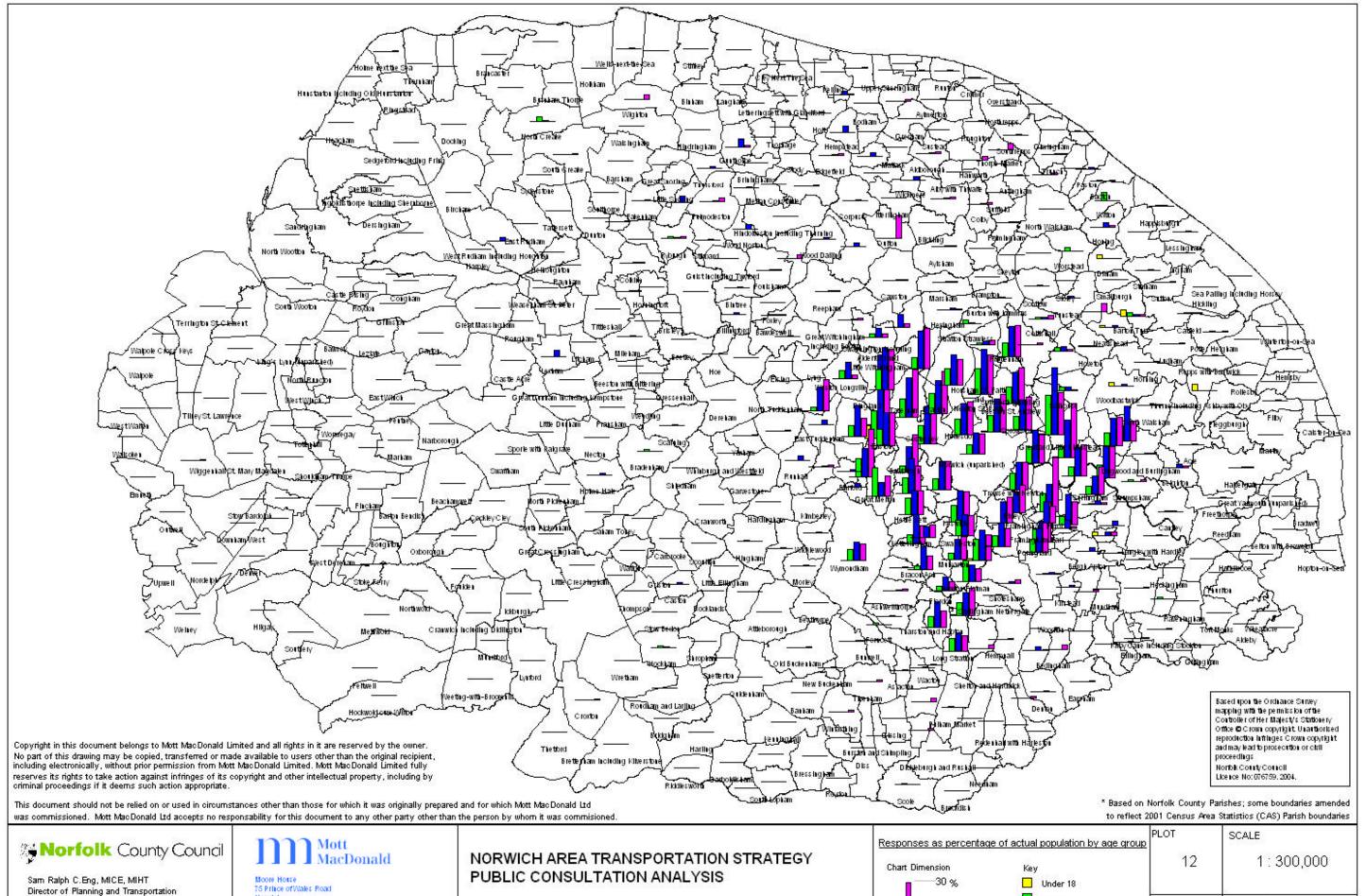


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Northern Distributor Road - Eastern Route Preferences

Key and Chart Dimension  10 <sup>*</sup> ■ Blue Route ⇔ Norfolf parish boundaries	PLOT 10	1: 220,000
Pink Route	DATE	26 April 2004
☐ No Response	PROJECT	202049 BA17
er constant	CREATED	A2C
itue value , refer lo lable G-2 for absolute value	WORKSPACE	Q9east.wor



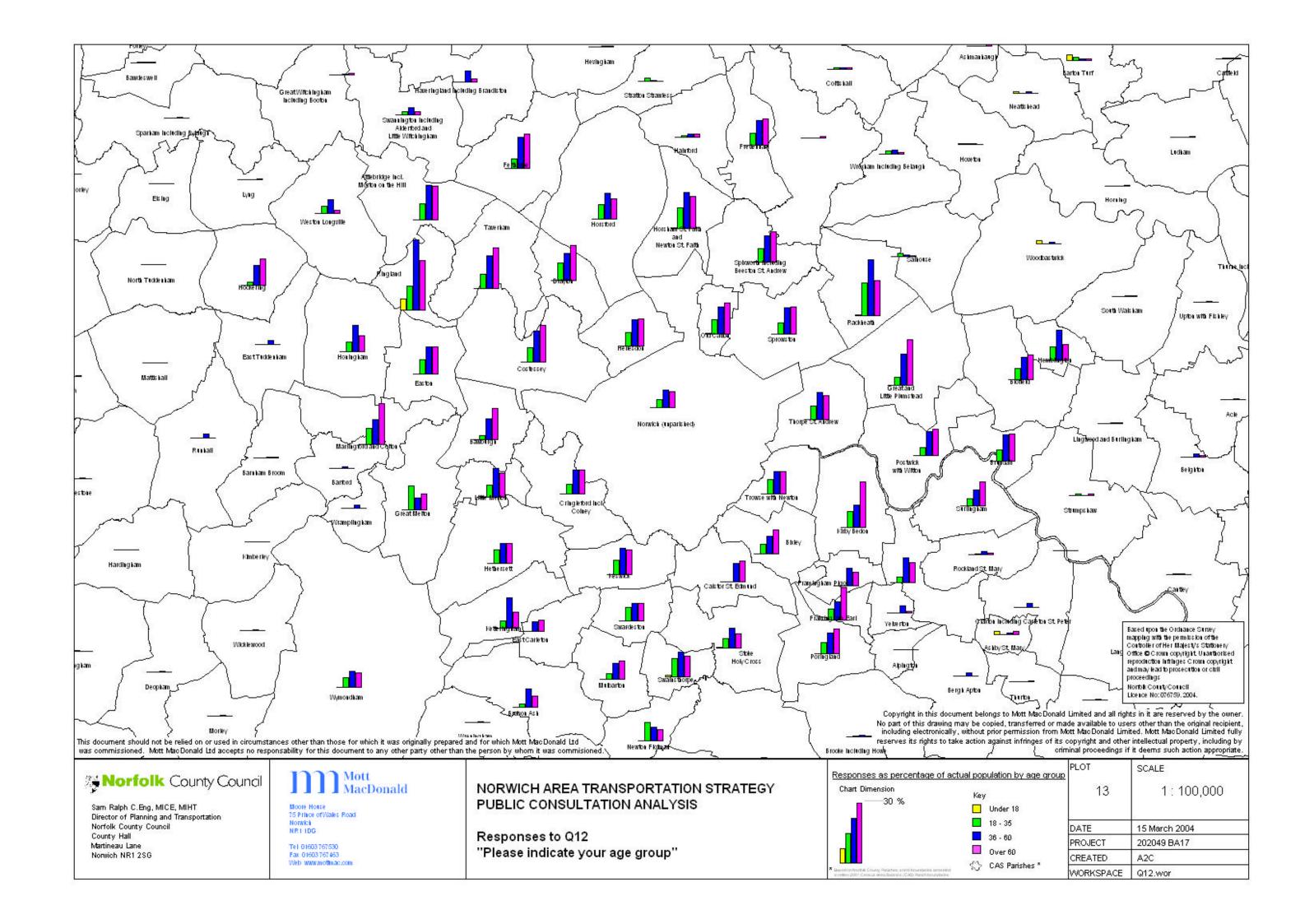


Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG

Norwick NR11DG

Tel 01603767530 Fax 01603767463 Web www.mottmac.com Responses to Q12 "Please indicate your age group"

	70.000	PLOT	SCALE
Responses as percentador Chart Dimension 30 %	ge of actual population by age grou Key Under 18	12	1:300,000
· ·	18 - 35	DATE	09 March 2004
The state of the s	36 - 60	PROJECT	202049 BA17
n <mark>d II</mark>	Over 60	CREATED	A2C
<u> </u>	CAS Parishes *	WORKSPACE	Q12.wor



### **Appendix H: Analysis of Organisation Responses – Data Tables**

A number of organisations responded more than once during the NATS Public Consultation period. Each response is treated as separate for analysis purposes.

Table H-1 is a full list of all organisations that responded by questionnaire, by letter and by email. The reference number provides a link to the data as stored in the database of responses. This table includes local councils.

**Table H-1 List of Organisations** 

Reference	Name	Pos	tcode
12369	101 MEDIA	NR4	6TJ
15081	4 TECH COMPUTERS	NR5	9JJ
101	99% OF GENERAL MOTORING PUBLIC		
14688	A ALCO	NR7	
2597	A.C.LEIGH	NR2	4PD
879	ABBEY NATIONAL	NR18	0QH
2226	ABBOTS ESTATE AGENTS	NR16	1EQ
14087	ABC SUPPLIERS LTD	NR13	6LH
7492	ACCOUNTANTS (NOT NAMED)	NR1	1RS
3865	ACE SKIP HIRE	NR4	6DW
19485	ACLE PARISH COUNCIL	NR13	3BP
21085	ACLE PARISH COUNCIL	NR13	ЗАА
12966	ADAMS CHILDRENSWEAR	NR1	3SG
17571	ADCOCK REFRIGERATION LTD	NR6	6RF
19406	AEW-THURNE LTD	NR7	9BB
19762	AGE CONCERN NORFOLK	NR6	6PP
20163	AGE GROUP SERVICES	TW1	4EG
9714	AGENCY EXPRESS LTD	NR1	1SP
4088	AIRPORT CAR CENTRE	NR6	6HE
17530	AIRWAYS DINER	NR6	6EB
17528	AIRWAYS NECOS	NR6	6EB
14700	ALDBOROUGH & THURGATON PARISH COUNCIL	NR11	7AA
13302	ALEKS JEWELLERS	NR2	1LD
469	ALISON MANUFACTURING	NR18	9AU
4972	ALLIED UNDERWRITING AGENCIES LTD	NR1	1NL
6902	ALLIY BAKERIES	NR6	6AN
4587	ALPHA CRAFT RIVERSIDE EST BRUNDALL	NR13	5PS
17009	ALPINGTON & YELVERTON PARISH COUNCIL	NR14	

Reference	Name	Post	code
823	ANDREWS SYKES HIRE LTD	NR4	6DQ
2564	ANGLIA BLINDS	NR4	7HD
6979	ANGLIA BOWLS LTD	NR3	3DZ
12453	ANGLIA BOWLS LTD	NR6	7AE
14222	ANGLIA DESIGN ASSOCIATES ARCHITECTS	NR2	4AX
11169	ANGLIA HARDWARE	NR3	2AT
19183	ANGLIA LEISURE LIMITED	NR8	6SB
13727	ANGLIA RAILWAYS		
19753	ANGLIA TRANSPORT ASSOCIATION	NR18	2NW
14551	ANGLIAN WATER	NR1	1SA
18980	ANGLIAN WINDOWS LTD	NR6	6EJ
20164	APE THEATRE GROUP	NR13	6LD
13953	APOLLO PLANT LTD	NR10	3SS
21393	ARCHANT	NR1	1RE
13958	ARCHANT LTD	NR1	1RE
18368	ARNOLDS CHARTERED SURVEYORS LTD	NR1	1LH
5226	ARRIVA PLC	NR6	6ED
17472	ARROW SCREEN PRINT LIMITED	NR3	3ST
2545	ARTHUR BRETT AND SONS	NR6	5DR
17843	ASHMANHAUGH PARISH COUNCIL	NR12	8YW
18986	ASSOCIATION OF HEAT CONTRACTORS	NR13	6PZ
17033	AURA DESIGN	NR13	6PX
21496	AYLSHAM TOWN COUNCIL		
2279	AYTON PRODUCTS (MAY GURNEY)	NR8	5DG
10511	BABYLAND	NR13	6LH
12307	BACO METAL CENTRE, CONCORDE RD, NORWICH	NR6	6BJ
2442	BARCLAYS GROUP PLC	NR3	1PD
17900	BARRATT AND COOKE	NR1	6DW
19290	BARTER HILL PARTNERSHIP LTD	NR6	5DR
19167	BARTON TURF AND IRSTEAD PARISH COUNCIL	NR12	
21479	BAWBURGH PARISH COUNCIL	NR9	3LU
19553	BEESTON WITH BITTERING PARISH COUNCIL	PE3	2LL
604	BELMORE SUPPLIES	NR3	2BS
591	BIGNOLD MIDDLE SCHOOL	NR2	2AN
8964	BLO' NORTON PARISH COUNCIL	IP22	2JB
21511	BLOFIELD TOWN COUNCIL		
6267	BLUSHERS	NR13	5AJ
583	BOATS 'N BITS.	NR2	4AB

Reference	Name	Post	code
794	BOOTS THE CHEMIST, 11-12 ANGLIA SQUARE	NR3	1DY
17231	BOWHILL & ELLIOT	NR2	1HL
21355	BOWLES AND WALKER LTD.	IP25	6UP
20936	BRADFORD HOUSE ACCOUNTANCY LTD	NR12	9PD
20934	BRADFORD HOUSE ACCOUNTANCY LTD.	NR18	0PH
20329	BRAMPTON PARISH COUNCIL	NR10	5AA
21523	BRINTON PARISH COUNCIL	NR21	0QJ
20358	BROADLAND BOWMEN		
21458	BROADLAND DISTRCT COUNCIL		
21539	BROADLAND DISTRICT COUNCIL	NR7	0DU
21520	BROADLAND DISTRICT COUNCIL		
3922	BROADLAND RADIATORS & HEAT EXCHANGERS LTD	NR13	6PD
19800	BROOK ALLOYS. TOOLS AND INDUSTRIAL DISTRIBUTORS	NR7	9QA
19224	BROOME PARISH COUNCIL	NR35	2NZ
3002	BRUMMELS SEAFOOD RESTAURANT	NR3	1LE
2249	BRUNDALL DENTAL SERVICES	NR13	5LR
19064	BRUNDALL PARISH COUNCIL	NR13	
20029	BUILDING PARTNERSHIP LTD	NR13	6HE
443	BUILDING SERVICES (EASTON) LTD	NR9	5EH
7924	BUNWELL PARISH COUNCIL	NR16	
	BURGER PLUS, 9 PAGE ROAD, SWEETBRIAR INDUSTRIAL ESTATE	NR3	2BX
17200	BURNHAM MARKET PARISH COUNCIL	PE31	8DS
17569	BUSINESS BASED IN AYLSHAM RD.	NR7	9LG
3351	BUSINESS MEN'S FELLOWSHIP	NR14	7DZ
10440	BUSSEYS	NR3	2EU
21362	BUXTON WITH LAMAS PARISH COUNCIL	NR10	5AF
19084	C.P.R.E	NR13	
20221	C.P.R.E	NR13	
20707	C.P.R.E	NR13	
17961	C.P.R.E	NR13	
20587	C.P.R.E (BROADLAND)	NR13	
19170	C.P.R.E NORFOLK	NR9	3DD
	C.R.A.S.H (COSTESSEY RESIDENTS AGAINST SPEEDING AND HGVS)	NR8	5AW
14195	C.W.U.	NR1	1RY
20374	CARBROOKS PARISH COUNCIL	IP25	6TD
16656	CAREWATCH (NORWICH)	NR3	3UE
7098	CARLTON FINANCIAL SERVICES LTD	NR6	5NZ

Reference	Name	Post	code
484	CASTLE PROMOTIONS LTD	NR3	2BS
20923	CASTON PARISH COUNCIL	NR17	1DD
20008	CATHERINE BARCLAY	NR2	1ER
19363	CAWSTON PARISH COUNCIL	NR10	4BS
14350	CECIL & AMEY	NR18	0BB
15523	C'EST CA LTD	NR3	1QA
17131	CHANDLER & SKITMORE LTD	NR6	5AD
2547	CHARLES STANLEY NORWICH	NR1	3DH
21145	CHET VALLEY GREEN PARTY	NR14	7HD
11007	CHILD SUPPORT AGENCY	NR1	1RN
3025	CHISWICK HOUSE RETIREMENT HOME	NR2	2AD
20450	CHURCH ORGANISATIONS IN CITY	NR7	0QW
20250	CITY & COUNTY ESTATE AGENTS	NR3	1HA
9773	CITY CARS LTD	NR1	1EN
16752	CITY ELECTRICAL FACTORS	NR2	4TN
4382	CITY SIGHTSEEING NORWICH / AWAYDAYS	NR11	6RN
8184	CITYGATE DEVELOPMENT	NR13	5LT
9181	CLASSIC ARRANGEMENTS	NR6	6AQ
5026	CLAYDALE LTD	NR8	6AP
8979	CLEMENT JOSCELYNE	NR2	1AL
12800	CMUA	NR3	4TZ
2878	COE COSTA AND MOORE OPTICIANS	NR6	6XW
6278	COLEMAN OPTICIANS	NR3	3DH
13137	COMMUNITY ACTION NORWICH	NR1	4DH
19311	COMMUNITY LIFE	NR8	5DP
21079	CONGHAM PARISH COUNCIL	PE32	1DY
4485	CONSTRUCTION WORKERS	NR9	3LL
3409	COPELAND ASSOCIATES NR14 7PZ	NR14	7QJ
19474	COSTESSEY MEDICAL PRACTICE	NR8	5AH
19892	COSTESSEY PARISH COUNCIL	NR8	5BS
1561	COUNSELLING PEOPLE	NR3	1JU
1371	COUNTRYWIDE SURVEYORS	NR2	2PA
21455	CRINGLEFORD PARISH COUNCIL	NR4	6UE
20514	CRISPIN LAMBERT ARCHITECTURE	NR3	2RY
21543	CROMER TOWN COUNCIL	NR27	0AH
21569	CROMER TOWN COUNCIL	NR27	0AH
2028	CROMWELL IND SUPPLIES	NR6	6BJ
4062	CROWES COMPLETE PRINT	NR6	6JB

Reference	Name	Post	code
17124	CURRAN PUBLISHING SERVICES LTD	NR3	3AF
4321	CURTIS HOLT NORWICH	NR4	6DG
5371	D & F MCCARTHY LTD	NR2	4LJ
8189	D UTTING & SON LTD	NR2	4QE
20345	D.M.COOK PARTNERSHIP AND COOK FAMILY TRUST		
21348	DAYNES OFFICE INTERIORS	NR19	1WD
2664	DEAN AND WOOD LTD	NR6	5DR
3911	DEBORAH SERVICES LTD	NR3	3DE
17125	DELANEY NORWICH LTD	NR2	4TP
13166	DENNY ENGINEERING LTD	NR5	9JJ
19187	DERSINGHAM PARISH COUNCIL	PE31	6LH
17586	DESIRA PLC	NR7	8RL
16340	DEVERE DUNSTAN HALL HOTEL	NR14	8PQ
17399	DIOCESAN MINISTRY COURSE	NR1	4DH
3065	DIPPLE & CONWAY LTD	NR2	1PB
17863	DITCHINGHAM PARISH COUNCIL	NR35	2RQ
925	DIXON SHOPPING CENTRE	NR6	6PA
1436	DKA	NR1	3JZ
2417	DOLLOND & AITCHISON	NR2	1PD
3385	DOORMOUSE BOOKSHOP	NR3	1HG
13122	DRAPER & NICHOLS LYD	NR5	0AD
21557	DRAYTON PARISH COUNCIL	NR8	6DW
21459	DRAYTON PARISH COUNCIL		
1662	DRAYTON TYRE-BATTERY	NR8	6RL
670	DRIVE ASSIST PLC	NR6	6NG
2445	DVLA	NR1	1UP
20987	DW LONG PAINTER AND DECORATOR	NR8	6BG
1986	E.U. LTD	NR3	3UE
2408	EARLHAM HOUSE POST OFFICE	NR2	3PD
19763	EARSHAM PARISH COUNCIL	NR35	2TL
1977	EAST	NR7	8QJ
8417	EAST ANGLIAN AMBULANCE TRUST		
	EAST ANGLIAN CYCLING CLUB	NR7	9DB
19981	EAST NORFOLK TRAVELLERS ASSN (BUS/RAIL USERS)	NR31	0BS
13065	EAST SUFFOLK TRAVELLERS ASSOCIATION	NR32	1RQ
19333	EAST TUDDENHAM PARISH COUNCIL	NR20	3LR
	EASTERN ROUTE	NR15	2RQ
6839	EASTERN SHOP EQUIPMENT LTD	NR6	6ED

Reference	Name	Post	code
21463	EASTON ESTATES	NR9	5EL
19002	EASTON PARISH COUNCIL	NR7	0BE
20392	EDGEFIELD PARISH COUNCIL	NR24	
20922	EDUCATION SENSORY SUPPORT	NR6	5ZH
18719	EDWIN DE GRAHAM LTD	NR11	6AP
1954	ELC, CAMBRIDGE	NR14	8OF
12229	ELIZABETH FITZROY SUPPORT	NR4	7ET
60	EMPLOYEES	NR4	7SB
11714	ENCAMS EAST OF ENGLAND	NR3	1WZ
20339	ENGLISH NATURE		
20829	ENVIRONMENT AGENCY		
16428	ENZO HAIRSTYLISTS & CREATIVE BATHROOMS	NR8	6YP
7623	ERPINGHAM AND CALTHORPE PARISH COUNCIL	NR11	8AJ
13612	EVANS LTD	NR1	3LT
14512	EYRE ELECTRICAL LTD	NR7	0EE
20227	F.A STONE & SONS (RETAIL BUSINESS - TIMBER HILL)	NR1	3JZ
15400	FAMILIES OF ROBIN HOOD ROAD	NR4	6BS
12305	FARA	NR2	1DE
21024	FARMING PARTNERSHIP	NR25	
16143	FELTHORPE PARISH COUNCIL	NR10	4DQ
14407	FINANCIAL FUTURES LTD	NR3	1DD
20342	FIRST EASTERN COUNTIES BUSES LTD		
1524	FITNESS EXCHANGE	NR1	1WT
1829	FIVE CENTRES PROJECT, JUBILEE COMMUNITY CENTRE	NR1	2EX
3518	FLOORING SUPPLIES ANGLIAN LTD	NR6	5DR
2908	FLUKE UK LTD	NR6	6JB
17838	FORD & YARHAM	NR7	9NQ
19194	FORESTRY COMMISSION		
17730	FOULSHAM SCHOOL	NR20	5SL
19459	FRETTENHAM PARISH COUNCIL	NR12	7LL
960	FW FROST (ENG) LTD	NR8	6AP
14321	G A PHARMACEUTICALS LTD	NR7	9BB
13677	GARDEN CAFÉ	NR2	1JG
18263	GEORGE GODDARD LTD	NR3	1DE
20511	GGS PHOTO GRAPHICS LTD.	NR4	6DG
19010	GREAT AND LITTLE PLUMSTEAD PARISH COUNCIL		
20833	GREAT YARMOUTH BOROUGH COUNCIL	NR30	2QF
10981	GRIPLET LTD	NR13	4RP

Reference	Name	Post	code
1538	GURNEY REEVE & CO LTD	NR18	9SR
10191	HADEN BUILDING MANAGEMENT	NR5	9JJ
21014	HAINFORD PARISH COUNCIL	NR10	3AX
8942	HAIR AFFAIR	NR3	4EB
2976	HARBER HIRE	NR6	6BW
16236	HARDINGHAM PARISH COUNCIL	NR9	
6969	HARFORD MANUFACTURING LTD	NR6	6AX
	HARKER HOUSE, RESIDENTIAL CARE HOME, LONG STRATTON	NR15	2TS
8448	HARRISONS ENGINEERS LTD	NR6	6RB
1246	HAVANT HOMES LTD	NR3	2BG
18193	HAVERINGLAND MEETING	NR10	4PT
	HEARTSEASE AND VALLEY DRIVE COMMUNITY PARTNERSHIP		
1911	HEL	NR4	6PE
21531	HELLESDON PARISH COUNCIL	NR6	5SR
21550	HEMPSTEAD BY HOLT PARISH COUNCIL		
5622	HERON PROPERTY MANAGEMENT	NR13	4LG
17686	HETHERSETT METHODIST CHURCH	NR9	
6166	HIGH KELLING PARISH COUNCIL	NR25	6RD
21021	HIGHWAYS AGENCY		
19725	HINGHAM TOWN COUNCIL	NR9	4LG
18235	HOCKERING PARISH COUNCIL	NR20	3JG
16934	HOLDEN	NR2	4TF
20158	HOLIDAY LETS & POOLSIDE LODGES		
17990	HOLME HALE PARISH COUNCIL	IP25	7ED
20912	HOLT TOWN COUNCIL	NR25	6DN
18398	HORNING PARISH COUNCIL	NR12	8PT
21491	HORSHAM & NEWTON ST FAITH'S PARISH COUNCIL	NR1	2PE
18929	HORSTEAD WITH STANNINGHALL PARISH COUNCIL	NR12	7EQ
19281	HOUGHTON PARISH COUNCIL	PE31	8RN
19637	HOVETON PARISH COUNCIL	NR12	8SA
4759	HOWE PARISH COUNCIL	NR15	1HD
3356	HUMBERSTONES	NR1	3SP
4726	ICENI TECHNOLOGY	NR3	1JU
7020	IES	NR2	1DX
	INDEPENDENCE ASSURED LTD, MONEY MATTERS, TMC FUNERAL	NR3	3HZ
15496	INSPIRE	NR3	3DT

Reference	Name	Posto	code
52	IPSWICH AND NORWICH COOP (DAIRY)	NR4	7TE
5131	J & H BUNN LTD	NR31	0JD
2393	J. LANGLEY & CO. LTD	NR2	1NQ
4666	JAMES CAWN ASSOCIATES	NR13	5AJ
20027	JARROLD AND SONS LTD HEAD OFFICE	NR3	1SH
19896	JARROLD AND SONS RETAIL DIVISION	NR2	1JF
19899	JARROLD AND SONS RETAIL DIVISION	NR2	1JF
1496	JOHN CLAYDON LUBRICANTS	NR3	2BT
4517	JOHN GROOMS COURT	NR3	4HX
21164	JOHN LEWIS	NR1	3LX
5218	JOHN PARKER BOATS	NR15	2TA
3788	JULLIAM GRAVES	NR1	1EG
2402	KAREN MILLEN	NR2	1LH
20796	KELLING PARISH COUNCIL	NR25	6EQ
7618	KESWICK & INTWOOD PARISH COUNCIL	NR4	6RU
18196	KIRBY CANE PARISH COUNCIL	NR35	2PT
13129	KJF DRIVING SCHOOL	NR2	2AN
4055	KLICK PHOTOPOINTS	NR2	1QU
17953	KNAPTON PARISH COUNCIL	NR28	0RY
2641	KP FACTORS, UNIT 4 GUARDIAN PD INDUSTRIAL ESTATE	NR5	8PF
21468	LANDOWNERS C/O BROWN AND CO.	NR2	4TA
	LANDOWNERS C/O JULIAN DARLING CHARTERED SURVEYOR		
21462	LANDOWNERS C/O THE SIMKINS PARTNERSHIP	W1T	4HB
11890	LARKING GOWEN	NR3	1LB
17848	LEDAN WINDOWS	NR6	6BJ
5320	LEISURE ACCESSORIES LTD	NR6	6EY
3130	LEISURE CONNECTION LTD	NR1	1WX
2276	LIBERAL DEMS HELLESDON MILL AREA (CITY)	NR6	5EZ
10236	LIND LTD	NR1	3ES
16673	LITTLE LULLABY	NR13	5DG
17226	LIVING STREETS	NR2	
5741	LONGWATER GRAVEL CO. LTD	NR5	0TX
21062	LOVEWELL BLAKE	NR1	1NY
18367	LSI ARCHITECHTS LTD	NR1	3DY
8348	LUCAS FETTES AND PARTNERS	NR1	1BD
9724	M & C AGRICULTURAL	NR13	6PZ
3376	MACHLOW INDUSTRIAL LTD	NR3	6NY

Reference	Name	Posto	code
16433	MAMAS & PAPAS	NR1	1WR
3092	MANDARIN CYCLES	NR3	3JZ
14640	MANOR GARAGE (BRUNDALL)	NR13	5JY
1143	MANSBROOK BROSCHE & CO LTD	NR1	1BG
17865	MANSBROOK BROSCHE LTD	NR6	7AE
1583	MARLINGFORD SPORTS CLUB	NR9	5AH
	MARRIOTT SPROWSTON MANOR HOTEL C/O CLIFF WALSINGHAM AND CO.	SL8	5AR
8740	MARTING PLASTICS LTD	NR7	9NT
15801	MARWOOD GROUP LTD	NR6	6AW
13423	MASS COMPUTING LTD	NR2	4HZ
2193	MASTINS OF NORWICH	NR7	8SX
	MAY GURNEY AND RMC PROPERTIES C/O CARPENTER PLANNING CONSULTANTS		
19108	MAY GURNEY LTD	NR14	8SZ
1061	MAYDAY LTD	NR6	6NN
4228	MENCAP	NR4	6QR
7002	MENCAP	NR14	8BB
2336	MERCURY AND PHILLIPS SIGNS	NR9	3LS
21016	MID NORFOLK GREEN PARTY	NR19	1LN
20935	MIKE BECCONSALL AND COMPANY LTD. (ACCOUNTANTS)	NR12	9PD
21524	MILE CROSS COMMUNITY COUNCIL	NR7	2NL
15987	MILEHAM PARISH COUNCIL	PE32	2TR
8008	MILLS KNIGHT ESTATE AGENTS	NR2	4SF
753	MINTERN SEMICONDUCTOR LTD	NR6	5DR
12784	MKI	NR1	3QN
	'MOON' ETHNIC CLOTHING. GENTLEMAN'S WALK, NORWICH	NR1	4HS
17873	MORNINGTHORPE PARISH COUNCIL	NR15	2QL
20017	MORRDIAL ENGLAND	NR3	2TA
14610	MORRIS ASSOCIATES, WEB DESIGNERS	NR18	0UA
10739	MOUNT LION FAMILY LIFE CENTRE	NR7	9NT
11305	MSI DEFENCE SYSTEMS LTD	NR7	9AY
3854	MUSIC SHOP	NR2	4AR
2573	MY COMPANY 'RETAIL CHAIN'	NR18	0BB
21370	NS&A	NR8	5EW
15235	NATIONWIDE	NR1	3QF
1372	NATIONWIDE BUILDING SOCIETY	NR2	1SX
18041	NCC OUTDOOR EDUCATION PROGRAMME	NR29	ЗАА

