



Norfolk County Council

GREAT YARMOUTH THIRD RIVER CROSSING

Benefits Realisation Plan

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WSP

WSP House
70 Chancery Lane
London
WC2A 1AF

Phone: +44 20 7314 5000

Fax: +44 20 7314 5111

WSP.com



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Prepared by	Rob Surl				
Checked by					
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1 INTRODUCTION

1.1.1. This document is the Benefits Realisation Plan for the Great Yarmouth Third River Crossing project (the scheme). It enables the benefits that are expected to be delivered by the scheme to be planned for, managed, tracked and realised. It forms a part of the Full Business Case (FBC) submitted by Norfolk County Council (NCC) and should be read in conjunction with both the FBC and the Monitoring and Evaluation (M&E) Plan.

REQUIREMENTS FOR BENEFITS REALISATION

- 1.1.2. The most important element of a successful project is that it delivers its intended outcomes. No project which fails to deliver what is planned of it can be considered a success.
- 1.1.3. The Department for Transport's guidance on Transport Business Cases (January 2013) therefore requires scheme promoters to include an outline of a Benefits Realisation Plan as part of the Outline Business Case, followed by a completed Benefits Realisation Plan as part of the Full Business Case.
- 1.1.4. Detailed guidance is given in the "Guide for Effective Benefits Management in Major Projects" document from the Infrastructure and Projects Authority (October 2017). This aligns with Cabinet Office advice in "Assurance of benefits realisation in major projects – supplementary guidance". These documents reflect the Government's concern for effective benefits realisation for all types of public project and are not specific to transport schemes.
- 1.1.5. The benefits management process spans all stages of project development, and involves asking the following questions:
- What benefits do we intend the scheme to achieve?
 - What is the value of these benefits?
 - **How can these benefits be realised by the scheme?**
 - Are these benefits being realised by the scheme?
 - What, if anything, should we change?
- 1.1.6. These questions arise at the various stages of scheme development – for example Strategic Outline Business Case, Outline Business Case and Full Business Case. By FBC stage, the benefits will have been defined, so the most important question (highlighted) is "how can these benefits be realised".
- 1.1.7. The different stages of benefits realisation are expressed in different ways in the various guidance notes. The "Guide for Effective Benefits Management" defines them as:
- Define success
 - Identify and quantify
 - Value and appraise
 - **Plan to realise**
 - Work to realise
 - Review performance
- 1.1.8. It is important not to be distracted by the terminology. The principles are very simple. We need to be clear what the scheme is for, by defining the intended benefits. We need to design and deliver the scheme in a way that will deliver these benefits. We need to know whether the benefits are really

being achieved, and we need to be prepared to make changes if it appears that benefits are not being achieved in full.

1.1.9. The benefits cycle, as described in the Cabinet Office guidance, is illustrated in Figure 1-1 below.

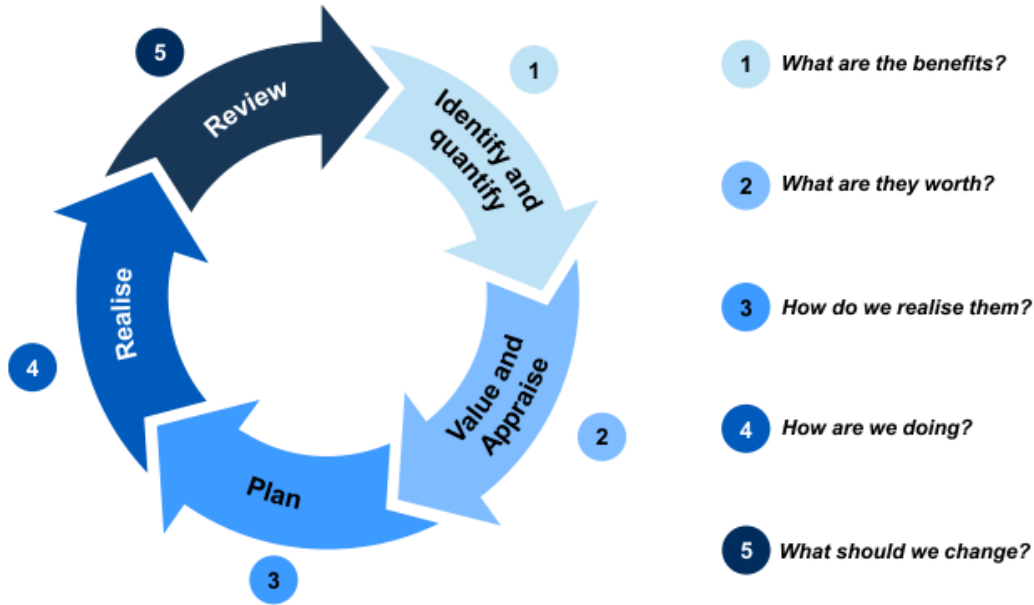


Figure 1-1 - The benefits cycle

1.1.10. There will be some overlap between these stages. Again, at the FBC stage, just prior to delivery of the scheme, the main task (highlighted) is to plan for the realisation of the defined benefits.

