

Project Packages Matrix

RTP Project Packages: Commitments - Ceredigion Link Roads											
SEA Objective	Key Baseline Indicators and Targets (where applicable)	Spatial Scale		Temporal Scale		Certainty	Transboundary		Interrelationships		Commentary
		Local	TraCC Region	Short Term	Long Term		Significance	Certainty	Significance	Certainty	
1. Ensure biodiversity is protected and enhanced	Air quality Designated sites in areas of scheme Species recorded	-	0	-	0	L	0	L	+/-	L	It has been assumed that the commitment schemes have, where appropriate been subject to an EIA and mitigation measures implemented as required, particularly in relation to ecological issues. It is expected that the scheme will have a negative impact on biodiversity locally in the short term, however most highways schemes if mitigated appropriately tend to have a greater effect at the local level that decreases overtime.
2. To safeguard soil quality		-	0	-	-	M	0	M	-	M	The current land use and soil type in the vicinity of the schemes are unknown. The scheme could lead to the contamination of soil locally, however it has been assumed that where appropriate an EIA has been undertaken for them and any identified negative effects on soil quality have been mitigated appropriately. There is the potential that the scheme could remediate contaminated soil if present on the site. There is likely to be a negative interrelationship between this objective and air quality. A reduction in air quality due to traffic movements may lead to acidification of soils. However, emissions produced during construction are not likely to have a significant effect on soil quality.
3. To minimise transport related effects on water resources and reduce the risk of flooding		0	0	0	0	L	0	L	-	L	Transport schemes should help maintain current water quality and flood risk as part of their remit. There is not likely to be a significant increase in traffic flows compared to the existing situation, so there is not likely to be a significant effect on water quality through emissions. SUDS should be implemented where possible in new road schemes. There is a negative interrelationship between this objective and air quality, as a reduction in air quality due to increased emissions may lead to acidification of river water.
4. To minimise transport related air pollution	There are no Air Quality Management Areas designated within the TraCC Region.	+/-	0	-	+/-	M	0	L	-	L	The Llandysul bypass will improve air quality within the town by removing through traffic. The bypass will however have a negative effect on the local air quality in the vicinity of the scheme in the short term during construction and in the long term due to vehicle emissions. The Post Bach to Synod Inn scheme is not likely to have a significant effect on air quality, as the scheme is widening and realigning the existing road. The scheme is not likely to significantly alter the traffic volume on the road from the existing situation. This objective is likely to have negative interrelationship with biodiversity, air quality and soil quality objectives.
5. To protect and enhance landscape and townscape character		+/-	0	-	+/-	M	0	L	0	M	The Llandysul Bypass will improve tranquillity in the town, but tranquillity is likely to be reduced along the length of the link both during construction in the short term and in the long term as a result of people using the preferred route. The Post Bach to Synod Inn scheme consists of widening and realigning the existing route, the visual impact is therefore likely to be minimal, although it is likely to be greater in the short term during construction. The Llandysul Bypass could potentially have a large negative visual impact on the surrounding landscape. It is assumed that an EIA has been carried out, if required, and visual impacts assessed and mitigated where necessary.
6. To protect and enhance the cultural heritage		0	0	0	0	L	0	L	0	M	It is assumed that the highway schemes will not have a significant effect on cultural heritage, it is also assumed if required an EIA has been undertaken on the scheme and any significant impacts mitigated.
7. To limit the effects of and adapt to climate change		-	0	-	0	M	-	M	0	M	The scheme may encourage people to travel by private car, as journey times and journey reliability are likely to be improved, however the new route is also likely to be the preferred option for public transport services, due to the improvements in journey time and reliability. Construction is likely to have a negative effect on greenhouse gas emissions.

