

Appraisal Summary Table

Date produced:: January 2020

Name of scheme:		Ipswich Northern Route - Outer Route Option					Organisation	WSP				
Description of scheme:		The Ipswich Northern Route (INR) would provide a new strategic transport link connecting the A14 and A12 to the north of Ipswich. The project has significant potential to relieve congestion on the existing east-west links and the A14, and to facilitate movements in and around of Ipswich, enabling connectivity to key connecting routes, easing bottlenecks around Ipswich and the wider area. It would improve accessibility and is expected to enable new development, helping Ipswich to maintain its role as a key driver of economic growth.					Role	Consultant				
Impacts		Summary of key impacts			Quantitative		Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp				
Economy	Business users & transport providers	The INR will provide a high quality, alternative route choice for business users will significantly improve journey times in Ipswich and the wider Suffolk area. Congestion in Ipswich Town Centre, A14 and A12 will be reduced as a result of the route. Congestion will reduce when the Orwell Bridge closes and alternative route choice for users. The route will have a positive impact on the Strategic Road Network, A14, at junctions with existing capacity issues. INR will create additional transport capacity to support planned and future employment growth in the wider Ipswich area. The economic benefits to business users are highlighted by the highly positive TUBA results.			Value of journey time changes(£)		£52m	N/A	£96,117,000	N/A		
	Net journey time changes (£)				0 to 2min		2 to 5min				> 5min	
					£26m	£12m	£13m					
					N/A		N/A				N/A	
	Reliability impact on Business users	The journey time in Ipswich and on the A14 and A12 is expected to become more reliable. The reliability of journey times around Ipswich and Suffolk will be improved by adding to the route choice for business users. Congestion will reduce on the approaches to Orwell Bridge and at existing junctions on the A14.			N/A		N/A	N/A				
	Regeneration	The delivery of the INR is fundamental to the delivery of around 10,000 to 15,000 additional homes across Suffolk. By alleviating the main traffic issues on the A14 and Ipswich it will support the regeneration of the local economy by providing additional transport capacity to support planned development in the wider Ipswich area.			N/A		N/A	N/A				
	Wider Impacts	Due to the reduced congestion and quicker, more reliable journeys, the scheme will likely provide easier access to key employment sites in Suffolk and Norfolk, as well as further afield in Cambridgeshire and Greater London. This means the project will have an important role in enabling the projected growth of the regional economy. By providing extra capacity on the SRN and allowing it to operate with higher resilience and reliability, the should help to increase productivity and facilitate economic growth. Reducing transport costs to businesses encourages them to increase their production of goods and services, known as 'output change in imperfectly competitive markets'. A 10% uplift to business user benefits has been applied to represent 'output change in imperfectly competitive markets' as per TAG unit A2.2.			N/A		N/A	£9,612,000				
Environmental	Noise	There are two Noise Important Areas (NIA 11332 and NIA 4810) and 1452 dwellings located within 600m from the route option. Most of noise sensitive receptors will be concentrated to the eastern edge of the route. This and low density populated areas within close proximity to the route are likely to experience a perceptible change in noise levels. Approximately 24 noise sensitive receptors within 60m from the proposed route are likely to exceed a noise level of 68 dB LA10,18h, used as the Significant Observed Adverse Effect Level (SOAEL) and the threshold for the Noise Insulation Regulations (NIR) 1975, as amended 1988.			N/A		Slight Adverse	N/A	N/A			
	Air Quality	There are 147 sensitive receptors identified within 200m of the road alignment and the junctions with the A12 (Woodbridge). These include residential buildings and two hotels. The route option will change air quality at these locations. Presence of an Ancient Woodland within 200m of the Highway Route option. Traffic flows will exceed the DMRB criteria for Annual Average Daily Traffic (AADT), Heavy Duty Vehicle (HDV), vehicle speeds along the road alignment, and junctions with the A140 and the A12, north and east of Woodbridge. Changes in traffic flows are likely to affect the Air Quality Management Area (AQMA) in Woodbridge (outside the footprint of the route option), which includes an area encompassing a number of properties near to the junction of Lime Kiln Quay Road, Throughfare and St John's Street in Woodbridge.			N/A		Slight Adverse	N/A	N/A			
	Greenhouse gases	Increases in emissions due to increase in traffic flows. However, potential decreases due to reduction in congestion and journey length.			Change in non-traded carbon over 60y (CO2e)		-	Neutral	£1,455,000			
				Change in traded carbon over 60y (CO2e)		-						
		Landscape	The Outer Route Option lies within a predominantly rural setting with landscapes varying from lowland agriculture and small villages bookended by the A12 and Woodbridge to the east and the A140 to the west. The Outer Route Option lies within three National Character Areas and crosses the northern edge of SSP38 - Special Landscape Area. Moderate adverse effect on the landscape pattern, culture, tranquility and landcover particularly in relation to views is expected primarily as a result of the introduction of new stretches of road on undeveloped land, introduction of new urbanising elements to the landscape and removal of landscape elements including hedgerows and trees.			N/A		Moderate Adverse	N/A			
	Townscape	Scoped out from further assessment.			N/A		N/A	N/A				