2 THE SCHEME

GREAT YARMOUTH THIRD RIVER CROSSING

- 2.1.1. The scheme is a new crossing of the River Yare which presently forms a barrier between Great Yarmouth's deep-water harbour (and key regeneration areas) and the western part of the town.
- 2.1.2. Figure 2-1 below shows the scheme within the context of Great Yarmouth.



Figure 2-1 - The scheme (context)

- 2.1.3. The River Yare bisects Great Yarmouth, with the town centre, seafront, industrial areas and outer harbour located on the narrow, 4 km long, South Denes peninsula between the river and the sea, isolated from the rest of the town.
- 2.1.4. Through traffic on the A47 presently crosses the River Yare on the Breydon Bridge, to the north of the town centre. Access to the peninsula from the south, and from the western part of the town is provided by the Haven Bridge which leads directly into the town centre, also at the northern end of the peninsula. Both are single carriageway lifting bridges. There are no crossings further south to give more direct access to the peninsula. As a result, the main industrial areas and deep-water outer harbour are up to 4 km from the nearest bridge. Access to the sea-front is similarly constrained, with all vehicles, cyclists and pedestrians having to use the bridges at the northern end.
- 2.1.5. The scheme will provide a third crossing of the River Yare, creating a direct link into the southern part of the peninsula. It will substantially improve connectivity between the strategic road network (A47) and destinations on the South Denes peninsula, including the Port and Outer Harbour, the Great Yarmouth Energy Park, and the South Denes Business Park, part of the Great Yarmouth and Lowestoft Enterprise Zone.
- 2.1.6. Figure 2-2 below illustrates the scheme in more detail.



Figure 2-2 - The scheme (detail)

- 2.1.7. More detailed descriptions of the scheme may be found in the FBC and the M&E Plan.

3 DEFINING SUCCESS:

WHAT BENEFITS DO WE INTEND THE SCHEME TO ACHIEVE?

The first step in the benefits cycle is to define what success looks like.

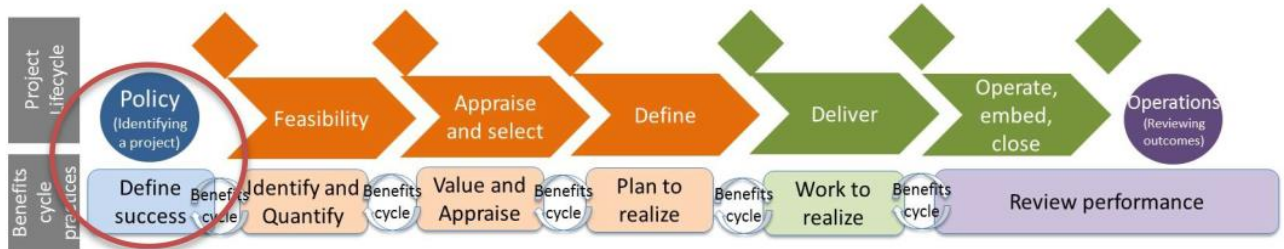


Figure 3-1 - Benefits cycle: Define success

Objectives

3.1.1. The high-level objectives of the scheme are:

- **To support Great Yarmouth as a centre for both offshore renewable energy and the offshore oil and gas industry**, enabling the delivery of renewable energy Nationally Significant Infrastructure Projects and enhancing the Port’s role as an international gateway;
- **To improve access and strategic connectivity between Great Yarmouth port and the national road network** thereby supporting and promoting economic and employment growth (particularly in the Enterprise Zone);
- **To support the regeneration of Great Yarmouth, including the town centre and seafront**, helping the visitor and retail economy;
- **To improve regional and local access** by enhancing the resilience of the local road network, reducing congestion and improving journey time reliability;
- **To improve safety and to reduce road casualties and accidents**, in part by reducing heavy traffic from unsuitable routes within the town centre;
- **To improve access to and from the Great Yarmouth peninsula for pedestrians, cyclists and buses**, encouraging more sustainable modes of transport and reducing community severance and;
- **To protect and enhance the environment** by reducing emissions of greenhouse gases and minimising the environmental impact of the Scheme.

3.1.2. The specific, or intermediate, objectives are:

- To provide traffic relief to Breydon Bridge and Haven Bridge
- To reduce congestion and delay in the town centre
- To improve journey time reliability
- To reduce traffic in historic areas
- To improve vehicular access to the South Denes peninsula and the outer harbour, especially from the A47 for cars, goods vehicles, buses, cyclists and pedestrians
- To reduce road accident casualties
- To reduce emissions of greenhouse gases
- To improve the resilience of the local road network.

3.1.3. These objectives define the benefits the scheme needs to achieve. They relate closely to the policies, opportunities and problems which were described in detail in the Strategic Case of the OBC and have been updated in the FBC.