Reference	Name	Posto	ode
6964	NCODP	NR4	6LS
3575	NEAD	NR2	1AX
2834	NEW BOUNDARIES	NR8	5LJ
2005	NEW IMAGE STONE-CHIPS LTD	NR1	1QU
13408	NICHOLAS FOWLE ANTIQUES	NR2	1AR
7540	NIGHT FREIGHT EAST	NR7	8TL
21613	NO TO THE N25 CAMPAIGN GROUP		
21484	NO TO THE N25 CAMPAIGN GROUP		
21486	NO TO THE N25 CAMPAIGN GROUP		
5377	NORFOLK AND NORWICH FESTIVAL	NR3	1AB
20018	NORFOLK CAR AUDIO	NR3	2TA
18581	NORFOLK CONSTABULARY	NR18	OWW
	NORFOLK COUNTY COUNCIL STAFF SPORTS AND SOCIAL CLUB	NR1	2DL
11873	NORFOLK ENVIRONMENTAL WASTE SERVICES LTD	NR10	3НН
4930	NORFOLK FAMILY HISTORY SOCIETY	NR2	1LS
20835	NORFOLK FIRE SERVICE SPROWSTON FIRE STATION		
21537	NORFOLK GARDENS TRUST	NR14	7DX
11820	NORFOLK LANDSCAPE ARCHAEOLOGY		
2631	NORFOLK MOBILITY LTD.	NR3	2BX
	NORFOLK POLICE - LOCAL NORTH NORWICH SECTOR (BROADLAND COUNCIL REGION)	NR7	8PU
21083	NORFOLK SOCIETY COMMITTEE MEMBER	NR10	3AF
17434	NORFOLK TOURIST ATTRACTIONS ASSOCIATION		
19891	NORFOLK WILDLIFE TRUST		
21483	NORTH NORFOLK DISTRICT COUNCIL	NR27	9EJ
21235	NORTH WALSHAM AREA PARTNERSHIP - REGENERATION	NR28	9AT
21549	NORTH WALSHAM TOWN COUNCIL	NR28	9DE
20162	NORTHERN BALLET CO	NR13	6LD
13228	NORWICH ACCESS GROUP	NR2	2PZ
19164	NORWICH AIRPORT LTD	NR6	6JA
21397	NORWICH AND NORFOLK TRANSPORT ACTION GROUP	NR2	3JD
17238	NORWICH CITY COLLEGE	NR2	4NF
	NORWICH CITY COLLEGE OF FURTHER & HIGHER EDUCATION	NR2	2LJ
21001	NORWICH CITY COLLEGE STUDENTS UNION	NR2	2LJ
21538	NORWICH CITY COUNCIL	NR2	1WP
1271	NORWICH COLOUR PRINT LTD	NR8	6RL
8563	NORWICH CYCLING CAMPAIGN		

Reference	Name	Pos	tcode	
	NORWICH CYCLING FORUM	NR1		
	NORWICH FIREPLACE CENTRE LTD	NR7	9HA	
	NORWICH FRINGE PROJECT	NR13	6LZ	
16448	NORWICH GAS CENTRE	NR13	6PZ	
	NORWICH GREEN PARTY	NR3	3NL	
21489	NORWICH INTERNATIONAL AIRPORT	NR6	6JA	
9591	NORWICH OVER THE WATER PARTY	NR3	4SF	
16314	NORWICH PRIMARY CARE TRUST	NR7	8QS	
13247	NORWICH PUPPET THEATRE	NR3	1TN	
7856	NORWICH ROWING CLUB			
21556	NORWICH RUGBY FOOTBALL CLUB	NR12	7BW	
20028	NORWICH SCHOOL	NR1	4DD	
21343	NORWICH THEATRE ROYAL	NR2	1RL	
16468	NORWICH UNION	NR1	3DY	
8436	NORWICH UNION CENTRAL SERVICES	NR5	9JB	
13149	NOTRE DAME HIGH SCHOOL	NR1	3PB	
10501	OAKLANDS HOTEL	NR7	6HF	
9502	OFFICE EQUIPMENT RETAILERS	NR3	3HR	
20259	OLD BUCKENHAM PARISH COUNCIL	NR17	1PD	
20628	OLD CATTON C OF E V.C. MIDDLE SCHOOL	NR6	7AP	
20629	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS) <sup>1</sup>	NR6	6DR	
20635	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR3	3PQ	
20631	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR6	6DT	
20634	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR6	7AS	
20633	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR6	6JQ	
20630	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR6	7AU	
20627	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR6	6DL	
20632	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR6	7LP	
20642	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR6	7LR	
20641	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR3	3JT	
20640	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR3	2QW	
20639	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR6	6DW	
	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR1	2SZ	
	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)			
20636	OLD CATTON MIDDLE SCHOOL (YEAR 7 PUPILS)	NR6	7DT	
19193	OLD CATTON PARISH COUNCIL			

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<sup>&</sup>lt;sup>1</sup> Responses from Old Catton Middle School are included in the list of organisations as the name of the school was entered for question 11b. However as these were responses from individual pupils they were not included in the analysis of questionnaires from organisations.

Reference	Name	Posto	code
18862	OLD CATTON SOCIETY		
21340	OMATIC	NR1	4AX
9675	ORDNANCE SURVEY	NR1	1RN
20722	ORMESBY MICHAEL PARISH COUNCIL	NR29	3JT
19524	OTW MARRING LTD	NR6	5QN
8561	OULTON PARISH COUNCIL	NR11	7DF
20361	OVERSTRAND PARISH COUNCIL	NR27	0NT
20373	OVINGTON PARISH COUNCIL	IP25	6TD
18246	PABULUM (REGISTERED CHARITY)	NR3	4TL
18324	PAMPERS BEAUTY CENTRE	NR2	1LD
555	PARAGRAPH PUBLISHING	NR1	1PY
15931	PARISH COUNCIL (POSTCODE NR13)	NR13	
16132	PARISH COUNCIL (POSTCODE NR14)	NR14	
6886	PARKER MERCHANTING LTD	NR4	6DG
13945	PARKERS SKIP HIRE LTD	NR13	6LH
1801	PATRICIAS FLORISTS	NR18	0BB
974	PATTESON PARIS ROOM & CLUB	NR4	6UE
10306	PEARL CONTINENTAL HOTEL	NR11	1RU
21052	PENROSE PC	NR5	8LD
3927	PEOPLE MOVERS LTD	NR10	4DT
17577	PEOPLE PLUS	NR14	7EQ
382	PERSIMMON	NR4	6NZ
6728	PERSONAL COMPANY	NR7	8DS
11766	PETANS LTD	NR10	3HT
11765	PETANS LTD	NR10	3HT
11764	PETANS LTD	NR10	3HT
21347	PINGUIN FOODS UK LTD	PE30	4LR
8171	PITMAN TRAINING	NR1	1NR
10026	PLUMSTEAD PARISH COUNCIL	NR11	7LG
19192	PORINGLAND PARISH COUNCIL		
15588	POTS (WROXHAM) LTD	NR12	8DB
18281	POTTER HEIGHAM PARISH COUNCIL	NR29	
2645	POYNTER LIMITED	NR3	1RB
18442	PPCS BROOKS (NORWICH) LTD	NR9	3NP
14004	PREMIER FLIGHT TRAINING LTD	NR6	6EG
19563	PRIVATE COMPANY	NR5	0SB
21587	PURDY VERTIGAN & CO	NR10	4LZ
13193	Q8 NORWICH SOUTH	NR1	2SA

Reference	Name	Post	code
12706	QUEST GIFTS LTD	NR2	1AX
216	R.T.HARVEY LTD - 63 GROVE ROAD NORWICH	NR1	3RL
8556	RACKHEATH PARISH COUNCIL	NR13	6NZ
21562	RAIL PASSENGERS COMMITTEE	PE1	1QF
16658	READ TIMBER LTD	NR6	6EZ
3939	REAVES PHARMACY LTD, LONG STRATTON	NR15	2XJ
14744	RECRUITMENT AGENCY	NR1	3DH
21268	REDENHALL WITH HARLESTON TOWN COUNCIL	IP20	9DD
2985	RELIANCE EMPLOYMENT LTD	NR1	1RY
19648	REPPS WITH BASTWICK PARISH COUNCIL	NR29	5AH
15062	RESIDENTIAL HOME	NR3	3LS
12719	REVOLUTIONS, TIMBER HILL	NR1	3JZ
	RG CARTER LIMITED AND DRAYTON FARMS LIMITED C/O CARPENTER PLANNING CONSULTANTS	NR3	1HY
	RICHARD GURNEY CHILDRENS TRUST AND DEVELOPERS FOR WHITE HOUSE FARM, SPROWSTON, C/O CARPENTER PLANNING CONSULTANTS		
14757	RICHMOND ELECTRONICS SERVICES LTD	NR6	6JB
21514	RINGLAND BYPASS COMMITTEE	NR8	6AB
21589	RINGLAND BYPASS COMMITTEE	NR8	6JA
21474	RINGLAND BYPASS COMMITTEE	NR8	6JA
308	RJ LITTEN & PARTNERS	NR4	7AB
13990	ROBERT JONES ASSOCIATES	NR7	0EE
	ROCKLAND ST MARY WITH HELLINGTON PARISH COUNCIL	NR14	7AH
2911	ROHAN DESIGNS, WESTLEGATE	NR1	3LT
21110	ROLLESBY PARISH COUNCIL	NR29	
13259	RONALDO ICES LTD	NR2	4PH
3470	ROSS-HOLLAND CHARTERED ACCOUNTANTS	NR2	2SL
11389	ROYAL NORWICH GOLF CLUB	NR6	5AH
19302	ROYS (WROXHAM) LTD	NR12	8DB
20346	RSPB		
5050	RSPCA	NR7	0AZ
21316	RUNTON PARISH COUNCIL	NR27	9LT
14059	S INTERNATIONAL LTD	NR2	2PA
3121	S&A ROBINSON STONE MASON	NR8	6XD
14759	SACKVILLE CHAMBERS	NR3	1JU
12498	SAHAM TONEY PARISH COUNCIL		
12911	SALVATION ARMY	NR2	1LL

Reference	Name	Post	code
16728	SEAGLAZE MARINE WINDOWS LTD	NR13	6LH
9942	SEASONS	NR6	5NZ
3626	SERVICE EMPLOYMENT AGENCY	NR2	4SE
692	SEWELL COMMUNITY GROUP	NR3	1JQ
11982	SGB	NR4	6DQ
21471	SHAPING THE FUTURE	NR1	1BL
751	SHELBACK LTD	NR3	
11451	SHOTESHAM PARISH COUNCIL	NR15	1YP
1777	SILVERSCREEN WINDSHEILD	NR3	2BY
7306	SIXT AIRPORT INDUSTRIAL ESTATE		
1971	SLYDRIFT AIRCHARTER LTD	NR6	6EP
2674	SMITHASTON	NR2	4SF
2085	SMITHS METAL CENTRES LTD	NR6	6NE
21334	SNETTISHAM PARISH COUNCIL	PE31	7QA
15113	SOCIAL SERVICES	NR3	1TT
20019	SONYS AUDIO	NR2	3ТА
19017	SOUTH NORFOLK COUNCIL	NR15	2XE
21521	SOUTH NORFOLK DISTRICT COUNCIL		
19486	SOUTH WALSHAM PARISH COUNCIL	NR13	6BP
21114	SPANDLER BROS LTD	NR31	0DW
19895	SPIXWORTH PARISH COUNCIL	NR10	3NQ
17957	SPORLE PARISH COUNCIL	PE32	2DR
21553	SPROWSTON MANOR HOTEL AND COUNTRY CLUB	NR7	8RP
21473	SPROWSTON MANOR HOTEL AND COUNTRY CLUB	NR7	8RP
21519	SPROWSTON MANOR HOTEL AND COUNTRY CLUB	NR7	8RP
20369	SPROWSTON PARISH COUNCIL	NR7	8EN
11882	ST GEORGE & HELLESDEN RC PARISH COUNCIL	NR3	4HZ
17560	ST GILES STREET GALLERY	NR2	1JR
13937	ST WILLIAMS PRIMARY SCHOOL	NR7	0AJ
	ST. AUGUSTINES CATHOLIC PRIMARY SCHOOL, COSTESSEY	NR8	5AG
16685	ST. MARYS GRAFT DENTAL PRACTICE	NR2	1NY
2443	ST.EDMUNDS SOCIETY, 68 EARLHAM ROAD, NORWICH	NR2	3DF
12452	STAMPS DIRECT LTD	NR3	3EP
9616	STANNAH LIFT SERVICES LIMITED	NR5	9JT
5188	START RITE SHOES LTD	NR3	4RS
10881	STEGGIES HIGHES LTD	NR1	1SQ
13920	STOKE HOLY CROSS PARISH COUNCIL	NR14	8ND

Reference	Name	Post	code
3804	STOMPERS LTD	NR2	1NQ
9584	STRATSTAN LTD	NR13	6LH
423	STRATTON QUICKFIT	NR15	2PD
18870	STRATTON STRAWLESS PARISH COUNCIL		
21507	SUFFOLK COUNTY COUNCIL	IP4	1LZ
3673	SUNFLEX UK / INNOVATIVE DESIGN SYSTEMS	NR6	6NN
2216	SUNLIGHT SERVICE	NR3	4BJ
143	SUPER CHEF LTD	NR15	2PD
44	SUPREME BATHROOMS LIMITED	NR18	0NL
20502	SUSTAINABLE TRANSPORT FOR THE EAST OF ENGLAND		
19497	SUSTRANS		
	SWANNINGTON, ALDERFORD AND LITTLE WITCHINGHAM PARISH COUNCIL	NR9	5PA
164	SYLVESTER BUILDING SERVICES LTD	NR3	2AW
4921	T.A. MILLARD EAST ANGLIA LTD	NR1	1BL
19181	TAVERHAM PARISH COUNCIL		
	TAVERHAM RESTRICTIVE COVENANT PRESERVATION SOCIETY	NR8	6UA
	TESCO STORES LTD CO/ CUSHMAN & WAKEFIELD HEALEY & BAKER		
20773	THARSTON AND HAPTON PARISH COUNCIL	NR15	1AD
14406	THE ALARM COMPANY	NR13	6PS
1853	THE ANTI DISESTABLISHMENT SOCIETY	NR18	0AJ
21000	THE COSTESSEY SOCIETY	NR5	
21588	THE COUNTRYSIDE AGENCY	CB2	1PT
21432	THE DEMOCRACY = FAIRNESS FOR ALL CAMPAIGN	NR2	3RH
20340	THE FORUM TRUST LIMITED		
12465	THE GIANT PET STORE LTD	NR6	6NG
15502	THE GREEK ORTHODOX CHURCH OF THE MOTHER OF GOD	NR1	1NR
15624	THE GREEN PARTY	NR10	3DH
14558	THE GREENHOUSE TRUST	NR2	1NR
	THE KING OF HEARTS (VEWS ARE PERSONAL, NOT NECESSARILY THOSE OF THE TRUSTEES) J. NEVILLE - MANAGER	NR3	1LJ
3149	THE MAGPIE PUBLIC HOUSE	NR3	1JQ
	THE NORWICH CENTRE FOR PERSONAL AND PROFESSIONAL DEVELOPMENT	NR2	3RA
20969	THE NORWICH MONTESSORI SCHOOL	NR14	7TW
21554	THE NORWICH SOCIETY	NR2	1RQ

Reference	Name	Post	code
10006	THE PEOPLE OF NORFOLK	NR5	
10759	THE PHOTOGRAPHIC UNIT	NR3	2BX
9002	THE RMP PARTNERSHIP	NR16	1AT
	THE SENSIBLE SPEEDS INITIATIVE WITH THE ROADCRAFT ADVICE PATROL SERVICE	NR13	6QW
20501	THE THORPE AND FELTHORPE TRUST	NR7	9LW
21402	THE THORPE AND FELTHORPE TRUST	NR7	9LW
14140	THE TREEHOUSE RESTAURANT	NR2	10E
	THE WIDEN THE CHOICE RURAL TRANSPORT PARTNERSHIP (NT/ RSPB / CA)	NR1	1UD
20161	THEATRE (VISITING CAST)	NR13	6LD
20160	THEATRE PANTO CAST	NR13	6LD
20165	THEATRE ROYAL CAST	SW15	3SL
20117	THORNHAM PARISH COUNCIL	PE36	6NE
21573	THORPE END RESIDENTS ASSOCIATION		
21545	THORPE END RESIDENTS ASSOCIATION	NR13	5BQ
10434	THORPE HOUSE SCHOOL	NR7	0EA
20375	THORPE ST ANDREW PARISH COUNCIL	NR7	0SR
18666	THORPE STANDREWS CONSERVATIVE BRANCH	NR7	0HB
16871	THORPE ST ANDREWS RECREATION SPACES	NR7	0XQ
17268	THORPE ST ANDREWS SCHOOL	NR7	0XS
19216	THURSFORD PARISH COUNCIL	NR21	0BS
9261	TOILETS + LTD	NR18	9JD
7741	TOPCROFT PARISH COUNCIL	NR35	2BJ
19357	TRANSPORT 2000	NR13	
15066	TRINITY STAINED GLASS	NR1	3EY
17139	TRUDI'S BEAUTY CENTRE	NR1	2AD
10939	TRUST & ALLSTAR EXECUTIVE TAXIES	NR5	0SE
	TURO TECHNOLOGY LLP (WORKS PARTLY IN NORWICH AREA)	PE30	2AL
13117	TURTON CMS LIMITED	NR2	4TP
10320	TWO STARS - RETAL LADIESWEAR	NR2	1NQ
8688	TWYFORD PARISH COUNCIL	NR20	5NA
11855	TYRE TRAX NORWICH	NR6	7QN
8180	TYRES-2-U	NR14	7RP
11038	UEA ROCKCLIMBING CLUB	NR2	3RR
16031	UK FIRS	NR1	1PY
20267	UPPER ST.GILES RESIDENTS AND TRADERS	NR2	1LT
20343	UPPER ST.GILES RESIDENTS AND TRADERS		

Reference	Name	Post	Postcode	
	ASSOCIATION			
16147	usc	NR2	1PB	
7591	VANCEBUILD LTD	NR7	0JQ	
12440	VETERANS AGENCY	NR3	1QA	
14478	VICTORIA STREET SURGERY	NR1	3QX	
16631	VIKING PLANT HIRE	NR13	6LN	
18646	W R BULLENS LTD	NR21	1HU	
7943	WALKER RUBBER AND PLASTICS	NR3	2BS	
2259	WARNERS FINANCIAL SERVICES	NR18	0AJ	
10947	WAVENEY TRUCK PARTS	NR6	6RY	
16517	WELLESLEY FIRST SCHOOL	NR1	4NT	
21090	WENSUM VALLEY PROJECT			
21031	WEST RUDHAM PARISH COUNCIL	PE31	8RN	
18543	WESTON LONGVILLE PARISH COUNCIL	NR9	5LQ	
12450	WESTWOOD POST OFFICE	NR6	5AD	
20864	WEYBOURNE PARISH COUNCIL	NR25	7SX	
	WHITBREAD HOTEL CO C/O CLIFF WALSINGHAM & COMPANY	SL8	5AR	
1766	WHITELINE PHOTOGRAPHERS	NR15	2TA	
18997	WICKMERE PARISH COUNCIL	NR11	7NA	
18662	WIGHTON PARISH COUNCIL	NR23	1PQ	
11257	WILCO MOTORSPORTS LTD	NR7	9AH	
12552	WINFARTHING PARISH COUNCIL	NR15	2EG	
20363	WOOD NORTON PARISH COUNCIL	NR20	5AY	
20608	WOODBASTWICK PARISH COUNCIL	NR13	6JG	
5824	WOODS MASONRY LTD	NR8	6XH	
9671	WORMAID OIL & GAS	NR5	9JD	
18904	WORTWELL PARISH COUNCIL	IP20	0BZ	
21030	WRENINGHAM PARISH COUNCIL			
18642	WYMONDHAM TOWN COUNCIL	NR18	0AD	
10367	XIASMA	NR14	4AX	
18679	YARE VALLEY SOCIETY	NR4	7LG	
18960	YAXHAM PARISH COUNCIL	NR19	1RQ	
12303	ZAKS RESTAURANT	NR3	1TS	
6594	ZENITH WINDOWS	NR3	2BW	

Tables H-2 to H-6 provide detail of questionnaire responses only from organisations, excluding local council responses. Analysis is for a total of 474 questionnaire responses.

Table H-2 Data for Q.1-7 – Organisation Responses (Excluding Council Responses)

Question	No Response	%	Strongly support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
1. Would you like to see a Northern Distributor Road for Norwich?	7	1.48	300	63.29	92	19.41	8	1.69	50	10.55	17	3.59
2. Do you support education, encouragem ent and enforcement measures?		2.74	149	31.43	194	40.93	40	8.44	35	7.38	43	9.07
3a. Do you support the current order of priorities?	30	6.33	64	13.50	126	26.58	137	28.90	69	14.56	48	10.13
3b. If not, do you support a more flexible order of priorities?	142	29.96	89	18.78	170	35.86	13	2.74	18	3.80	42	8.86
4a. Do you support improving traffic flow on the main road network?	15	3.16	256	54.01	175	36.92	13	2.74	4	0.84	11	2.32

Question	No Response	%	Strongly support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
4b. Do you support improving bus, rail and other passenger transport?	11	2.32	249	52.53	174	36.71	12	2.53	9	1.90	19	4.01
4c. Do you support a new park and ride site along the Drayton/Taverham corridor?	0	1.90	161	33.97	169	35.65	29	6.12	19	4.01	87	18.35
4d. Do you support introducing trams?	8	1.69	152	32.07	160	33.76	54	11.39	42	8.86	58	12.24
5a. Do you support access restrictions on roads around the north of Norwich?	16	3.38	39	8.23	106	22.36	135	28.48	104	21.94	74	15.61
5b. Do you support access restrictions on residential side streets?	13	2.74	63	13.29	175	36.92	105	22.15	69	14.56	49	10.34
6a. Do you support small scale traffic measures in the city centre?	17	3.59	67	14.14	201	42.41	73	15.40	70	14.77	46	9.70

Question	No Response	%	Strongly support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
6b. Do you support stopping traffic driving straight through the city centre?	9	1.90	88	18.57	96	20.25	108	22.78	140	29.54	33	6.96
7a. Do you support road user charging within 5 years?	7	1.48	25	5.27	42	8.86	87	18.35	283	59.70	30	6.33
7b. Do you support road user charging within 5 to 10 years?	23	4.85	16	3.38	41	8.65	89	18.78	274	57.81	31	6.54
7c. Do you support workplace charging within 5 years?	9	1.90	38	8.02	41	8.65	83	17.51	267	56.33	36	7.59
7d. Do you support workplace charging within 5 to 10 years?	22	4.64	30	6.33	41	8.65	84	17.72	261	55.06	36	7.59

**Table H-3 Q.9 NDR Western Route Preferences – Organisation Responses** 

	Responses	%
No Response	83	17.51
Red	105	22.15
Blue	78	16.46
Orange	119	25.11
Green	89	18.78

Table H-4 Q.9 NDR Eastern Route Preferences – Organisation Responses

	Responses	%
No Response	84	17.72
Blue	120	25.32
Yellow	111	23.42
Pink	159	33.54

**Table H-5 Q.12 Age Groups – Organisation Responses** 

	Responses	%
No Response	86	10.13
Under 18	0	0
18-35	89	18.99
36-60	309	58.44
Over 60	79	12.45

Table H-6 Q.8 and Q.13 Comments – Organisation Responses

Q.8	Comment Size	No. Comments	%
	1-3 lines	65	11.40
	4-6 lines	74	12.98
	7 + lines	30	5.26
	<b>Total Comments</b>	169	29.65
Q.13	Comment Size	No. Comments	%
	1-3 lines	76	13.33
	4-6 lines	87	15.26
	7 + lines	65	11.40
	<b>Total Comments</b>	228	40.00

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# Appendix I: Analysis of Local Council Responses – Data Tables

# Table of Individual Local Council Responses

- Table I.1 provides the names of all the local council's that responded, and their answers given to questions 1 to 7d and question 9 from the questionnaire.
- Where a council responded by letter or email but did not return a questionnaire, 'No Questionnaire' is noted in the table.

# For Q.1-Q.7d in table I.1 the following key is used:

- 1- Strongly Support
- 2- Support
- 3- Oppose
- 4- Strongly Oppose
- 5- No Strong View

Blank- Did not answer the question

# For Q.9 West and Q.9 East in table I.1 the following key is used:

- R- Western Red Route
- B- Blue Route (For both Western Blue and Eastern Blue)
- O- Western Orange Route
- G- Western Green Route
- Y- Eastern Yellow Route
- P- Eastern Pink Route
- Blank- No route selected or more than one route selected

Table I-1 List of Individual Local Council Responses (Key on page I-1)

Name	Q.1	Q.2	Q.	Q.3	Q.													
		_	3a	b	4a	4b	4c	4d	5a	5b	6a	6b	7a	7b	7c	7d	9W	9E
ACLE PC (RESPONSE A)	2	2	2	2	2	1	2	2	5	2	2	2	3	4	4	4	R	
ACLE PC (RESPONSE B)	1	1	2		2	1	2	2	4	5	2	4	4	4	5	5		
ALDBOROUGH & THURGATON PC	1	2	2		1	1	1	3	3	3	3	2	3	3	3	3	R	В
ALPINGTON & YELVERTON PC	1	3	3	1	1	2	1	1	3	3	3	3	4	4	4	4	G	Р
ASHMANHAUGH PC	2	2	5	5	2	1	1	5	5	2	2	5	3	3	3	3	В	В
AYLSHAM TOWN COUNCIL	No	Quest	ionna	ire														
BARTON TURF AND IRSTEAD PC	1	3	4	1	2	2	5	5	4	3	2	2	4	4	4	4	0	В
BAWBURGH PC	No	Quest	ionna	ire														
BEESTON WITH BITTERING PC	2	1	2		1	1	1	5	3	2	2	2	4	4	5	5	G	Υ
BLO' NORTON PC	5	5	5	5	3	1	5	4	5	1	5	1	4	4	5	5		
BLOFIELD TOWN COUNCIL	No	Quest	ionna	ire														
BRAMPTON PC	1	2	3	2	2	2	2	2	3	2	2	2	4	4	4	4		
BRINTON PC	No	Quest	ionna	ire														
BROADLAND DISTRCT COUNCIL	1	1	3	2	2	1	2	2	1	1	1	1	4	4	3	3		
BROADLAND DISTRICT COUNCIL	No	Quest	ionna	ire														
BROADLAND DISTRICT COUNCIL	No	Quest	ionna	ire														
BROOME PC	1	1	1		1	1	1	1	1	1	1	3	4	4	4	4	G	Υ
BRUNDALL PC	1	1	5	5	2	1	1	3	2	1	1	2	4	4	4	4	0	Υ
BUNWELL PC	2	2	2		2	2	2	5	3	3	2	3	3	3	3	3	R	В
BURNHAM MARKET PC	1	2	3	2	2	5	1	3	2	2	3	2	3	3	3	3	В	В
BUXTON WITH LAMAS PC	1	1	5	1	2	2	2	2	5	5	2	2	3	3	3	3		
CARBROOKS PC	5	2	2		2	5	5	5	3	2	2	2	4	4	4	4	В	В
CASTON PC	1	2	5	1	2	2	1	1	4	2		3	3	3	5	5	0	Р
CAWSTON PARISH COUNCIL	1	2	2		2	1	2	2	4	3	2	4	4	4	4	4	0	Υ
CONGHAM PC																		

Name	Q.1	Q.2	Q.	Q.3	Q.													
			3a	b	4a	4b	4c	4d	5a	5b	6a	6b	7a	7b	7c	7d	9W	9E
COSTESSEY PC	1	2	2		2	1	2	2	2	2	2	2	5	5	5	5	0	
CRINGLEFORD PC	1	2	2		1	1	2	2	2	2	5	2	3	3	3	3	G	В
CROMER TOWN COUNCIL	No	Quest	ionna	ire														
CROMER TOWN COUNCIL	No	Quest	ionna	ire														
DERSINGHAM PC	5	2	3	2	1	1	5	5	5	5	5	5	3	3	3	3		
DITCHINGHAM PC	1	2	2		2	2				2	2	1	4	4	4	4		
DRAYTON PC	2		3	2	1	1	1	4	3	1	4	1	4	4	4	4	0	Р
DRAYTON PC	No	Quest	ionna	ire														
EARSHAM PC	1	1	4	1	1	1	2	2	1	1	1	1	2	2	4	4	R	Р
EAST TUDDENHAM PC	2	4	4	2	2	2	2	4	4	3	4	4	4	4	4	4	R	Υ
EASTON PC	1																0	Υ
EDGEFIELD PC	1	2	2	2	1	1	1	1	5	5	2	5	5	5	5	5	G	Р
ERPINGHAM AND CALTHORPE PC	1	1	1		1	1	1	3	2	2	2	1	2	2	1	1	R	
FELTHORPE PC	1	2	4	1	1	2	2	2	3	2	2	1	4	4	4	4	R	В
FRETTENHAM PC	1	1	2		1	1	1	3	4	2	2	2	4	4	4	4		
GREAT AND LITTLE PLUMSTEAD PC	No	Quest	ionna	ire														
GREAT YARMOUTH BOROUGH COUNCIL	1	2	2	2	1	1	2	2	5	2	2	2	3	3	3	3	В	Р
HAINFORD PC	1	5	5	5	1	1	1	1	1	1	1	1	4	4	4	4	В	В
HARDINGHAM PC	1	5	3	2	1	2	5	1	3	3	5	3	3	5	4	5	0	В
HELLESDON PC	No	Quest	ionna	ire														
HEMPSTEAD BY HOLT PC	No	Quest	ionna	ire														
HIGH KELLING PC	No	Quest	ionna	ire														
HINGHAM TOWN COUNCIL	3	2		2	2	1	1	1	1	1	1	1	1	1	1	1	0	
HOCKERING PC																	R	
HOLME HALE PC	1	2	2	5	1	2	2	4	4	2	2	4	4	4	4	4	0	Р
HOLT TOWN COUNCIL	1	1	2		2	2	1	3	3	2	2	3	2	2	2		G	Р

