PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Consultation Eastern Pink Route	Construction of the 10km long eastern half of a new dual carriageway with 6 at grade and 1 grade separated junctions.	£62,246,160	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at Postwick, northwards from Broadland Way to Middle Road; westwards between Thorpe End and Dussindale to Plumstead Road; north-westwards to the C246; then north-westwards around the north of the airport.			

Noise Qualitative Impact: Approximately 227 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 227 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 53 properties, 3 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 53 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: Landscape character varies along the route. Where, it remains within the urban fringes of Norwich, it is characterised by partially enclosed open arable farmland, and in localised areas is characterised by extensive woodland areas. The historic parkland associated with Sprowston Manor would be adversely affected. Visual intrusion would be experienced by properties in Thorpe St Andrew and Thorpe End and isolated properties close to road.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: Sprowston Manor and parkland have more recently been converted into a hotel and golf course with areas of the historic parkland converted to arable production, although a large number of ancient trees remain. The church of St Mary and St Margaret (grade 1) is the only listed building close to the road. It is likely to experience a level of visual intrusion but its character and setting would remain on the whole unaffected. Quaker Farm is important in terms of its historic landscape. This property would be significantly affected by the proposals. No Ancient Monuments are affected.	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Biodiversity Qualitative Impact: Racecourse plantation, a County Wildlife site, would be affected although the site is fairly degraded at present. A significant number of hedges would be lost and ancient trees removed, affecting local biodiversity. Protected species are also likely to be present, particularly bats and great crested newts.	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Water Environment Qualitative Impact: Part of the route overlies the chalk aquifer supplying Norwich with its source of water. With adequate mitigation measures in place there should be no affect on groundwater. No watercourses, open water or floodplains affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs a cycleway which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. The provision of 8 at grade roundabouts along the route may impact on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £234.5M (estimate)
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £434.3M (estimate)
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £341.2M (estimate)
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: This route separates Thorpe End from the Norwich urban area. It severs a cycleway but no PROWs.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment, areas of employment and mineral resources.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Consultation Eastern Yellow Route	Construction of the 10km long eastern half of a new dual carriageway with 4 at grade and 1 grade separated junctions.	£52,580,107	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at Postwick, northwards from Broadland Way to Plumstead Road; westwards north of Thorpe End to Salhouse Road; north-westwards to the C246; then north-westwards around the north of the airport.			

Noise Qualitative Impact: Approximately 101 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 101 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 54 properties, 3 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 54 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: Landscape character is mainly partially enclosed open arable farmland with pockets of more enclosed well wooded farmland, resulting from the presence of former estates such as Beeston Park and Rackheath Hall, giving rise to areas of good landscape quality that would be adversely affected by the road. Isolated properties and residents of Thorpe St Andrew, Thorpe End and Spixworth would experience substantial visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: Three areas of historic parkland would be significantly affected, most notably Red Hall Farm and Beeston Park where the road would divide the areas of parkland from its property. Rackheath Hall is a grade two listed building, although its setting is unlikely to be affected. No ancient monuments or conservation areas are affected.	**Quantitative Impact:** N/A	**Assessment:** Severe Adverse
Biodiversity Qualitative Impact: A significant number of hedgerows would be severed, parkland divided and a large number of mature trees lost. Two areas of ancient woodland are adjacent to the road. Although not directly affected, the link with other areas of woodland would be lost impacting upon the local biodiversity. Protected species are also likely to be present including bats and great crested newts.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Water Environment Qualitative Impact: Part of the route overlies the chalk aquifer supplying Norwich with its source of water. With adequate mitigation measures in place there should be no affect on groundwater. No watercourses, open water or floodplains affected. The route crosses a closed landfill site with a risk of contaminating groundwater.	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs a cycleway which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. The provision of 6 at grade roundabouts along the route may impact on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £173.9M (estimate)
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £369.3M (estimate)
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £290.1M (estimate)
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: No communities are severed by this route. It severs 0 PROWs and a cycleway.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment, areas for employment and mineral resources.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Consultation Eastern Blue Route	Construction of the 11km long eastern half of a new dual carriageway with 4 at grade and 1 grade separated junctions.	£53,215,499	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at Postwick, northwards from Broadland Way to Plumstead Road; north-westwards south of Rackheath to the B1150; south-westwards to the C246; then north-westwards around the north of the airport.			