Economic benefits

3.1.4. As with most highway schemes, some of the benefits can be both quantified and monetised, enabling us to forecast in some detail the extent to which the scheme should achieve them. The economic benefits that can be monetised in this way are:

- The value of reductions in greenhouse gas emissions
- The value of time savings for different classes of user
- The value of savings in vehicle operating costs for different classes of user
- The value of increases in physical activity (walking and cycling)
- The value of accident savings
- Changes in revenues from indirect taxation
- The value of improvements in journey time reliability

3.1.5. These benefits clearly relate to many of the specific scheme objectives – for example the time and cost savings, and reliability improvements are expected to help to create the conditions which stimulate local regeneration.

3.1.6. The forecasting and evaluation of the expected monetised economic benefits was described in the Economic Case of the OBC and has been updated in the FBC.

4 VALUATION AND APPRAISAL

WHAT IS THE VALUE OF THESE BENEFITS?

4.1.1. The next steps in the benefits cycle are to quantify, value and appraise the intended benefits:

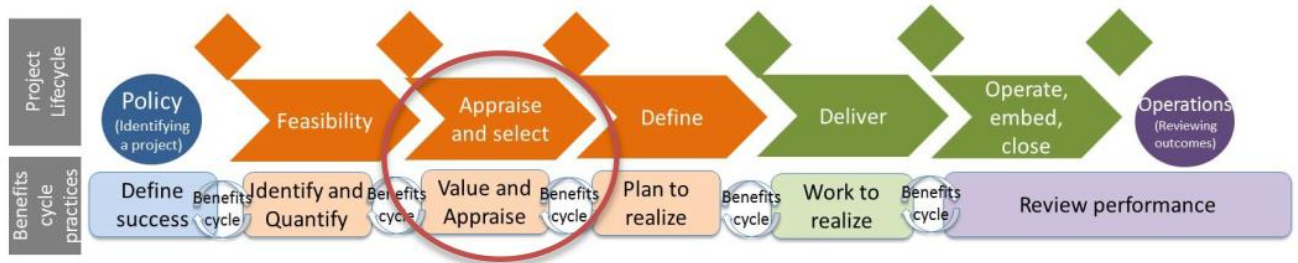


Figure 4-1 - Benefits cycle: Value and appraise

4.1.2. The benefits detailed in Paragraph 3.1.1 cannot generally be expressed in monetary terms, although they will have financial, economic and societal impacts. They are, however, in all cases a direct consequence of the changes in traffic flow which the scheme will cause. These expected changes have been quantified through the traffic modelling and forecasting that was undertaken at SOBC and OBC stages and updated for the FBC. The results are set out in the Local Model Validation Report and the Forecasting Report.

Economic benefits

4.1.3. The economic benefits detailed in Paragraph 3.1.4 have been quantified and monetised at both OBC and FBC stages, at increasing levels of detail and confidence, in line with Transport Appraisal Guidance (TAG). In conjunction with the forecast scheme costs, the results have critically informed decisions on the both the design of the scheme and the financial approvals to date. The results of the appraisal are set out in the Economic Case of the FBC and are summarised in Table 4-1.

Table 4-1 – Valuation of benefits

Benefit	Who benefits	Value (2010 prices discounted to 2010)
TT Travel time savings	Consumer users (commuting)	41,191
	Consumer users (other)	88,640
	Businesses users and providers	64,337
VO Vehicle operating cost savings	Consumer users (commuting)	934
	Consumer users (other)	7,175
	Businesses users and providers	12,876
PA Physical activity (active modes benefits)	All users	12,307
AC Accident savings	All users	947

Benefit	Who benefits	Value (2010 prices discounted to 2010)
TX Indirect taxation revenues	Wider public finances	-5,747
RE Improvements in journey time reliability	All users	11,292
WI Wider economic impacts	The wider economy	68,338
GG Reductions in greenhouse gases	All	2,951
AQ Air quality impacts	All	-386
NI Noise impacts	All	-1,408
Present Value of Benefits (adjusted BCR)	All	303,447

4.1.4. Most of the monetised benefits will be directly due to the time savings which the scheme makes possible, as illustrated in Figure 4-2.