Historic Environment	The Outer Route Option is anticipated to have Large Adverse impact on Coddenham Conservation Area. The Outer Route Option will have a Moderate Adverse impact on the setting of designated heritage assets, which include the Grade I Registered Shrubland Hall Park, two Grade I listed buildings, three Grade II* listed buildings and 52 Grade II listed buildings. No designated heritage assets will be physically impacted by the Route Option.	N/A	Large Adverse	N/A														
	Biodiversity	The Outer Route Option is unlikely to affect European Designated sites or Sites of Special Scientific Interest (SSSIs) providing avoidance and mitigation measures are implemented. The Route is likely to directly affect three County Wildlife Sites (CWSs) including Shrubland Park CWS which supports nationally rare invertebrates and plants. Measures to mitigate and compensate for impacts on the CWSs will be required. The Route will cross several Habitats of Principal Importance including deciduous woodland. There may be indirect effects on additional designated sites as a result of deterioration of air quality, and increase in noise and lighting during construction and operation. The most significant impacts of the Route are likely to be on the CWSs and habitats supporting birds and bats. Further surveys of designated sites, habitats and species are necessary to inform an assessment of significant effects and mitigation and species licensing may be required.	N/A	Large Adverse	N/A													
	Water Environment	The Outer Route option crosses a tributary of the River Gipping, Coddenham Watercourse and a tributary of the River Deben, the River Lark. The River Gipping flows into the Orwell Estuary and the River Lark and Finn the Deben Estuary, both of which are designated Ramsar, SSSI and Special Protection Area (SPAs). Surrounding areas are classified as a mixture of Flood Risk Zone 1, 2 and 3 (including Zone 3b - functional flood plain when crossing Coddenham Watercourse). The Scheme may affect flood conveyance and flood storage capacity. The Outer Route option traverses a Surface Water Safeguarded Zone and Groundwater Source Protection Zones. The Route Option lies within a zone classified as a mixture of major and minor aquifers with low / intermediate / high groundwater vulnerability.	N/A	Slight Adverse	N/A													
Social	Commuting and Other users	There are forecast to be very large benefits to commuters and other users of the highway network in Suffolk as the INR will improve connections for vehicles accessing the north of Suffolk from the A14 and A12. Journey time savings across the town are expected to be high, as a result of the alternative route choice to users provided by the INR and reduced congestion on the approaches to Orwell Bridge. The economic benefits to business users are highlighted by the highly positive journey time savings and reduced vehicle operating costs from reduced.	