Noise Qualitative Impact: Approximately 168 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 168 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 88 properties, 8 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 88 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: The landscape is predominately open arable farmland except from a small area surrounding the tributary of the River Bure which is of attractive landscape quality. Isolated properties and residents of Spixworth, Rackheath, Thorpe End and Thorpe St Andrew would experience substantial visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: Rackheath Hall and its historic parkland run adjacent to the road alignment. Beeston Hall's historic parkland would be split by the road. However, the parkland that would be severed is now in agricultural production although a significant number of mature trees remain. Both areas of parkland would be adversely impacted upon. The setting of Rackheath Hall, a grade two listed building, would be adversely affected. No ancient monuments or conservation areas affected.	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Biodiversity Qualitative Impact: A significant number of mature trees and hedgerows would lost or severed, affecting local biodiversity. Protected species, such as bats and great crested newts would be affected.	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Water Environment Qualitative Impact: Part of the route overlies the chalk aquifer supplying Norwich with its source of water. With adequate mitigation measures in place there should be no affect on ground water. No watercourses, open water or flood plains affected. However, the road is immediately adjacent to a spring which forms a tributary of the River Bure.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs a cycleway which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. The provision of 6 at grade roundabouts along the route may impact on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £166.0M (estimate)
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £348.8M (estimate)
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £274.1M (estimate)
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: No communities are severed by this route. It severs 0 PROWs and a cycleway.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment, areas of employment and mineral resources.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Alternative Eastern Pink Route	Construction of the 11km long eastern half of a new dual carriageway with 5 at grade and 1 grade separated junctions.	£60,858,044	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at Postwick, northwards from Broadland Way to Plumstead Road; westwards north of Thorpe End to the A1151, north-westwards to the C246; then north-westwards around the north of the airport.			

Noise Qualitative Impact: Approximately 119 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 119 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 47 properties, 3 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 47 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: Landscape character varies along the route. Where, it remains within the urban fringes of Norwich, it is characterised by partially enclosed open arable farmland, and in localised areas is characterised by extensive woodland areas. The historic parkland associated with Sprowston Manor would be adversely affected. Visual intrusion would be experienced by properties in Thorpe St Andrew and Thorpe End and isolated properties close to the road.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: Sprowston Manor and parkland have more recently been converted into a hotel and golf course with areas of the historic parkland converted to arable production although a large number of ancient trees remain. The route also skirts the edge of Rackheath Hall parkland. The church of St Mary and St Margaret (grade 1) is the only listed building close to the road. It is likely to experience a level of visual intrusion but its character and setting would remain on the whole unaffected. Quaker Farm is important in terms of the historic landscape. This property would be significantly affected by the proposals. No	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Biodiversity Qualitative Impact: Biodiversity: The route affects a significant number of hedges and ancient trees, affecting local biodiversity. An area of ancient woodland is adjacent to the road. Although not directly affected, the link with other areas of woodland would be lost impacting upon the local biodiversity. Protected species are also likely to be present, particularly bats and great crested newts.	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Water Environment Qualitative Impact: Part of the route overlies the chalk aquifer supplying Norwich with its source of water. With adequate mitigation measures in place there should be no affect on groundwater. No watercourses, open water or floodplains affected. The route crosses a closed landfill site with a risk of contaminating groundwater.	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs a cycleway which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. The provision of 7 at grade roundabouts along the route may impact on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £232.0M (estimate)
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £434.3M (estimate)
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £341.2M (estimate)
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: This route severs a cycleway but no PROWs.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment, areas of employment and mineral resources.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Alternative Eastern Yellow Route	Construction of the 10km long eastern half of a new dual carriageway with 4 at grade and 1 grade separated junctions.	£55,845,727	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at Postwick, northwards from Broadland Way to Plumstead Road; westwards north of Thorpe End to Salhouse Road; north-westwards to the A1151, westwards to the C246; then north-westwards around the north of the airport.			