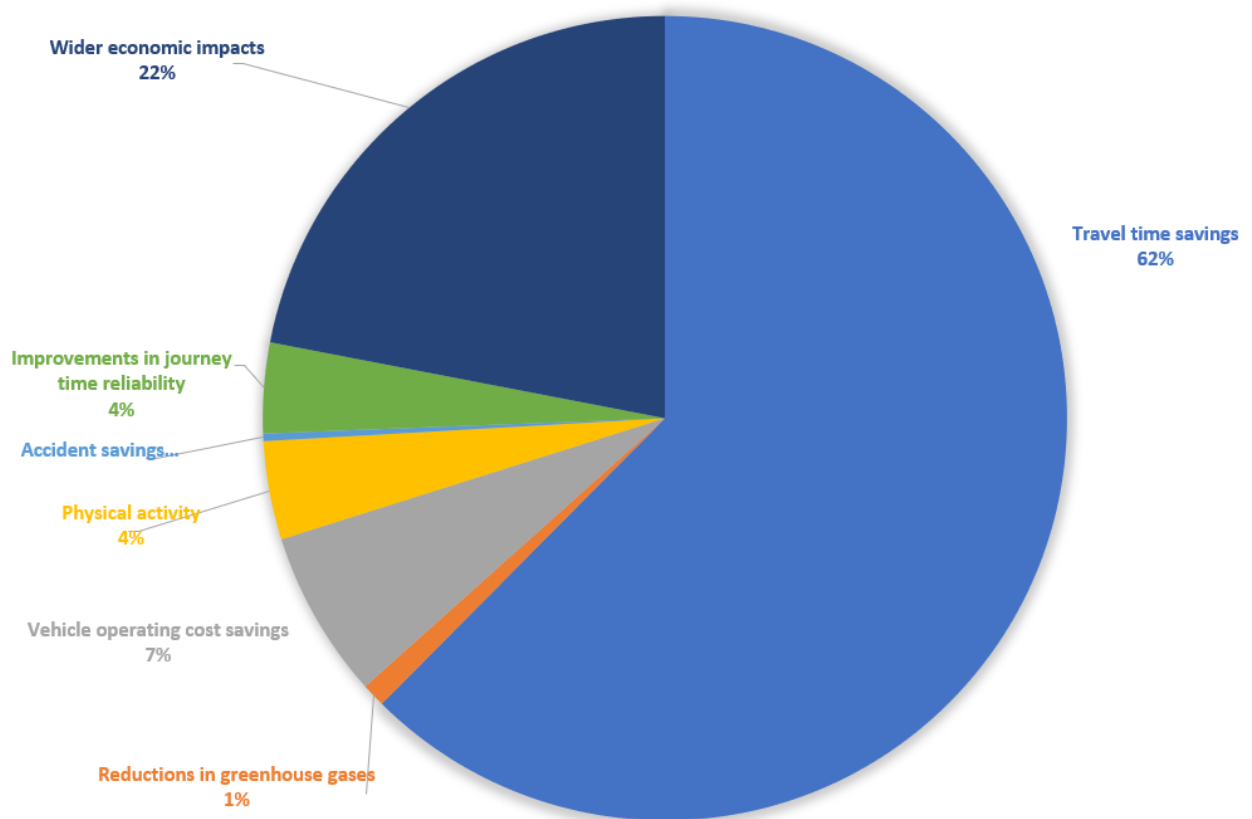


Figure 4-2 - Monetised benefits

5 PLAN TO REALISE

HOW WILL THESE BENEFITS BE REALISED BY THE SCHEME?

- 5.1.1. The scheme is now (2020) at the FBC stage, equivalent to Gate 3 in the Cabinet Office guidance. A plan for the realisation of the benefits is now in place. It involves identifying and selecting the benefits that the project team will concentrate on realising, allocating responsibility for delivering each benefit, and determining the best metric for tracking progress.
- 5.1.2. At the FBC stage, the design of the scheme, and the programme for its construction have been settled, and expected benefits have been re-forecast. This is the critical point at which to check that the scheme is still on track to achieve intended benefits. The purpose of the Plan to Realise is to put in place appropriate mechanisms so that there is a clear understanding of the roles, responsibilities, timescales and governance arrangements required for realising and reviewing benefits.

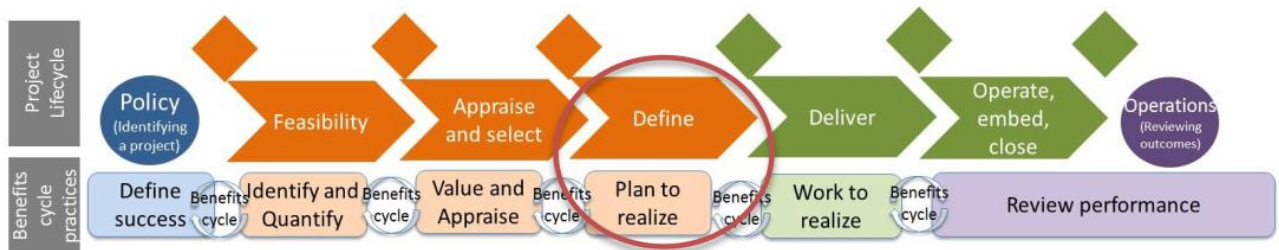


Figure 5-1 - Benefits cycle: Plan to realise

Costs

- 5.1.3. The Financial Case of the FBC sets out the finalised costs of the scheme, including the costs of monitoring and reporting on delivery, as detailed in the Monitoring and Evaluation Plan.

Project plan

- 5.1.4. The Management Case of the FBC includes the Project Plan. This sets out all key project tasks and their duration, the interdependencies between them, and the key milestones and gateways. Certain elements of the programme have built in tolerance and contingency to account for risks identified in the risk register. The detailed project plan and risk register are appended to the FBC.