RTP Project Packages: Commitments - Ceredigion Link Roads

SEA Objective	Key Baseline Indicators and Targets (where applicable)	Spatial Scale		Temporal Scale		Certainty	Transboundary		Interrelationships		Commentary
		Local	TraCC Region	Short Term	Long Term		Significance	Certainty	Significance	Certainty	
8. Promote the development of a sustainable transport system		+/-	+/-	+/-	+/-	L	0	L	0	M	The scheme may encourage people to travel by private car, as journey times and journey reliability are likely to be improved, however the new route is also likely to be the preferred option for public transport services, due to the improvements in journey time and reliability.
9. Provide inclusive access to all services and facilities and reduce severance		+	0	+	+	M	0	M	0	M	The Llandysul Bypass will relieve the town of community severance effects by removing through traffic. The schemes are unlikely to improve integration of different modes of travel and are unlikely to have a significant effect on improving access to services/ facilities.
10. Protect and promote the general physical and mental well being of the local population		+	0	+	+	M	0	M	0	M	The Llandysul Bypass is likely to have a local positive effect for the town by reducing through traffic within the town, which is likely to improve safety for people walking and cycling. The Post Bach to Synod Inn scheme is likely to improve road safety as it involves widening and realigning the existing road to remove severe pinch points and excessive 'hilliness' and 'bendiness'. The schemes are not likely to affect access to health facilities by a variety of modes.
11. Minimise transport related noise and vibration		+/-	0	-	+/-	M	0	M	0	M	The Bypass is likely to reduce noise and vibration in the town of Llandysul by reducing through traffic. It is assumed that an EIA has been undertaken for the scheme, if required, and noise and vibration effects taken into consideration and mitigated where necessary. The Post Bach to Synod Inn scheme is not likely to change current noise and vibration effects as it involves improving the condition of the existing road. The scheme may encourage people to travel by private car, as journey times and journey reliability are likely to be improved, so increasing noise and vibration effects. In the short term there will be effect of noise and vibration during construction.
12. Ensure the efficient use of natural resources	Transport related waste going to landfill Use of alternative materials, and secondary and recycled aggregates for construction Amount of land used for highway constructions	+/-	-	--	+	M	-	M	0	M	The negative effects are likely to be in the short term, during construction when natural resources are required. It is also assumed that the principle of avoid, reduce, reuse and recycle will be followed for highway construction related waste, therefore minimising any adverse effects. Land will also be required. In the long term through reduced journey times and enabling more fuel efficient driving, fuel use may reduce. Due to the nature of natural resources, it is likely that these will be sourced outside of the TraCC region, therefore any effect will be transboundary.

Project Packages Matrix

RTP Project Packages – Public Transport Enhancements											
SEA Objective	Key Baseline Indicators and Targets (where applicable)	Spatial Scale		Temporal Scale		Certainty	Transboundary		Interrelationships		Commentary
		Local	TraCC Region	Short Term	Long Term		Significance	Certainty	Significance	Certainty	
1. Ensure biodiversity is protected and enhanced		0	0	0	0	M	0	M	0	M	Public transport enhancements will result in improvements largely to existing facilities in the TraCC region. These improvements will predominately occur at the local scale and largely within the proximity of existing infrastructure. Several of the projects propose an increase in service provision, such as the purchase of community transport vehicles and the New Quay Road Train, however these vehicles will use the existing network.
2. To safeguard soil quality		0	0	0	0	M	0	M	0	M	Public transport enhancements will result in improvements largely to existing facilities in the TraCC region. These improvements will predominately occur at the local scale and largely within the proximity of existing infrastructure, which are not likely to have a significant effect on soil quality.
3. To minimise transport related effects on water resources and reduce the risk of flooding		0	0	0	0	M	0	M	0	M	Public transport enhancements may increase the number of people travelling by public transport as opposed to the private car, but it is not likely to have a significant effect on water quality. However, public transport services will remain carbon fuelled.
4. To minimise transport related air pollution		+	+	+	+	M	0	M	0	M	Public transport enhancements are likely to encourage people to use public transport services as opposed to the private car, so will contribute positively to a reduction in air pollution. However public transport services will remain carbon fuelled. It would score more positively if alternative fuels were used. The improvements to existing infrastructure has the potential to have minor local negative effect on air quality in the short term, but due to the minor nature of the works, with suitable mitigation measures construction is not likely to have a significant effect on air quality.
5. To protect and enhance landscape and townscape character		0	0	0	0	M	0	M	0	M	The proposed improvements will largely be to existing infrastructure but are unlikely to have a significant effect. It is assumed that any new infrastructure will be built appropriately/ sympathetically. There is potential that the public transport enhancements will encourage modal shift to public transport, which would have a positive impact on this objective, however the impact is not expected to be significant.
6. To protect and enhance the cultural heritage		0	0	0	0	M	0	M	0	M	Infrastructure improvements will largely be to existing infrastructure but are unlikely to have a significant effect. It is assumed that any new infrastructure will be built appropriately/ sympathetically.
7. To limit the effects of and adapt to climate change		+	+	+	+	M	0	M	0	M	Public transport enhancements are likely to increase the number of people travelling by public transport as opposed to private car and are therefore likely to make a positive contribution to reducing greenhouse gas emissions. There is potential for emissions of greenhouse gases as a result of construction, however the impact is likely to be minor. The improvements will increase public transport adaptability to climate change.
8. Promote the development of a sustainable transport system		+	+	+	+	M	+	M	0	M	Public transport enhancements will contribute significantly to promoting sustainable travel, through reducing the need to travel by private car, by providing a more suitable alternative. This project package has not scored more positively as buses are generally carbon fuelled. It would score more positively if alternative fuels were used. There is potential for a positive transboundary effect as better interchanges and new services may result in regional improvements.