Name	Q.1	Q.2	Q.	Q.3	Q.													
			3a	b	4a	4b	4c	4d	5a	5b	6a	6b	7a	7b	7c	7d	9W	9E
HORNING PC	2	2	3	2	2	1	5	3	3	2	2	2	3	3	3	3		В
HORSHAM & NEWTON ST FAITH'S PC	No	Quest	ionna	ire														
HORSTEAD WITH STANNINGHALL PC	1	2	2	5	2	2	5	5	3	3		2	4	4	4	4		
HOUGHTON PC	2	2	2		2	2	2	2	2	2	2	3	4	4	3	3	В	Р
HOVETON PC	1	2	2	2	1	2	2	3	3	2	2	2	3	3	4	4	В	В
HOWE PC	2	2	2		2	1	1	1	2	2	2	2	2		2		Ο	Υ
KELLING PC	1	2	2		1	1	2	2	2	2	2	2	3	2	1	4		Р
KESWICK & INTWOOD PC	1	5	3	2	1		1	1	4	4	4	4	4	4	1	1	0	В
KIRBY CANE PC	1	1	3	2	1	1	2	1	2	1	2	1	4	4	4	4	0	В
KNAPTON PC																	R	В
MILEHAM PC	2	2	2		1	1	1	2	3	2	3	3	4	4	4	4	Ŋ	Р
MORNINGTHORPE PC	1	1	2	2	1	1		5	3		3	4	4	4	4	4		
NORTH NORFOLK DISTRICT COUNCIL	No	Quest	ionna	ire														
NORTH WALSHAM TOWN COUNCIL	No	Quest	ionna	ire														
NORWICH CITY COUNCIL	No	Quest	ionna	ire														
OLD BUCKENHAM PC	1	1	3	2	1	1	5	2	3	3	1	4	4	4	1	1	G	Р
OLD CATTON PC	No	Quest	ionna	ire														
ORMESBY MICHAEL PC	2	2	2	5	2	2	2	2	2	2	2	2	5	5	5	5	В	В
OULTON PC	No	Quest	ire															
OVERSTRAND PC	2	2	2		2	2	2	3	3	2	3	3	4	4	2		R	В
OVINGTON PC	2	2			2	1	2	2	3	2	2	2	3	2	3	3	R	Р
PARISH COUNCIL (UNNAMED, POSTCODE NR13)	1 2 2				2	2	5	2	5	5			4	4	3	3	В	Р

Name	Q.1	Q.2	Q.	Q.3	Q.													
			3a	b	4a	4b	4c	4d	5a	5b	6a	6b	7a	7b	7c	7d	9W	9E
PARISH COUNCIL (UNNAMED,	1	2	3	2	1	2	2	3	2	2	2	2	4	4	4	4	0	В
POSTCODE NR14)																		
PLUMSTEAD PARISH COUNCIL	2	1	1		1	1	5	2	2	2	2	2	5	5	5	5	G	Р
PORINGLAND PC	No	Quest	ionna	ire														
POTTER HEIGHAM PC	1	2	5	5	1	2	2	2		2			4	4	4	4	В	Υ
RACKHEATH PC	1	1	1		1	1	5	5	1	1	4	4	4	4	4	4		Υ
REDENHALL WITH HARLESTON	2	2	3	2	2	2	5	4	3	2	2	2	4	4	2	2	G	Υ
TOWN COUNCIL																		
REPPS WITH BASTWICK PC	1	2	2		1	1	2	2	3	3	3	2	2	2	2	1	0	Р
ROCKLAND ST MARY WITH																	R	В
HELLINGTON PC																		
ROLLESBY PC	2	2	5	5	2	2	2	5	5	5	2	5	3	3	3	3	В	Υ
RUNTON PC	1	2	2	5	2	2	2	5	3	5	2	5	5	3	2	5	G	Υ
SAHAM TONEY PC	1	2	2		1	1	2	1	2	2	2	2	4	4	4	4	R	Р
SHOTESHAM PC	1	2	4	2	1	1	2	2	2	2	2	1	4	3	4	3	В	Р
SNETTISHAM PC	1	1	1	5	1	1	1	1	2	2	2	2	4	4	4	4	В	В
SOUTH NORFOLK COUNCIL	2	2	5	2	2	1	2	2	2	2	2	2	5	2	2	2		
SOUTH NORFOLK DISTRICT COUNCIL	No	Quest	ionna	ire														
SOUTH WALSHAM PC	1	2	3	1	1	1	2		3	3	2	3	4	4	4	4	В	Υ
SPIXWORTH PC	2	1	4	2	1	1	1	4	1	1	5	5	4	4	4	4		
SPORLE PC	1	2	3	2	2	2	2	4	3	3	2	4	4	4	4	4	R	В
SPROWSTON PC	2	2	1		2	1			2	1								
ST GEORGE & HELLESDEN RC PC	1	2	4	2	2	2	2	2	4	4	3	4	4	4	4	4	0	В
STOKE HOLY CROSS PC	1	5	2		1	2	1	5	5	5	2	2	5	5	3	3	R	В
STRATTON STRAWLESS PC	No	Quest																
SUFFOLK COUNTY COUNCIL	No	Quest	ionna	ire														

Name	Q.1	Q.2	Q. 3a	Q.3 b	Q. 4a	Q. 4b	Q. 4c	Q. 4d	Q. 5a	Q. 5b	Q. 6a	Q. 6b	Q. 7a	Q. 7b	Q. 7c	Q. 7d	Q. 9W	Q. 9E
SWANNINGTON, ALDERFORD AND LITTLE WITCHINGHAM PC	1	2	2	3	2	2	2	3	3	3	3	3	3	3	3	3	0	Р
TAVERHAM PC	1	2	4	1	1	1	1	5	4	5	5	4	4	4	4	4		
THARSTON AND HAPTON PC	2	2			1	1	2	2	5	2	5	5	3	3	3	3	0	Р
THORNHAM PC	1				1	1	2	1	4	2		4			4	4		
THORPE ST ANDREW PC	1	1	5	1	1	1	1	4	2	2	5	5	4	4	4	4		В
THURSFORD PC	1	5	2	5	1	1	3	2	3	2	3	1	4	4	4	4	В	Р
TOPCROFT PC	1	1	2	1	1	1	2	1	3	1	1	3	3	3	2	2	В	Υ
TWYFORD PC	1	1	2	5	2	1	2	1	2	2	1	1	2	5	5	5	0	Р
WEST RUDHAM PC	2	2	2		2	2	2	2	3	2	2	2				4		
WESTON LONGVILLE PC	2																0	
WEYBOURNE PC	2	2	5	1	2	1	1	5	5	5	2	3	4	3	4	3	R	Υ
WICKMERE PC	1	3	3	2	2	2	2	2	3	2	3	3	3	3	3	3	G	Υ
WIGHTON PC	5	2	2	5	2	2	2	5	2	2	5	3	3	2	3	3	R	
WINFARTHING PC	1	2	2	2	2	2	5	3	5	2	2	3	3	3	3	3	В	Р
WOOD NORTON PC	1	1	1	4	1	1	1	1	1	1	2	2	4	4	3	3	0	Р
WOODBASTWICK PC	2	1	2		1	1	5	5	2	2	2	2	4	4	4	4	В	Υ
WORTWELL PC	1	1	4	1	2	2	2	2	2	2	2	3	3	3	4	4	0	В
WRENINGHAM PC	1	3	4	1	1	1	1	1	1	2	3	2	4	4	4	4	В	Υ
WYMONDHAM TOWN COUNCIL	1	2	5	2	1	1	1	2	2	2	1	1	5	2	5	2	0	Υ
YAXHAM PC	2	1	2		2	1	2	1	2	2	2	2		2	2		G	Υ

Table I-2 to I-4 display data for the 93 local council questionnaire responses received.

Table I-2 Data for Q.1-7 – Local Council Responses

Question	No Response	%	Strongly support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
1. Would you like to see a Northern Distributor Road for Norwich?	4	4.30	59	63.44	25	26.88	1	1.08	0	0.00	4	4.30
2. Do you support education, encouragem ent and enforcement measures?	8	8.60	24	25.81	50	53.76	4	4.30	1	1.08	6	6.45
3a. Do you support the current order of priorities?	11	11.83	7	7.53	37	39.78	16	17.20	10	10.75	12	12.90
3b. If not, do you support a more flexible order of priorities?	36	38.71	13	13.98	28	30.11	1	1.08	1	1.08	14	15.05
4a. Do you support improving traffic flow on the main road network?	6	6.45	44	47.31	42	45.16	1	1.08	0	0.00	0	0.00

Question	No Response	%	Strongly support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
4b. Do you support improving bus, rail and other passenger transport?	7	7.53	52	55.91	32	34.41	0	0.00	0	0.00	2	2.15
4c. Do you support a new park and ride site along the Drayton/Taverham corridor?	9	9.68	27	29.03	42	45.16	1	1.08	0	0.00	14	15.05
4d. Do you support introducing trams?	9	9.68	18	19.35	30	32.26	12	12.90	8	8.60	16	17.20
5a. Do you support access restrictions on roads around the north of Norwich?	8	8.60	9	9.68	24	25.81	28	30.11	11	11.83	13	13.98
5b. Do you support access restrictions on residential side streets?	7	7.53	14	15.05	47	50.54	13	13.98	2	2.15	10	10.75
6a. Do you support small scale traffic measures in the city centre?	12	12.90	10	10.75	46	49.46	12	12.90	4	4.30	9	9.68

Question	No Response	%	Strongly support	%	Support	%	Oppose	%	Strongly Oppose	%	No Strong View	%
6b. Do you support stopping traffic driving straight through the city centre?	9	9.68	14	15.05	33	35.48	17	18.28	12	12.90	8	8.60
7a. Do you support road user charging within 5 years?	10	10.75	1	1.08	6	6.45	23	24.73	45	48.39	8	8.60
7b. Do you support road user charging within 5 to 10 years?	10	10.75	1	1.08	10	10.75	21	22.58	44	47.31	7	7.53
7c. Do you support workplace charging within 5 years?	8	8.60	5	5.38	9	9.68	21	22.58	40	43.01	10	10.75
7d. Do you support workplace charging within 5 to 10 years?	12	12.90	5	5.38	3	3.23	23	24.73	39	41.94	11	11.83

Table I-3 Q.9 NDR Western Route Preferences – Local Council Responses

	Responses	%
No Response	21	22.58
Red	17	18.28
Blue	19	20.43
Orange	23	24.73
Green	13	13.98

Table I-4 Q.9 NDR Eastern Route Preferences – Local Council Responses

	Responses	%
No Response	24	25.81
Blue	25	26.88
Yellow	20	21.51
Pink	24	25.81

# **Supplement**

# Norwich Area Transportation Strategy

# **Public Consultation Analysis**

June 2004





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# Supplement Norwich Area Transportation Strategy Public Consultation Analysis

# Issue and Revision Record

Rev	Date	Originator	Checker	Approver	Description
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Lis	t of Cor	ntents	Page
Cha	pters		
1	Introd	duction	1
2	Data	Tables	3
	2.1	Table 1 Question 3a and Question 3b Results by Parish	3
	2.2	Table 2 Question 6a and Question 6b Results by Parish	19
	2.3	Table 3 Question 7a and Question 7b Results by Parish	35
	2.4	Table 4 Question 7c and Question 7d Results by Parish	51
3	Plots		67

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## 1 Introduction

This report is a supplement to the Norwich Area Transportation Strategy (NATS) Public Consultation Analysis of May 2004.

In September 2003, residents and stakeholders around Norwich were consulted on the preferred strategy for the NATS and upon route options for a Northern Distributor Road (NDR). The results from the public consultation questionnaires were published in the May 2004 report.

This additional report contains results of selected questions from the NATS questionnaire. Responses have been grouped by postcode to illustrate the geographical spread of the results. The questions considered in this report were not analysed by postcode in the initial NATS Public Consultation Analysis Report.

Results for the following questions are included in this report:

- Q.3a Do you support the current order of priorities?
- Q.3b If not, do you support a more flexible order of priorities?
- Q.6a Do you support small scale traffic management measures in the city centre?
- Q.6b Do you support stopping traffic driving straight through the city centre?
- Q.7a Do you support road user charging within 5 year?
- Q.7b Do you support road user charging within 5 to 10 years?
- Q.7c Do you support workplace parking charging within 5 years?
- Q.7d Do you support workplace parking charging within 5 to 10 years?

Data tables of results are displayed in Chapter 2.

Plots of results are displayed in Chapter 3.

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## 2 Data Tables

Responses were geocoded by postcode and grouped by parish. Due to some respondents supplying incomplete postcode data, out of the total of 21,416 questionnaire received only 19,819 records could be geocoded. Data is listed in the tables below and illustrated on maps included in Chapter 3.

# 2.1 Table 1 Question 3a and Question 3b Results by Parish

Question 3a 'Do you support the current order of priorities'
Question 3b\ 'If not, do you support a more flexible order of priorities?

<u>Key</u>

1 Strongly Support 3 Strongly Oppose

2 Support 5 No Strong View

3 Oppose 0 No Response

			Q.3a	3					Q.3	3b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Acle	2	5	2	1	1	0	1	2	1	0	1	6
Alburgh	0	0	0	1	0	0	1	0	0	0	0	0
Alby With												
Thwaite	0	0	0	0	0	0	0	0	0	0	0	0
Aldborough	1	2	0	0	0	0	1	0	0	0	0	2
Aldeby	0	0	0	0	0	0	0	0	0	0	0	0
Alderford	1	1	0	0	0	0	0	0	1	0	0	1
Alpington	0	0	0	0	0	0	0	0	0	0	0	0
Anmer	0	0	0	0	0	0	0	0	0	0	0	0
Antingham	0	0	0	0	0	1	0	0	0	0	0	1
Ashby St Mary	0	2	1	0	0	1	0	1	0	0	0	3
Ashby With												
Oby	0	0	0	0	0	1	0	0	0	0	0	1
Ashill	0	0	0	0	0	0	0	0	0	0	0	0
Ashmanhaugh	0	0	0	0	1	0	0	0	0	0	1	0
Ashwellthorpe	0	0	2	1	0	1	0	3	0	0	0	1
Aslacton	0	0	0	0	1	0	0	1	0	0	0	0
Attleborough	2	1	2	0	0	0	0	3	0	0	0	2
Attlebridge	1	4	3	2	0	3	2	5	1	0	0	5
Aylmerton	1	0	0	0	0	0	0	0	0	0	1	0
Aylsham	8	8	8	3	0	3	4	8	1	3	2	12
Baconsthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Bacton	1	1	0	0	0	0	1	1	0	0	0	0

Public Con			Q.3a	ì					Q.3	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Bagthorpe												
With Barmer	0	0	0	0	0	0	0	0	0	0	0	0
Banham	0	0	1	0	0	0	1	0	0	0	0	0
Barford	0	2	0	0	0	0	0	1	0	0	1	0
Barnham Broom	0	2	0	0	1	0	0	1	0	0	0	2
Barsham	0	0	0	0	0	0	0	0	0	0	0	0
Barton	0	0	0	U	0	0	0	U	0	U	0	0
Bendish	0	0	0	0	0	0	0	0	0	0	0	0
Barton Turf	3	1	0	1	1	2	2	2	0	1	1	2
Barwick	0	0	0	0	0	0	0	0	0	0	0	0
Bawburgh	8	11	8	3	6	4	2	11	0	1	7	19
Bawdeswell	0	0	3	0	0	0	0	3	0	0	0	0
Bawsey	0	0	0	0	0	0	0	0	0	0	0	0
Beachamwell	0	0	0	0	0	0	0	0	0	0	0	0
Bedingham	0	0	0	0	0	1	0	1	0	0	0	0
Beeston Regis	1	0	0	0	0	0	0	0	0	0	0	1
Beeston St												
Andrew	0	0	1	0	0	0	0	1	0	0	0	0
Beeston With											_	
Bittering	0	0	0	0	0	0	0	0	0	0	0	0
Beetley	0	0	1	0	0	0	0	0	1	0	0	0
Beighton	1	1	0	1	1	0	0	2	0	0	0	2
Belaugh	0	0	2	0	0	0	2	0	0	0	0	0
Belton	0	1	0	0	0	0	0	0	1	0	0	0
Bergh Apton	1	1	2	0	0	0	0	3	0	0	0	1
Besthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Billingford	0	1	0	0	0	0	0	0	0	0	1	0
Binham	0	0	0	0	0	0	0	0	0	0	0	0
Bintree	0	1	0	0	0	0	0	0	0	0	1	0
Bircham	0	0	0	0	0	0	0	0	0	0	0	0
Bixley	1	4	2	2	0	1	3	2	0	0	0	5
Blakeney	0	0	0	0	0	0	0	0	0	0	0	0
Blickling	0	0	0	0	0	0	0	0	0	0	0	0
Blo' Norton	0	0	0	0	1	0	0	0	0	0	1	0
Blofield	33	93	61	30	39	11	40	86	6	5	36	94
Bodham	0	0	0	0	0	0	0	0	0	0	0	0
Booton	0	0	0	0	0	0	0	0	0	0	0	0
Boughton	0	0	0	0	0	0	0	0	0	0	0	0
Bracon Ash	3	3	7	5	4	3	5	9	3	0	0	8
Bradenham	0	0	1	0	0	0	0	1	0	0	0	0
Bradwell	1	0	1	0	0	0	0	0	1	0	0	1

Public Con		7	Q.3a	3					Q.3	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Bramerton	7	7	9	3	5	3	9	8	2	0	3	12
Brampton	0	0	1	0	0	0	0	1	0	0	0	0
Brancaster	0	0	0	0	0	0	0	0	0	0	0	0
Brandiston	1	0	0	0	0	0	0	0	0	0	1	0
Bressingham	0	0	0	0	0	0	0	0	0	0	0	0
Brettenham	0	0	0	0	0	0	0	0	0	0	0	0
Bridgham	0	0	0	0	0	0	0	0	0	0	0	0
Briningham	0	0	0	0	0	0	0	0	0	0	0	0
Brinton	0	0	0	0	0	0	0	0	0	0	0	0
Brisley	0	0	0	0	0	0	0	0	0	0	0	0
Briston	0	1	2	1	0	0	1	2	0	0	1	0
Brockdish	0	0	0	0	0	0	0	0	0	0	0	0
Brooke	3	1	2	1	1	0	1	4	1	0	1	1
Broome	1	0	0	0	0	0	0	0	0	0	0	1
Brumstead	0	0	0	0	0	0	0	0	0	0	0	0
Brundall	41	135	111	28	40	19	48	132	14	5	36	139
Bunwell	0	0	1	0	0	0	0	1	0	0	0	0
Burgh And												
Tuttington	0	0	0	0	0	0	0	0	0	0	0	0
Burgh Castle	0	0	0	0	0	0	0	0	0	0	0	0
Burgh St Peter	0	0	0	0	0	0	0	0	0	0	0	0
Burnham	0	4	0	0	0	_	0	0	0	•	0	4
Market Burnham	0	1	0	0	0	0	0	0	0	0	0	1
Norton	0	0	1	0	0	0	0	1	0	0	0	0
Burnham	0	0		U	U	- 0	0		0	0	U	U
Overy	0	0	0	0	0	0	0	0	0	0	0	0
Burnham	-	_									_	
Thorpe	0	0	0	0	0	0	0	0	0	0	0	0
Burston And												
Shimpling	0	0	0	0	0	0	0	0	0	0	0	0
Buxton With		4	•	4	•		•		•	•	4	•
Lammas	0	1	3	1	2	0	3	3	0	0	1	0
Bylaugh	0	0	0	0	0	0	0	0	0	0	0	0
Caister-On- Sea	0	1	2	0	0	0	0	2	0	0	1	0
Caistor St	U	I		U	U	U	U		U	U	1	U
Edmund	1	9	2	0	2	4	3	5	0	0	3	7
Cantley	0	1	1	0	0	1	1	1	0	0	0	1
Carbrooke	0	1	0	0	0	1	0	0	0	0	0	2
Carleton Rode	0	0	0	0	0	0	0	0	0	0	0	0
Carleton St										)		
Peter	0	0	1	0	0	0	0	1	0	0	0	0

r ubile con			Q.3a	ì					Q.3	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Castle Acre	0	0	0	0	0	0	0	0	0	0	0	0
Castle Rising	0	0	0	0	0	0	0	0	0	0	0	0
Caston	0	0	0	1	1	0	2	0	0	0	0	0
Catfield	1	0	1	0	2	0	1	0	0	0	3	0
Cawston	1	2	0	1	0	0	1	1	1	0	0	1
Chedgrave	0	0	0	0	0	1	0	1	0	0	0	0
Choseley	0	0	0	0	0	0	0	0	0	0	0	0
Claxton	0	0	0	1	1	0	0	2	0	0	0	0
Clenchwarton	0	0	0	0	0	0	0	0	0	0	0	0
Cley Next The												
Sea	0	0	0	0	0	0	0	0	0	0	0	0
Cockley Cley	0	0	0	0	0	0	0	0	0	0	0	0
Colby	0	1	2	0	0	0	0	2	0	0	0	1
Colkirk	0	1	1	0	0	0	1	0	0	0	0	1
Colney	4	0	3	3	1	5	4	3	0	2	2	5
Coltishall	0	2	7	5	0	0	6	5	1	0	0	2
Congham	0	0	0	0	0	1	0	0	0	0	0	1
Corpusty	0	0	0	0	1	0	0	0	0	0	1	0
Costessey	148	342	297	96	166	100	142	404	34	8	149	412
Cranwich	0	0	0	0	0	0	0	0	0	0	0	0
Cranworth	0	0	0	0	0	0	0	0	0	0	0	0
Crimplesham	0	0	0	0	0	0	0	0	0	0	0	0
Cringleford	25	46	54	26	21	11	26	78	4	4	12	59
Cromer	9	4	7	1	0	0	3	4	1	4	1	8
Crostwick	0	0	0	0	0	0	0	0	0	0	0	0
Croxton	1	0	0	0	0	0	0	0	0	0	0	1
Denton	0	1	0	0	0	0	0	0	0	0	0	1
Denver	0	0	0	0	0	0	0	0	0	0	0	0
Deopham	1	0	0	0	0	0	1	0	0	0	0	0
Dereham	1	0	4	3	0	2	3	4	0	0	0	3
Dersingham	0	0	1	0	0	0	0	1	0	0	0	0
Dickleburgh												
And Rushall	0	0	0	0	0	0	0	0	0	0	0	0
Didlington	0	0	0	0	0	0	0	0	0	0	0	0
Dilham	0	0	0	0	0	1	0	0	0	0	0	1
Diss	1	2	1	0	1	0	0	3	0	0	0	2
Ditchingham	0	1	0	0	0	0	0	0	0	0	0	1
Docking	0	0	0	0	0	0	0	0	0	0	0	0
Downham												
Market	0	0	0	0	1	0	0	1	0	0	0	0
Downham	0	0	0	0	0	0	0	0	0	0	0	0

	Q.3a Q.3b											
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
West												
Drayton	63	167	141	59	68	34	72	199	13	4	74	170
Dunton	0	0	0	0	0	0	0	0	0	0	0	0
Earsham	0	1	0	1	0	0	1	1	0	0	0	0
East Beckham	0	0	0	0	0	0	0	0	0	0	0	0
East Carleton	1	5	6	1	0	0	4	5	1	0	1	2
East Rudham	0	0	0	0	0	0	0	0	0	0	0	0
East Ruston	0	0	0	0	0	0	0	0	0	0	0	0
East												
Tuddenham	0	0	0	2	1	1	0	3	0	0	0	1
East Walton	0	0	0	0	0	0	0	0	0	0	0	0
East Winch	0	0	0	0	0	0	0	0	0	0	0	0
Easton	7	37	31	11	11	3	15	39	3	0	9	34
Edgefield	0	1	1	0	0	1	1	0	0	0	0	2
Ellingham	0	0	1	0	0	0	0	1	0	0	0	0
Elsing	0	0	0	0	0	0	0	0	0	0	0	0
Emneth	0	0	0	0	0	0	0	0	0	0	0	0
Erpingham	0	1	0	1	1	0	1	0	1	0	1	0
Fakenham	0	10	8	2	1	0	3	8	2	0	2	6
Felbrigg	0	0	0	0	0	0	0	0	0	0	0	0
Felmingham	0	0	0	0	2	0	0	1	0	0	1	0
Felthorpe	9	26	18	10	6	5	13	28	2	1	7	23
Feltwell	0	0	0	0	0	0	0	0	0	0	0	0
Field Dalling	0	0	0	0	0	0	0	0	0	0	0	0
Filby	1	1	0	0	0	0	1	0	0	0	0	1
Fincham	0	0	0	0	0	0	0	0	0	0	0	0
Fleggburgh	0	0	0	0	1	0	0	1	0	0	0	0
Flitcham With												
Appleton	0	0	0	0	0	0	0	0	0	0	0	0
Flordon	1	5	2	2	1	0	1	2	0	0	2	6
Fordham	0	0	0	0	0	0	0	0	0	0	0	0
Forncett	0	1	0	0	2	0	0	0	0	0	2	1
Foulden	0	0	0	0	0	0	0	0	0	0	0	0
Foulsham	1	0	1	0	0	0	1	0	0	0	0	1
Foxley	0	0	0	0	0	0	0	0	0	0	0	0
Framingham	_				4.5	_	4 -	4.5		_		<b>.</b> .
Earl	7	22	15	11	12	6	15	18	2	3	14	21
Framingham	2	2	2	4	^	^	2	2	^	_	0	<b>1</b>
Pigot	2	3	2	1	0	0	2	2	0	0	0	4
Fransham	0	0	0	0	0	0	0	0	0	0	0	0
Freethorpe	0	1	0	0	0	0	0	0	1	0	0	0

		-	Q.3a	1					Q.3	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Frettenham	6	27	18	7	5	4	4	27	0	1	8	27
Fring	0	0	0	0	0	0	0	0	0	0	0	0
Fritton And St												
Olaves	0	0	0	0	0	0	0	0	0	0	0	0
Fulmodeston	0	1	1	1	0	0	0	2	0	0	0	1
Garboldisham	0	0	0	0	0	0	0	0	0	0	0	0
Garvestone	0	0	0	2	0	0	2	0	0	0	0	0
Gateley	0	1	0	0	0	0	0	0	0	0	0	1
Gayton	0	0	0	0	0	0	0	0	0	0	0	0
Geldeston	0	0	0	0	0	0	0	0	0	0	0	0
Gillingham	0	0	0	0	0	0	0	0	0	0	0	0
Gimingham	0	0	0	0	0	0	0	0	0	0	0	0
Gissing	0	0	0	0	0	0	0	0	0	0	0	0
Gooderstone	0	0	0	0	0	0	0	0	0	0	0	0
Great And												
Little												
Plumstead	37	101	92	24	41	17	41	113	6	2	38	112
Great												
Cressingham	0	0	0	0	0	0	0	0	0	0	0	0
Great Dunham	0	0	0	0	0	0	0	0	0	0	0	0
Great	0	0		0		_	0	0		0	0	0
Ellingham	0	0	0	0	0	0	0	0	0	0	0	0
Great	0	1	0	0	0	0	0	1	0	0	0	0
Massingham Great Melton	1	2	2	1	3	0	2	2	1	0	2	2
	0	1	0	0	0	1	0	1	0	0	0	1
Great Moulton		0	0	0	0	0	0	0	0	0	0	0
Great Snoring	0	U	U	U	U	U	U	U	U	U	U	U
Great Witchingham	0	1	0	0	2	0	1	0	0	1	1	0
Great	0	'		U			'	U	- 0	'	'	0
Yarmouth	6	4	6	0	1	1	4	6	0	0	2	6
Gresham	0	0	0	0	0	0	0	0	0	0	0	0
Gressenhall	0	0	0	0	1	0	0	0	0	0	1	0
Grimston	0	0	0	0	0	0	0	0	0	0	0	0
Griston	0	0	0	0	0	0	0	0	0	0	0	0
Guestwick	0	0	0	0	0	0	0	0	0	0	0	0
Guist	0	0	0	0	0	0	0	0	0	0	0	0
Gunthorpe	1	1	0	2	1	0	1	0	0	1	1	2
Haddiscoe	0	0	0	0	0	0	0	0	0	0	0	0
Hainford	3	5	1	2	3	0	1	2	0	0	4	7
Hales	0	0	0	1	0	0	0	1	0	0	0	0
Halvergate	0	0	1	0	0	1	1	0	0	0	0	1
riaiveryale	U	U	I	U	U	I	I	U	U	U	U	I

r ubile con			Q.3a	1					Q.3	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Hanworth	0	1	0	0	0	0	0	1	0	0	0	0
Happisburgh	2	1	0	1	0	0	2	0	2	0	0	0
Hardingham	0	0	0	0	0	0	0	0	0	0	0	0
Harling	0	0	0	0	0	0	0	0	0	0	0	0
Harpley	0	0	0	0	0	0	0	0	0	0	0	0
Haveringland	0	0	1	2	2	0	2	1	0	0	2	0
Heacham	0	0	1	0	0	0	0	1	0	0	0	0
Heckingham	0	0	0	0	0	0	0	0	0	0	0	0
Hedenham	0	0	0	0	0	0	0	0	0	0	0	0
Helhoughton	0	0	0	0	0	0	0	0	0	0	0	0
Hellesdon	170	368	263	79	138	86	115	392	33	25	143	396
Hellington	0	0	1	0	0	0	0	1	0	0	0	0
Hemblington	3	5	9	2	9	1	4	11	1	0	5	8
Hempnall	0	0	0	0	1	0	0	0	0	0	1	0
Hempstead	0	2	0	0	0	0	0	0	1	0	0	1
Hempton	0	0	0	1	0	0	0	1	0	0	0	0
Hemsby	0	1	0	1	0	0	1	1	0	0	0	0
Hethersett	57	118	119	41	45	22	49	164	7	7	33	142
Hevingham	1	2	1	0	1	0	0	2	0	0	1	2
Heydon	0	0	0	0	0	0	0	0	0	0	0	0
Hickling	0	0	1	0	0	0	0	1	0	0	0	0
High Kelling	2	2	1	0	0	1	1	0	0	0	0	5
Hilborough	0	0	0	0	0	0	0	0	0	0	0	0
Hilgay	0	0	0	0	0	0	0	0	0	0	0	0
Hillington	0	0	0	0	0	0	0	0	0	0	0	0
Hindolveston	0	0	0	0	0	0	0	0	0	0	0	0
Hindringham	0	0	0	0	0	0	0	0	0	0	0	0
Hingham	1	1	0	0	2	1	0	1	1	0	3	0
Hockering	8	8	9	4	5	6	2	14	1	3	4	16
Hockham	0	0	0	2	0	0	0	1	0	0	0	1
Hockwold-												
Cum-Wilton	0	0	0	0	0	0	0	0	0	0	0	0
Hoe	0	0	0	0	0	0	0	0	0	0	0	0
Holkham	0	0	0	0	0	0	0	0	0	0	0	0
Holme Hale	0	1	1	0	0	0	0	1	0	0	1	0
Holme-Next-	_		_	_	_		_	_	_	_	_	
The-Sea	0	1	0	0	0	0	0	0	0	0	0	1
Holt	1	4	2	1	0	2	0	3	0	0	0	7
Holverston	0	0	0	0	0	0	0	0	0	0	0	0
Honing	1	1	1	1	0	0	0	2	0	0	0	2
Honingham	2	8	11	2	2	4	3	8	2	0	2	14