Roles and responsibilities

- 5.1.5. Roles and responsibilities and governance arrangements have also been finalised in the Management Case of the FBC. Overall the benefits realisation strategy is owned by David Alfrey (NCC) as the Senior Responsible Owner and managed by Mark Kemp (NCC) as the Project Manager. Specific Benefit owners are identified in the Benefits Realisation Strategy (Table 5-1).

Benefits map

5.1.6. The benefits map below (Figure 5-2), taken from the FBC¹, shows how the scheme is expected to deliver the benefits detailed in Section 3 above, and achieve NCC's overall aim for the scheme. Key linkages are demonstrated, but for clarity not all are shown in detail.

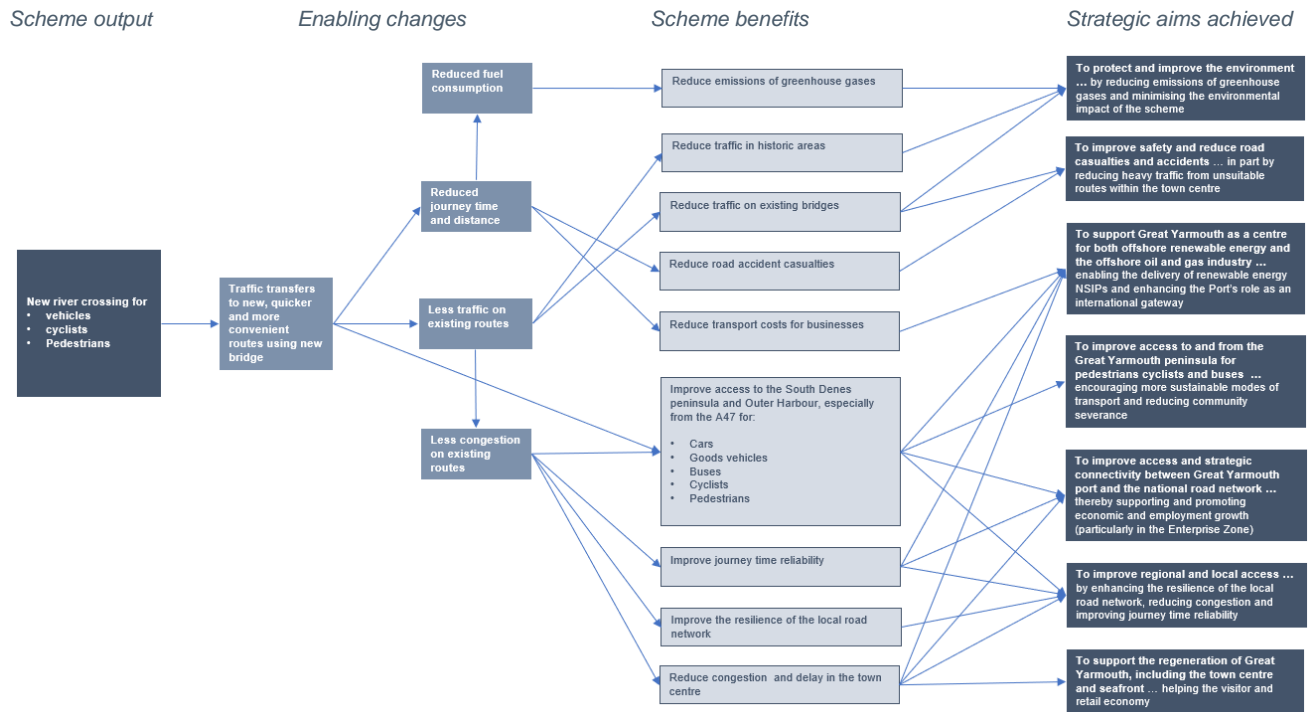


Figure 5-2 – Benefits map (Logic map)

Benefits realisation strategy

5.1.7. The benefits realisation strategy is set out in Table 5-1. It provides the framework against which the anticipated benefits will be planned for, tracked and realised. It sets out the key activities needed to manage the successful realisation of the benefits in the short, medium and long term, together with the timescales and who is responsible for each activity.

5.1.8. The strategy starts with the scheme objectives and follows a logical progression:

- Scheme objectives – as set out in the Strategic Case of the FBC
- Enabling changes – what the scheme needs to deliver in order to achieve each objective
- Benefits experienced – the benefits that will occur as a result of successful delivery of change
- Key beneficiaries – who will experience the benefits
- Benefit owners – who has responsibility for delivering the benefits

¹ The labels in the Benefits Map differ from those used in the FBC and M&E Plan and reflect the labelling conventions in the Cabinet Office Guidance on Assurance of Benefits Realisation. Meanings are unchanged.