RTP Project Packages – Public Transport Enhancements

SEA Objective	Key Baseline Indicators and Targets (where applicable)	Spatial Scale		Temporal Scale		Certainty	Transboundary		Interrelationships		Commentary
		Local	TraCC Region	Short Term	Long Term		Significance	Certainty	Significance	Certainty	
9. Provide inclusive access to all services and facilities and reduce severance		+	+	+	+	M	0	M	0	M	Public transport enhancements will improve access to services and will promote integration between different modes of travel. The package of projects has the potential to encourage modal shift to public transport from the private car, however the impact on community severance is not expected to be significant.
10. Protect and promote the general physical and mental well being of the local population		+	+	+	+	L	0	M	0	M	Positive contribution to the general physical and mental well being of the local population by improving community/public transport services and passenger facilities. It may also improve access to facilities such as health facilities by providing a wider variety of modes and better integration.
11. Minimise transport related noise and vibration		+	+	+	+	M	0	M	0	M	Public transport enhancements are likely to encourage people to use public transport services as opposed to the private car, so will reduce noise and vibration. There is potential for increased noise and vibration effects in the short term due to construction, the effects are likely to be minor and not have a significant impact with the implementation of suitable mitigation measures.
12. Ensure the efficient use of natural resources		0	0	0	0	L	0	L	0	M	Infrastructure improvements are likely to use natural resources, the effect is not likely to be significant as many of the projects will be improvements to the existing infrastructure. Any negative effect on resource use will only be in the short term during these works. Welsh Assembly Government sustainability principles should be followed for the procurement of materials to minimise any effect. Due to the nature of natural resources, it is likely these will be sourced outside of the TraCC region, so there will be a transboundary effect.

Project Packages Matrix

RTP Project Packages: Sustainable Transport Initiatives and Accessibility Improvements											
SEA Objective	Key Baseline Indicators and Targets (where applicable)	Spatial Scale		Temporal Scale		Certainty	Transboundary		Interrelationships		Commentary
		Local	TraCC Region	Short Term	Long Term		Significance	Certainty	Significance	Certainty	
1. Ensure biodiversity is protected and enhanced		0	0	0	0	M	0	M	0	H	Sustainable travel initiatives, such as cycle/ footways and crossings, and the provision of facilities for cycles are unlikely to have a significant effect on biodiversity, especially if they follow existing roads or disused rail lines. Regional routes have the potential to positively benefit people's access to wildlife.
2. To safeguard soil quality		0	0	0	0	M	0	M	0	H	Sustainable travel initiatives are generally small scale works, which are not likely to have a significant effect on soil quality. Land take is expected to be minimal, as most routes are likely to follow existing roads and disused rail lines. These projects may reduce the number of private car journeys, so may reduce emissions and have a positive effect on soil quality, however the effect is not likely to be significant.
3. To minimise transport related effects on water resources and reduce the risk of flooding		0	0	0	0	M	0	M	0	H	The provision of sustainable travel facilities is unlikely to have a significant effect on this objective. These projects are likely to be small scale.
4. To minimise transport related air pollution		+	+	+	+	M	0	M	0	H	Provision of sustainable travel initiatives may encourage people to travel by sustainable travel modes as opposed to using the private car, which would reduce emissions and have a positive impact on local air quality. The project package could improve the condition of existing infrastructure, due to the small scale of the works this is not likely to be a significant effect.
5. To protect and enhance landscape and townscape character		0	0	0	0	L	0	M	0	H	Provision of sustainable travel initiatives are not likely to have a significant visual impact, however they may reduce the number of cars which could have a positive impact on landscapes and townscapes. Any potential impact should be mitigated through sensitive design to integrate structures into the surrounding landscape. The project package could improve the condition of existing infrastructure, due to the small scale of the works this is not likely to be a significant effect.
6. To protect and enhance the cultural heritage		0	0	0	0	M	0	M	0	H	Due to the small scale of the works proposed in this project package, it is not likely to significantly affect cultural heritage, however they may reduce the number of cars which could have a positive impact on landscapes and townscapes. It is assumed that if disused rail/ tram lines are designated as cycle/footways then the design is appropriate/ sympathetic.
7. To limit the effects of and adapt to climate change		+	+	+	+	L	0	M	0	H	The provision of sustainable travel initiatives may lead to a reduction in private car journeys and consequently a reduction in greenhouse gas emissions. Promotion of smarter choices will encourage use of more sustainable modes of transport.
8. Promote the development of a sustainable transport system		++	+	++	++	M	0	M	0	H	The provision of sustainable travel initiatives is likely to encourage the use of alternative modes of transport and reduce the need to travel by private car, particularly for short journeys to facilities within and around towns and to employment sites. Promotion of smarter choices will encourage use of more sustainable modes of transport.