Noise Qualitative Impact: Approximately 92 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 92within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 49 properties, 2 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 49 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: Landscape character is mainly partially enclosed open arable farmland with pockets of more enclosed well wooded farmland, resulting from the presence of former estates such as Beeston Park and Rackheath Hall, giving rise to areas of good landscape quality that would be adversely affected by the road. Isolated properties and residents of Thorpe St Andrew and Thorpe End would experience substantial visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: Three areas of historic parkland would be significantly affected, most notably Beeston Park where the road would divide some areas of parkland from its property. Rackheath Hall is a grade two listed building, although its setting is unlikely to be affected. The route passes to the south of Red Hall Farm parkland. No ancient monuments or conservation areas are affected.	**Quantitative Impact:**	**Assessment:** Severe Adverse
Biodiversity Qualitative Impact: A significant number of hedgerows would be severed, parkland divided and a large number of mature trees lost. Two areas of ancient woodland are adjacent to the road. Although not directly affected, the link with other areas of woodland would be lost impacting upon the local biodiversity. Protected species are also likely to be present including bats and great crested newts.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Water Environment Qualitative Impact: Part of the route overlies the chalk aquifer supplying Norwich with its source of water. With adequate mitigation measures in place there should be no affect on groundwater. No watercourses, open water or floodplains affected. The route crosses a closed landfill site with a risk of contaminating groundwater.	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs a cycleway which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. The provision of 6 at grade roundabouts along the route may impact on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £178.6M (estimate)
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £369.3M (estimate)
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £290.1M (estimate)
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: No communities are severed by this route. It severs 0 PROWs and a cycleway.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment, areas for employment and mineral resources.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Alternative Eastern Blue Route	Construction of the 11km long eastern half of a new dual carriageway with 4 at grade and 1 grade separated junctions.	£54,309,325	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at Postwick, northwards from Broadland Way to Plumstead Road; north-westwards south of Rackheath to the B1150; westwards to the C246; then north-westwards around the north of the airport.			

Noise Qualitative Impact: Approximately 167 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 167 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 80 properties, 8 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 80 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: The landscape is predominately open arable farmland except from a small area surrounding the tributary of the River Bure which is of attractive landscape quality. Isolated properties and residents of Spixworth, Rackheath, Thorpe End and Thorpe St Andrew would experience substantial visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: Rackheath Hall and its historic parkland run adjacent to the road alignment. Beeston Hall's historic parkland would be split by the road. However, the parkland that would be severed is now in agricultural production although a significant number of mature trees remain. Both areas of parkland would be adversely impacted upon. The setting of Rackheath Hall, a grade two listed building, would be adversely affected. No ancient monuments or conservation areas affected.	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Biodiversity Qualitative Impact: A significant number of mature trees and hedgerows would lost or severed, affecting local biodiversity. Protected species, such as bats and great crested newts would be affected.	**Quantitative Impact:** N/A	**Assessment:** Moderate Adverse
Water Environment Qualitative Impact: Part of the route overlies the chalk aquifer supplying Norwich with its source of water. With adequate mitigation measures in place there should be no affect on ground water. No watercourses, open water or flood plains affected. However, the road is immediately adjacent to a spring which forms a tributary of the River Bure.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs a cycleway which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. The provision of 6 at grade roundabouts along the route may impact on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £167.6M (estimate)
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £348.8M
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £274.1M
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: No communities are severed by this route. It severs 0 PROWs and a cycleway.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment, areas of employment and mineral resources.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Eastern Consultation Route	Construction of the 2.5km long eastern end of a new dual carriageway with 1 at grade and 1 grade separated junction.	£16,327,951	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at Postwick, northwards from Broadland Way to Middle Road; then northwards to Plumstead Road.			