- Benefit enablers - an outline of actions to be taken, and additional actions which could be taken to help achieve the benefits

Key benefits

5.1.9. In line with guidance, three of the scheme objectives have been identified in the Monitoring and Evaluation Plan for consideration in more detail:

- **To improve access and strategic connectivity between Great Yarmouth port and the national road network** ... thereby supporting and promoting economic and employment growth (particularly in the Enterprise Zone);
- **To support Great Yarmouth as a centre for both offshore renewable energy and the offshore oil and gas industry** ... enabling the delivery of renewable energy Nationally Significant Infrastructure Projects and enhancing the Port's role as an international gateway;
- **To improve access to and from the Great Yarmouth peninsula for pedestrians, cyclists and buses** ... encouraging more sustainable modes of transport and reducing community severance

5.1.10. These three objectives encompass the key benefits which the scheme needs to deliver – tackling congestion, providing a “missing link” in the road network and supporting regeneration. More information can be found in the Monitoring and Evaluation Plan.

Economic benefits

5.1.11. The strategic benefits identified in the Benefits Realisation Strategy are all, to a greater or lesser degree, associated with one or more of the monetised economic benefits identified in Table 4-1 above:

- | | |
|--|----|
| ▪ reductions in greenhouse gas emissions | GG |
| ▪ travel time savings | TS |
| ▪ savings in vehicle operating costs | VC |
| ▪ increases in physical activity | PA |
| ▪ accident savings | AC |
| ▪ revenues from indirect taxation | TX |
| ▪ improvements in journey time reliability | RE |

5.1.12. The most relevant benefits are indicated in Table 5-1, the Benefits Realisation Strategy, below.

Consideration of potential disbenefits

5.1.13. It is important that potential disbenefits are also considered. This is implicit in the appraisal of economic benefits where, for example, the value of time savings on individual routes in the study area may be either positive or negative, and the result of the appraisal is the net benefit – in other words the aggregate value of the time savings achieved by the scheme. The same applies to each of the economic benefits assessed. Overall, the appraisal considers the extent to which the overall benefits of the scheme will exceed the economic cost of delivering it. The results are set out in the Economic Case of the FBC

5.1.14. Other potential disbenefits are related to noise, air quality, impact on townscape and landscape, and other environmental impacts. These have been assessed and, wherever possible, quantified and the results set out in the Environmental Impact Assessment and summarised in the Appraisal Summary Tables and the Economic Case of the FBC.

Table 5-1 – Benefits realisation strategy

Scheme objective	Enabling changes	Benefits experienced	Who will benefit	Benefit owners	Benefit enablers
<p>To support Great Yarmouth as a centre for both offshore renewable energy and the offshore oil and gas industry ... enabling the delivery of renewable energy NSIPs and enhancing the Port's role as an international gateway;</p> <p>TS VC RE</p>	<p>New river crossing provides a more convenient and attractive route into the peninsula</p> <p>Reduced journey time and distance via new bridge</p> <p>Less congestion on many existing routes</p>	<p>Shows commitment to the future of the Port, increasing business confidence.</p> <p>Businesses experience reduced transport costs</p> <p>The Port and businesses on the peninsula have a faster and more reliable connection to the rest of the country</p>	<p>Energy companies (offshore renewables, oil and gas) and their suppliers</p> <p>Employees</p> <p>Customers</p> <p>Wider community</p>	<p>Norfolk County Council</p> <p>Highways England</p> <p>Great Yarmouth Borough Council</p> <p>New Anglia LEP</p> <p>East of England All Energy Industry Council</p> <p>Energy companies</p> <p>Peel Ports Great Yarmouth</p>	<p>Completion of the scheme</p> <p>Improvements to A47 junctions</p> <p>Promotion, support and collaboration across the offshore energy sector</p>
<p>To improve access and strategic connectivity between Great Yarmouth port and the national road network ... thereby supporting and promoting economic and employment growth (particularly in the Enterprise Zone)</p> <p>TS VC RE</p>	<p>New river crossing provides a more convenient and attractive route into the peninsula</p> <p>Reduced journey time and distance via new bridge</p> <p>Less congestion on many existing routes</p>	<p>Scheme links directly to the A47 trunk road at Harfrey's Roundabout.</p> <p>Traffic to / from the Port no longer needs to pass through the town centre.</p> <p>Very significant time and distance savings for traffic between the Port and the A47, especially the A47 south.</p>	<p>Local employers</p> <p>Employees</p> <p>Customers</p> <p>Wider community</p>	<p>Norfolk County Council</p> <p>Highways England</p> <p>New Anglia LEP</p> <p>Peel Ports Great Yarmouth</p>	<p>Completion of the scheme</p> <p>Improvements to A47 junctions</p> <p>Marketing and promotion of Enterprise Zone sites at S. Denes to potential inward investors</p> <p>Simplified Planning Zone</p>
<p>To support the regeneration of Great</p>	<p>New river crossing provides a more</p>	<p>More attractive environment within the</p>	<p>Retailers and other town centre businesses</p>	<p>Norfolk County Council</p>	<p>Completion of the scheme</p>