<table border="1"> <tr> <td colspan="2">Value of journey time changes (£)</td> <td>£280m</td> </tr> <tr> <td colspan="3">Net journey time changes (£)</td> </tr> <tr> <td>0 to 2min</td> <td>2 to 5min</td> <td>> 5min</td> </tr> <tr> <td>£139m</td> <td>£70m</td> <td>£70m</td> </tr> </table>	Value of journey time changes (£)		£280m	Net journey time changes (£)			0 to 2min	2 to 5min	> 5min	£139m	£70m	£70m	N/A	£257,676,000	N/A
	Value of journey time changes (£)		£280m															
	Net journey time changes (£)																	
	0 to 2min	2 to 5min	> 5min															
	£139m	£70m	£70m															
	Reliability impact on Commuting and Other users	Strategic traffic on the local and strategic highway network in Suffolk will experience less incidences of congestion & will therefore be able to maintain higher speeds. This is as result of an alternative route choice for commuters and other users, as well as less congestion on the approaches to the Ipswich town centre and Orwell Bridge.	N/A	Slight Beneficial	N/A													
	Physical activity	The scheme will help to improve opportunities for sustainable trips in the greater Ipswich area, including walking and cycling. Removal of strategic traffic from the town could improve the environment for pedestrians and cyclists.	N/A	Slight Beneficial	N/A													
	Journey quality	Enhanced journey quality for all users of the INR, through decreased journey times and good forward visibility. Transport users will experience enhanced journey quality as Suffolk local and strategic highway network is improved and create alternative route choice in the wider Ipswich area. Shorter journey times (and therefore saved travel hours) will also contribute to this improvement	N/A	Slight Beneficial	N/A													
	Affordability	Consumers will benefit from modest savings in vehicle operating costs through decreased journey times & reduced congestion	N/A	Neutral	N/A	N/A												
	Security	Not applicable to scheme	N/A	N/A	N/A	N/A												
Access to services	Not applicable to scheme	N/A	N/A	N/A	N/A													
Accidents	A Cost & Benefit to Accidents - Light Touch (COBALT), which is a DFT developed computer programme to undertake the analysis of accidents, has not been undertaken. Accident savings are expected to be minimal.	N/A	N/A	N/A	N/A													
Severance	Removal of strategic traffic from the town centre will reduce severance issues for pedestrians and cyclists.	N/A	N/A	N/A	N/A													
Option and non-use values	Not applicable to this scheme.	N/A	N/A	N/A														
Public Account	Cost to Broad Transport Budget	These consist of the scheme investment costs and operating costs (i.e. annual maintenance costs and capital renewal costs).	N/A	N/A	£268,996,000													
	Indirect Tax Revenues	Increased indirect tax revenues as a result of increased fuel spends.	N/A	N/A	£2,768,000													