Noise Qualitative Impact: Approximately 42 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 42 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 24 properties, 5 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 24 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: The landscape character is that of open farmland, its quality varies from ordinary to attractive. Properties such as Oaks Farm and Smee House would experience adverse visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: No ancient monuments, listed buildings or conservation areas would be affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Biodiversity Qualitative Impact: A number of hedgerows would be severed contributing to the fragmentation of habitat affecting local biodiversity.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Water Environment Qualitative Impact: No watercourses, floodplains affected although the route does pass over the major chalk aquifer below Norwich.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. The provision of 2 at grade roundabouts along the route may impact on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £166.0M (estimate)
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £348.8M (estimate)
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £274.1M (estimate)
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: No communities are severed by this route. It severs 0 PROWs. It would sever the Business Park to some extent, causing a conflict between local and longer distance traffic.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment and areas of employment.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Cucumber Lane Route 1	Construction of the 3.5km long eastern end of a new dual carriageway with 0 at grade and 1 grade separated junction.	£19,077,597	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at the Cucumber Lane junction, north-westwards to Plumstead Road.			

Noise Qualitative Impact: Approximately 43 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 43 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 15 properties, 3 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 15 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: The landscape quality of this route is high being more enclosed and intimate in character. Properties in Witton and Great Plumstead would experience adverse visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: No ancient monuments or conservation areas would be affected. The setting of the Church of St Margaret (Grade II*) and the Old Lodge (Grade II) may be affected.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Biodiversity Qualitative Impact: A number of hedgerows would be severed contributing to the fragmentation of habitat affecting local biodiversity.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Water Environment Qualitative Impact: The route passes over the major chalk aquifer below Norwich. Witton Run, a tributary of the River Yare is adversely affected where the road and watercourse coincide.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs 2 PROW which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. There would be no at grade roundabouts along the route impacting on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £168.2M
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £327.3M
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £257.1M
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: This route severs the Great Plumstead Hospital allocated housing from Great Plumstead village. It severs 1 PROW.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Cucumber Lane Route 2	Construction of the 4.5km long eastern end of a new dual carriageway with 1 at grade and 1 grade separated junction.	£21,065,695	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at the Cucumber Lane junction, north-westwards to Middle Road; northwards to Pumstead Road.			

Noise Qualitative Impact: Approximately 117 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 117 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 47 properties, 0 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 47 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: The landscape quality of this route is high being more enclosed and intimate in character. Properties in Witton and Great Plumstead would experience adverse visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: No ancient monuments or conservation areas would be affected. Smee Farm House (Grade II) and Smee Farm Barn (Grade II) may be affected in their setting.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Biodiversity Qualitative Impact: A number of hedgerows would be severed contributing to the fragmentation of habitat affecting local biodiversity.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Water Environment Qualitative Impact: No watercourses, floodplains affected although the route does pass over the major chalk aquifer below Norwich.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs 2 PROWs which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. There would be no at grade roundabouts along the route impacting on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £170.9M (estimate)
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £327.3M (estimate)
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £257.1M (estimate)
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: No communities are severed by this route. It severs 2 PROWs.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Church Road Route	Construction of the 3.5km long eastern end of a new dual carriageway with 1 at grade and 1 grade separated junction.	£25,213,037	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at a junction midway between Church Road and Mill Road, north-westwards to Middle Road; northwards to Plumstead Road.			

Noise Qualitative Impact: Approximately 37 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 37 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 15 properties, 0 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 15 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: The landscape quality of this route is high being more enclosed and intimate in character. Properties such as Oaks Farm and Apple Tree Farm would experience adverse visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: No ancient monuments, listed buildings or conservation areas would be affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Biodiversity Qualitative Impact: A number of hedgerows would be severed contributing to the fragmentation of habitat affecting local biodiversity.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Water Environment Qualitative Impact: No watercourses, floodplains affected although the route does pass over the major chalk aquifer below Norwich.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs 2 PROWs which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. There would be no at grade roundabouts along the route impacting on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £176.5M (estimate)
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £340.9M (estimate)
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £267.9M (estimate)
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: No communities are severed by this route. It severs 2 PROWs.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
The Grange Route	Construction of the 3.5km long eastern end of a new dual carriageway with 1 at grade and 1 grade separated junction.	£18,401,409	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at a junction midway between Church Road and Brundall Low Road, north-westwards to Middle Road; northwards to Plumstead Road.			