Scheme objective	Enabling changes	Benefits experienced	Who will benefit	Benefit owners	Benefit enablers
<p>Yarmouth, including the town centre and seafront ... helping the visitor and retail economy</p> <p>TS RE</p>	<p>convenient and attractive route into the peninsula</p> <p>Less through traffic and less congestion in the town centre</p>	<p>town centre due to the removal of through traffic, especially heavy traffic</p> <p>Easier access to the seafront for vehicles, pedestrians and cyclists, especially from the south</p>	<p>The visitor economy</p> <p>Residents</p> <p>Visitors</p> <p>Pedestrians</p>	<p>Great Yarmouth Borough Council</p> <p>Great Yarmouth Town Centre Partnership</p>	<p>Town Centre Regeneration Framework and Master Plan initiatives</p> <p>Promotion of town centre through Business Improvement District</p>
<p>To improve regional and local access ... by enhancing the resilience of the local road network, reducing congestion and improving journey time reliability</p> <p>TS RE</p>	<p>New river crossing provides a more convenient and attractive route into the peninsula</p> <p>Reduced journey time and distance via new bridge</p> <p>Less congestion on many existing routes</p>	<p>Reduced congestion generally will lead to less variation in journey times and greater reliability.</p>	<p>Commuters</p> <p>Business users</p> <p>Other road users</p>	<p>Norfolk County Council</p> <p>Highways England</p>	<p>Completion of the scheme</p> <p>Improvements to A47 junctions</p> <p>Monitoring of performance and fine-tuning of signal-controlled junctions</p>
<p>To improve safety and to reduce road casualties and accidents ... in part by reducing heavy traffic from unsuitable routes within the town centre</p> <p>AC</p>	<p>New river crossing provides a shorter, more attractive route into the peninsula leading to reduced journey time and distance.</p> <p>New bridge is designed to modern standards and subject to full safety audit</p> <p>Less traffic on existing routes which may have higher accident rates</p>	<p>Less exposure to risk of collisions.</p> <p>Fewer accidents</p> <p>Fewer casualties</p> <p>Safer environment for pedestrians and cyclists in the town centre</p> <p>Creates opportunities for other improvements to safety</p>	<p>All road users</p> <p>Pedestrians and cyclists</p>	<p>Norfolk County Council</p> <p>Highways England</p> <p>Norfolk Constabulary</p>	<p>Completion of the scheme</p> <p>Road safety audit</p> <p>Monitoring / investigation of accidents</p> <p>Traffic management</p> <p>Education / enforcement</p>

Scheme objective	Enabling changes	Benefits experienced	Who will benefit	Benefit owners	Benefit enablers
<p>To improve access to and from the Great Yarmouth peninsula for pedestrians, cyclists and buses ... encouraging more sustainable modes of transport and reducing community severance</p> <p>TS PA RE</p>	<p>New river crossing provides a shorter, more convenient and attractive route into the peninsula for pedestrians and cyclists</p> <p>Reduced traffic and congestion on other routes.</p> <p>New bridge creates opportunity to develop more efficient bus routes into the peninsula</p>	<p>Walking or cycling becomes a more feasible option for some trips into the peninsula, especially trips to / from the south, leading to an increase in walking and cycling.</p> <p>Health benefits from active travel</p> <p>Bus operators and passengers benefit from reduced congestion and greater journey time reliability.</p> <p>Bus operators have opportunity to provide new or modified services using the new bridge</p> <p>People, including those without access to a car, are better able to access jobs, services and recreational facilities on the opposite side of the river, reducing community severance and improving access to employment</p>	<p>Local residents</p> <p>Commuters</p> <p>Local businesses and service providers</p> <p>Pedestrians and cyclists</p> <p>Health providers</p> <p>Bus users</p> <p>Bus operators</p>	<p>Norfolk County Council</p> <p>Bus operators</p>	<p>Completion of the scheme, including cycle and pedestrian facilities</p>
<p>To protect and enhance the environment ... by reducing emissions of greenhouse gases and minimising the</p>	<p>New river crossing provides a more convenient and attractive route into the peninsula</p>	<p>Reduced fuel consumption due to reduced vehicle km</p>	<p>Local people</p> <p>The wider community</p> <p>Health providers</p>	<p>Norfolk County Council</p>	<p>Completion of the scheme</p>



Scheme objective	Enabling changes	Benefits experienced	Who will benefit	Benefit owners	Benefit enablers
environmental impact of the Scheme GG PA AQ NI	Reduced journey time and distance via new bridge Less traffic on many existing routes	Reduced emissions of CO ₂ and other greenhouse gases Less traffic in the historic town centre			

6 WORK TO REALISE

ARE THESE BENEFITS BEING REALISED BY THE SCHEME?