Appraisal Summary Table

Date produced: January 2020

Name of scheme:	Ipswich Northern Route - Middle Route	Organisation	WSP
Description of scheme:	The Ipswich Northern Route (INR) would provide a new strategic transport link connecting the A14 and A12 to the north of Ipswich. The project has significant potential to relieve congestion on the existing east-west links and the A14, and to facilitate movements in and around of Ipswich, enabling connectivity to key connecting routes, easing bottlenecks around Ipswich and the wider area. It would improve accessibility and is expected to enable new development, helping Ipswich to maintain its role as a key driver of economic growth.	Role	Consultant

Impacts		Summary of key impacts	Assessment						
			Quantitative			Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp	
Economy	Business users & transport providers	The INR will provide a high quality, alternative route choice for business users & significantly improve journey times in Ipswich and the wider Suffolk area. Congestion in Ipswich Town Centre, A14 and A12 will be reduced as a result of the route. Congestion will reduce when the Orwell Bridge closes and alternative route choice for users. The route will have a positive impact on the Strategic Road Network, A14, at junctions with existing capacity issues. INR will create additional transport capacity to support planned and future employment growth in the wider Ipswich area. The economic benefits to business users are highlighted by the highly positive TUBA results.	Value of journey time changes(£)		£75m	N/A	£139,037,000	N/A	
				Net journey time changes (£)					
				0 to 2min	2 to 5min				> 5min
				£26m	£30m				£20m
	Reliability impact on Business users	The journey time in Ipswich and on the A14 and A12 is expected to become more reliable. The reliability of journey times around Ipswich and Suffolk will be improved by adding to the route choice for business users. Congestion will reduce on the approaches to Orwell Bridge and at existing junctions on the A14.	N/A			N/A	N/A		
	Regeneration	The delivery of the INR is fundamental to the delivery of around 10,000 to 15,000 additional homes across Suffolk. By alleviating the main traffic issues on the A14 and Ipswich will support the regeneration of the local economy by providing additional transport capacity to support planned development in the wider Ipswich area.	N/A			N/A	N/A		
	Wider Impacts	Due to the reduced congestion and quicker, more reliable journeys, the scheme will likely provide easier access to key employment sites in Suffolk and Norfolk, as well as further afield in Cambridgeshire and Greater London. This means the project will have an important role in enabling the projected growth of the regional economy. By providing extra capacity on the SRN and allowing it to operate with higher resilience and reliability, the should help to increase productivity and facilitate economic growth. Reducing transport costs to businesses encourages them to increase their production of goods and services, known as 'output change in imperfectly competitive markets'. A 10% uplift to business user benefits has been applied to represent 'output change in imperfectly competitive markets' as per TAG unit A2.2.	N/A			N/A	£13,904,000		
Environmental	Noise	There are four Noise Important Areas (NIA 4822, NIA 4807, NIA 4808 and NIA 4806) within 600m of the Route Option. There are up to 1807 dwellings located within 600m of the Route Option. These sensitive receptors and low density populated areas within close proximity to the route are likely to experience a perceptible change in noise levels. Approximately 46 noise sensitive receptors within 80m of the proposed route are likely to exceed a noise level of 68 dB LA10,18h, used as the Significant Observed Adverse Effect Level (SOAEL) and the threshold for the Noise Insulation Regulations 1975, as amended 1988.	N/A			Slight Adverse	N/A	N/A	
	Air Quality	There are up to 234 sensitive receptors within 200m of the Route Option. These include residential buildings, schools, hotels and a care home. Presence of an Ancient Woodland within 200m of the Route Options. The proposed Highway Route option will change air quality at these locations. Traffic flows will exceed the DMRB criteria for Annual Average Daily Traffic (AADT), Heavy Duty Vehicle (HDV), vehicle speeds along the road alignment, and junctions with the A14, South of Claydon and the A12, east of Woodbridge. Changes in traffic flows are likely to affect the Air Quality Management Area (AQMA) in Woodbridge.	N/A			Slight Adverse	N/A	N/A	
	Greenhouse gases	Increases in emissions due to increase in traffic flows. However, potential decreases due to reduction in congestion and journey length.	Change in non-traded carbon over 60y (CO2e)		-	Neutral	£2,518,000		
			Change in traded carbon over 60y (CO2e)		-				