		-	Q.3a	1			Q.3b						
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0	
Hopton-On-													
Sea	0	0	0	0	0	0	0	0	0	0	0	0	
Horning	1	0	1	1	0	0	0	2	0	1	0	0	
Horningtoft	0	0	0	0	0	0	0	0	0	0	0	0	
Horsey	0	0	0	0	0	0	0	0	0	0	0	0	
Horsford	31	111	83	24	48	15	43	112	7	0	45	105	
Horsham St Faith And													
Newton St													
Faith	24	66	57	31	27	18	34	77	12	6	35	59	
Horstead With													
Stanninghall	1	3	2	0	0	0	1	1	0	0	3	1	
Houghton	0	0	0	0	0	0	0	0	0	0	0	0	
Hoveton	1	2	2	1	2	0	1	1	1	1	2	2	
Howe	0	1	0	1	0	0	0	1	0	0	0	1	
Hunstanton	0	0	0	1	0	0	1	0	0	0	0	0	
Ickburgh	0	0	0	0	0	0	0	0	0	0	0	0	
Ingham	0	0	0	0	0	0	0	0	0	0	0	0	
Ingoldisthorpe	0	0	0	0	0	0	0	0	0	0	0	0	
Ingworth	0	0	0	0	0	0	0	0	0	0	0	0	
Itteringham	0	0	0	0	0	0	0	0	0	0	0	0	
Kelling	0	0	0	0	0	0	0	0	0	0	0	0	
Kempstone	0	0	0	0	0	0	0	0	0	0	0	0	
Kenninghall	0	0	0	0	0	0	0	0	0	0	0	0	
Keswick	9	12	9	2	5	2	3	12	2	1	7	14	
Ketteringham	4	4	1	3	1	1	2	4	3	0	1	4	
Kettlestone	1	0	1	0	0	0	0	0	0	0	0	2	
Kilverstone	0	0	0	0	0	0	0	0	0	0	0	0	
Kimberley	0	0	0	0	0	0	0	0	0	0	0	0	
King's Lynn	1	0	2	0	0	1	0	0	1	1	0	2	
Kirby Bedon	0	3	7	3	4	1	4	10	1	0	0	3	
Kirby Cane	0	0	1	0	0	0	0	1	0	0	0	0	
Kirstead	1	0	0	0	0	0	0	0	0	0	0	1	
Knapton	0	0	0	0	0	1	0	0	0	0	0	1	
Langham	0	0	0	0	0	0	0	0	0	0	0	0	
Langley With													
Hardley	0	0	0	1	0	0	0	1	0	0	0	0	
Lessingham	0	0	1	0	0	0	1	0	0	0	0	0	
Letheringsett													
With Glandford	0	0	0	0	0	0	0	0	0	0	0	0	
Lexham	0	1	0	0	1	0	0	2	0	0	0	0	
Leziate	0	0	0	0	0	0	0	0	0	0	0	0	

r ubile con		,	Q.3a	1					Q.3	b	_	
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Lingwood And												
Burlingham	2	2	2	0	0	1	0	2	3	0	0	2
Litcham	0	0	0	0	0	0	0	0	0	0	0	0
Little		•		•	•		•		•			
Barningham	0	0	0	0	0	0	0	0	0	0	0	0
Little Cressingham	0	0	0	0	0	0	0	0	0	0	0	0
Little Dunham	0	0	0	0	0	0	0	0	0	0	0	0
Little												
Ellingham	0	0	0	0	0	0	0	0	0	0	0	0
Little												
Massingham	0	0	0	0	0	0	0	0	0	0	0	0
Little Melton	10	27	17	10	9	6	7	25	3	2	9	33
Little Snoring	0	1	0	0	0	0	0	0	1	0	0	0
Little												
Witchingham	0	1	0	0	0	0	0	0	1	0	0	0
Loddon	1	1	1	1	1	0	1	1	0	0	0	3
Long Stratton	23	64	36	21	30	11	26	54	1	4	31	69
Longham	0	0	0	0	0	0	0	0	0	0	0	0
Ludham	0	1	1	0	1	0	1	0	0	0	1	1
Lynford	0	0	0	0	0	0	0	0	0	0	0	0
Lyng	0	1	0	0	0	0	0	0	0	0	0	1
Marham	0	0	0	0	0	0	0	0	0	0	0	0
Marlingford	5	12	14	2	6	2	5	13	2	0	6	15
Marsham	0	0	2	0	0	0	1	1	0	0	0	0
Marshland St												
James	0	0	0	0	0	1	0	1	0	0	0	0
Martham	0	0	0	0	1	0	0	ı	0	0	0	0
Matlask	0	0	0	0	0	0	0	0	0	0	0	0
Mattishall	0	1	2	0	0	0	1	2	0	0	0	0
Mautby	0	0	0	0	0	0	0	0	0	0	0	0
Melton	0	0		0	0	_	0	0	0		0	0
Constable	0	0	0	0	0	0	0	0	0	0	0	0
Merton	0	0	0	0	0	0	0	0	0	0	0	0
Methwold	0	0	0	0	0	0	0	0	0	0	0	0
Middleton	0	1	0	0	0	0	0	1	0	0	0	0
Mileham	0	1	0	0	0	0	0	0	0	0	0	1
Morley	0	1	0	0	0	0	0	0	0	0	0	1
Morningthorpe	0	1	1	0	0	0	0	2	0	0	0	0
Morston	0	0	0	0	0	0	0	0	0	0	0	0
Morton On The Hill	1	8	1	0	1	3	1	3	1	0	1	8

11 of 74

06/01/05

F ubile Coll		,	Q.3	3					Q.3	3b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Mulbarton	14	60	38	17	21	7	18	48	12	2	22	55
Mundesley	1	0	1	1	0	0	1	1	0	0	0	1
Mundford	0	0	0	0	0	0	0	0	0	0	0	0
Mundham	0	0	0	0	0	0	0	0	0	0	0	0
Narborough	0	1	1	0	0	0	0	1	0	0	0	1
Narford	0	0	0	0	0	0	0	0	0	0	0	0
Neatishead	1	0	0	1	1	1	0	2	0	1	0	1
Necton	0	0	0	0	1	0	1	0	0	0	0	0
Needham	0	0	0	0	0	0	0	0	0	0	0	0
New												
Buckenham	0	0	1	0	0	0	1	0	0	0	0	0
Newton By	_	_			_				_		_	
Castle Acre	0	0	0	0	0	0	0	0	0	0	0	0
Newton Flotman	8	18	21	8	8	4	11	22	2	0	6	26
Nordelph	0	0	0	0	0	0	0	0	0	0	0	0
North Creake	0	0	2	0	0	0	0	2	0	0	0	0
North Elmham	0	1	0	0	0	0	0	0	0	0	0	1
North Lopham	0	0	0	0	0	0	0	0	0	0	0	0
North	0	0	0				0					0
Pickenham	0	0	0	0	0	0	0	0	0	0	0	0
North Runcton	0	0	0	0	0	0	0	0	0	0	0	0
North												
Tuddenham	0	0	0	0	0	0	0	0	0	0	0	0
North	_				_			_	_		_	_
Walsham	0	4	4	2	6	0	4	6	0	0	5	1
North Wootton	0	0	0	0	0	0	0	0	0	0	0	0
Northrepps	0	0	1	0	0	1	0	2	0	0	0	0
Northwold	0	0	0	0	0	0	0	0	0	0	0	0
Norton	0	0	0		0				0		0	
Subcourse	0	0	0	0	0	0	0	0	0	0	0	0
Norwich	1517	1982	1457	485	840	465	912	1937	291	215	855	2536
Old Buckenham	0	0	3	0	0	0	0	3	0	0	0	0
Old Catton	90	167	170	65	72	30	85	204	28	17	66	194
Old	00	107	170	- 00		- 00	00	204		1,	- 00	104
Hunstanton	0	0	0	0	0	0	0	0	0	0	0	0
Ormesby St	-	-						-		-		
Margaret With												
Scratby	0	2	0	0	0	0	0	0	0	0	2	0
Ormesby St												
Michael	0	0	0	0	0	0	0	0	0	0	0	0
Oulton	0	0	2	0	0	0	0	2	0	0	0	0

r ubile con		,	Q.3a	1			Q.3b						
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0	
Outwell	0	0	0	0	0	0	0	0	0	0	0	0	
Overstrand	0	1	1	0	0	0	1	0	0	0	0	1	
Ovington	0	0	0	0	0	0	0	0	0	0	0	0	
Oxborough	0	0	0	0	0	0	0	0	0	0	0	0	
Paston	0	0	0	0	1	0	0	1	0	0	0	0	
Pentney	0	0	0	0	0	0	0	0	0	0	0	0	
Plumstead	1	0	0	0	0	0	0	0	0	0	0	1	
Poringland	32	89	72	21	34	15	44	83	7	2	32	95	
Postwick	2	10	13	2	0	2	4	12	2	0	2	9	
Potter													
Heigham	0	1	0	1	0	0	1	1	0	0	0	0	
Pudding													
Norton	0	0	0	0	0	0	0	0	0	0	0	0	
Pulham Market	1	0	0	0	0	0	0	0	1	0	0	0	
Pulham St	0	0	0	0	0	0	0	0	0	0	0	0	
Mary	0	0	0	0	0	0	0	0	0	0	0	0	
Quidenham		86	72	19		17	36		5	5	36	84	
Rackheath	31	0	0	0	39	0		98 0	0	0	0		
Raveningham	0	0	0	0	0	0	0	0	0	0	0	0	
Raynham Redenhall	U	U	U	U	U	U	U	U	U	U	U	U	
With Harleston	1	1	1	0	0	0	0	1	0	1	0	1	
Reedham	0	0	1	0	2	0	0	1	0	0	2	0	
Reepham	2	3	4	0	1	0	2	4	0	1	1	2	
Repps With Bastwick	0	1	0	0	0	0	0	0	0	0	0	1	
Riddlesworth	0	0	0	0	0	0	0	0	0	0	0	0	
Ringland	1	16	13	3	5	12	3	16	3	1	5	22	
Ringstead	0	0	0	0	0	0	0	0	0	0	0	0	
Rockland St													
Mary	0	4	1	1	1	1	1	3	1	0	1	2	
Rocklands	0	0	0	0	0	0	0	0	0	0	0	0	
Rollesby	0	0	0	0	0	0	0	0	0	0	0	0	
Roudham	0	0	0	0	0	0	0	0	0	0	0	0	
Rougham	0	0	0	0	0	0	0	0	0	0	0	0	
Roughton	0	1	0	0	0	1	1	0	0	0	0	1	
Roydon	0	0	0	0	0	0	0	0	0	0	0	0	
Roydon	0	0	0	0	1	0	0	0	0	0	0	1	
Runcton													
Holme	0	0	0	0	0	0	0	0	0	0	0	0	
Runhall	1	0	1	0	1	0	0	1	0	0	1	1	
Runton	0	2	1	0	0	0	0	1	0	0	1	1	

		-	Q.3a	1					Q.3	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Ryburgh	2	2	0	0	1	0	1	0	0	0	0	4
Ryston	0	0	0	0	0	0	0	0	0	0	0	0
Saham Toney	0	0	0	0	0	0	0	0	0	0	0	0
Salhouse	1	5	6	2	2	0	1	8	1	0	0	6
Sall	0	0	0	1	0	0	1	0	0	0	0	0
Salthouse	0	0	0	0	0	0	0	0	0	0	0	0
Sandringham	0	0	0	0	0	0	0	0	0	0	0	0
Saxlingham Nethergate	0	1	0	0	0	0	0	0	0	0	0	1
Scarning	3	1	1	0	0	0	1	0	0	0	1	3
Scole	0	1	0	0	0	0	0	0	0	0	1	0
Scottow	2	0	1	0	0	0	1	0	0	0	0	2
Scoulton	0	0	0	0	0	0	0	0	0	0	0	0
Sculthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Sea Palling	0	0	0	0	0	0	0	0	0	0	0	0
Sedgeford	0	0	0	0	0	0	0	0	0	0	0	0
Seething	0	1	0	0	0	0	0	0	0	0	0	1
Shelfanger	0	0	0	0	0	0	0	0	0	0	0	0
Shelton	0	0	0	0	0	0	0	0	0	0	0	0
Sheringham	5	4	2	0	2	0	3	0	1	1	4	4
Shernborne	0	0	0	0	0	0	0	0	0	0	0	0
Shipdham	0	0	0	0	0	0	0	0	0	0	0	0
Shotesham	2	1	0	2	0	0	2	1	0	0	0	2
Shouldham	0	0	0	0	0	0	0	0	0	0	0	0
Shouldham												
Thorpe	0	0	0	0	0	0	0	0	0	0	0	0
Shropham	0	0	0	0	0	0	0	0	0	0	0	0
Sidestrand	0	0	0	0	0	0	0	0	0	0	0	0
Sisland	0	1	0	0	0	0	0	0	0	0	0	1
Skeyton	0	0	0	0	0	0	0	0	0	0	0	0
Sloley	0	0	0	0	0	0	0	0	0	0	0	0
Smallburgh	0	0	0	0	0	0	0	0	0	0	0	0
Snetterton	0	0	0	0	0	0	0	0	0	0	0	0
Snettisham	0	0	0	0	0	0	0	0	0	0	0	0
Somerton	0	0	0	0	0	0	0	0	0	0	0	0
South Acre	0	0	0	0	0	0	0	0	0	0	0	0
South Creake	1	0	0	0	0	0	1	0	0	0	0	0
South Lopham	0	0	0	0	0	0	0	0	0	0	0	0
South Pickenham	0	0	0	0	0	0	0	0	0	0	0	0
South	0	0	2	0	0	0	0	2	0	0	0	0

Public Con			Q.3	3					Q.3	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Walsham												
South Wootton	0	0	0	0	0	0	0	0	0	0	0	0
Southery	0	0	0	0	0	0	0	0	0	0	0	0
Southrepps	0	0	0	0	0	1	0	0	0	0	0	1
Sparham	0	0	1	0	0	0	1	0	0	0	0	0
Spixworth	38	124	95	27	34	27	34	134	13	4	39	121
Sporle With												
Palgrave	0	0	1	0	0	0	0	1	0	0	0	0
Sprowston	167	453	345	114	157	97	155	487	54	17	158	462
Stalham	1	0	3	0	1	1	4	0	1	0	0	1
Stanfield	0	0	0	0	0	0	0	0	0	0	0	0
Stanford	0	0	0	0	0	0	0	0	0	0	0	0
Stanhoe	0	0	0	0	0	0	0	0	0	0	0	0
Starston	0	0	0	0	0	0	0	0	0	0	0	0
Stibbard	0	0	1	0	0	0	0	1	0	0	0	0
Stiffkey	0	0	0	0	0	0	0	0	0	0	0	0
Stockton	0	0	0	0	0	0	0	0	0	0	0	0
Stody	0	0	0	0	0	0	0	0	0	0	0	0
Stoke Ferry	0	0	1	0	0	0	0	1	0	0	0	0
Stoke Holy				_	4.0	_	- 4				4.0	
Cross	12	32	35	7	10	7	21	33	2	0	13	34
Stokesby With	0	0	0	0	0	0	0	0	0	0	0	0
Herringby Stow Bardolph	0	0	0	0	0	0	0	0	0	0	0	0
Stow Bardolphi Stow Bedon	0	0	0	0	0	0	0	0	0	0	0	0
Stradsett	0	0	0	0	0	0	0	0	0	0	0	0
Stratton	U	U	U	U	U	U	U	U	U	U	U	U
Strawless	0	2	0	0	0	0	0	0	0	0	0	2
Strumpshaw	1	2	0	0	0	0	1	0	0	0	0	2
Sturston	0	0	0	0	0	0	0	0	0	0	0	0
Suffield	0	0	0	0	0	0	0	0	0	0	0	0
Surlingham	4	11	15	4	7	3	4	19	1	0	6	14
Sustead	0	0	0	0	0	0	0	0	0	0	0	0
Sutton	0	1	1	0	0	0	1	1	0	0	0	0
Swaffham	1	1	1	0	1	0	0	2	0	0	1	1
Swafield	1	0	0	0	0	0	0	0	1	0	0	0
Swainsthorpe	5	9	9	6	2	3	4	17	1	0	0	12
Swannington	0	0	6	0	0	0	2	4	0	0	0	0
Swanton							_	•				<u></u>
Abbott	0	0	0	0	0	0	0	0	0	0	0	0
Swanton												
Morley	0	0	0	0	0	0	0	0	0	0	0	0

Public Con		· · · · · · · · · · · · · · · · · · ·	Q.3	3					Q.3	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Swanton												
Novers	0	1	0	0	0	0	0	0	0	0	0	1
Swardeston	2	9	11	5	8	2	3	18	2	0	5	9
Syderstone	0	0	0	0	0	0	0	0	0	0	0	0
Tacolneston	2	0	0	0	0	0	0	0	0	0	0	2
Tasburgh	7	25	17	13	7	4	19	26	1	0	3	24
Tattersett	0	0	0	0	0	0	0	0	0	0	0	0
Taverham	158	350	280	115	150	71	156	381	34	14	154	385
Terrington St	_		_	_			_	_	_	_	_	
Clement	0	1	0	0	0	0	0	0	0	0	0	1
Terrington St	0		0		0	0	0	0	0	_	0	_
John	0	0	0	0	3	3	0 8	0 9	0	0	0 5	0
Tharston	5	14	12							-		17
Themelthorpe	0	0	0	0	0	1	0	1	0	0	0	0
Thetford	1	-	0		0	0	0	0	0	0	0	1
Thompson	0	0	0	0	0	0	0	0	0	0	0	0
Thornage	0	0	0	0	0	0	0	0	0	0	0	0
Thornham	0	0	0	0	0	1	0	0	0	0	0	1
Thorpe Market	1	0	1	0	1	0	1	1	0	0	0	1
Thorpe St Andrew	160	388	317	123	170	68	184	422	37	23	157	403
Thurlton	0	0	0	0	0	00	0	0	0	0	0	0
Thurne	0	0	0	0	0	0	0	0	0	0	0	0
Thurning	0	0	0	0	0	0	0	0	0	0	0	0
Thursford	0	1	0	0	0	0	0	0	0	0	1	0
Thurston	0	0	0	0	0	1	0	1	0	0	0	0
Thwaite	0	0	0	0	0	0	0	0	0	0	0	0
Tibenham	0	0	<u>0</u> 1	0	0	0	1	0	0	0	0	0
Tilney All	0	0	<u> </u>	U	0	U	ı	0	0	U	0	
Saints	0	0	0	0	0	0	0	0	0	0	0	0
Tilney St												
Lawrence	0	0	0	0	0	0	0	0	0	0	0	0
Titchwell	0	0	0	0	0	0	0	0	0	0	0	0
Tittleshall	0	0	0	0	0	0	0	0	0	0	0	0
Tivetshall St												
		1	0	0	0	0	0	1	0	0	0	0
Margaret	0	ı										
Tivetshall St												
Tivetshall St Mary	0	1	0	0	0	0	0	0	0	0	0	1
Tivetshall St Mary Toft Monks	0	1	0	0	0	0	0	0	0	0	0	0
Tivetshall St Mary Toft Monks Topcroft	0 0 1	1 0 1	0 0 0	0	0	0	0	0	0	0	0	0
Tivetshall St Mary Toft Monks	0	1	0	0	0	0	0	0	0	0	0	0

r ubile con		,	Q.3a	1					Q.3	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Trimingham	0	0	0	0	0	0	0	0	0	0	0	0
Trowse With												
Newton	7	11	9	3	6	2	4	9	2	0	5	18
Trunch	0	0	2	0	0	0	0	2	0	0	0	0
Tunstead	1	1	0	1	0	0	0	1	0	0	0	2
Twyford	0	0	0	0	0	0	0	0	0	0	0	0
Upper	0	0	0	0	0	0	0	0	0	0	0	0
Sheringham Upton With	U	U	U	U	U	U	U	U	U	U	U	U
Fishley	1	0	1	0	0	0	1	0	0	0	0	1
Upwell	0	0	0	0	0	0	0	0	0	0	0	0
Wacton	0	0	1	0	0	0	0	1	0	0	0	0
Walpole	0	0	0	0	0	0	0	0	0	0	0	0
Walpole Cross					-				-			
Keys	0	0	0	0	0	0	0	0	0	0	0	0
Walpole												
Highway	0	0	0	0	0	0	0	0	0	0	0	0
Walsingham	0	0	0	0	0	0	0	0	0	0	0	0
Walsoken	0	0	0	0	0	0	0	0	0	0	0	0
Warham	0	0	0	0	0	0	0	0	0	0	0	0
Watlington	1	0	0	0	0	0	0	0	0	0	0	1
Watton	1	1	3	0	0	0	2	2	0	0	0	1
Weasenham	0		0	•	0	•	0	0	0	•	0	0
All Saints	0	0	0	0	0	0	0	0	0	0	0	0
Weasenham St Peter	0	0	0	0	0	0	0	0	0	0	0	0
Weeting-With-	0	0	0	0	0	0	0	0	0	U	0	- 0
Broomhill	1	0	0	0	0	0	0	0	0	0	0	1
Wellingham	0	0	0	0	0	0	0	0	0	0	0	0
Wells-Next-		_				-					_	
The-Sea	0	2	2	0	1	0	0	4	0	0	0	1
Welney	0	0	0	0	0	0	0	0	0	0	0	0
Wendling	0	0	0	0	0	0	0	0	0	0	0	0
Wereham	0	0	0	0	0	0	0	0	0	0	0	0
West Acre	0	0	0	0	0	0	0	0	0	0	0	0
West Beckham	0	1	0	0	0	0	1	0	0	0	0	0
West Caister	0	0	0	0	0	0	0	0	0	0	0	0
West Dereham	0	0	0	0	0	0	0	0	0	0	0	0
West Rudham	0	2	0	0	0	0	0	0	0	0	0	2
West Walton	0	0	0	0	0	0	0	0	0	0	0	0
West Winch	0	0	0	0	0	0	0	0	0	0	0	0
Weston												
Longville	1 M Project	3	4	1	2	2	3	4	1	0	0	5

06/01/05

			Q.3a	ì					Q.3	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Westwick	0	0	0	0	0	0	0	0	0	0	0	0
Weybourne	0	0	0	0	1	0	1	0	0	0	0	0
Wheatacre	0	0	0	0	0	0	0	0	0	0	0	0
Whinburgh	0	0	0	0	0	0	0	0	0	0	0	0
Whissonsett	0	0	1	1	0	0	2	0	0	0	0	0
Wicklewood	0	3	0	0	0	0	0	0	0	0	0	3
Wickmere	0	0	1	0	0	0	0	1	0	0	0	0
Wiggenhall St Germans	0	0	0	0	0	0	0	0	0	0	0	0
Wiggenhall St Mary Magdalen	0	0	0	0	0	0	0	0	0	0	0	0
Wighton	0	1	0	0	0	0	0	0	0	0	1	0
Wimbotsham	0	0	0	0	0	0	0	0	0	0	0	0
Winfarthing	0	1	0	0	0	0	0	0	0	0	0	1
Winterton-On- Sea	0	0	0	0	0	0	0	0	0	0	0	0
Witton	1	0	0	0	0	0	0	0	0	0	0	1
Wiveton	0	0	0	0	0	0	0	0	0	0	0	0
Wood Dalling	0	1	0	0	0	0	0	0	0	0	0	1
Wood Norton	2	0	0	1	0	0	0	1	0	1	0	1
Woodbastwick	0	1	0	0	1	1	0	1	0	0	0	2
Woodton	0	0	0	0	0	0	0	0	0	0	0	0
Wormegay	0	0	0	0	0	0	0	0	0	0	0	0
Worstead	0	1	2	0	0	0	1	0	1	0	1	0
Wortwell	0	0	0	0	0	0	0	0	0	0	0	0
Wramplingham	0	0	1	0	0	0	1	0	0	0	0	0
Wreningham	0	0	1	0	0	0	0	1	0	0	0	0
Wretham	0	0	0	0	0	0	0	0	0	0	0	0
Wretton	0	0	0	0	0	0	0	0	0	0	0	0
Wroxham	4	4	4	4	5	1	5	7	0	1	4	5
Wymondham	83	227	181	60	108	35	110	220	19	9	96	240
Yaxham	0	1	0	0	0	0	0	0	0	0	0	1
Yelverton	0	0	1	1	1	0	2	0	0	0	1	0

## 2.2 Table 2 Question 6a and Question 6b Results by Parish

Q.6a Do you support small scale traffic management measures in the city centre? Q.6b Do you support stopping traffic driving straight through the city centre?

Key1 Strongly Support3 Strongly Oppose2 Support5 No Strong View3 Oppose0 No Response

			Q.6a	1					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Acle	3	7	0	1	0	0	4	4	1	2	0	0
Alburgh	0	1	0	0	0	0	0	0	1	0	0	0
Alby With												
Thwaite	0	0	0	0	0	0	0	0	0	0	0	0
Aldborough	1	1	1	0	0	0	1	2	0	0	0	0
Aldeby	0	0	0	0	0	0	0	0	0	0	0	0
Alderford	1	1	0	0	0	0	1	0	0	0	1	0
Alpington	0	0	0	0	0	0	0	0	0	0	0	0
Anmer	0	0	0	0	0	0	0	0	0	0	0	0
Antingham	0	0	0	0	1	0	0	1	0	0	0	0
Ashby St Mary	1	1	1	0	0	1	1	0	1	1	0	1
Ashby With												
Oby	0	0	0	0	0	1	0	0	0	0	0	1
Ashill	0	0	0	0	0	0	0	0	0	0	0	0
Ashmanhaugh	0	1	0	0	0	0	0	0	0	0	1	0
Ashwellthorpe	1	0	2	0	1	0	1	0	1	1	1	0
Aslacton	0	0	0	0	1	0	0	1	0	0	0	0
Attleborough	0	2	2	1	0	0	1	0	2	2	0	0
Attlebridge	2	7	2	0	0	2	5	2	1	3	0	2
Aylmerton	0	1	0	0	0	0	0	1	0	0	0	0
Aylsham	7	11	4	4	2	2	8	7	4	8	1	2
Baconsthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Bacton	1	1	0	0	0	0	2	0	0	0	0	0
Bagthorpe												
With Barmer	0	0	0	0	0	0	0	0	0	0	0	0
Banham	0	1	0	0	0	0	0	0	1	0	0	0
Barford	0	1	0	1	0	0	0	0	0	2	0	0

		-	Q.6a	)					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Barnham												
Broom	0	3	0	0	0	0	0	2	0	1	0	0
Barsham	0	0	0	0	0	0	0	0	0	0	0	0
Barton												
Bendish	0	0	0	0	0	0	0	0	0	0	0	0
Barton Turf	2	1	0	1	2	2	2	0	0	2	2	2
Barwick	0	0	0	0	0	0	0	0	0	0	0	0
Bawburgh	11	13	3	3	8	2	9	8	10	5	6	2
Bawdeswell	0	3	0	0	0	0	1	1	0	1	0	0
Bawsey	0	0	0	0	0	0	0	0	0	0	0	0
Beachamwell	0	0	0	0	0	0	0	0	0	0	0	0
Bedingham	0	1	0	0	0	0	0	1	0	0	0	0
Beeston Regis	0	0	0	0	1	0	1	0	0	0	0	0
Beeston St												
Andrew	0	1	0	0	0	0	0	0	0	1	0	0
Beeston With												
Bittering	0	0	0	0	0	0	0	0	0	0	0	0
Beetley	0	0	1	0	0	0	0	0	0	1	0	0
Beighton	0	3	0	1	0	0	0	2	0	2	0	0
Belaugh	0	1	0	1	0	0	1	0	0	1	0	0
Belton	0	1	0	0	0	0	0	0	1	0	0	0
Bergh Apton	0	3	1	0	0	0	0	1	0	2	1	0
Besthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Billingford	0	1	0	0	0	0	1	0	0	0	0	0
Binham	0	0	0	0	0	0	0	0	0	0	0	0
Bintree	1	0	0	0	0	0	1	0	0	0	0	0
Bircham	0	0	0	0	0	0	0	0	0	0	0	0
Bixley	1	5	0	3	0	1	0	1	4	4	0	1
Blakeney	0	0	0	0	0	0	0	0	0	0	0	0
Blickling	0	0	0	0	0	0	0	0	0	0	0	0
Blo' Norton	0	0	0	0	1	0	1	0	0	0	0	0
Blofield	45	142	29	24	24	3	64	84	45	54	13	7
Bodham	0	0	0	0	0	0	0	0	0	0	0	0
Booton	0	0	0	0	0	0	0	0	0	0	0	0
Boughton	0	0	0	0	0	0	0	0	0	0	0	0
Bracon Ash	4	13	2	4	1	1	8	3	6	7	0	1
Bradenham	0	0	0	1	0	0	0	0	0	1	0	0
Bradwell	1	0	1	0	0	0	1	0	1	0	0	0
Bramerton	6	14	8	1	3	2	7	7	11	7	2	0
Brampton	0	1	0	0	0	0	0	1	0	0	0	0
Brancaster	0	0	0	0	0	0	0	0	0	0	0	0