6.1.1. The realisation of the benefits begins with the construction of the scheme and will continue throughout its operation and use:

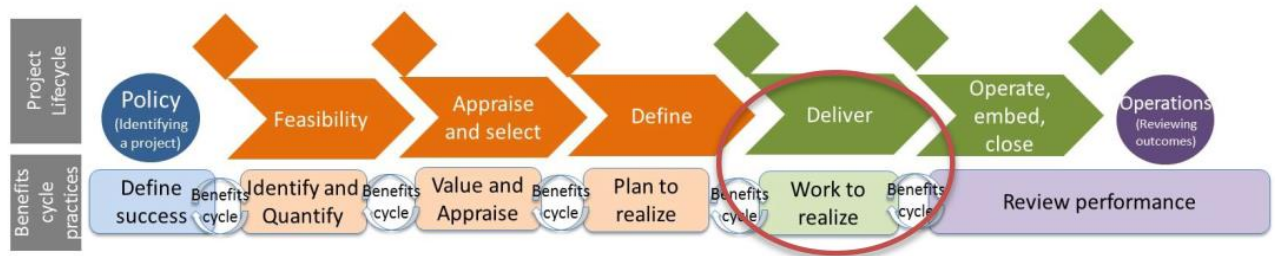


Figure 6-1 - Benefits cycle: Work to realise

Monitoring and evaluation

6.1.2. The impacts of the scheme and achievement of its key benefits will be monitored both before, during and after construction (one year after and five years after). The proposals are set out in full in the Monitoring and Evaluation Plan which covers the following impacts:

- Scheme objectives
- Travel demand
- Travel times and reliability
- Impact on the economy
- Carbon
- Noise
- Local air quality
- Accidents
- Value for money

7 REVIEW PERFORMANCE

WHAT, IF ANYTHING, SHOULD WE CHANGE?

- 7.1.1. The final stage of the benefits realisation cycle is to review the performance of the scheme, and to take any actions that are necessary to ensure that the benefits continue to be delivered:

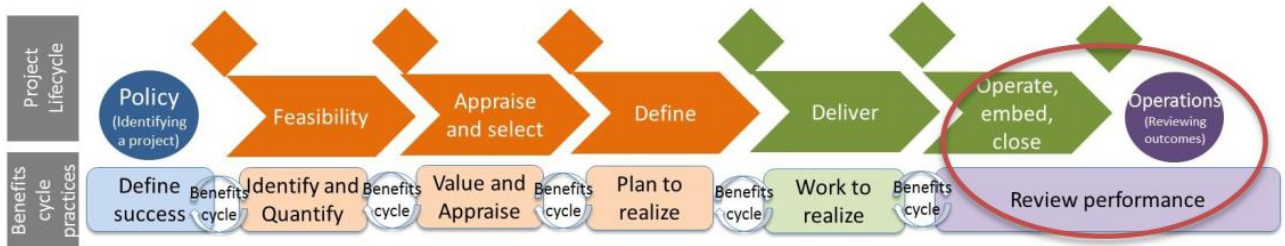


Figure 7-1 - Benefits cycle: Review performance

- 7.1.2. Every stage of the benefits cycle involves review and feedback of the scheme’s ability to achieve benefits. For example, outputs from the traffic modelling have been used to assess the expected performance of new and existing junctions, and to identify where improvements could be made to the design. This process is described in the Traffic Impact Assessment (TIA) which was considered as part of the Development Consent Order (DCO) process.
- 7.1.3. Once the scheme is complete, and monitoring has been undertaken in line with the Monitoring and Evaluation Report, it will be important to review its overall performance and consider whether the intended benefits have been, or are being, achieved and:
- what lessons can be learnt to inform decisions on similar schemes in future
 - what actions are needed to address areas where benefits are not being achieved

Learning lessons

- 7.1.4. The “Five years after” Monitoring and Evaluation report, which will be shared with stakeholders and published on the NCC and DfT websites, will specifically address the question of which benefits have, or have not been achieved, and will consider the lessons that can be learnt from the scheme.

Remedial actions

- 7.1.5. Traffic studies conducted within a year of the opening of the scheme will identify whether it is performing as expected, in terms of route choices, relief to the existing bridges and roads, and performance of junctions. If it becomes clear that the scheme is not working as effectively as it should, remedial action could be undertaken including, for example, adjustments to traffic signal timings, signing and lining.
- 7.1.6. Sometimes it may be difficult to attribute changes to the scheme, as many other factors will affect, for example, decisions of new firms to locate in the Enterprise Zone. In these cases, feedback from engagement with stakeholders, as proposed in the Monitoring and Evaluation Plan, will help to determine the contribution of the scheme to business confidence.
- 7.1.7. In the case of road accidents, these are individually rare events and changes are difficult to predict or detect in the short term. Norfolk County Council monitors all accidents and has a statutory duty to take steps to reduce and prevent accidents, promote road safety and secure the safe movement of



traffic (including pedestrians) on their roads. The scheme is expected to reduce traffic flow on some roads and junctions, whilst increasing it on others, and it will also have an impact on traffic speeds. These impacts can be forecast and will be monitored in the shorter term (one year after opening). The Council will take these changes into account in determining where resources can be deployed most effectively to maintain the safe movement of traffic.

WSP House
70 Chancery Lane
London
WC2A 1AF

wsp.com