	Landscape	The Middle Route Option lies within a predominantly rural setting with landscapes varying from lowland agriculture and small villages bookended by the A12 and Woodbridge to the east and the A140 to the west. The Middle Route Option lies within three National Character Areas and SSP38 - Special Landscape Area. Moderate adverse effect on the landscape pattern, culture, tranquility and landcover particularly in relation to views is expected primarily as a result of the introduction of new stretches of road on undeveloped land, introduction of new urbanising elements to the landscape and removal of landscape elements including hedgerows and trees.	N/A	Moderate Adverse	N/A				
	Townscape	Scoped out from further assessment.	N/A	N/A	N/A				
	Historic Environment	The Middle Route option will impact on the setting of one Grade I listed building, five Grade II* listed buildings, 32 Grade II listed buildings, one conservation area and one Grade II Registered Park or Garden. No assets will be physically impacted by the Middle Route Option.	N/A	Moderate Adverse	N/A				
	Biodiversity	The Middle Route option is unlikely to affect European Designated sites or Sites of Special Scientific Interest (SSSIs), providing avoidance and mitigation measures are implemented. The Route is likely to directly affect three CWSs including ancient woodland habitat at Blunt's Wood CWS. Measures to mitigate and compensate for impacts on the CWSs will be required. The Route will cross several Habitats of Principal Importance including deciduous woodland. There may be indirect effects on additional designated sites as a result of deterioration of air quality, and increase in noise and lighting during construction and operation. The most significant impacts of the Route are likely to be on CWSs and habitats supporting or used by bats and birds. Further surveys of designated sites, habitats and species are necessary to inform an assessment of significant effects and mitigation and species licensing may be required.	N/A	Large Adverse	N/A				
	Water Environment	The Middle Route option crosses the River Gipping and two designated tributaries, namely the River Lark and the River Fynn, which both feed the River Deben. The River Gipping flows into the Orwell Estuary, and the River Lark and the River Fynn flow into the Deben Estuary, both of which are designated Ramsar, SSSI and Special Protection Area (SPA). Surrounding areas are classified as a mixture of Flood Risk Zone 1, 2 and 3 (including Zone 3b - functional flood plain when crossing the River Gipping). The Scheme may affect flood conveyance and flood storage capacity. The Middle Route option traverses a Surface Water Safeguarded Zone and Groundwater Source Protection Zones. The Route Option lies within a zone classified as a mixture of major and minor aquifers with low / intermediate / high groundwater vulnerability.	N/A	Moderate Adverse	N/A				
Social	Commuting and Other users	There are forecast to be very large benefits to commuters and other users of the highway network in Suffolk as the INR will improve connections for vehicles accessing the north of Suffolk from the A14 and A12. Journey time savings across the town are expected to be high, as a result of the alternative route choice to users provided by the INR and reduced congestion on the approaches to Orwell Bridge. The economic benefits to business users are highlighted by the highly positive journey time savings and reduced vehicle operating costs from reduced.	Value of journey time changes (£) £412m		N/A	£377,648,000	N/A		
				Net journey time changes (£)					
				0 to 2min				2 to 5min	> 5min
				£146m	£150m	£115m			
	Reliability impact on Commuting and Other users	Strategic traffic on the local and strategic highway network in Suffolk will experience fewer incidences of congestion and will therefore be able to maintain higher speeds.	N/A	Slight Beneficial	N/A				
	Physical activity	The scheme will help to improve opportunities for sustainable trips in the greater Ipswich area, including walking and cycling. Removal of strategic traffic from the town could improve the environment for pedestrians and cyclists.	N/A	Slight Beneficial	N/A				
	Journey quality	Enhanced journey quality for all users of the INR, through decreased journey times and good forward visibility. Transport users will experience enhanced journey quality as Suffolk local and strategic highway network is improved and create alternative route choice in the wider Ipswich area. Shorter journey times (and therefore saved travel hours) will also contribute to this improvement	N/A	Slight Beneficial	N/A				
	Accidents	A COBALT assessment has not been undertaken. Accident savings are expected to be minimal.	N/A	Neutral	N/A	N/A			
	Security	Not applicable to this scheme.	N/A	N/A	N/A	N/A			
	Access to services	Not applicable to this scheme.	N/A	N/A	N/A	N/A			
Affordability	Consumers will benefit from modest savings in vehicle operating costs through decreased journey times and reduced congestion.	N/A	N/A	N/A	N/A				
Severance	Removal of strategic traffic from the town will reduce severance issues for pedestrians and cyclists.	N/A	N/A	N/A	N/A				
Option and non-use values	Not applicable to this scheme.	N/A	N/A	N/A					
Public Account	Cost to Broad Transport Budget	These consist of the scheme investment costs and operating costs (i.e. annual maintenance costs and capital renewal costs).	N/A	N/A	£296,297,000				
	Indirect Tax Revenues	Increased indirect tax revenues as a result of increased fuel spends.	N/A	N/A	£4,390,000				