		-	Q.6a	ì					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Brandiston	1	0	0	0	0	0	1	0	0	0	0	0
Bressingham	0	0	0	0	0	0	0	0	0	0	0	0
Brettenham	0	0	0	0	0	0	0	0	0	0	0	0
Bridgham	0	0	0	0	0	0	0	0	0	0	0	0
Briningham	0	0	0	0	0	0	0	0	0	0	0	0
Brinton	0	0	0	0	0	0	0	0	0	0	0	0
Brisley	0	0	0	0	0	0	0	0	0	0	0	0
Briston	0	3	0	0	0	1	1	0	2	1	0	0
Brockdish	0	0	0	0	0	0	0	0	0	0	0	0
Brooke	3	3	1	0	0	1	3	2	3	0	0	0
Broome	1	0	0	0	0	0	0	0	1	0	0	0
Brumstead	0	0	0	0	0	0	0	0	0	0	0	0
Brundall	61	209	30	37	28	9	93	115	65	72	22	7
Bunwell	1	0	0	0	0	0	0	0	1	0	0	0
Burgh And												
Tuttington	0	0	0	0	0	0	0	0	0	0	0	0
Burgh Castle	0	0	0	0	0	0	0	0	0	0	0	0
Burgh St Peter	0	0	0	0	0	0	0	0	0	0	0	0
Burnham		_	_	_		_			_		_	
Market	1	0	0	0	0	0	1	0	0	0	0	0
Burnham	0	0	4	0	0	0	0	4	0	0	0	0
Norton Burnham	0	0	1	U	0	0	U	1	U	0	U	U
Overy	0	0	0	0	0	0	0	0	0	0	0	0
Burnham	O	0	J		0		J	0		0	0	0
Thorpe	0	0	0	0	0	0	0	0	0	0	0	0
Burston And												
Shimpling	0	0	0	0	0	0	0	0	0	0	0	0
Buxton With												
Lammas	0	4	0	0	3	0	3	2	1	1	0	0
Bylaugh	0	0	0	0	0	0	0	0	0	0	0	0
Caister-On-		0	0	0	0	0	0	4		0		
Sea Cointer St	1	2	0	0	0	0	0	1	1	0	1	0
Caistor St Edmund	4	10	3	0	1	0	4	6	6	0	2	0
Cantley	1	10	0	0	0	1	0	2	0	0	0	1
Carthey	0	2	0	0	0	0	0	2	0	0	0	0
Carleton Rode	0	0	0	0	0	0	0	0	0	0	0	0
Carleton St	U	U	U	U	U	U	U	U	U	U	U	U
Peter	0	0	1	0	0	0	0	0	1	0	0	0
Castle Acre	0	0	0	0	0	0	0	0	0	0	0	0
Castle Rising	0	0	0	0	0	0	0	0	0	0	0	0
Caston	0	0	0	1	0	1	0	0	<u></u>	1	0	0

		•	Q.6a	1					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Catfield	0	2	0	0	2	0	0	1	0	1	2	0
Cawston	0	3	0	1	0	0	0	0	0	3	1	0
Chedgrave	0	1	0	0	0	0	0	0	0	0	0	1
Choseley	0	0	0	0	0	0	0	0	0	0	0	0
Claxton	1	0	1	0	0	0	1	0	0	1	0	0
Clenchwarton	0	0	0	0	0	0	0	0	0	0	0	0
Cley Next The												
Sea	0	0	0	0	0	0	0	0	0	0	0	0
Cockley Cley	0	0	0	0	0	0	0	0	0	0	0	0
Colby	0	2	1	0	0	0	0	1	2	0	0	0
Colkirk	0	2	0	0	0	0	0	2	0	0	0	0
Colney	2	2	4	1	1	6	4	1	1	4	1	5
Coltishall	2	7	1	4	0	0	0	4	5	4	1	0
Congham	0	0	0	0	0	1	0	0	0	0	0	1
Corpusty	0	1	0	0	0	0	0	0	0	1	0	0
Costessey	179	536	148	107	135	44	250	309	283	211	73	23
Cranwich	0	0	0	0	0	0	0	0	0	0	0	0
Cranworth	0	0	0	0	0	0	0	0	0	0	0	0
Crimplesham	0	0	0	0	0	0	0	0	0	0	0	0
Cringleford	36	89	25	14	13	6	47	45	37	33	16	5
Cromer	6	8	3	1	3	0	5	8	2	3	2	1
Crostwick	0	0	0	0	0	0	0	0	0	0	0	0
Croxton	1	0	0	0	0	0	1	0	0	0	0	0
Denton	0	1	0	0	0	0	0	0	1	0	0	0
Denver	0	0	0	0	0	0	0	0	0	0	0	0
Deopham	0	0	0	0	1	0	0	0	0	0	1	0
Dereham	0	7	2	0	0	1	1	3	1	4	0	1
Dersingham	0	0	0	0	1	0	0	0	0	0	1	0
Dickleburgh												
And Rushall	0	0	0	0	0	0	0	0	0	0	0	0
Didlington	0	0	0	0	0	0	0	0	0	0	0	0
Dilham	0	0	0	0	0	1	0	0	0	0	0	1
Diss	1	3	0	0	0	1	3	1	1	0	0	0
Ditchingham	0	1	0	0	0	0	1	0	0	0	0	0
Docking	0	0	0	0	0	0	0	0	0	0	0	0
Downham												
Market	0	1	0	0	0	0	1	0	0	0	0	0
Downham												
West	0	0	0	0	0	0	0	0	0	0	0	0
Drayton	81	266	64	46	54	21	129	162	112	85	38	6
Dunton	0	0	0	0	0	0	0	0	0	0	0	0

r ublic Coll			Q.6a	1					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Earsham	2	0	0	0	0	0	2	0	0	0	0	0
East Beckham	0	0	0	0	0	0	0	0	0	0	0	0
East Carleton	5	4	0	2	2	0	3	4	0	2	1	3
East Rudham	0	0	0	0	0	0	0	0	0	0	0	0
East Ruston	0	0	0	0	0	0	0	0	0	0	0	0
East												
Tuddenham	0	1	0	1	1	1	0	0	0	3	0	1
East Walton	0	0	0	0	0	0	0	0	0	0	0	0
East Winch	0	0	0	0	0	0	0	0	0	0	0	0
Easton	8	57	18	9	6	2	16	30	29	18	7	0
Edgefield	1	0	0	1	0	1	1	1	0	1	0	0
Ellingham	1	0	0	0	0	0	0	1	0	0	0	0
Elsing	0	0	0	0	0	0	0	0	0	0	0	0
Emneth	0	0	0	0	0	0	0	0	0	0	0	0
Erpingham	0	3	0	0	0	0	0	3	0	0	0	0
Fakenham	5	12	0	1	1	2	4	9	4	2	2	0
Felbrigg	0	0	0	0	0	0	0	0	0	0	0	0
Felmingham	0	2	0	0	0	0	0	0	0	1	1	0
Felthorpe	11	32	9	8	11	3	17	22	14	11	9	1
Feltwell	0	0	0	0	0	0	0	0	0	0	0	0
Field Dalling	0	0	0	0	0	0	0	0	0	0	0	0
Filby	2	0	0	0	0	0	2	0	0	0	0	0
Fincham	0	0	0	0	0	0	0	0	0	0	0	0
Fleggburgh	0	0	1	0	0	0	0	1	0	0	0	0
Flitcham With												
Appleton	0	0	0	0	0	0	0	0	0	0	0	0
Flordon	1	6	2	2	0	0	1	5	2	2	1	0
Fordham	0	0	0	0	0	0	0	0	0	0	0	0
Forncett	1	1	1	0	0	0	0	0	3	0	0	0
Foulden	0	0	0	0	0	0	0	0	0	0	0	0
Foulsham	2	0	0	0	0	0	0	2	0	0	0	0
Foxley	0	0	0	0	0	0	0	0	0	0	0	0
Framingham												
Earl	12	34	8	11	7	1	14	22	13	20	3	1
Framingham	2	_	^	4		^	2	2	4		^	^
Pigot	2	5	0	0	0	0	3 0	2 0	1 0	2 0	0	0
Fransham		0		0					<u>U</u> 1	0		0
Freethorpe	0		1		0	0	0	0		_	0	0
Frettenham	6	35	12	5	9	0	8	19	17	14	9	0
Fring Fritton And St	0	0	0	0	0	0	0	0	0	0	0	0
Fritton And St Olaves	0	0	0	0	0	0	0	0	0	0	0	0
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			Q.6a	ì					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Fulmodeston	0	2	0	1	0	0	2	0	0	1	0	0
Garboldisham	0	0	0	0	0	0	0	0	0	0	0	0
Garvestone	1	1	0	0	0	0	2	0	0	0	0	0
Gateley	0	1	0	0	0	0	0	1	0	0	0	0
Gayton	0	0	0	0	0	0	0	0	0	0	0	0
Geldeston	0	0	0	0	0	0	0	0	0	0	0	0
Gillingham	0	0	0	0	0	0	0	0	0	0	0	0
Gimingham	0	0	0	0	0	0	0	0	0	0	0	0
Gissing	0	0	0	0	0	0	0	0	0	0	0	0
Gooderstone	0	0	0	0	0	0	0	0	0	0	0	0
Great And Little Plumstead	44	160	36	33	32	7	59	97	69	57	24	6
Great	44	100	30	33	32		39	91	09	31		0
Cressingham	0	0	0	0	0	0	0	0	0	0	0	0
Great Dunham	0	0	0	0	0	0	0	0	0	0	0	0
Great					<u> </u>		J			-		
Ellingham	0	0	0	0	0	0	0	0	0	0	0	0
Great												
Massingham	1	0	0	0	0	0	1	0	0	0	0	0
Great Melton	1	6	0	1	1	0	2	2	2	3	0	0
Great Moulton	0	1	0	0	1	0	1	1	0	0	0	0
Great Snoring	0	0	0	0	0	0	0	0	0	0	0	0
Great Witchingham	0	1	2	0	0	0	2	0	0	1	0	0
Great	2	44	4	0	0	4	_	6	_	0	0	_
Yarmouth	3	11	1	0	2	1	6	6	5	0	0	1
Gresham	0	0	0	0	0	0	0	0	0	0	0	0
Gressenhall	0	0	0	0	0	1	0	0	1	0	0	0
Grimston	0	0	0	0	0	0	0	0	0	0	0	0
Griston	0	0	0	0	0	0	0	0	0	0	0	0
Guestwick	0	0	0	0	0	0	0	0	0	0	0	0
Guist	0	0	0	0	0	0	0	0	0	0	0	0
Gunthorpe	1	1	1	1	1	0	1	1	1	2	0	0
Haddiscoe	0	0	0	0	0	0	0	0	0	0	0	0
Hainford	5	7	1	0	1	0	5	1	7	1	0	0
Hales	0	0	1	0	0	0	0	0	1	0	0	0
Halvergate	0	1	1	0	0	0	0	0	1	0	1	0
Hanworth	0	0	1	0	0	0	0	0	0	0	1	0
Happisburgh	0	3	0	1	0	0	3	0	0	1	0	0
Hardingham	0	0	0	0	0	0	0	0	0	0	0	0
Harling	0	0	0	0	0	0	0	0	0	0	0	0

			Q.6a	ì					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Harpley	0	0	0	0	0	0	0	0	0	0	0	0
Haveringland	0	3	1	0	1	0	0	2	1	0	2	0
Heacham	0	0	1	0	0	0	0	0	1	0	0	0
Heckingham	0	0	0	0	0	0	0	0	0	0	0	0
Hedenham	0	0	0	0	0	0	0	0	0	0	0	0
Helhoughton	0	0	0	0	0	0	0	0	0	0	0	0
Hellesdon	176	547	153	98	100	30	291	313	209	186	88	17
Hellington	0	0	0	0	0	1	0	0	0	1	0	0
Hemblington	2	12	7	4	3	1	6	6	8	6	3	0
Hempnall	0	1	0	0	0	0	1	0	0	0	0	0
Hempstead	0	2	0	0	0	0	0	1	1	0	0	0
Hempton	0	0	1	0	0	0	0	1	0	0	0	0
Hemsby	0	2	0	0	0	0	0	1	0	0	1	0
Hethersett	61	193	61	36	37	14	80	118	91	83	21	9
Hevingham	1	1	2	0	1	0	2	0	1	2	0	0
Heydon	0	0	0	0	0	0	0	0	0	0	0	0
Hickling	0	1	0	0	0	0	0	0	1	0	0	0
High Kelling	1	3	0	0	0	2	1	3	0	1	0	1
Hilborough	0	0	0	0	0	0	0	0	0	0	0	0
Hilgay	0	0	0	0	0	0	0	0	0	0	0	0
Hillington	0	0	0	0	0	0	0	0	0	0	0	0
Hindolveston	0	0	0	0	0	0	0	0	0	0	0	0
Hindringham	0	0	0	0	0	0	0	0	0	0	0	0
Hingham	2	3	0	0	0	0	4	0	1	0	0	0
Hockering	3	19	4	5	7	2	10	10	7	7	6	0
Hockham	0	1	0	1	0	0	0	1	0	1	0	0
Hockwold-												
Cum-Wilton	0	0	0	0	0	0	0	0	0	0	0	0
Hoe	0	0	0	0	0	0	0	0	0	0	0	0
Holkham	0	0	0	0	0	0	0	0	0	0	0	0
Holme Hale	0	1	1	0	0	0	0	0	1	1	0	0
Holme-Next-	4	0	0	•	0	•		0	•	0	•	
The-Sea	1	0	0	0	0	0	1	0	0	0	0	0
Holt	0	7	1	0	1	1	1	4	3	0	1	1
Holverston	0	0	0	0	0	0	0	0	0	0	0	0
Honing	2	1	0	1	0	0	2	0	1	1	0	0
Honingham	4	15	2	3	3	2	5	7	6	5	4	2
Hopton-On-	0		0	_	_	0		0	0		0	0
Sea	0	0	0	0 1	0	0	0	0	0	0	0	0
Horning	1	1	0		0	0	0			1	1	0
Horningtoft	0	0	0	0	0	0	0	0	0	0	0	0

Public Con		,	Q.6a	1					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Horsey	0	0	0	0	0	0	0	0	0	0	0	0
Horsford	47	158	43	23	27	14	54	87	75	59	28	9
Horsham St												
Faith And												
Newton St						_						
Faith	30	107	34	29	17	6	33	68	50	45	23	4
Horstead With	1	2	1	0	0	2	1	3	1	1	0	0
Stanninghall	0	0	0	0	0	0	0	0	0	0	0	0
Houghton Hoveton	0	2	3	1	2	0	2	1	0	3	2	0
Howe	0	1	0	1	0	0	0	1	0	1	0	0
Hunstanton	1	0	0	0	0	0	1	0	0	0	0	0
Ickburgh	0	0	0	0	0	0	0	0	0	0	0	0
Ingham	0	0	0	0	0	0	0	0	0	0	0	0
Ingoldisthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Ingworth	0	0	0	0	0	0	0	0	0	0	0	0
Itteringham	0	0	0	0	0	0	0	0	0	0	0	0
Kelling	0	0	0	0	0	0	0	0	0	0	0	0
Kempstone	0	0	0	0	0	0	0	0	0	0	0	0
Kenninghall	0	0	0	0	0	0	0	0	0	0	0	0
Keswick	6	18	5	6	3	1	13	9	5	10	2	0
Ketteringham	3	6	2	2	1	0	4	4	4	2	0	0
Kettlestone	1	0	0	0	0	1	1	0	0	0	0	1
Kilverstone	0	0	0	0	0	0	0	0	0	0	0	0
Kimberley	0	0	0	0	0	0	0	0	0	0	0	0
King's Lynn	0	3	1	0	0	0	2	0	1	0	1	0
Kirby Bedon	4	3	4	4	2	1	4	2	6	6	0	0
Kirby Cane	0	1	0	0	0	0	1	0	0	0	0	0
Kirstead	0	1	0	0	0	0	0	0	1	0	0	0
Knapton	0	0	0	0	0	1	0	0	0	0	0	1
Langham	0	0	0	0	0	0	0	0	0	0	0	0
Langley With	U	0	U	0		0	U	U	0	U		U
Hardley	0	1	0	0	0	0	0	0	1	0	0	0
Lessingham	1	0	0	0	0	0	1	0	0	0	0	0
Letheringsett	-		-				-					
With Glandford	0	0	0	0	0	0	0	0	0	0	0	0
Lexham	0	2	0	0	0	0	1	1	0	0	0	0
Leziate	0	0	0	0	0	0	0	0	0	0	0	0
Lingwood And												
Burlingham	3	2	0	1	0	1	2	1	1	1	2	0
Litcham	0	0	0	0	0	0	0	0	0	0	0	0
Little	0	0	0	0	0	0	0	0	0	0	0	0

Public Con		,	Q.6a	1					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Barningham												
Little												
Cressingham	0	0	0	0	0	0	0	0	0	0	0	0
Little Dunham	0	0	0	0	0	0	0	0	0	0	0	0
Little												
Ellingham	0	0	0	0	0	0	0	0	0	0	0	0
Little	0	0	0	0	0	0	0		0	0	0	0
Massingham	0	0	0	0	0	0	0	0	0	0	0	0
Little Melton	9	43	6	11	6	4	17	21	14	19	3	5
Little Snoring Little	1	0	0	0	0	0	1	0	0	0	0	0
Witchingham	0	0	1	0	0	0	0	0	1	0	0	0
Loddon	0	2	1	1	1	0	0	1	<u>'</u> 1	2	1	0
Long Stratton	36	95	15	17	19	3	45	58	37	29	12	4
Longham	0	0	0	0	0	0	0	0	0	0	0	0
Ludham	1	1	0	0	1	0	2	0	0	0	1	0
Lynford	0	0	0	0	0	0	0	0	0	0	0	0
Lyng	0	1	0	0	0	0	0	0	0	1	0	0
Marham	0	0	0	0	0	0	0	0	0	0	0	0
Marlingford	6	19	5	3	5	3	11	8	11	7	4	0
Marsham	0	1	1	0	0	0	0	0	<u>' ' '</u>	1	0	0
Marshland St	U	•			0		0	0			0	0
James	0	1	0	0	0	0	0	0	1	0	0	0
Martham	0	0	1	0	0	0	0	0	0	1	0	0
Matlask	0	0	0	0	0	0	0	0	0	0	0	0
Mattishall	1	2	0	0	0	0	1	1	0	1	0	0
Mautby	0	0	0	0	0	0	0	0	0	0	0	0
Melton												
Constable	0	0	0	0	0	0	0	0	0	0	0	0
Merton	0	0	0	0	0	0	0	0	0	0	0	0
Methwold	0	0	0	0	0	0	0	0	0	0	0	0
Middleton	1	0	0	0	0	0	1	0	0	0	0	0
Mileham	0	0	1	0	0	0	0	0	1	0	0	0
Morley	0	0	0	0	1	0	0	1	0	0	0	0
Morningthorpe	0	0	1	1	0	0	0	0	0	2	0	0
Morston	0	0	0	0	0	0	0	0	0	0	0	0
Morton On The												
Hill	0	9	3	1	1	0	0	5	5	3	1	0
Mulbarton	25	72	24	20	15	1	28	48	41	33	5	2
Mundesley	0	2	0	1	0	0	2	1	0	0	0	0
Mundford	0	0	0	0	0	0	0	0	0	0	0	0
Mundham	0	0	0	0	0	0	0	0	0	0	0	0

		-	Q.6a	3					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Narborough	0	1	0	0	1	0	0	1	1	0	0	0
Narford	0	0	0	0	0	0	0	0	0	0	0	0
Neatishead	1	1	0	1	0	1	1	0	1	1	0	1
Necton	0	1	0	0	0	0	0	1	0	0	0	0
Needham	0	0	0	0	0	0	0	0	0	0	0	0
New												
Buckenham	0	0	1	0	0	0	0	0	0	1	0	0
Newton By	•	0	•	•	•						0	0
Castle Acre	0	0	0	0	0	0	0	0	0	0	0	0
Newton Flotman	14	31	7	11	3	1	19	20	9	14	4	1
Nordelph	0	0	0	0	0	0	0	0	0	0	0	0
North Creake	1	0	0	0	<u>0</u> 1	0	0	1	0	1	0	0
North Elmham	0	1	0	0	0	0	0	1	0	0	0	0
North Lopham	0	0	0	0	0	0	0	0	0	0	0	0
North	U	U	- 0	U	- 0	U	U	U	U	U	U	U
Pickenham	0	0	0	0	0	0	0	0	0	0	0	0
North Runcton	0	0	0	0	0	0	0	0	0	0	0	0
North							- ŭ			J		J
Tuddenham	0	0	0	0	0	0	0	0	0	0	0	0
North												
Walsham	4	6	1	1	4	0	3	5	3	4	1	0
North Wootton	0	0	0	0	0	0	0	0	0	0	0	0
Northrepps	0	2	0	0	0	0	1	1	0	0	0	0
Northwold	0	0	0	0	0	0	0	0	0	0	0	0
Norton												
Subcourse	0	0	0	0	0	0	0	0	0	0	0	0
Norwich	1709	2868	765	563	559	282	2210	1584	1228	1186	388	150
Old			•		•						•	•
Buckenham	2	1	0	0	0	0	1	0	0	2	0	0
Old Catton	109	281	91	59	36	18	157	146	125	132	29	5
Old Hunstanton	0	0	0	0	0	0	_	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
Ormesby St Margaret With												
Scratby	0	1	0	0	1	0	0	1	0	0	1	0
Ormesby St		•			· · · ·		- J			<u> </u>		<u> </u>
Michael	0	0	0	0	0	0	0	0	0	0	0	0
Oulton	0	2	0	0	0	0	2	0	0	0	0	0
Outwell	0	0	0	0	0	0	0	0	0	0	0	0
Overstrand	0	1	1	0	0	0	0	0	1	1	0	0
Ovington	0	0	0	0	0	0	0	0	0	0	0	0
Oxborough	0	0	0	0	0	0	0	0	0	0	0	0

Supplement Norwich Area Transportation Strategy Public Consultation Analysis

		•	Q.6a	1					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Paston	0	1	0	0	0	0	0	0	0	0	1	0
Pentney	0	0	0	0	0	0	0	0	0	0	0	0
Plumstead	0	1	0	0	0	0	0	1	0	0	0	0
Poringland	49	129	35	26	18	6	65	58	60	59	16	5
Postwick	5	16	3	4	1	0	4	9	8	6	2	0
Potter												
Heigham	0	2	0	0	0	0	0	2	0	0	0	0
Pudding												
Norton	0	0	0	0	0	0	0	0	0	0	0	0
Pulham Market	0	1	0	0	0	0	1	0	0	0	0	0
Pulham St												
Mary	0	0	0	0	0	0	0	0	0	0	0	0
Quidenham	0	0	0	0	0	0	0	0	0	0	0	0
Rackheath	33	130	36	25	32	8	54	74	48	57	24	7
Raveningham	0	0	0	0	0	0	0	0	0	0	0	0
Raynham	0	0	0	0	0	0	0	0	0	0	0	0
Redenhall												
With Harleston	0	3	0	0	0	0	1	1	0	1	0	0
Reedham	1	0	0	0	2	0	1	0	0	0	2	0
Reepham	3	5	1	1	0	0	3	3	1	2	0	1
Repps With												
Bastwick	0	0	1	0	0	0	0	1	0	0	0	0
Riddlesworth	0	0	0	0	0	0	0	0	0	0	0	0
Ringland	3	25	9	1	4	8	5	7	20	5	6	7
Ringstead	0	0	0	0	0	0	0	0	0	0	0	0
Rockland St												
Mary	0	6	0	0	1	1	2	4	1	0	0	1
Rocklands	0	0	0	0	0	0	0	0	0	0	0	0
Rollesby	0	0	0	0	0	0	0	0	0	0	0	0
Roudham	0	0	0	0	0	0	0	0	0	0	0	0
Rougham	0	0	0	0	0	0	0	0	0	0	0	0
Roughton	1	1	0	0	0	0	1	1	0	0	0	0
Roydon	0	0	0	0	0	0	0	0	0	0	0	0
Roydon	0	1	0	0	0	0	1	0	0	0	0	0
Runcton												
Holme	0	0	0	0	0	0	0	0	0	0	0	0
Runhall	1	2	0	0	0	0	1	1	1	0	0	0
Runton	0	2	0	0	1	0	0	1	1	0	1	0
Ryburgh	1	4	0	0	0	0	1	2	1	0	1	0
Ryston	0	0	0	0	0	0	0	0	0	0	0	0
Saham Toney	0	0	0	0	0	0	0	0	0	0	0	0
Salhouse	3	6	3	0	2	2	4	2	4	2	4	0

			Q.6a	1					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Sall	1	0	0	0	0	0	1	0	0	0	0	0
Salthouse	0	0	0	0	0	0	0	0	0	0	0	0
Sandringham	0	0	0	0	0	0	0	0	0	0	0	0
Saxlingham												
Nethergate	0	1	0	0	0	0	0	1	0	0	0	0
Scarning	4	0	0	1	0	0	3	0	0	2	0	0
Scole	0	0	0	0	1	0	0	0	1	0	0	0
Scottow	1	1	1	0	0	0	2	0	1	0	0	0
Scoulton	0	0	0	0	0	0	0	0	0	0	0	0
Sculthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Sea Palling	0	0	0	0	0	0	0	0	0	0	0	0
Sedgeford	0	0	0	0	0	0	0	0	0	0	0	0
Seething	0	1	0	0	0	0	0	0	1	0	0	0
Shelfanger	0	0	0	0	0	0	0	0	0	0	0	0
Shelton	0	0	0	0	0	0	0	0	0	0	0	0
Sheringham	3	7	0	0	3	0	5	4	3	1	0	0
Shernborne	0	0	0	0	0	0	0	0	0	0	0	0
Shipdham	0	0	0	0	0	0	0	0	0	0	0	0
Shotesham	1	3	0	1	0	0	2	2	1	0	0	0
Shouldham	0	0	0	0	0	0	0	0	0	0	0	0
Shouldham	0	0	0	U	U	U		0		0	0	
Thorpe	0	0	0	0	0	0	0	0	0	0	0	0
Shropham	0	0	0	0	0	0	0	0	0	0	0	0
Sidestrand	0	0	0	0	0	0	0	0	0	0	0	0
Sisland	0	0	1	0	0	0	0	0	0	1	0	0
Skeyton	0	0	0	0	0	0	0	0	0	0	0	0
Sloley	0	0	0	0	0	0	0	0	0	0	0	0
Smallburgh	0	0	0	0	0	0	0	0	0	0	0	0
Snetterton	0	0	0	0	0	0	0	0	0	0	0	0
Snettisham	0	0	0	0	0	0	0	0	0	0	0	0
Somerton	0	0	0	0	0	0	0	0	0	0	0	0
South Acre	0	0	0	0	0	0	0	0	0	0	0	0
*	1	0	0	0	0	0	1	0	0	0	0	0
South Lopham	0	0	0	0	0	0	0	0	0	0	0	0
South Lopham South	U	U	U	U	U	U	U	U	U	U	U	U
Pickenham	0	0	0	0	0	0	0	0	0	0	0	0
South	U		- 0	0	0	- 0		0		0	0	<u> </u>
Walsham	0	1	0	0	1	0	1	0	1	0	0	0
South Wootton	0	0	0	0	0	0	0	0	0	0	0	0
Southery	0	0	0	0	0	0	0	0	0	0	0	0
Southrepps	0	0	0	1	0	0	0	0	0	1	0	0

		J	Q.6a	а					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Sparham	0	0	1	0	0	0	0	0	1	0	0	0
Spixworth	35	177	57	34	30	12	65	100	87	60	26	7
Sporle With												
Palgrave	0	1	0	0	0	0	0	0	0	1	0	0
Sprowston	218	625	174	133	132	51	319	342	283	272	87	30
Stalham	1	4	0	0	1	0	2	1	0	3	0	0
Stanfield	0	0	0	0	0	0	0	0	0	0	0	0
Stanford	0	0	0	0	0	0	0	0	0	0	0	0
Stanhoe	0	0	0	0	0	0	0	0	0	0	0	0
Starston	0	0	0	0	0	0	0	0	0	0	0	0
Stibbard	0	1	0	0	0	0	0	0	1	0	0	0
Stiffkey	0	0	0	0	0	0	0	0	0	0	0	0
Stockton	0	0	0	0	0	0	0	0	0	0	0	0
Stody	0	0	0	0	0	0	0	0	0	0	0	0
Stoke Ferry	1	0	0	0	0	0	1	0	0	0	0	0
Stoke Holy												
Cross	19	52	11	9	8	4	25	27	16	26	5	4
Stokesby With	0	0	0		0	0	0		0	0	0	0
Herringby	0	0	0	0	0	0	0	0	0	0	0	0
Stow Bardolph	0	0	0	0	0	0	0	0	0	0	0	0
Stow Bedon	0	0	0	0	0	0	0	0	0	0	0	0
Stradsett	0	0	0	0	0	0	0	0	0	0	0	0
Stratton Strawless	0	1	0	1	0	0	0	1	0	1	0	0
Strumpshaw	0	3	0	0	0	0	2	1	0	0	0	0
Sturipsriaw	0	0	0	0	0	0	0	0	0	0	0	0
Suffield	0	0	0	0	0	0	0	0	0	0	0	0
Surlingham	8	20	8	2	5	1	11	13	10	8	1	1
Sustead	0	0	0	0	0	0	0	0	0	0	0	0
Sutton	0	2	0	0	0	0	0	1	1	0	0	0
Swaffham	1	2	0	0	1	0	0	1	2	0	1	0
Swafield	0	1	0	0	0	0	0	1	0	0	0	0
Swainsthorpe	7	16	5	4	0	2	9	6	10	7	1	1
Swannington	2	4	0	0	0	0	2	2	2	0	0	0
Swanton		4		0	U	U				U	0	0
Abbott	0	0	0	0	0	0	0	0	0	0	0	0
Swanton										J		
Morley	0	0	0	0	0	0	0	0	0	0	0	0
Swanton												
Novers	0	1	0	0	0	0	0	0	1	0	0	0
Swardeston	6	18	6	4	2	1	8	9	9	9	1	1
Syderstone	0	0	0	0	0	0	0	0	0	0	0	0

Public Con		,	Q.6a	3					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Tacolneston	1	1	0	0	0	0	1	1	0	0	0	0
Tasburgh	11	42	9	4	6	1	12	22	18	15	6	0
Tattersett	0	0	0	0	0	0	0	0	0	0	0	0
Taverham	175	571	134	95	118	31	267	337	222	188	83	27
Terrington St												
Clement	0	0	1	0	0	0	0	0	1	0	0	0
Terrington St									_			
John	0	0	0	0	0	0	0	0	0	0	0	0
Tharston	11	17	3	3	5	0	13	7	6	9	3	1
Themelthorpe	0	1	0	0	0	0	1	0	0	0	0	0
Thetford	0	0	0	0	1	0	0	0	1	0	0	0
Thompson	0	0	0	0	0	0	0	0	0	0	0	0
Thornage	0	0	0	0	0	0	0	0	0	0	0	0
Thornham	0	0	0	0	0	1	0	0	0	1	0	0
Thorpe Market	1	2	0	0	0	0	2	0	1	0	0	0
Thorpe St												
Andrew	213	605	166	125	85	32	310	331	247	241	73	24
Thurlton	0	0	0	0	0	0	0	0	0	0	0	0
Thurne	0	0	0	0	0	0	0	0	0	0	0	0
Thurning	0	0	0	0	0	0	0	0	0	0	0	0
Thursford	0	0	1	0	0	0	1	0	0	0	0	0
Thurton	0	1	0	0	0	0	0	0	0	1	0	0
Thwaite	0	0	0	0	0	0	0	0	0	0	0	0
Tibenham	0	1	0	0	0	0	1	0	0	0	0	0
Tilney All						_					_	_
Saints	0	0	0	0	0	0	0	0	0	0	0	0
Tilney St	0	0	0	0	0	0	0	0	0	0	0	0
Lawrence	0	0	0	0	0	0	0	0	0	0	0	0
Titchwell	0	0	0	0	0	0	0	0	0			0
Tittleshall Tivetshall St	U	U	U	U	U	U	U	0	U	0	0	U
Margaret	0	1	0	0	0	0	0	0	1	0	0	0
Tivetshall St	U		0	0	0	0	0	0	'	U	0	U
Mary	0	0	1	0	0	0	0	0	0	1	0	0
Toft Monks	0	0	0	0	0	0	0	0	0	0	0	0
Topcroft	2	0	0	0	0	0	0	0	2	0	0	0
Tottenhill	0	0	0	0	0	0	0	0	0	0	0	0
Tottington	0	0	0	0	0	0	0	0	0	0	0	0
Trimingham	0	0	0	0	0	0	0	0	0	0	0	0
Trowse With		<u> </u>			<u> </u>					<u> </u>		
Newton	3	24	8	1	1	1	9	13	5	8	1	2
Trunch	0	1	0	1	0	0	1	0	0	1	0	0