Noise Qualitative Impact: Approximately 38 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 38 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 15 properties, 0 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 15 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: The landscape character is that of open farmland, its quality varies from ordinary to attractive. Properties such as Oaks Farm, The Grange, and Apple Tree Farm would experience adverse visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: No ancient monuments, listed buildings or conservation areas would be affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Biodiversity Qualitative Impact: A number of hedgerows would be severed contributing to the fragmentation of habitat affecting local biodiversity.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Water Environment Qualitative Impact: No watercourses, floodplains affected although the route does pass over the major chalk aquifer below Norwich.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs 2 PROWs which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. There would be no at grade roundabouts along the route impacting on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £167.2M
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £340.9M
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £267.9M
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: No communities are severed by this route. It severs 2 PROWs.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
Heath Farm Route	Construction of the 3km long eastern end of a new dual carriageway with 1 at grade and 1 grade separated junction.	£18,252,442	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at a junction on the Postwick slip road at Oaks Lane, northwards to Middle Road; northwards to Plumstead Road.			

Noise Qualitative Impact: Approximately 32 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 32 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 8 properties, 1 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 8 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: The landscape character is that of open farmland, its quality varies from ordinary to attractive. Properties such as Oaks Farm, The Grange, and Apple Tree Farm would experience adverse visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: No ancient monuments, listed buildings or conservation areas would be affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Biodiversity Qualitative Impact: A number of hedgerows would be severed contributing to the fragmentation of habitat affecting local biodiversity.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Water Environment Qualitative Impact: No watercourses, floodplains affected although the route does pass over the major chalk aquifer below Norwich.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs a PROW which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. There would be no at grade roundabouts along the route impacting on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £168.7M
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £348.8M
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £274.1M
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: No communities are severed by this route. It severs 1 PROW.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts

PRELIMINARY APPRAISAL SUMMARY TABLES

Option:	Description:	PVC to Public:	Problems:
The Nursery Route	Construction of the 2.5km long eastern end of a new dual carriageway with 1 at grade and 1 grade separated junction.	£14,646,647	- Congestion & slow journey times in built up areas - Reliability and availability of bus services - Problems caused by traffic - nuisance to residents, busy roads, poor air quality - Population growth and new housing development - Increasing economic growth and prosperity - Access to Norwich International Airport
From the A47 at Postwick, north-eastwards from Broadland Way to Smee Lane; northwards to Middle Road; northwards to Plumstead Road.			