Appraisal Summary Table

Date produced: January 2020

Name of scheme:		Ipswich Northern Route - Inner Route					Organisation	WSP		
Description of scheme:		The Ipswich Northern Route (INR) would provide a new strategic transport link connecting the A14 and A12 to the north of Ipswich. The project has significant potential to relieve congestion on the existing east-west links and the A14, and to facilitate movements in and around Ipswich, enabling connectivity to key connecting routes, easing bottlenecks around Ipswich and the wider area. It would improve accessibility and is expected to enable new development, helping Ipswich to maintain its role as a key driver of economic growth.					Role	Consultant		
Impacts		Summary of key impacts			Quantitative		Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp		
Economy	Business users & transport providers	The INR will provide a high quality, alternative route choice for business users will significantly improve journey times in Ipswich and the wider Suffolk area. Congestion in Ipswich Town , A14 and A12 will be reduced as a result of the route. Congestion will reduce when the Orwell Bridge closes and alternative route choice for users. The route will have a positive impact on the Strategic Road Network, A14, at junctions with existing capacity issues. INR will create additional transport capacity to support planned and future employment growth in the wider Ipswich area. The economic benefits to business users are highlighted by the highly positive TUBA results.			Value of journey time changes(£)		£99m	N/A	£172,717,000	N/A
	Net journey time changes (£)									
	0 to 2min				2 to 5min	> 5min				
	£28m				£38m	£34m				
Reliability impact on Business users	The journey time in Ipswich and on the A14 and A12 is expected to become more reliable. The reliability of journey times around Ipswich and Suffolk will be improved by adding to the route choice for business users. Congestion will reduce on the approaches to Orwell Bridge and at existing junctions on the A14.			N/A			N/A			
Regeneration	The delivery of the INR is fundamental to the delivery of around 10,000 to 15,000 additional homes across Suffolk. By alleviating the main traffic issues on the A14 and Ipswich will support the regeneration of the local economy by providing additional transport capacity to support planned development in the wider Ipswich area.			N/A			N/A			
Wider Impacts	Due to the reduced congestion and quicker, more reliable journeys, the scheme will likely provide easier access to key employment sites in Suffolk and Norfolk, as well as further afield in Cambridgeshire and Greater London. This means the project will have an important role in enabling the projected growth of the regional economy. By providing extra capacity on the SRN and allowing it to operate with higher resilience and reliability, the should help to increase productivity and facilitate economic growth. Reducing transport costs to businesses encourages them to increase their production of goods and services, known as 'output change in imperfectly competitive markets'. A 10% uplift to business user benefits has been applied to represent 'output change in imperfectly competitive markets' as per TAG unit A2.2.			N/A			£17,272,000			
Environmental	Noise	There is One Noise Important Area (Ref. 4822) and 1381 dwellings located within 600m of the Inner Route. These and low density populated areas within close proximity to the route are likely to experience a perceptible change in noise levels. Approximately 12 noise sensitive receptors within 100m from the proposed route are likely to exceed a noise level of 68 dB LA10,18h, used as the Significant Observed Adverse Effect Level (SOAEL) and the threshold for the Noise Insulation Regulations 1975, as amended 1988.			N/A			Slight Adverse	N/A	N/A
	Air Quality	There are 76 sensitive receptors identified within 200m of the route option including residential, schools, and a care home. The route option will change air quality at these locations. Presence of two ecological receptors within 200m of the Highway Route option: Sinks Valley, Kesgrave, a SSSI, and Lux Wood, an Ancient Woodland. Traffic flows will exceed the DMRB criteria for Annual Average Daily Traffic (AADT), Heavy Duty Vehicle (HDV), vehicle speeds along the road alignment, and junctions with the A14, South of Claydon and the A12/A1214 junction east of Kesgrave and west of Martlesham. Changes in traffic flows are likely to affect the Air Quality Management Area (AQMA) in Woodbridge.			N/A			Slight Adverse	N/A	N/A
	Greenhouse gases	Increases in emissions due to increase in traffic flows. However, potential decreases due to reduction in congestion and journey length.			Change in non-traded carbon over 60y (CO2e)			Neutral	£5,456,000	
			Change in traded carbon over 60y (CO2e)							