			Q.6a	ì					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Tunstead	2	0	1	0	0	0	1	0	1	0	0	1
Twyford	0	0	0	0	0	0	0	0	0	0	0	0
Upper												
Sheringham	0	0	0	0	0	0	0	0	0	0	0	0
Upton With												
Fishley	1	1	0	0	0	0	0	0	1	0	1	0
Upwell	0	0	0	0	0	0	0	0	0	0	0	0
Wacton	0	1	0	0	0	0	0	1	0	0	0	0
Walpole	0	0	0	0	0	0	0	0	0	0	0	0
Walpole Cross												
Keys	0	0	0	0	0	0	0	0	0	0	0	0
Walpole												
Highway	0	0	0	0	0	0	0	0	0	0	0	0
Walsingham	0	0	0	0	0	0	0	0	0	0	0	0
Walsoken	0	0	0	0	0	0	0	0	0	0	0	0
Warham	0	0	0	0	0	0	0	0	0	0	0	0
Watlington	1	0	0	0	0	0	1	0	0	0	0	0
Watton	1	4	0	0	0	0	0	2	1	1	1	0
Weasenham												
All Saints	0	0	0	0	0	0	0	0	0	0	0	0
Weasenham												
St Peter	0	0	0	0	0	0	0	0	0	0	0	0
Weeting-With-												
Broomhill	0	1	0	0	0	0	1	0	0	0	0	0
Wellingham	0	0	0	0	0	0	0	0	0	0	0	0
Wells-Next-	_	_	_	_	_					_	_	_
The-Sea	0	3	0	0	2	0	1	1	1	0	2	0
Welney	0	0	0	0	0	0	0	0	0	0	0	0
Wendling	0	0	0	0	0	0	0	0	0	0	0	0
Wereham	0	0	0	0	0	0	0	0	0	0	0	0
West Acre	0	0	0	0	0	0	0	0	0	0	0	0
West Beckham	1	0	0	0	0	0	0	1	0	0	0	0
West Caister	0	0	0	0	0	0	0	0	0	0	0	0
West Dereham	0	0	0	0	0	0	0	0	0	0	0	0
West Rudham	0	2	0	0	0	0	0	1	1	0	0	0
West Walton	0	0	0	0	0	0	0	0	0	0	0	0
West Winch	0	0	0	0	0	0	0	0	0	0	0	0
Weston							J					
Longville	1	8	1	0	1	2	1	4	3	3	0	2
Westwick	0	0	0	0	0	0	0	0	0	0	0	0
Weybourne	0	1	0	0	0	0	0	0	<u></u>	0	0	0
Wheatacre	0	0	0	0	0	0	0	0	0	0	0	0

			Q.6a	1					Q.	6b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Whinburgh	0	0	0	0	0	0	0	0	0	0	0	0
Whissonsett	0	1	1	0	0	0	0	1	0	1	0	0
Wicklewood	0	2	0	0	1	0	0	1	1	1	0	0
Wickmere	0	0	1	0	0	0	0	0	1	0	0	0
Wiggenhall St Germans	0	0	0	0	0	0	0	0	0	0	0	0
Wiggenhall St Mary				•		•		•	•	•	•	•
Magdalen	0	0	0	0	0	0	0	0	0	0	0	0
Wighton	0	0	0	0	1	0	0	0	1	0	0	0
Wimbotsham	0	0	0	0	0	0	0	0	0	0	0	0
Winfarthing	1	0	0	0	0	0	0	1	0	0	0	0
Winterton-On-	0	0		0	0	0	0	0	0	0	0	0
Sea	0	0	0	0	0	0	0	0	0	0	<u>0</u> 1	0
Witton									0			
Wiveton	0	0	0	0	0	0	0	0	0	0	0	0
Wood Dalling		1					1	0	0	0	0	0
Wood Norton	0	1	0	1	0	1	1	1	0	1	0	0
Woodbastwick	0	2	0	0	0	1 0	0	2	0	0	0	0
Woodton	0		0				0	0				
Wormegay	0	0	0	0	0	0	0	0	0	0	0	0
Worstead	0	1	0	0	1 0	0	0	1 0	<u>1</u>	1 0	0	0
Wortwell	0	0	0		0		0					
Wramplingham			0	1		0		0	0	1	0	0
Wreningham	0	0	1	0	0	0	0	0	0	1	0	0
Wretham	0	0	0	0	0	0	0	0	0	0	0	0
Wretton	0	0	0	0	0	0	0	0	0	0	0	0
Wroxham	5	11	1	2	3	0	6	9	2	3	2	0
Wymondham	105	352	84	47	83	23	168	200	152	121	41	12
Yaxham	0	1	0	0	0	0	0	1	0	0	0	0
Yelverton	1	1	0	1	0	0	1	0	0	1	1	0

## 2.3 Table 3 Question 7a and Question 7b Results by Parish

Q.7a Do you support road user charging within 5 years?

Q.7b Do you support road user charging within 5 to 10 years?

**Key** 

1 Strongly Support 3 Strongly Oppose

2 Support 5 No Strong View

3 Oppose 0 No Response

			Q.7	7a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Acle	1	1	3	5	1	0	0	1	1	6	1	2
Alburgh	0	0	1	0	0	0	0	0	1	0	0	0
Alby With												
Thwaite	0	0	0	0	0	0	0	0	0	0	0	0
Aldborough	1	0	1	0	1	0	0	1	1	0	1	0
Aldeby	0	0	0	0	0	0	0	0	0	0	0	0
Alderford	0	1	0	1	0	0	0	1	0	1	0	0
Alpington	0	0	0	0	0	0	0	0	0	0	0	0
Anmer	0	0	0	0	0	0	0	0	0	0	0	0
Antingham	0	0	1	0	0	0	0	0	1	0	0	0
Ashby St Mary	1	0	0	1	1	1	1	0	0	1	1	1
Ashby With												
Oby	0	0	0	0	0	1	0	0	0	0	0	1
Ashill	0	0	0	0	0	0	0	0	0	0	0	0
Ashmanhaugh	0	0	1	0	0	0	0	0	1	0	0	0
Ashwellthorpe	0	0	2	2	0	0	0	0	2	2	0	0
Aslacton	0	0	0	1	0	0	0	0	0	1	0	0
Attleborough	1	0	1	2	1	0	1	0	1	2	1	0
Attlebridge	0	0	5	8	0	0	0	0	4	8	0	1
Aylmerton	0	0	1	0	0	0	0	1	0	0	0	0
Aylsham	1	3	5	16	2	3	0	2	5	15	2	6
Baconsthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Bacton	1	0	0	0	1	0	0	0	0	0	1	1
Bagthorpe												
With Barmer	0	0	0	0	0	0	0	0	0	0	0	0
Banham	0	0	0	1	0	0	0	0	0	1	0	0
Barford	0	0	1	1	0	0	0	1	0	1	0	0

			Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Barnham												
Broom	0	0	2	1	0	0	0	0	2	1	0	0
Barsham	0	0	0	0	0	0	0	0	0	0	0	0
Barton												
Bendish	0	0	0	0	0	0	0	0	0	0	0	0
Barton Turf	3	0	0	2	1	2	3	0	0	2	1	2
Barwick	0	0	0	0	0	0	0	0	0	0	0	0
Bawburgh	4	4	9	19	3	1	3	4	9	18	5	1
Bawdeswell	0	0	2	1	0	0	0	0	2	1	0	0
Bawsey	0	0	0	0	0	0	0	0	0	0	0	0
Beachamwell	0	0	0	0	0	0	0	0	0	0	0	0
Bedingham	1	0	0	0	0	0	0	0	0	0	0	1
Beeston Regis	0	0	0	1	0	0	0	0	0	1	0	0
Beeston St												
Andrew	0	0	0	0	1	0	0	1	0	0	0	0
Beeston With					_				_			
Bittering	0	0	0	0	0	0	0	0	0	0	0	0
Beetley	0	0	0	1	0	0	0	0	0	1	0	0
Beighton	0	0	1	3	0	0	0	0	1	3	0	0
Belaugh	0	0	0	2	0	0	0	0	0	2	0	0
Belton	0	0	1	0	0	0	0	0	1	0	0	0
Bergh Apton	0	1	0	2	1	0	0	1	0	1	1	1
Besthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Billingford	0	0	0	1	0	0	0	0	0	1	0	0
Binham	0	0	0	0	0	0	0	0	0	0	0	0
Bintree	0	1	0	0	0	0	0	0	0	0	1	0
Bircham	0	0	0	0	0	0	0	0	0	0	0	0
Bixley	1	1	1	6	0	1	0	1	1	6	0	2
Blakeney	0	0	0	0	0	0	0	0	0	0	0	0
Blickling	0	0	0	0	0	0	0	0	0	0	0	0
Blo' Norton	0	0	0	1	0	0	0	0	0	1	0	0
Blofield	14	10	61	159	16	7	8	16	57	155	18	13
Bodham	0	0	0	0	0	0	0	0	0	0	0	0
Booton	0	0	0	0	0	0	0	0	0	0	0	0
Boughton	0	0	0	0	0	0	0	0	0	0	0	0
Bracon Ash	2	3	4	15	1	0	1	3	4	15	0	2
Bradenham	0	0	0	1	0	0	0	0	0	1	0	0
Bradwell	1	0	1	0	0	0	1	0	1	0	0	0
Bramerton	3	2	5	19	4	1	3	2	5	19	4	1
Brampton	0	0	0	1	0	0	0	0	0	1	0	0
Brancaster	0	0	0	0	0	0	0	0	0	0	0	0

F ubile Coll			Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Brandiston	0	0	1	0	0	0	0	0	1	0	0	0
Bressingham	0	0	0	0	0	0	0	0	0	0	0	0
Brettenham	0	0	0	0	0	0	0	0	0	0	0	0
Bridgham	0	0	0	0	0	0	0	0	0	0	0	0
Briningham	0	0	0	0	0	0	0	0	0	0	0	0
Brinton	0	0	0	0	0	0	0	0	0	0	0	0
Brisley	0	0	0	0	0	0	0	0	0	0	0	0
Briston	0	0	1	3	0	0	0	0	1	3	0	0
Brockdish	0	0	0	0	0	0	0	0	0	0	0	0
Brooke	2	0	2	4	0	0	0	1	2	4	0	1
Broome	0	0	0	1	0	0	0	0	0	1	0	0
Brumstead	0	0	0	0	0	0	0	0	0	0	0	0
Brundall	17	35	104	176	28	14	8	46	92	177	26	25
Bunwell	0	1	0	0	0	0	0	1	0	0	0	0
Burgh And												
Tuttington	0	0	0	0	0	0	0	0	0	0	0	0
Burgh Castle	0	0	0	0	0	0	0	0	0	0	0	0
Burgh St Peter	0	0	0	0	0	0	0	0	0	0	0	0
Burnham												
Market	0	1	0	0	0	0	0	1	0	0	0	0
Burnham	0		_		0	0	0					
Norton	0	0	1	0	0	0	0	0	1	0	0	0
Burnham Overy	0	0	0	0	0	0	0	0	0	0	0	0
Burnham	U	0	0	0	0	0	0	0	0	0	0	0
Thorpe	0	0	0	0	0	0	0	0	0	0	0	0
Burston And		-	-	-								
Shimpling	0	0	0	0	0	0	0	0	0	0	0	0
Buxton With												
Lammas	0	2	3	2	0	0	0	1	3	2	0	1
Bylaugh	0	0	0	0	0	0	0	0	0	0	0	0
Caister-On-												
Sea	0	0	0	2	1	0	0	0	1	1	1	0
Caistor St Edmund	4	4	o	6	2	_	0	4	7	6	ာ	4
	1	1	8	6	2	0	0	1			3	1
Cantley	0	1	0	0	1	1	0	1	0	0	1	1
Carbrooke	0	0	1	1	0	0	0	1	0	1	0	0
Carleton Rode Carleton St	0	0	0	0	0	0	0	0	0	0	0	0
Peter	0	0	1	0	0	0	0	0	1	0	0	0
Castle Acre	0	0	0	0	0	0	0	0	0	0	0	0
Castle Rising	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	1	0	0	0	0	1	1	0	0
Caston	•	_			_		_	_		<u>'</u>		U

1 ublic Coll		•	Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Catfield	0	0	1	1	2	0	0	0	1	1	2	0
Cawston	0	0	0	4	0	0	0	0	0	4	0	0
Chedgrave	0	0	0	0	0	1	0	0	0	0	0	1
Choseley	0	0	0	0	0	0	0	0	0	0	0	0
Claxton	1	0	0	1	0	0	1	0	0	1	0	0
Clenchwarton	0	0	0	0	0	0	0	0	0	0	0	0
Cley Next The												
Sea	0	0	0	0	0	0	0	0	0	0	0	0
Cockley Cley	0	0	0	0	0	0	0	0	0	0	0	0
Colby	0	0	0	3	0	0	0	0	0	3	0	0
Colkirk	0	0	0	2	0	0	0	0	0	2	0	0
Colney	1	1	2	6	1	5	0	1	2	6	1	6
Coltishall	0	0	2	11	0	1	0	0	2	11	0	1
Congham	0	0	0	0	0	1	0	0	0	0	0	1
Corpusty	0	0	0	1	0	0	0	0	0	1	0	0
Costessey	53	76	311	586	87	36	42	89	284	583	90	61
Cranwich	0	0	0	0	0	0	0	0	0	0	0	0
Cranworth	0	0	0	0	0	0	0	0	0	0	0	0
Crimplesham	0	0	0	0	0	0	0	0	0	0	0	0
Cringleford	20	11	48	81	15	8	7	16	42	82	19	17
Cromer	7	1	3	8	2	0	1	1	3	8	2	6
Crostwick	0	0	0	0	0	0	0	0	0	0	0	0
Croxton	1	0	0	0	0	0	0	0	0	0	0	1
Denton	0	0	0	1	0	0	0	0	0	1	0	0
Denver	0	0	0	0	0	0	0	0	0	0	0	0
Deopham	0	0	0	0	1	0	0	0	0	0	1	0
Dereham	0	0	1	6	2	1	0	1	1	6	1	1
Dersingham	0	0	1	0	0	0	0	0	1	0	0	0
Dickleburgh												
And Rushall	0	0	0	0	0	0	0	0	0	0	0	0
Didlington	0	0	0	0	0	0	0	0	0	0	0	0
Dilham	0	0	0	0	0	1	0	0	0	0	0	1
Diss	1	1	0	3	0	0	0	1	0	3	0	1
Ditchingham	0	0	0	1	0	0	0	0	0	1	0	0
Docking	0	0	0	0	0	0	0	0	0	0	0	0
Downham	_	_		_	_	_	_			_	_	_
Market	0	0	1	0	0	0	0	0	1	0	0	0
Downham					0		^		_	0		_
West	0	0	0	0	0	0	0	0	122	0	0	0
Drayton	21	36	133	277	52	13	14	48	123	270	55	22
Dunton	0	0	0	0	0	0	0	0	0	0	0	0

			VSIS Q.7	'a					Q.7	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Earsham	0	1	0	1	0	0	0	1	0	1	0	0
East Beckham	0	0	0	0	0	0	0	0	0	0	0	0
East Carleton	0	2	3	7	0	1	1	1	2	7	0	2
East Rudham	0	0	0	0	0	0	0	0	0	0	0	0
East Ruston	0	0	0	0	0	0	0	0	0	0	0	0
East												
Tuddenham	0	0	0	3	0	1	0	0	0	3	0	1
East Walton	0	0	0	0	0	0	0	0	0	0	0	0
East Winch	0	0	0	0	0	0	0	0	0	0	0	0
Easton	3	3	33	56	4	1	2	5	33	52	5	3
Edgefield	0	0	1	1	1	0	0	0	1	1	1	0
Ellingham	0	0	1	0	0	0	0	0	1	0	0	0
Elsing	0	0	0	0	0	0	0	0	0	0	0	0
Emneth	0	0	0	0	0	0	0	0	0	0	0	0
Erpingham	0	0	1	1	1	0	0	0	1	1	1	0
Fakenham	0	3	8	9	0	1	0	5	6	9	0	1
Felbrigg	0	0	0	0	0	0	0	0	0	0	0	0
Felmingham	0	0	1	1	0	0	0	0	1	1	0	0
Felthorpe	1	5	21	38	7	2	1	8	16	38	8	3
Feltwell	0	0	0	0	0	0	0	0	0	0	0	0
Field Dalling	0	0	0	0	0	0	0	0	0	0	0	0
Filby	1	0	0	1	0	0	1	0	0	1	0	0
Fincham	0	0	0	0	0	0	0	0	0	0	0	0
Fleggburgh	0	0	0	1	0	0	0	0	0	1	0	0
Flitcham With	_	_	_	_	_		_	_	_	_	_	_
Appleton	0	0	0	0	0	0	0	0	0	0	0	0
Flordon	0	0	5	6	0	0	0	0	5	5	0	1
Fordham	0	0	0	0	0	0	0	0	0	0	0	0
Forncett	0	1	1	1	0	0	0	1	1	1	0	0
Foulden	0	0	0	0	0	0	0	0	0	0	0	0
Foulsham	1	1	0	0	0	0	0	1	1	0	0	0
Foxley	0	0	0	0	0	0	0	0	0	0	0	0
Framingham	0		0.4	0.5	0	0	_	_	00	0.0	0	0
Earl	2	6	24	35	3	3	5	5	22	36	3	2
Framingham Piget	2	1	1	1	0	0	1	1	0	4	0	2
Pigot Fransham	0	0	0	4 0	0	0	0	0	0	0	0	0
Freethorpe	0	0	0	1	0	0	0	0	0	1	0	0
Frettenham	1	4	18	37	7	0	1	5	18	36	7	0
	0	0	0	0	0	0	0	0	0	0	0	0
Fring Fritton And St	U	U	U	U	U	U	U	U	U	U	U	U
Olaves	0	0	0	0	0	0	0	0	0	0	0	0

			Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Fulmodeston	0	0	0	3	0	0	0	0	0	3	0	0
Garboldisham	0	0	0	0	0	0	0	0	0	0	0	0
Garvestone	1	0	1	0	0	0	1	1	0	0	0	0
Gateley	0	0	0	1	0	0	0	0	0	1	0	0
Gayton	0	0	0	0	0	0	0	0	0	0	0	0
Geldeston	0	0	0	0	0	0	0	0	0	0	0	0
Gillingham	0	0	0	0	0	0	0	0	0	0	0	0
Gimingham	0	0	0	0	0	0	0	0	0	0	0	0
Gissing	0	0	0	0	0	0	0	0	0	0	0	0
Gooderstone	0	0	0	0	0	0	0	0	0	0	0	0
Great And Little Plumstead	8	23	67	187	16	11	6	25	67	182	18	14
Great												
Cressingham	0	0	0	0	0	0	0	0	0	0	0	0
Great Dunham	0	0	0	0	0	0	0	0	0	0	0	0
Great												
Ellingham	0	0	0	0	0	0	0	0	0	0	0	0
Great	0	0	0	0	•	_	4		0	0		
Massingham	0	0	0	0	0	1	1	0	0	0	0	0
Great Melton	0	1	4	4	0	0	0	2	3	4	0	0
Great Moulton	0	1	0	1	0	0	0	1	0	0	0	1
Great Snoring	0	0	0	0	0	0	0	0	0	0	0	0
Great Witchingham	1	0	0	2	0	0	0	0	0	2	0	1
Great Yarmouth	3	1	9	5	0	0	0	5	7	5	0	1
Gresham	0	0	0	0	0	0	0	0	0	0	0	0
Gressenhall	0	0	0	1	0	0	0	0	0	1	0	0
Grimston	0	0	0	0	0	0	0	0	0	0	0	0
Griston	0	0	0	0	0	0	0	0	0	0	0	0
Guestwick	0	0	0	0	0	0	0	0	0	0	0	0
Guist	0	0	0	0	0	0	0	0	0	0	0	0
Gunthorpe	1	0	1	3	0	0	0	0	1	3	0	1
Haddiscoe	0	0	0	0	0	0	0	0	0	0	0	0
Hainford	1	1	6	6	0	0	1	1	5	6	0	1
Hales	0	0	1	0	0	0	0	0	1	0	0	0
Halvergate	0	1	0	1	0	0	0	1	0	1	0	0
Hanworth	0	1	0	0	0	0	0	1	0	0	0	0
	1		0	1	1	0	0	2	0	1	1	0
Happisburgh	-	1			-					•		
Hardingham	0	0	0	0	0	0	0	0	0	0	0	0
Harling	0	0	0	0	0	0	0	0	0	0	0	0

r ublic Con			Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Harpley	0	0	0	0	0	0	0	0	0	0	0	0
Haveringland	0	0	3	2	0	0	0	0	3	2	0	0
Heacham	0	0	1	0	0	0	0	0	1	0	0	0
Heckingham	0	0	0	0	0	0	0	0	0	0	0	0
Hedenham	0	0	0	0	0	0	0	0	0	0	0	0
Helhoughton	0	0	0	0	0	0	0	0	0	0	0	0
Hellesdon	53	85	284	578	78	26	34	102	265	568	86	49
Hellington	0	0	0	1	0	0	0	0	0	1	0	0
Hemblington	0	2	8	17	1	1	0	1	9	16	1	2
Hempnall	0	0	0	0	1	0	0	0	0	0	1	0
Hempstead	0	0	2	0	0	0	0	0	2	0	0	0
Hempton	0	0	0	1	0	0	0	0	0	1	0	0
Hemsby	0	0	1	0	1	0	0	0	1	0	1	0
Hethersett	16	29	104	209	30	14	8	39	98	209	30	18
Hevingham	1	0	1	3	0	0	1	0	1	3	0	0
Heydon	0	0	0	0	0	0	0	0	0	0	0	0
Hickling	0	0	0	1	0	0	0	0	0	1	0	0
High Kelling	1	1	2	1	0	1	0	1	3	1	0	1
Hilborough	0	0	0	0	0	0	0	0	0	0	0	0
Hilgay	0	0	0	0	0	0	0	0	0	0	0	0
Hillington	0	0	0	0	0	0	0	0	0	0	0	0
Hindolveston	0	0	0	0	0	0	0	0	0	0	0	0
Hindringham	0	0	0	0	0	0	0	0	0	0	0	0
Hingham	1	0	4	0	0	0	1	1	3	0	0	0
Hockering	2	5	7	23	2	1	1	6	6	23	2	2
Hockham	0	0	0	1	1	0	0	0	0	1	1	0
Hockwold-												
Cum-Wilton	0	0	0	0	0	0	0	0	0	0	0	0
Hoe	0	0	0	0	0	0	0	0	0	0	0	0
Holkham	0	0	0	0	0	0	0	0	0	0	0	0
Holme Hale	0	0	0	2	0	0	0	0	0	2	0	0
Holme-Next-									_			
The-Sea	1	0	0	0	0	0	0	0	0	0	0	1
Holt	1	1	2	4	0	2	1	2	2	4	0	1
Holverston	0	0	0	0	0	0	0	0	0	0	0	0
Honing	2	0	1	1	0	0	2	0	1	1	0	0
Honingham	2	6	9	8	3	1	2	5	8	8	3	3
Hopton-On-		_			_		_	_	_	^	_	_
Sea	0	0	0	0	0	0	0	0	0	0	0	0
Horning	0	0	1	1	1	0	0	0	1	1	1	0
Horningtoft	0	0	0	0	0	0	0	0	0	0	0	0

Public Con			Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Horsey	0	0	0	0	0	0	0	0	0	0	0	0
Horsford	6	25	76	178	18	9	10	23	74	172	18	15
Horsham St												
Faith And												
Newton St Faith	9	14	74	106	14	6	10	16	68	106	14	9
Horstead With	9	14	74	100	14	O	10	10	00	100	14	9
Stanninghall	0	0	1	5	0	0	0	0	1	5	0	0
Houghton	0	0	0	0	0	0	0	0	0	0	0	0
Hoveton	1	0	1	5	1	0	1	0	1	5	1	0
Howe	0	1	0	1	0	0	0	0	0	1	0	1
Hunstanton	0	0	1	0	0	0	0	0	1	0	0	0
Ickburgh	0	0	0	0	0	0	0	0	0	0	0	0
Ingham	0	0	0	0	0	0	0	0	0	0	0	0
Ingoldisthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Ingworth	0	0	0	0	0	0	0	0	0	0	0	0
Itteringham	0	0	0	0	0	0	0	0	0	0	0	0
Kelling	0	0	0	0	0	0	0	0	0	0	0	0
Kempstone	0	0	0	0	0	0	0	0	0	0	0	0
Kenninghall	0	0	0	0	0	0	0	0	0	0	0	0
Keswick	4	6	9	15	5	0	5	7	5	14	4	4
Ketteringham	0	1	2	11	0	0	1	0	2	10	1	0
Kettlestone	2	0	0	0	0	0	0	0	0	0	0	2
Kilverstone	0	0	0	0	0	0	0	0	0	0	0	0
Kimberley	0	0	0	0	0	0	0	0	0	0	0	0
King's Lynn	0	0	1	3	0	0	0	0	1	3	0	0
Kirby Bedon	3	2	2	11	0	0	3	0	2	11	0	2
Kirby Cane	0	0	0	1	0	0	0	0	0	1	0	0
Kirstead	0	0	1	0	0	0	0	0	1	0	0	0
Knapton	0	0	0	0	0	1	0	0	0	0	0	1
Langham	0	0	0	0	0	0	0	0	0	0	0	0
Langley With				4	•				•	4		
Hardley	0	0	0	1	0	0	0	0	0	1	0	0
Lessingham	0	1	0	0	0	0	0	1	0	0	0	0
Letheringsett With Glandford	0	0	0	0	0	0	0	0	0	0	0	0
Lexham	0	1	0	0	1	0	0	1	0	0	1	0
Leziate	0	0	0	0	0	0	0	0	0	0	0	0
Lingwood And	U	U	U	U	U	0	U	0	U	U	0	0
Burlingham	1	1	1	1	3	0	1	0	1	1	3	1
Litcham	0	0	0	0	0	0	0	0	0	0	0	0
Little	0	0	0	0	0	0	0	0	0	0	0	0

1 45110 0011			Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Barningham												
Little												
Cressingham	0	0	0	0	0	0	0	0	0	0	0	0
Little Dunham	0	0	0	0	0	0	0	0	0	0	0	0
Little												
Ellingham	0	0	0	0	0	0	0	0	0	0	0	0
Little	0	0	0	0	0	0	0	0	0	0	0	
Massingham	0	0	0	0	0	0	0	0	0	0	0	0
Little Melton	6	3	17	48	4	1	2	4	14	48	4	7
Little Snoring Little	0	0	1	0	0	0	0	1	0	0	0	0
Witchingham	0	0	1	0	0	0	0	0	1	0	0	0
Loddon	0	0	0	5	0	0	0	0	0	5	0	0
Long Stratton	9	10	51	94	15	6	5	17	46	89	17	11
Longham	0	0	0	0	0	0	0	0	0	0	0	0
Ludham	0	0	0	2	<u>0</u> 1	0	0	0	0	2	1	0
Lynford	0	0	0	0	0	0	0	0	0	0	0	0
Lyng	1	0	0	0	0	0	0	1	0	0	0	0
Marham	0	0	0	0	0	0	0	0	0	0	0	0
Marlingford	3	3	10	20	4	1	1	5	10	20	4	1
Marsham	0	0	0	20	0	0	0	0	0	20	0	0
Marshland St	0	0	U		<u> </u>	0	0	0	0		0	0
James	0	0	1	0	0	0	0	0	1	0	0	0
Martham	0	0	0	1	0	0	0	0	0	1	0	0
Matlask	0	0	0	0	0	0	0	0	0	0	0	0
Mattishall	0	1	0	2	0	0	0	1	0	2	0	0
Mautby	0	0	0	0	0	0	0	0	0	0	0	0
Melton		-	-	-								
Constable	0	0	0	0	0	0	0	0	0	0	0	0
Merton	0	0	0	0	0	0	0	0	0	0	0	0
Methwold	0	0	0	0	0	0	0	0	0	0	0	0
Middleton	0	0	0	1	0	0	0	0	0	1	0	0
Mileham	0	0	0	1	0	0	0	0	0	1	0	0
Morley	0	1	0	0	0	0	0	1	0	0	0	0
Morningthorpe	0	0	0	2	0	0	0	0	0	2	0	0
Morston	0	0	0	0	0	0	0	0	0	0	0	0
Morton On The												
Hill	0	2	4	8	0	0	0	3	2	8	1	0
Mulbarton	6	8	48	82	10	3	3	12	44	76	13	9
Mundesley	1	0	0	2	0	0	1	0	0	2	0	0
Mundford	0	0	0	0	0	0	0	0	0	0	0	0
Mundham	0	0	0	0	0	0	0	0	0	0	0	0