Noise Qualitative Impact: Approximately 34 properties lie within 300m of the route option. At this stage the traffic information is unavailable determining how many properties lie within 300m of existing roads experiencing an increase or decrease in traffic levels of more than 25%.	**Quantitative Impact:** Information on levels of noise is unavailable at this stage	**Assessment:** 34 properties within 300m of route
Air Quality Qualitative Impact: The route passes within 200m of 8 properties, 0 of which fall within 50m. Impacts of traffic emissions on local air quality are experienced up to 200m from the roadside. It is anticipated that the air quality limits and objectives for PM10 and NO2 will not be breached. The scheme does not pass through an Air Quality Management Zone.	**Quantitative Impact:** Information on quantities of PM10 and NO2 is unavailable at this stage	**Assessment:** 8 properties within 200m of route
Greenhouse Gases Qualitative Impact: With the do-minimum scenario CO2 emissions can be expected to increase. With this route option they will also be expected to increase. The assessment of the size of these increases is still to be carried out.	**Quantitative Impact:** Information on the quantity of CO2 is unavailable at this stage	**Assessment:** Adverse impact
Landscape Qualitative Impact: The landscape character is that of open farmland, its quality varies from ordinary to attractive. Properties such as Oaks Farm and Smee House would experience adverse visual intrusion.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Townscape Qualitative Impact: No townscape affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Heritage of Historic Resources Qualitative Impact: No ancient monuments, listed buildings or conservation areas would be affected.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Biodiversity Qualitative Impact: A number of hedgerows would be severed contributing to the fragmentation of habitat affecting local biodiversity.	**Quantitative Impact:** N/A	**Assessment:** Slight adverse
Water Environment Qualitative Impact: No watercourses, floodplains affected although the route does pass over the major chalk aquifer below Norwich.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Physical Fitness Qualitative Impact: A footpath/cycleway will be provided along the length of the road which may encourage walking/cycling. This route severs a PROW which may discourage pedestrians/equestrians/cyclists unless suitable crossing points are provided.	**Quantitative Impact:** Information on numbers of pedestrians, equestrians and cyclists is unavailable at this stage	**Assessment:** Slight beneficial impact
Journey Ambience Qualitative Impact: Uninterrupted travel on a modern dual carriageway through the countryside provides improved journey ambience. The provision of 1 at grade roundabout along the route may impact on driver stress.	**Quantitative Impact:** N/A	**Assessment:** Large beneficial impact
Accidents Qualitative Impact: By transferring traffic from congested roads within the northern suburbs and surrounding rural lanes and villages onto a modern purpose-built road, it is estimated this option would bring about an annual saving of up to 60 casualties a year.	**Quantitative Impact:** Information on the number of Personal Injury Accidents over the 30 year assessment period is unavailable at this stage	**Assessment:** Large beneficial
Security Qualitative Impact: There will be a number of lay-bys at locations minimising security risks. At this stage it is not proposed to provide emergency telephones or lighting in the lay-bys. A footway/cycleway will be provided along the length of the new road but it will not be lit and may be separated from the road by landscaping. Bridges and underpasses will be designed for pedestrian and cyclist use where appropriate.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Public Accounts Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVC = £163.7M (estimate)
Transport Economic Efficiency: Business Users and Transport Providers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £348.8M (estimate)
Transport Economic Efficiency: Consumers Qualitative Impact:	**Quantitative Impact:**	**Assessment:** PVB = £274.1M (estimate)
Reliability Qualitative Impact:	**Quantitative Impact:**	**Assessment:** Large beneficial impact
Wider Economic Impacts Qualitative Impact: The scheme would enhance access to Norwich International Airport, and also aid development around the Norwich Area.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Option Value Qualitative Impact: No new transport options created by this scheme	**Quantitative Impact:** N/A	**Assessment:** Neutral
Severance Qualitative Impact: No communities are severed by this route. It severs 1 PROW. It would sever the Business Park to some extent, causing a conflict between local and longer distance traffic.	**Quantitative Impact:** N/A	**Assessment:** Moderate adverse impact
Access to Transport System Qualitative Impact: May improve public transport through reduced congestion in the northern suburbs. Longer distance bus services may use the NDR to access the best corridor into the city.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impact
Transport Interchange Qualitative Impact: This option would facilitate passenger and freight interchange at Norwich International Airport. It would also enhance access to the Park and Ride sites at the airport, Postwick and Sprowston	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts
Landuse Policies Qualitative Impact: The route will have a positive impact on policies for the development of Norwich airport, environmental improvements to urban areas and the enhancement of public highways. The route will have a negative impact on policies for the protection of landscape, countryside and the environment and areas of employment.	**Quantitative Impact:** N/A	**Assessment:** Neutral
Other Policies Qualitative Impact: Would support policy objectives by facilitating inter-regional movement, economic growth, reducing peripherality and higher road safety standards. The agricultural land take and loss of trees and natural habitats would conflict with certain objectives.	**Quantitative Impact:** N/A	**Assessment:** Slight beneficial impacts