	Landscape	The Inner Route Option lies within a predominantly rural setting although the outskirts of Ipswich and Kesgrave are within close proximity to the south. The Inner Route Option lies within three National Character Areas and SSP38 - Special Landscape Area. Moderate adverse effect on the landscape pattern, culture, tranquility and landcover particularly in relation to views is expected primarily as a result of the introduction of new stretches of road on undeveloped land, introduction of new urbanising elements to the landscape and removal of landscape elements including hedgerows and trees.	N/A	Moderate Adverse	N/A			
	Townscape	Scoped out from further assessment.	N/A	N/A	N/A			
	Historic Environment	The Inner Route Option will impact on the setting of three Grade II* listed buildings, 21 Grade II listed buildings and three Scheduled Monuments. No assets will be physically impacted by the Inner Route Option.	N/A	Moderate Adverse	N/A			
	Biodiversity	The Inner Route Option is unlikely to affect European Designated sites or Sites of Special Scientific Interest (SSSIs), providing avoidance and mitigation measures are implemented. The Route is likely to directly affect three County Wildlife Sites (CWSs) including ancient woodland habitat at Lux Wood CWS. Measures to mitigate and compensate for impacts on the CWSs and ancient woodland will be required. There may be indirect effects on additional designated sites as a result of deterioration of air quality, and increase in noise and lighting during construction and operation. The Route will cross several Habitats of Principal Importance, including deciduous woodland. The most significant impacts of the Route are likely to be on ancient woodland habitat, CWSs and habitats supporting or used by bats and birds. Further surveys of designated sites, habitats and species are necessary to inform an assessment of significant effects and mitigation and species licensing may be required.	N/A	Large Adverse	N/A			
	Water Environment	The Inner Route Option crosses the River Gipping. The River Gipping flows into the Orwell Estuary which is designated as Ramsar, SSSI and Special Protection Area (SPA). Surrounding areas are classified as a mixture of Flood Risk Zone 1, 2 and 3 (including Zone 3b - functional flood plain when crossing the River Gipping). The Scheme may affect flood conveyance and flood storage capacity. The Inner Route option traverses a Surface Water Safeguarded Zone and Groundwater Source Protection Zones. The Route Option lies within a zone classified as a mixture of major and minor aquifers with low / intermediate / high groundwater vulnerability.	N/A	Moderate Adverse	N/A			
Social	Commuting and Other users	There are forecast to be very large benefits to commuters and other users of the highway network in Suffolk as the INR will improve connections for vehicles accessing the north of Suffolk from the A14 and A12. Journey time savings across the town are expected to be high, as a result of the alternative route choice to users provided by the INR and reduced congestion on the approaches to Orwell Bridge. The economic benefits to business users are highlighted by the highly positive journey time savings and reduced vehicle operating costs from reduced.	Value of journey time changes (£)		N/A	£443,994,000	N/A	
			£489m					
			Net journey time changes (£)					
			0 to 2min	2 to 5min				> 5min
		£156m	£172m	£161m				
	Reliability impact on Commuting and Other users	Strategic traffic on the local and strategic highway network in Suffolk will experience fewer incidences of congestion and will therefore be able to maintain higher speeds. This is as result of an alternative route choice for commuters and other users, as well as less congestion on the approaches to the Ipswich town.	N/A	Slight Beneficial	N/A			
	Physical activity	The scheme will help to improve opportunities for sustainable trips in the greater Ipswich area, including walking and cycling. Removal of strategic traffic from the town could improve the environment for pedestrians and cyclists.	N/A	Slight Beneficial	N/A			
	Journey quality	Enhanced journey quality for all users of the INR, through decreased journey times and good forward visibility. Transport users will experience enhanced journey quality as Suffolk local and strategic highway network is improved and create alternative route choice in the wider Ipswich area. Shorter journey times (and therefore saved travel hours) will also contribute to this improvement	N/A	Slight Beneficial	N/A			
Accidents	A COBALT assessment has not been undertaken. Accident savings are expected to be minimal.	N/A	Neutral	N/A	N/A			
Security	Not applicable to this scheme.	N/A	N/A	N/A	N/A			
Access to services	Not applicable to this scheme.	N/A	N/A	N/A	N/A			
Affordability	Consumers will benefit from modest savings in vehicle operating costs through decreased journey times and reduced congestion.	N/A	N/A	N/A	N/A			
Severance	Removal of strategic traffic from the town will reduce severance issues for pedestrians and cyclists.	N/A	N/A	N/A	N/A			
Option and non-use values	Not applicable to this scheme.	N/A	N/A	N/A				
Public Account	Cost to Broad Transport Budget	These consist of the scheme investment costs and operating costs (i.e. annual maintenance costs and capital renewal costs).	N/A	N/A	£303,021,000			
	Indirect Tax Revenues	Increased indirect tax revenues as a result of increased fuel spends.	N/A	N/A	£10,742,000			