Public Con			Q.7	7a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Narborough	0	0	1	1	0	0	0	0	1	1	0	0
Narford	0	0	0	0	0	0	0	0	0	0	0	0
Neatishead	0	0	1	2	0	1	0	0	1	2	0	1
Necton	0	0	0	1	0	0	0	0	0	1	0	0
Needham	0	0	0	0	0	0	0	0	0	0	0	0
New												
Buckenham	0	0	0	1	0	0	0	0	0	1	0	0
Newton By												
Castle Acre	0	0	0	0	0	0	0	0	0	0	0	0
Newton		_			_			_				
Flotman	1	5	18	39	2	2	0	5	17	39	4	2
Nordelph	0	0	0	0	0	0	0	0	0	0	0	0
North Creake	0	0	2	0	0	0	0	0	2	0	0	0
North Elmham	0	0	0	1	0	0	0	0	0	1	0	0
North Lopham	0	0	0	0	0	0	0	0	0	0	0	0
North		_			_			_				
Pickenham	0	0	0	0	0	0	0	0	0	0	0	0
North Runcton	0	0	0	0	0	0	0	0	0	0	0	0
North	0	0	0	0	0	_	0	0	0			
Tuddenham North	0	0	0	0	0	0	0	0	0	0	0	0
Walsham	1	2	1	11	1	0	0	1	1	11	2	1
North Wootton	0	0	0	0	0	0	0	0	0	0	0	0
Northrepps	0	1	0	1	0	0	0	0	0	1	0	1
Northwold	0	0	0	0	0	0	0	0	0	0	0	0
Norton	U	U	U	U	U	U	U	U	U	U	U	U
Subcourse	0	0	0	0	0	0	0	0	0	0	0	0
Norwich	823	766	1504	2878	564	211	485	869	1378	2793	630	591
Old	020	700	1007	2010	304	211	700	000	1070	2700	000	331
Buckenham	0	0	0	2	1	0	0	0	0	2	1	0
Old Catton	44	42	138	323	39	8	35	55	119	312	44	29
Old				020						0.2		
Hunstanton	0	0	0	0	0	0	0	0	0	0	0	0
Ormesby St												
Margaret With												
Scratby	0	0	1	0	1	0	0	0	1	0	1	0
Ormesby St												
Michael	0	0	0	0	0	0	0	0	0	0	0	0
Oulton	0	0	2	0	0	0	0	0	2	0	0	0
Outwell	0	0	0	0	0	0	0	0	0	0	0	0
Overstrand	0	0	0	2	0	0	0	0	0	2	0	0
Ovington	0	0	0	0	0	0	0	0	0	0	0	0
Oxborough	0	0	0	0	0	0	0	0	0	0	0	0

			Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Paston	0	0	0	1	0	0	0	0	0	1	0	0
Pentney	0	0	0	0	0	0	0	0	0	0	0	0
Plumstead	0	0	0	0	1	0	0	0	0	0	1	0
Poringland	12	19	67	142	19	4	4	21	63	140	19	16
Postwick	0	3	11	14	1	0	1	3	10	13	1	1
Potter												
Heigham	0	0	0	2	0	0	0	0	0	2	0	0
Pudding												
Norton	0	0	0	0	0	0	0	0	0	0	0	0
Pulham Market	1	0	0	0	0	0	1	0	0	0	0	0
Pulham St												
Mary	0	0	0	0	0	0	0	0	0	0	0	0
Quidenham	0	0	0	0	0	0	0	0	0	0	0	0
Rackheath	9	13	62	154	20	6	11	17	58	147	25	6
Raveningham	0	0	0	0	0	0	0	0	0	0	0	0
Raynham	0	0	0	0	0	0	0	0	0	0	0	0
Redenhall												
With Harleston	0	1	0	2	0	0	0	1	0	2	0	0
Reedham	0	0	1	0	2	0	0	0	1	0	2	0
Reepham	1	1	2	4	2	0	2	2	1	4	1	0
Repps With												
Bastwick	0	1	0	0	0	0	0	1	0	0	0	0
Riddlesworth	0	0	0	0	0	0	0	0	0	0	0	0
Ringland	2	6	11	22	1	8	1	6	12	21	1	9
Ringstead	0	0	0	0	0	0	0	0	0	0	0	0
Rockland St												
Mary	1	1	3	1	1	1	1	2	3	1	0	1
Rocklands	0	0	0	0	0	0	0	0	0	0	0	0
Rollesby	0	0	0	0	0	0	0	0	0	0	0	0
Roudham	0	0	0	0	0	0	0	0	0	0	0	0
Rougham	0	0	0	0	0	0	0	0	0	0	0	0
Roughton	0	0	1	0	0	1	0	0	1	0	0	1
Roydon	0	0	0	0	0	0	0	0	0	0	0	0
Roydon	0	0	0	1	0	0	0	0	0	1	0	0
Runcton												
Holme	0	0	0	0	0	0	0	0	0	0	0	0
Runhall	1	1	1	0	0	0	1	1	1	0	0	0
Runton	0	0	0	2	1	0	0	0	1	2	0	0
Ryburgh	0	0	3	2	0	0	0	2	1	2	0	0
Ryston	0	0	0	0	0	0	0	0	0	0	0	0
Saham Toney	0	0	0	0	0	0	0	0	0	0	0	0
Salhouse	0	2	5	8	1	0	0	3	3	9	1	0

Public Consultation Analysis
Norwich Area Transportation Strategy
Supplement

	Q.7a 1 2 3 4 5 0								Q.7	b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Sall	0	0	0	1	0	0	0	0	0	1	0	0
Salthouse	0	0	0	0	0	0	0	0	0	0	0	0
Sandringham	0	0	0	0	0	0	0	0	0	0	0	0
Saxlingham												
Nethergate	0	0	1	0	0	0	0	0	1	0	0	0
Scarning	2	0	1	2	0	0	3	0	0	2	0	0
Scole	0	0	0	1	0	0	0	0	0	1	0	0
Scottow	1	1	0	1	0	0	0	1	0	1	0	1
Scoulton	0	0	0	0	0	0	0	0	0	0	0	0
Sculthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Sea Palling	0	0	0	0	0	0	0	0	0	0	0	0
Sedgeford	0	0	0	0	0	0	0	0	0	0	0	0
Seething	0	0	1	0	0	0	0	0	1	0	0	0
Shelfanger	0	0	0	0	0	0	0	0	0	0	0	0
Shelton	0	0	0	0	0	0	0	0	0	0	0	0
Sheringham	3	1	3	4	1	1	3	2	2	3	2	1
Shernborne	0	0	0	0	0	0	0	0	0	0	0	0
Shipdham	0	0	0	0	0	0	0	0	0	0	0	0
Shotesham	1	1	1	2	0	0	1	0	2	1	0	1
Shouldham	0	0	0	0	0	0	0	0	0	0	0	0
Shouldham												
Thorpe	0	0	0	0	0	0	0	0	0	0	0	0
Shropham	0	0	0	0	0	0	0	0	0	0	0	0
Sidestrand	0	0	0	0	0	0	0	0	0	0	0	0
Sisland	0	0	0	1	0	0	0	0	0	1	0	0
Skeyton	0	0	0	0	0	0	0	0	0	0	0	0
Sloley	0	0	0	0	0	0	0	0	0	0	0	0
Smallburgh	0	0	0	0	0	0	0	0	0	0	0	0
Snetterton	0	0	0	0	0	0	0	0	0	0	0	0
Snettisham	0	0	0	0	0	0	0	0	0	0	0	0
Somerton	0	0	0	0	0	0	0	0	0	0	0	0
South Acre	0	0	0	0	0	0	0	0	0	0	0	0
South Creake	1	0	0	0	0	0	1	0	0	0	0	0
South Lopham	0	0	0	0	0	0	0	0	0	0	0	0
South				-					-			
Pickenham	0	0	0	0	0	0	0	0	0	0	0	0
South												
Walsham	0	0	0	2	0	0	0	0	0	2	0	0
South Wootton	0	0	0	0	0	0	0	0	0	0	0	0
Southery	0	0	0	0	0	0	0	0	0	0	0	0
Southrepps	0	0	0	1	0	0	0	0	0	1	0	0

Public Con			Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Sparham	0	0	0	1	0	0	0	0	0	1	0	0
Spixworth	15	18	84	205	18	5	12	18	86	196	17	16
Sporle With												
Palgrave	0	0	0	1	0	0	0	0	0	1	0	0
Sprowston	54	98	361	690	92	38	35	87	353	673	103	82
Stalham	1	0	1	4	0	0	0	0	2	4	0	0
Stanfield	0	0	0	0	0	0	0	0	0	0	0	0
Stanford	0	0	0	0	0	0	0	0	0	0	0	0
Stanhoe	0	0	0	0	0	0	0	0	0	0	0	0
Starston	0	0	0	0	0	0	0	0	0	0	0	0
Stibbard	0	0	1	0	0	0	0	0	1	0	0	0
Stiffkey	0	0	0	0	0	0	0	0	0	0	0	0
Stockton	0	0	0	0	0	0	0	0	0	0	0	0
Stody	0	0	0	0	0	0	0	0	0	0	0	0
Stoke Ferry	1	0	0	0	0	0	1	0	0	0	0	0
Stoke Holy												
Cross	3	6	27	56	7	4	3	8	24	54	8	6
Stokesby With				_			_			_		_
Herringby	0	0	0	0	0	0	0	0	0	0	0	0
Stow Bardolph	0	0	0	0	0	0	0	0	0	0	0	0
Stow Bedon	0	0	0	0	0	0	0	0	0	0	0	0
Stradsett	0	0	0	0	0	0	0	0	0	0	0	0
Stratton	0		0		4	0	0	0	0	4	4	0
Strawless	0	0	0	1	1	0	0	0	0	1	1	0
Strumpshaw	0	0	1	2	0	0	0	0	1	1	0	1
Sturston	0	0	0	0	0	0	0	0	0	0	0	0
Suffield	0	0	0	-	0	0	0	-	0	0	0	0
Surlingham	0	6	12	22	2	2	2	5	10	23	2	2
Sustead	0	0	0	0	0	0	0	0	0	0	0	0
Sutton	0	0	0	2	0	0	0	0	0	2	0	0
Swaffham	1	0	1	1	1	0	1	1	0	1	1	0
Swafield	0	0	0	0	1	0	0	0	0	0	1	0
Swainsthorpe	4	3	9	17	1	0	3	4	6	17	2	2
Swannington	0	2	1	3	0	0	0	1	2	3	0	0
Swanton Abbott	0	0	0	0	0	0	0	0	0	0	0	0
Swanton	U	U	U	U	U	0	U	U	U	U	U	U
Morley	0	0	0	0	0	0	0	0	0	0	0	0
Swanton												
Novers	0	1	0	0	0	0	0	0	1	0	0	0
Swardeston	5	4	8	18	2	0	2	4	9	17	3	2
Syderstone	0	0	0	0	0	0	0	0	0	0	0	0

Public Con			Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Tacolneston	1	0	1	0	0	0	0	0	1	0	0	1
Tasburgh	0	4	15	46	8	0	0	2	14	45	9	3
Tattersett	0	0	0	0	0	0	0	0	0	0	0	0
Taverham	52	91	269	635	56	21	31	96	258	618	60	61
Terrington St												
Clement	0	0	0	1	0	0	0	0	0	1	0	0
Terrington St	0	0			0	0	0	0		0	0	^
John	0	0	0	0	0	0	0	3	0	0	0	0
Tharston	2	5	8	22	2	0	3		9	20		2
Themelthorpe	0	0	1	0	0	0	0	0	1	0	0	0
Thetford	0	0	0	1	0	0	0	0	0	1	0	0
Thompson	0	0	0	0	0	0	0	0	0	0	0	0
Thornage	0	0	0	0	0	0	0	0	0	0	0	0
Thornham	0	0	0	0	0	1	0	0	0	0	0	1
Thorpe Market	0	2	0	1	0	0	0	1	0	1	0	1
Thorpe St Andrew	76	85	321	646	72	26	40	110	315	621	85	55
Thurlton	0	0	0	0	0	0	0	0	0	021	0	0
Thurne	0	0	0	0	0	0	0	0	0	0	0	0
Thurning	0	0	0	0	0	0	0	0	0	0	0	0
Thursford	0	0	0	1	0	0	0	0	0	1	0	0
Thurton	0	0	1	0	0	0	0	0	1	0	0	0
Thwaite	0	0	0	0	0	0	0	0	0	0	0	0
Tibenham	0	0	1	0	0	0	0	1	0	0	0	0
Tilney All			•					•				
Saints	0	0	0	0	0	0	0	0	0	0	0	0
Tilney St												
Lawrence	0	0	0	0	0	0	0	0	0	0	0	0
Titchwell	0	0	0	0	0	0	0	0	0	0	0	0
Tittleshall	0	0	0	0	0	0	0	0	0	0	0	0
Tivetshall St												
Margaret	0	0	1	0	0	0	0	0	1	0	0	0
Tivetshall St	0	0			0	0	0	0		4	0	_
Mary	0	0	0	1	0	0	0	0	0	1	0	0
Toft Monks	0	0	0	0	0	0	0	0	0	0	0	0
Topcroft	0	1	1	0	0	0	1	0	1	0	0	0
Tottenhill	0	0	0	0	0	0	0	0	0	0	0	0
Tottington	0	0	0	0	0	0	0	0	0	0	0	0
Trimingham	0	0	0	0	0	0	0	0	0	0	0	0
Trowse With Newton	3	4	10	18	1	2	0	6	9	17	3	3
Trunch	0	0	10	10	0	0	0	0	1	17	0	0
TTUTICIT	U	U	I	I	U	U	U	U	I	I	U	U

		Q.7a 1 2 3 4 5 0							Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Tunstead	0	0	0	3	0	0	0	1	0	2	0	0
Twyford	0	0	0	0	0	0	0	0	0	0	0	0
Upper												
Sheringham	0	0	0	0	0	0	0	0	0	0	0	0
Upton With												
Fishley	0	0	0	1	1	0	0	1	0	1	0	0
Upwell	0	0	0	0	0	0	0	0	0	0	0	0
Wacton	0	0	0	1	0	0	0	0	0	1	0	0
Walpole	0	0	0	0	0	0	0	0	0	0	0	0
Walpole Cross												
Keys	0	0	0	0	0	0	0	0	0	0	0	0
Walpole												
Highway	0	0	0	0	0	0	0	0	0	0	0	0
Walsingham	0	0	0	0	0	0	0	0	0	0	0	0
Walsoken	0	0	0	0	0	0	0	0	0	0	0	0
Warham	0	0	0	0	0	0	0	0	0	0	0	0
Watlington	0	1	0	0	0	0	0	0	0	0	0	1
Watton	0	2	0	3	0	0	0	1	0	3	0	1
Weasenham												
All Saints	0	0	0	0	0	0	0	0	0	0	0	0
Weasenham												
St Peter	0	0	0	0	0	0	0	0	0	0	0	0
Weeting-With-	_	_	_	_	_		_	_	_	_	_	_
Broomhill	0	0	0	0	0	1	0	1	0	0	0	0
Wellingham	0	0	0	0	0	0	0	0	0	0	0	0
Wells-Next-								_		_		
The-Sea	0	0	2	2	1	0	0	1	1	2	1	0
Welney	0	0	0	0	0	0	0	0	0	0	0	0
Wendling	0	0	0	0	0	0	0	0	0	0	0	0
Wereham	0	0	0	0	0	0	0	0	0	0	0	0
West Acre	0	0	0	0	0	0	0	0	0	0	0	0
West Beckham	0	1	0	0	0	0	0	0	1	0	0	0
West Caister	0	0	0	0	0	0	0	0	0	0	0	0
West Dereham	0	0	0	0	0	0	0	0	0	0	0	0
West Rudham	0	0	0	1	0	1	0	0	0	1	0	1
West Walton	0	0	0	0	0	0	0	0	0	0	0	0
West Winch	0	0	0	0	0	0	0	0	0	0	0	0
Weston	-	-	-	-								
Longville	0	3	2	5	0	3	0	1	2	7	0	3
Westwick	0	0	0	0	0	0	0	0	0	0	0	0
Weybourne	0	0	0	1	0	0	0	0	1	0	0	0
Wheatacre	0	0	0	0	0	0	0	0	0	0	0	0

			Q.7	'a					Q.7	'b		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Whinburgh	0	0	0	0	0	0	0	0	0	0	0	0
Whissonsett	0	0	0	2	0	0	0	0	0	2	0	0
Wicklewood	0	0	0	3	0	0	0	0	0	3	0	0
Wickmere	0	0	1	0	0	0	0	0	1	0	0	0
Wiggenhall St Germans	0	0	0	0	0	0	0	0	0	0	0	0
Wiggenhall St Mary Magdalen	0	0	0	0	0	0	0	0	0	0	0	0
Wighton	0	0	1	0	0	0	0	1	0	0	0	0
Wimbotsham	0	0	0	0	0	0	0	0	0	0	0	0
Winfarthing	0	0	1	0	0	0	0	0	1	0	0	0
Winterton-On-	0	•	0	•	•	•	0	0	•	0	0	•
Sea	0	0	0	0	0	0	0	0	0	0	0	0
Witton	1	0	0	0	0	0	0	1	0	0	0	0
Wiveton	0	0	0	0	0	0	0	0	0	0	0	0
Wood Dalling	0	1	0	0	0	0	0	1	0	0	0	0
Wood Norton	1	0	0	2	0	0	0	0	0	2	0	1
Woodbastwick	0	0	0	2	0	1	0	0	0	2	0	1
Woodton	0	0	0	0	0	0	0	0	0	0	0	0
Wormegay	0	0	0	<u>0</u>	0	0	0	0	2	<u>0</u> 1	0	0
Worstead Wortwell	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	1
Wramplingham Wreningham	0	0	1	0	0	0	0	0	1	0	0	0
Wretham	0	0	0	0	0	0	0	0	0	0	0	0
Wretton	0	0	0	0	0	0	0	0	0	0	0	0
Wroxham	4	1	7	9	0	1	3	4	4	9	0	2
Wymondham	32	55	183	359	52	13	20	55	177	339	56	47
Yaxham	0	0	0	339	0	1	0	1	0	339	0	0
Yelverton	0	1	1	1	0	0	0	1	1	1	0	0
I CIVELLOII	U	I	I	I	U	U	U	I	I	I	U	U

## 2.4 Table 4 Question 7c and Question 7d Results by Parish

Q.7c Do you support workplace parking charging within 5 years? Q.7d Do you support workplace parking charging within 5 to 10 years?

Key1 Strongly Support3 Strongly Oppose2 Support5 No Strong View3 Oppose0 No Response

	Q.7c						Q.7d					
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Acle	1	0	2	5	3	0	0	0	1	5	3	2
Alburgh	0	0	0	1	0	0	0	0	0	1	0	0
Alby With												
Thwaite	0	0	0	0	0	0	0	0	0	0	0	0
Aldborough	0	2	1	0	0	0	1	0	1	0	0	1
Aldeby	0	0	0	0	0	0	0	0	0	0	0	0
Alderford	0	1	0	0	1	0	0	1	0	0	1	0
Alpington	0	0	0	0	0	0	0	0	0	0	0	0
Anmer	0	0	0	0	0	0	0	0	0	0	0	0
Antingham	0	0	0	1	0	0	0	0	0	1	0	0
Ashby St Mary	0	0	0	2	0	2	0	1	0	2	0	1
Ashby With												
Oby	0	0	0	0	0	1	0	0	0	0	0	1
Ashill	0	0	0	0	0	0	0	0	0	0	0	0
Ashmanhaugh	0	0	1	0	0	0	0	0	1	0	0	0
Ashwellthorpe	1	1	1	1	0	0	0	1	1	1	0	1
Aslacton	0	0	0	1	0	0	0	0	0	1	0	0
Attleborough	2	0	0	2	1	0	2	0	0	2	1	0
Attlebridge	0	0	5	7	0	1	0	0	4	7	1	1
Aylmerton	0	0	1	0	0	0	0	1	0	0	0	0
Aylsham	3	6	2	14	3	2	0	4	3	13	5	5
Baconsthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Bacton	0	1	0	0	1	0	0	0	0	0	1	1
Bagthorpe With Barmer	0	0	0	0	0	0	0	0	0	0	0	<b>C</b>
Banham			0	1				0		0	0	0
	0	0			0	0	0		0	1		
Barford	0	0	0	2	0	0	0	0	1	1	0	0

			Q.7	'C					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Barnham												
Broom	0	0	0	1	2	0	0	0	0	1	2	0
Barsham	0	0	0	0	0	0	0	0	0	0	0	0
Barton												
Bendish	0	0	0	0	0	0	0	0	0	0	0	0
Barton Turf	2	0	0	2	2	2	2	0	0	2	2	2
Barwick	0	0	0	0	0	0	0	0	0	0	0	0
Bawburgh	4	5	7	14	9	1	4	7	4	14	10	1
Bawdeswell	0	0	2	1	0	0	0	0	2	1	0	0
Bawsey	0	0	0	0	0	0	0	0	0	0	0	0
Beachamwell	0	0	0	0	0	0	0	0	0	0	0	0
Bedingham	0	0	0	0	0	1	0	1	0	0	0	0
Beeston Regis	0	0	0	1	0	0	0	0	0	1	0	0
Beeston St												
Andrew	0	0	1	0	0	0	0	0	1	0	0	0
Beeston With												
Bittering	0	0	0	0	0	0	0	0	0	0	0	0
Beetley	0	0	0	1	0	0	0	0	0	1	0	0
Beighton	0	0	1	3	0	0	0	0	1	3	0	0
Belaugh	0	0	0	1	1	0	0	0	0	2	0	0
Belton	0	0	1	0	0	0	0	0	1	0	0	0
Bergh Apton	0	1	0	2	1	0	0	0	0	2	1	1
Besthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Billingford	0	0	0	1	0	0	0	0	0	1	0	0
Binham	0	0	0	0	0	0	0	0	0	0	0	0
Bintree	0	0	0	0	1	0	0	0	0	0	1	0
Bircham	0	0	0	0	0	0	0	0	0	0	0	0
Bixley	1	2	1	4	1	1	0	2	1	4	1	2
Blakeney	0	0	0	0	0	0	0	0	0	0	0	0
Blickling	0	0	0	0	0	0	0	0	0	0	0	0
Blo' Norton	0	0	0	0	1	0	0	0	0	0	1	0
Blofield	19	29	59	119	32	9	12	28	57	118	32	20
Bodham	0	0	0	0	0	0	0	0	0	0	0	0
Booton	0	0	0	0	0	0	0	0	0	0	0	0
Boughton	0	0	0	0	0	0	0	0	0	0	0	0
Bracon Ash	1	3	4	14	2	1	1	3	4	13	2	2
Bradenham	0	0	0	1	0	0	0	0	0	1	0	0
Bradwell	0	0	1	1	0	0	0	0	1	1	0	0
Bramerton	2	6	4	13	7	2	2	5	4	13	7	3
Brampton	0	0	0	1	0	0	0	0	0	13	0	0
•	0	0	0	0	0	0		0		0	0	0
Brancaster	U	U	U	U	U	U	0	U	0	U	U	U

			Q.7	'C					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Brandiston	0	0	1	0	0	0	0	0	1	0	0	0
Bressingham	0	0	0	0	0	0	0	0	0	0	0	0
Brettenham	0	0	0	0	0	0	0	0	0	0	0	0
Bridgham	0	0	0	0	0	0	0	0	0	0	0	0
Briningham	0	0	0	0	0	0	0	0	0	0	0	0
Brinton	0	0	0	0	0	0	0	0	0	0	0	0
Brisley	0	0	0	0	0	0	0	0	0	0	0	0
Briston	0	1	0	2	1	0	0	1	0	2	1	0
Brockdish	0	0	0	0	0	0	0	0	0	0	0	0
Brooke	1	0	3	4	0	0	0	0	3	4	0	1
Broome	0	0	0	1	0	0	0	0	0	1	0	0
Brumstead	0	0	0	0	0	0	0	0	0	0	0	0
Brundall	31	47	97	142	41	16	20	50	88	143	45	28
Bunwell	0	0	1	0	0	0	0	0	1	0	0	0
Burgh And												
Tuttington	0	0	0	0	0	0	0	0	0	0	0	0
Burgh Castle	0	0	0	0	0	0	0	0	0	0	0	0
Burgh St Peter	0	0	0	0	0	0	0	0	0	0	0	0
Burnham		_	_	_			_	_	_	_	_	_
Market	0	0	1	0	0	0	0	0	1	0	0	0
Burnham	0	0	4		0	0	_	0	4	0		_
Norton Burnham	0	0	1	0	0	0	0	0	1	0	0	0
Overy	0	0	0	0	0	0	0	0	0	0	0	0
Burnham	0	0	0	- 0	0	0	U	U	U	0	0	0
Thorpe	0	0	0	0	0	0	0	0	0	0	0	0
Burston And				-	-							
Shimpling	0	0	0	0	0	0	0	0	0	0	0	0
Buxton With												
Lammas	0	3	2	2	0	0	0	3	2	2	0	0
Bylaugh	0	0	0	0	0	0	0	0	0	0	0	0
Caister-On-		_	_	_			_	_	_	_	_	_
Sea	0	0	0	2	1	0	0	0	0	2	1	0
Caistor St	0	4	_	_	4	0	_	4	4	_	4	4
Edmund	0	4	5	5	4	0	0	4	4	5	4	1
Cantley	1	1	0	0	0	1	1	1	0	0	0	1
Carbrooke	0	0	1	1	0	0	0	0	1	1	0	0
Carleton Rode	0	0	0	0	0	0	0	0	0	0	0	0
Carleton St Peter	0	1	0	0	0	0	0	1	0	0	0	0
Castle Acre	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0			0		0		0
Castle Rising	0					0	0		0		0	
Caston	0	0	0	1	1	0	0	0	0	1	1	0

			Q.7	'C					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Catfield	0	0	0	2	2	0	0	0	0	2	2	0
Cawston	0	0	0	4	0	0	0	0	0	4	0	0
Chedgrave	0	0	0	0	0	1	0	0	0	0	0	1
Choseley	0	0	0	0	0	0	0	0	0	0	0	0
Claxton	1	0	0	1	0	0	1	0	0	0	0	1
Clenchwarton	0	0	0	0	0	0	0	0	0	0	0	0
Cley Next The												
Sea	0	0	0	0	0	0	0	0	0	0	0	0
Cockley Cley	0	0	0	0	0	0	0	0	0	0	0	0
Colby	0	0	0	2	1	0	0	0	0	2	1	0
Colkirk	0	0	0	1	1	0	0	0	0	1	1	0
Colney	2	2	1	4	2	5	1	1	2	4	2	6
Coltishall	0	0	3	10	1	0	0	0	3	10	1	0
Congham	0	0	0	0	0	1	0	0	0	0	0	1
Corpusty	0	0	0	1	0	0	0	0	0	1	0	0
Costessey	91	149	235	501	137	36	73	135	228	495	136	82
Cranwich	0	0	0	0	0	0	0	0	0	0	0	0
Cranworth	0	0	0	0	0	0	0	0	0	0	0	0
Crimplesham	0	0	0	0	0	0	0	0	0	0	0	0
Cringleford	26	26	36	62	28	5	14	29	33	61	27	19
Cromer	9	3	4	3	2	0	3	4	3	3	2	6
Crostwick	0	0	0	0	0	0	0	0	0	0	0	0
Croxton	1	0	0	0	0	0	0	0	0	0	0	1
Denton	0	0	1	0	0	0	0	1	0	0	0	0
Denver	0	0	0	0	0	0	0	0	0	0	0	0
Deopham	0	0	0	0	1	0	0	0	0	0	1	0
Dereham	0	1	3	4	1	1	0	2	2	4	1	1
Dersingham	0	0	1	0	0	0	0	0	1	0	0	0
Dickleburgh												
And Rushall	0	0	0	0	0	0	0	0	0	0	0	0
Didlington	0	0	0	0	0	0	0	0	0	0	0	0
Dilham	0	0	0	0	0	1	0	0	0	0	0	1
Diss	1	1	0	2	1	0	0	1	0	2	1	1
Ditchingham	0	0	0	1	0	0	0	0	0	1	0	0
Docking	0	0	0	0	0	0	0	0	0	0	0	0
Downham	_	_	_	_				_	_	_		_
Market	0	0	1	0	0	0	0	0	1	0	0	0
Downham		_	_	•		_		^		•	_	
West	0	0	0	0	0	0	0	0	0	0	0	0
Drayton	36	76	113	232	64	11	21	78	105	228	70	30
Dunton	0	0	0	0	0	0	0	0	0	0	0	0

			Q.7	'C					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Earsham	0	1	0	1	0	0	1	0	0	1	0	0
East Beckham	0	0	0	0	0	0	0	0	0	0	0	0
East Carleton	0	3	2	6	2	0	1	2	2	6	1	1
East Rudham	0	0	0	0	0	0	0	0	0	0	0	0
East Ruston	0	0	0	0	0	0	0	0	0	0	0	0
East												
Tuddenham	0	0	0	3	0	1	0	0	0	3	0	1
East Walton	0	0	0	0	0	0	0	0	0	0	0	0
East Winch	0	0	0	0	0	0	0	0	0	0	0	0
Easton	3	9	28	47	11	2	6	6	28	45	10	5
Edgefield	0	0	0	2	1	0	0	0	0	2	1	0
Ellingham	0	1	0	0	0	0	0	1	0	0	0	0
Elsing	0	0	0	0	0	0	0	0	0	0	0	0
Emneth	0	0	0	0	0	0	0	0	0	0	0	0
Erpingham	0	1	1	0	1	0	0	1	1	0	1	0
Fakenham	0	2	9	7	2	1	1	2	8	7	2	1
Felbrigg	0	0	0	0	0	0	0	0	0	0	0	0
Felmingham	0	0	0	2	0	0	0	0	0	2	0	0
Felthorpe	4	8	16	38	6	2	3	9	14	38	7	3
Feltwell	0	0	0	0	0	0	0	0	0	0	0	0
Field Dalling	0	0	0	0	0	0	0	0	0	0	0	0
Filby	0	0	1	1	0	0	0	0	1	1	0	0
Fincham	0	0	0	0	0	0	0	0	0	0	0	0
Fleggburgh	0	0	0	1	0	0	0	0	0	1	0	0
Flitcham With	0	0	0	0	0	0	0	0	0	0	0	0
Appleton	0	<u>0</u> 4	0	4	0	0 1	0	3	0	4	1	1
Flordon Fordham	0	0	0	0	0	0	0	0	0	0	0	0
Forncett	1	1	0	1	0	0	1	1	0	1	0	0
Foulden	0	0	0	0	0	0	0	0	0	0	0	0
Foulsham	1	0	1	0	0	0	1	1	0	0	0	0
Foxley	0	0	0	0	0	0	0	0	0	0	0	0
Framingham	0	0	0	0	0	0	0	U	U	U	0	0
Earl	5	11	14	37	4	2	6	6	15	37	4	5
Framingham				<u> </u>	-					<u> </u>	-	
Pigot	1	1	2	4	0	0	1	1	0	4	0	2
Fransham	0	0	0	0	0	0	0	0	0	0	0	0
Freethorpe	0	0	0	1	0	0	0	0	0	1	0	0
Frettenham	2	7	19	27	12	0	2	5	20	28	12	0
Fring	0	0	0	0	0	0	0	0	0	0	0	0
Fritton And St												
Olaves	0	0	0	0	0	0	0	0	0	0	0	0

			Q.7	C					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Fulmodeston	0	0	0	3	0	0	0	0	0	3	0	0
Garboldisham	0	0	0	0	0	0	0	0	0	0	0	0
Garvestone	1	0	0	0	0	1	1	0	0	0	0	1
Gateley	0	0	0	1	0	0	0	0	0	1	0	0
Gayton	0	0	0	0	0	0	0	0	0	0	0	0
Geldeston	0	0	0	0	0	0	0	0	0	0	0	0
Gillingham	0	0	0	0	0	0	0	0	0	0	0	0
Gimingham	0	0	0	0	0	0	0	0	0	0	0	0
Gissing	0	0	0	0	0	0	0	0	0	0	0	0
Gooderstone	0	0	0	0	0	0	0	0	0	0	0	0
Great And Little Plumstead	16	47	52	148	41	8	11	45	52	142	41	21
Great												
Cressingham	0	0	0	0	0	0	0	0	0	0	0	0
Great Dunham	0	0	0	0	0	0	0	0	0	0	0	0
Great												
Ellingham	0	0	0	0	0	0	0	0	0	0	0	0
Great												
Massingham	0	0	0	1	0	0	0	0	0	1	0	0
Great Melton	1	1	2	3	1	1	1	1	2	3	1	1
Great Moulton	0	0	0	1	0	1	0	0	0	1	1	0
Great Snoring	0	0	0	0	0	0	0	0	0	0	0	0
Great Witchingham	0	1	0	1	0	1	0	0	1	1	0	1
Great Yarmouth	2	3	11	1	1	0	1	5	8	1	2	1
Gresham	0	0	0	0	0	0	0	0	0	0	0	0
Gressenhall	0	0	0	1	0	0	0	0	0	1	0	0
Grimston	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
Griston		0	0	0		0	0	0	0	0	0	0
Guestwick	0	0	0	0	0	0		0	0		0	
Guist	0				0		0			0		0
Gunthorpe	1	0	1	3	0	0	0	0	1	3	0	1
Haddiscoe	0	0	0	0	0	0	0	0	0	0	0	0
Hainford	1	2	2	8	0	1	1	2	1	8	0	2
Hales	0	0	1	0	0	0	0	1	0	0	0	0
Halvergate	0	1	1	0	0	0	0	1	1	0	0	0
Hanworth	0	1	0	0	0	0	0	1	0	0	0	0
Happisburgh	2	0	0	1	1	0	0	2	0	1	1	0
Hardingham	0	0	0	0	0	0	0	0	0	0	0	0
Harling	0	0	0	0	0	0	0	0	0	0	0	0

			Q.7	С					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Harpley	0	0	0	0	0	0	0	0	0	0	0	0
Haveringland	0	1	2	1	1	0	0	1	2	1	1	0
Heacham	0	0	1	0	0	0	0	0	1	0	0	0
Heckingham	0	0	0	0	0	0	0	0	0	0	0	0
Hedenham	0	0	0	0	0	0	0	0	0	0	0	0
Helhoughton	0	0	0	0	0	0	0	0	0	0	0	0
Hellesdon	76	144	250	466	146	22	53	139	225	468	155	64
Hellington	0	0	0	1	0	0	0	0	0	1	0	0
Hemblington	1	3	4	17	4	0	1	0	5	17	4	2
Hempnall	0	0	0	0	1	0	0	0	0	0	1	0
Hempstead	0	0	1	0	1	0	0	0	1	0	1	0
Hempton	0	1	0	0	0	0	0	1	0	0	0	0
Hemsby	0	0	1	0	1	0	0	0	1	0	1	0
Hethersett	35	45	83	182	46	11	24	39	84	181	51	23
Hevingham	1	0	1	3	0	0	1	0	1	2	0	1
Heydon	0	0	0	0	0	0	0	0	0	0	0	0
Hickling	0	0	0	1	0	0	0	0	0	1	0	0
High Kelling	1	1	2	1	0	1	1	0	3	1	0	1
Hilborough	0	0	0	0	0	0	0	0	0	0	0	0
Hilgay	0	0	0	0	0	0	0	0	0	0	0	0
Hillington	0	0	0	0	0	0	0	0	0	0	0	0
Hindolveston	0	0	0	0	0	0	0	0	0	0	0	0
Hindringham	0	0	0	0	0	0	0	0	0	0	0	0
Hingham	1	1	2	0	1	0	1	2	1	0	1	0
Hockering	5	3	5	22	5	0	2	4	5	22	5	2
Hockham	0	0	0	1	1	0	0	1	0	1	0	0
Hockwold-												
Cum-Wilton	0	0	0	0	0	0	0	0	0	0	0	0
Hoe	0	0	0	0	0	0	0	0	0	0	0	0
Holkham	0	0	0	0	0	0	0	0	0	0	0	0
Holme Hale	0	0	0	2	0	0	0	0	0	2	0	0
Holme-Next-		0	0	0	0	_	0			0	0	
The-Sea	1	0	0	0	0	0	0	0	0	0	0	1
Holt	2	2	2	2	1	1	1	2	1	3	1	2
Holverston	0	0	0	0	0	0	0	0	0	0	0	0
Honing	2	0	1	1	0	0	1	0	1	1	0	1
Honingham	2	4	6	9	6	2	2	2	6	9	7	3
Hopton-On-	0	0	0	0	0	0	0	0	0	0	0	0
Sea												
Horning	0	0	1	1	1	0	0	0	1	1	1	0
Horningtoft	0	0	0	0	0	0	0	0	0	0	0	0

			Q.7	С					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Horsey	0	0	0	0	0	0	0	0	0	0	0	0
Horsford	15	37	78	149	26	7	18	30	74	147	29	14
Horsham St Faith And Newton St												
Faith Horstead With	9	28	55	98	27	6	10	25	55	97	26	10
Stanninghall	0	0	0	5	1	0	0	0	0	5	1	0
Houghton	0	0	0	0	0	0	0	0	0	0	0	0
Hoveton	0	0	1	6	1	0	0	0	1	6	1	0
Howe	1	1	0	0	0	0	1	0	0	0	0	1
Hunstanton	0	0	1	0	0	0	0	0	1	0	0	0
lckburgh	0	0	0	0	0	0	0	0	0	0	0	0
Ingham	0	0	0	0	0	0	0	0	0	0	0	0
Ingoldisthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Ingworth	0	0	0	0	0	0	0	0	0	0	0	0
Itteringham	0	0	0	0	0	0	0	0	0	0	0	0
Kelling	0	0	0	0	0	0	0	0	0	0	0	0
Kempstone	0	0	0	0	0	0	0	0	0	0	0	0
Kenninghall	0	0	0	0	0	0	0	0	0	0	0	0
Keswick	9	8	8	12	2	0	6	12	3	10	2	6
Ketteringham	0	2	2	8	2	0	1	1	2	8	2	0
Kettlestone	2	0	0	0	0	0	0	0	0	0	0	2
Kilverstone	0	0	0	0	0	0	0	0	0	0	0	0
Kimberley	0	0	0	0	0	0	0	0	0	0	0	0
King's Lynn	0	1	2	1	0	0	0	0	3	1	0	0
Kirby Bedon	3	3	1	8	2	1	4	1	1	8	2	2
Kirby Cane	0	0	0	1	0	0	0	0	0	1	0	0
Kirstead	0	0	0	1	0	0	0	0	0	1	0	0
Knapton	0	0	0	0	0	1	0	0	0	0	0	1
Langham	0	0	0	0	0	0	0	0	0	0	0	0
Langley With Hardley	0	1	0	0	0	0	0	1	0	0	0	0
Lessingham	0	0	0	0	1	0	0	0	0	0	1	0
Letheringsett												
With Glandford	0	0	0	0	0	0	0	0	0	0	0	0
Lexham	0	1	0	0	1	0	0	1	0	0	1	0
Leziate	0	0	0	0	0	0	0	0	0	0	0	0
Lingwood And												
Burlingham	2	1	1	1	2	0	1	1	1	1	2	1
Litcham	0	0	0	0	0	0	0	0	0	0	0	0
Little	0	0	0	0	0	0	0	0	0	0	0	0

F ubile Coll			Q.7	'C					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Barningham												
Little												
Cressingham	0	0	0	0	0	0	0	0	0	0	0	0
Little Dunham	0	0	0	0	0	0	0	0	0	0	0	0
Little											_	_
Ellingham	0	0	0	0	0	0	0	0	0	0	0	0
Little	0	0			0	0	_	0	0	0		0
Massingham	9	0 11	0	0	0 4	0	0 5	0	0	0	0 5	7
Little Melton			15	39		1		10	14	38		
Little Snoring Little	1	0	0	0	0	0	0	0	1	0	0	0
Witchingham	0	0	1	0	0	0	0	0	1	0	0	0
Loddon	0	0	0	5	0	0	0	0	0	5	0	0
Long Stratton	14	20	37	89	19	6	8	18	38	88	21	12
Longham	0	0	0	0	0	0	0	0	0	0	0	0
Ludham	0	1	0	1	1	0	0	1	0	1	1	0
Lynford	0	0	0	0	0	0	0	0	0	0	0	0
Lyng	0	1	0	0	0	0	0	1	0	0	0	0
Marham	0	0	0	0	0	0	0	0	0	0	0	0
Marlingford	5	6	8	16	5	1	3	7	8	16	6	1
Marsham	0	0	0	2	0	0	0	0	0	2	0	0
Marshland St					•	•			<u> </u>			
James	0	0	1	0	0	0	0	0	1	0	0	0
Martham	0	0	0	1	0	0	0	0	0	1	0	0
Matlask	0	0	0	0	0	0	0	0	0	0	0	0
Mattishall	0	1	2	0	0	0	0	1	2	0	0	0
Mautby	0	0	0	0	0	0	0	0	0	0	0	0
Melton												
Constable	0	0	0	0	0	0	0	0	0	0	0	0
Merton	0	0	0	0	0	0	0	0	0	0	0	0
Methwold	0	0	0	0	0	0	0	0	0	0	0	0
Middleton	0	0	0	1	0	0	0	0	0	1	0	0
Mileham	0	0	0	1	0	0	0	0	0	1	0	0
Morley	0	1	0	0	0	0	1	0	0	0	0	0
Morningthorpe	0	0	0	2	0	0	0	0	0	2	0	0
Morston	0	0	0	0	0	0	0	0	0	0	0	0
Morton On The												
Hill	1	2	3	7	1	0	1	2	3	7	1	0
Mulbarton	7	15	36	74	19	6	6	16	35	73	19	8
Mundesley	1	0	1	1	0	0	1	0	1	1	0	0
Mundford	0	0	0	0	0	0	0	0	0	0	0	0
Mundham	0	0	0	0	0	0	0	0	0	0	0	0

			Q.7	'c					Q.7	<b>7</b> d		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Narborough	0	0	1	1	0	0	0	0	1	1	0	0
Narford	0	0	0	0	0	0	0	0	0	0	0	0
Neatishead	1	0	1	1	0	1	1	0	1	1	0	1
Necton	0	0	0	1	0	0	0	0	0	1	0	0
Needham	0	0	0	0	0	0	0	0	0	0	0	0
New												
Buckenham	0	0	0	1	0	0	0	0	0	1	0	0
Newton By												
Castle Acre	0	0	0	0	0	0	0	0	0	0	0	0
Newton	_	_						_			_	_
Flotman	4	8	14	31	8	2	1	9	12	31	9	5
Nordelph	0	0	0	0	0	0	0	0	0	0	0	0
North Creake	0	1	1	0	0	0	0	0	1	0	0	1
North Elmham	0	0	0	1	0	0	0	0	0	1	0	0
North Lopham	0	0	0	0	0	0	0	0	0	0	0	0
North												
Pickenham	0	0	0	0	0	0	0	0	0	0	0	0
North Runcton	0	0	0	0	0	0	0	0	0	0	0	0
North	_	_	_	_			_	_	_	_	_	_
Tuddenham	0	0	0	0	0	0	0	0	0	0	0	0
North	4	0	0	40	4	_	_	_		40		
Walsham	1	2	2	10	1	0	1	1	2	10	1	1
North Wootton	0	0	0	0	0	0	0	0	0	0	0	0
Northrepps	0	0	0	2	0	0	0	0	0	2	0	0
Northwold	0	0	0	0	0	0	0	0	0	0	0	0
Norton	0	0	0	0	•	•	0	0				
Subcourse	0	0	0	0	0	0	0	0	0	0	0	0
Norwich	974	1051	1368	2318	804	231	679	994	12/6	2309	848	640
Old	2	0	0	0	4	0	2	0			4	0
Buckenham	2	70	0	0	1	7	2	0	0	0	1	0
Old Catton Old	55	78	124	256	74	/	43	71	117	251	83	29
Hunstanton	0	0	0	0	0	0	0	0	0	0	0	0
Ormesby St	U	U	U	U	U	U	U	U	U	U	U	U
Margaret With												
Scratby	0	0	1	0	1	0	0	0	1	0	1	0
Ormesby St									<u>'</u>			
Michael	0	0	0	0	0	0	0	0	0	0	0	0
Oulton	0	2	0	0	0	0	0	2	0	0	0	0
Outwell	0	0	0	0	0	0	0	0	0	0	0	0
Overstrand	0	1	0	1	0	0	0	0	0	1	0	1
Ovington	0	0	0	0	0	0	0	0	0	0	0	0
Oxborough	0	0	0	0	0	0	0	0	0	0	0	0
OADUIUUGII	U	U	U	U	U	U	U	U	U	l U	U	U

		ni Aliai	Q.7	С					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Paston	0	0	0	1	0	0	0	0	0	1	0	0
Pentney	0	0	0	0	0	0	0	0	0	0	0	0
Plumstead	0	0	0	0	1	0	0	0	0	0	1	0
Poringland	19	33	61	115	30	5	10	28	59	114	30	22
Postwick	3	3	10	10	3	0	4	3	10	9	3	0
Potter												
Heigham	0	0	0	2	0	0	0	0	0	2	0	0
Pudding												
Norton	0	0	0	0	0	0	0	0	0	0	0	0
Pulham Market	1	0	0	0	0	0	1	0	0	0	0	0
Pulham St												
Mary	0	0	0	0	0	0	0	0	0	0	0	0
Quidenham	0	0	0	0	0	0	0	0	0	0	0	0
Rackheath	17	26	52	137	28	4	13	28	50	132	33	8
Raveningham	0	0	0	0	0	0	0	0	0	0	0	0
Raynham	0	0	0	0	0	0	0	0	0	0	0	0
Redenhall												
With Harleston	0	2	0	1	0	0	0	2	0	1	0	0
Reedham	0	0	1	0	2	0	0	0	1	0	2	0
Reepham	1	0	1	3	4	1	2	1	1	3	3	0
Repps With												
Bastwick	0	1	0	0	0	0	1	0	0	0	0	0
Riddlesworth	0	0	0	0	0	0	0	0	0	0	0	0
Ringland	3	5	12	20	2	8	1	6	13	19	2	9
Ringstead	0	0	0	0	0	0	0	0	0	0	0	0
Rockland St												
Mary	1	3	2	1	0	1	2	0	2	1	1	2
Rocklands	0	0	0	0	0	0	0	0	0	0	0	0
Rollesby	0	0	0	0	0	0	0	0	0	0	0	0
Roudham	0	0	0	0	0	0	0	0	0	0	0	0
Rougham	0	0	0	0	0	0	0	0	0	0	0	0
Roughton	0	0	1	0	0	1	0	0	1	0	0	1
Roydon	0	0	0	0	0	0	0	0	0	0	0	0
Roydon	0	0	0	1	0	0	0	0	0	1	0	0
Runcton												
Holme	0	0	0	0	0	0	0	0	0	0	0	0
Runhall	1	0	2	0	0	0	1	0	2	0	0	0
Runton	0	1	0	1	1	0	0	0	0	1	2	0
Ryburgh	0	0	3	2	0	0	0	1	2	2	0	0
Ryston	0	0	0	0	0	0	0	0	0	0	0	0
Saham Toney	0	0	0	0	0	0	0	0	0	0	0	0
Salhouse	0	4	4	5	2	1	0	4	3	6	3	0

			Q.7	C					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Sall	0	0	0	1	0	0	0	0	0	1	0	0
Salthouse	0	0	0	0	0	0	0	0	0	0	0	0
Sandringham	0	0	0	0	0	0	0	0	0	0	0	0
Saxlingham												
Nethergate	0	1	0	0	0	0	0	1	0	0	0	0
Scarning	0	0	0	3	2	0	0	0	0	3	2	0
Scole	0	0	0	1	0	0	0	0	0	1	0	0
Scottow	2	0	0	1	0	0	1	0	0	1	0	1
Scoulton	0	0	0	0	0	0	0	0	0	0	0	0
Sculthorpe	0	0	0	0	0	0	0	0	0	0	0	0
Sea Palling	0	0	0	0	0	0	0	0	0	0	0	0
Sedgeford	0	0	0	0	0	0	0	0	0	0	0	0
Seething	0	0	1	0	0	0	0	0	1	0	0	0
Shelfanger	0	0	0	0	0	0	0	0	0	0	0	0
Shelton	0	0	0	0	0	0	0	0	0	0	0	0
Sheringham	3	2	1	3	4	0	1	3	1	2	5	1
Shernborne	0	0	0	0	0	0	0	0	0	0	0	0
Shipdham	0	0	0	0	0	0	0	0	0	0	0	0
Shotesham	1	0	1	2	1	0	1	0	1	1	1	1
Shouldham	0	0	0	0	0	0	0	0	0	0	0	0
Shouldham				_								
Thorpe	0	0	0	0	0	0	0	0	0	0	0	0
Shropham	0	0	0	0	0	0	0	0	0	0	0	0
Sidestrand	0	0	0	0	0	0	0	0	0	0	0	0
Sisland	0	0	0	1	0	0	0	0	0	1	0	0
Skeyton	0	0	0	0	0	0	0	0	0	0	0	0
Sloley	0	0	0	0	0	0	0	0	0	0	0	0
Smallburgh	0	0	0	0	0	0	0	0	0	0	0	0
Snetterton	0	0	0	0	0	0	0	0	0	0	0	0
Snettisham	0	0	0	0	0	0	0	0	0	0	0	0
Somerton	0	0	0	0	0	0	0	0	0	0	0	0
South Acre	0	0	0	0	0	0	0	0	0	0	0	0
South Creake	1	0	0	0	0	0	1	0	0	0	0	0
South Lopham	0	0	0	0	0	0	0	0	0	0	0	0
South				-	-							
Pickenham	0	0	0	0	0	0	0	0	0	0	0	0
South												
Walsham	0	0	0	2	0	0	0	0	0	2	0	0
South Wootton	0	0	0	0	0	0	0	0	0	0	0	0
Southery	0	0	0	0	0	0	0	0	0	0	0	0
Southrepps	1	0	0	0	0	0	1	0	0	0	0	0

			Q.7	'C					Q.7	'd		
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0
Sparham	0	0	0	1	0	0	0	0	0	1	0	0
Spixworth	25	35	77	168	32	8	19	38	74	166	30	18
Sporle With												
Palgrave	0	0	0	1	0	0	0	0	0	1	0	0
Sprowston	94	148	309	573	178	31	66	136	290	572	180	89
Stalham	2	0	1	3	0	0	1	0	2	3	0	0
Stanfield	0	0	0	0	0	0	0	0	0	0	0	0
Stanford	0	0	0	0	0	0	0	0	0	0	0	0
Stanhoe	0	0	0	0	0	0	0	0	0	0	0	0
Starston	0	0	0	0	0	0	0	0	0	0	0	0
Stibbard	0	0	1	0	0	0	0	0	1	0	0	0
Stiffkey	0	0	0	0	0	0	0	0	0	0	0	0
Stockton	0	0	0	0	0	0	0	0	0	0	0	0
Stody	0	0	0	0	0	0	0	0	0	0	0	0
Stoke Ferry	1	0	0	0	0	0	1	0	0	0	0	0
Stoke Holy												
Cross	4	18	19	49	9	4	7	16	15	49	10	6
Stokesby With												
Herringby	0	0	0	0	0	0	0	0	0	0	0	0
Stow Bardolph	0	0	0	0	0	0	0	0	0	0	0	0
Stow Bedon	0	0	0	0	0	0	0	0	0	0	0	0
Stradsett	0	0	0	0	0	0	0	0	0	0	0	0
Stratton	0			4		•		0	0			
Strawless	0	0	0	1	1	0	0	0	0	1	1	0
Strumpshaw	1	0	1	1	0	0	0	1	1	1	0	0
Sturston	0	0	0	0	0	0	0	0	0	0	0	0
Suffield	0	0	0	0	0	0	0	0	0	0	0	0
Surlingham	3	7	8	20	4	2	2	6	7	21	5	3
Sustead	0	0	0	0	0	0	0	0	0	0	0	0
Sutton	0	0	0	2	0	0	0	0	0	2	0	0
Swaffham	1	2	1	0	0	0	1	2	1	0	0	0
Swafield	0	0	0	0	1	0	0	0	0	0	1	0
Swainsthorpe	4	6	8	13	2	1	3	4	8	13	2	4
Swannington	0	2	2	2	0	0	0	2	2	2	0	0
Swanton	_									_	_	
Abbott	0	0	0	0	0	0	0	0	0	0	0	0
Swanton				_		_		_	_	0	^	
Morley	0	0	0	0	0	0	0	0	0	0	0	0
Swanton Novers	0	0	1	0	0	0	0	0	1	0	0	0
	6	6	9	13	2	1	3	8	9	13	2	2
Swardeston												
Syderstone	0	0	0	0	0	0	0	0	0	0	0	0

	Q.7c						Q.7d						
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0	
Tacolneston	0	0	0	1	0	1	1	0	0	1	0	0	
Tasburgh	5	9	15	33	11	0	5	8	13	32	11	4	
Tattersett	0	0	0	0	0	0	0	0	0	0	0	0	
Taverham	65	136	247	515	134	27	53	136	231	505	132	67	
Terrington St Clement	0	0	0	1	0	0	0	0	0	1	0	0	
Terrington St John	0	0	0	0	0	0	0	0	0	0	0	0	
Tharston	4	3	9	18	5	0	4	3	9	18	5	0	
Themelthorpe	0	0	1	0	0	0	0	0	1	0	0	0	
Thetford	0	0	0	0	1	0	0	0	0	0	1	0	
Thompson	0	0	0	0	0	0	0	0	0	0	0	0	
Thornage	0	0	0	0	0	0	0	0	0	0	0	0	
Thornham	0	0	0	1	0	0	0	0	0	1	0	0	
Thorpe Market	1	1	0	1	0	0	1	0	0	1	0	1	
Thorpe St													
Andrew	98	155	278	537	135	23	66	173	268	527	137	55	
Thurlton	0	0	0	0	0	0	0	0	0	0	0	0	
Thurne	0	0	0	0	0	0	0	0	0	0	0	0	
Thurning	0	0	0	0	0	0	0	0	0	0	0	0	
Thursford	0	0	0	1	0	0	0	0	0	1	0	0	
Thurton	0	0	1	0	0	0	0	0	1	0	0	0	
Thwaite	0	0	0	0	0	0	0	0	0	0	0	0	
Tibenham	0	1	0	0	0	0	1	0	0	0	0	0	
Tilney All													
Saints	0	0	0	0	0	0	0	0	0	0	0	0	
Tilney St	0			0	_	0	0	0	0	0	0	_	
Lawrence	0	0	0	0	0	0	0	0	0	0	0	0	
Titchwell	0	0	0	0	0	0	0	0	0	0	0	0	
Tittleshall Tivetshall St	0	0	0	0	0	0	0	0	0	0	0	0	
Margaret	0	0	1	0	0	0	0	0	1	0	0	0	
Tivetshall St	U	- 0	'	0	0	0	0	0	'	0	0	0	
Mary	0	0	0	0	1	0	0	0	0	0	1	0	
Toft Monks	0	0	0	0	0	0	0	0	0	0	0	0	
Topcroft	0	2	0	0	0	0	1	1	0	0	0	0	
Tottenhill	0	0	0	0	0	0	0	0	0	0	0	0	
Tottington	0	0	0	0	0	0	0	0	0	0	0	0	
Trimingham	0	0	0	0	0	0	0	0	0	0	0	0	
Trowse With	-	-	-		-								
Newton	4	9	6	17	1	1	2	8	5	17	1	5	
Trunch	0	0	1	1	0	0	0	0	1	1	0	0	

	Q.7c						Q.7d						
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0	
Tunstead	0	0	0	3	0	0	0	0	0	3	0	0	
Twyford	0	0	0	0	0	0	0	0	0	0	0	0	
Upper													
Sheringham	0	0	0	0	0	0	0	0	0	0	0	0	
Upton With													
Fishley	0	0	0	1	1	0	0	0	0	1	1	0	
Upwell	0	0	0	0	0	0	0	0	0	0	0	0	
Wacton	0	0	0	1	0	0	0	0	0	1	0	0	
Walpole	0	0	0	0	0	0	0	0	0	0	0	0	
Walpole Cross													
Keys	0	0	0	0	0	0	0	0	0	0	0	0	
Walpole	_	_	_	_						_	_	_	
Highway	0	0	0	0	0	0	0	0	0	0	0	0	
Walsingham	0	0	0	0	0	0	0	0	0	0	0	0	
Walsoken	0	0	0	0	0	0	0	0	0	0	0	0	
Warham	0	0	0	0	0	0	0	0	0	0	0	0	
Watlington	0	0	0	0	0	1	0	1	0	0	0	0	
Watton	0	1	1	2	0	1	0	1	1	2	0	1	
Weasenham													
All Saints	0	0	0	0	0	0	0	0	0	0	0	0	
Weasenham													
St Peter	0	0	0	0	0	0	0	0	0	0	0	0	
Weeting-With-						_				_			
Broomhill	0	1	0	0	0	0	0	0	0	0	0	1	
Wellingham	0	0	0	0	0	0	0	0	0	0	0	0	
Wells-Next-	4	4	0	_	0	•		0	_				
The-Sea	1	1	2	1	0	0	1	0	1	1	1	1	
Welney	0	0	0	0	0	0	0	0	0	0	0	0	
Wendling	0	0	0	0	0	0	0	0	0	0	0	0	
Wereham	0	0	0	0	0	0	0	0	0	0	0	0	
West Acre	0	0	0	0	0	0	0	0	0	0	0	0	
West Beckham	0	0	1	0	0	0	0	0	1	0	0	0	
West Caister	0	0	0	0	0	0	0	0	0	0	0	0	
West Dereham	0	0	0	0	0	0	0	0	0	0	0	0	
West Rudham	0	0	1	0	0	1	0	0	1	1	0	0	
West Walton	0	0	0	0	0	0	0	0	0	0	0	0	
West Winch	0	0	0	0	0	0	0	0	0	0	0	0	
Weston													
Longville	0	2	3	6	1	1	0	1	3	5	1	3	
Westwick	0	0	0	0	0	0	0	0	0	0	0	0	
Weybourne	0	0	0	1	0	0	0	0	1	0	0	0	
Wheatacre	0	0	0	0	0	0	0	0	0	0	0	0	

	Q.7c						Q.7d						
Parish Name	1	2	3	4	5	0	1	2	3	4	5	0	
Whinburgh	0	0	0	0	0	0	0	0	0	0	0	0	
Whissonsett	0	0	0	2	0	0	0	0	0	2	0	0	
Wicklewood	0	2	0	1	0	0	0	2	0	1	0	0	
Wickmere	0	0	1	0	0	0	0	0	1	0	0	0	
Wiggenhall St Germans	0	0	0	0	0	0	0	0	0	0	0	0	
Wiggenhall St Mary	0	0	0	0	0	0	0	0	0	0	0	0	
Magdalen	0			0						0			
Wighton	0	0	1 0	0	0	0	0	0	1	0	0	0	
Wimbotsham			1	0	0	0		0	0				
Winfarthing Winterton-On-	0	0	1	U	0	0	0	0	1	0	0	0	
Sea	0	0	0	0	0	0	0	0	0	0	0	0	
Witton	1	0	0	0	0	0	0	1	0	0	0	0	
Wiveton	0	0	0	0	0	0	0	0	0	0	0	0	
Wood Dalling	0	1	0	0	0	0	0	0	0	0	0	1	
Wood Norton	0	0	1	1	0	1	1	0	1	1	0	0	
Woodbastwick	0	0	0	2	0	1	0	0	0	2	0	1	
Woodton	0	0	0	0	0	0	0	0	0	0	0	0	
Wormegay	0	0	0	0	0	0	0	0	0	0	0	0	
Worstead	0	1	1	1	0	0	0	1	2	0	0	0	
Wortwell	0	0	0	0	0	0	0	0	0	0	0	0	
Wramplingham	1	0	0	0	0	0	1	0	0	0	0	0	
Wreningham	0	0	0	1	0	0	0	0	0	1	0	0	
Wretham	0	0	0	0	0	0	0	0	0	0	0	0	
Wretton	0	0	0	0	0	0	0	0	0	0	0	0	
Wroxham	4	1	10	5	2	0	2	4	7	5	2	2	
Wymondham	50	82	152	303	88	19	31	90	141	295	89	48	
Yaxham	0	1	0	0	0	0	0	0	0	0	0	1	
Yelverton	0	1	1	1	0	0	0	1	1	1	0	0	

## 3 Plots

Responses were geocoded by postcode, grouped by parish and plotted on different scale maps.

Plots of responses to Q.3a, Q.3b, Q.6a, Q.6b and all sections of Q.7 are illustrated on the following pages.

Plot 1	Q.3a Do you support the current order of priorities? Responses from Norfolk
Plot 2	Q.3a Do you support the current order of priorities? Responses from Norwich and surrounding area
Plot 3	Q.3b If not, do you support a more flexible order of priorities? Responses from Norfolk
Plot 4	Q.3b If not, do you support a more flexible order of priorities? Responses from Norwich and surrounding area
Plot 5	Q. 6a Do you support small scale traffic management measures in the city centre? Responses from Norfolk
Plot 6	Q. 6a Do you support small scale traffic management measures in the city centre? Responses from Norwich and surrounding area
Plot 7	Q.6b Do you support stopping traffic driving straight through the city centre? Responses from Norfolk
Plot 8	Q.6b Do you support stopping traffic driving straight through the city centre? Responses from Norwich and surrounding area
Plot 9	Q.7a Do you support road user charging within 5 year? Responses from Norfolk
Plot 10	Q.7a Do you support road user charging within 5 year? Responses from Norwich and surrounding area
Plot 11	Q.7b Do you support road user charging within 5 to 10 years? Responses from Norfolk
Plot 12	Q.7b Do you support road user charging within 5 to 10 years? Responses from Norwich and surrounding area
Plot 13	Q. 7c Do you support workplace parking charging within 5 years? Responses from Norfolk
Plot 14	Q. 7c Do you support workplace parking charging within 5 years? Responses from Norwich and surrounding area
Plot 15	Q. 7d Do you support workplace parking charging within 5 to 10 years? Responses from Norfolk
Plot 16	Q. 7d Do you support workplace parking charging within 5 to 10 years? Responses from Norwich and surrounding area

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06/01/05



## Appendix O



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Mapping Browser Page 1 of 1