RTP Project Packages: Sustainable Transport Initiatives and Accessibility Improvements											
SEA Objective	Key Baseline Indicators and Targets (where applicable)	Spatial Scale		Temporal Scale		Certainty	Transboundary		Interrelationships		Commentary
		Local	TraCC Region	Short Term	Long Term		Significance	Certainty	Significance	Certainty	
9. Provide inclusive access to all services and facilities and reduce severance		++	++	+	++	M	0	M	0	H	The provision of sustainable travel initiatives will significantly contribute to achieving this SEA objective, in particular the provision of cycle/ footways in urban centres and the provision of cycle facilities at key sites. The accessibility improvement studies will propose measures to improve accessibility to services and facilities across the region.
10. Protect and promote the general physical and mental well being of the local population		+	+	+	+	M	0	M	0	H	The provision of sustainable travel initiatives, such as dedicated or off-road routes, will increase safety and security for users of the transport system and encourage walking and cycling, therefore promoting a healthier lifestyle. It will also help to provide access to facilities by a variety of modes.
11. Minimise transport related noise and vibration		0	0	0	0	M	0	M	0	H	The provision of sustainable travel initiatives may encourage increase in the use of alternative modes of transport and reduce the need to travel by private car. The reduction in noise and vibration is not likely to be significant.
12. Ensure the efficient use of natural resources		0	0	0	0	L	0	L	0	M	The provision of sustainable travel initiatives may encourage walking and cycling as an alternative to using a motorised mode of transport, which will reduce fuel consumption, however the impact is not likely to have a significant effect. Provision of these facilities would have a natural resource use, however the impact is not likely to be significant. Sustainability principles should be adhered to minimise this effect.

Project Packages Matrix

RTP Project Packages: Network Improvements											
SEA Objective and Sub Objectives	Key Baseline Indicators and Targets (where applicable)	Spatial Scale		Temporal Scale		Certainty	Transboundary		Interrelationships		Commentary
		Local	TraCC Region	Short Term	Long Term		Significance	Certainty	Significance	Certainty	
1. Ensure biodiversity is protected and enhanced		?	0	?	?	L	0	L	0	L	It has been assumed that where appropriate EIA will be undertaken and mitigation measures implemented as required, particularly in relation to ecological issues. Most highways schemes if mitigated appropriately tend to have the greatest effect at the local level that decreases over time and will be within close proximity of the existing infrastructure.
2. To safeguard soil quality		-	0	-	0	L	0	L	0	M	There is little information available regarding the detail involved in the network improvements. There is likely to be a small negative effect on soil quality in terms of land take, this is not likely to have a significant negative effect as the schemes largely involve improvements to the existing highway. The effects are expected to be local. The majority of schemes are expected to be improvements to the existing network and not generate a significant increase in traffic. The highway improvements may also include improved provision for walkers and cyclists and will facilitate improved public transport movement. Overall there is not likely to be a significant increase in emissions and soil acidification.
3. To minimise transport related effects on water resources and reduce the risk of flooding		+/-	0	+/-	+/-	L	0	M	0	M	Highway schemes should improve water quality and flood risk as part of their remit, but at least should not make the current situation worse. All effects are likely to be at a local scale. The project package includes a new river crossing, this may have negative effects on water quality and flooding in both the short and long term, it is assumed that an EIA will be undertaken for the schemes (if required) and where appropriate mitigation implemented, where necessary.
4. To minimise transport related air pollution		0	0	0	0	L	0	M	0	M	A significant proportion of the proposed highway schemes will improve the existing network, rather than the construction of new roads. However, network improvements are not likely to result in a significant increase in traffic. However, bypass schemes may encourage people to travel by private car, as journey times and journey reliability are likely to be improved, but there is likely to be a reduction in traffic along other routes. The highway improvements may also include improved provision for walkers and cyclists and will facilitate improved public transport journeys. Overall therefore there is not likely to be a significant increase in emissions or change in air quality.
5. To protect and enhance landscape and townscape character		-/+	0	-	-/+	L	0	M	0	M	It is assumed that the network improvements will largely involve alteration to the existing highway and will not have a significant visual impact. In the short term construction is likely to have a negative visual and noise impact. Traffic management schemes will reduce the impact of road traffic. Any new infrastructure should be sympathetically located to reduce visual impact. The construction of new road such as bypasses could lead to reductions in tranquillity on rural roads. The increase in traffic on these highways is likely to lead to a reduction in traffic on other routes and could have positive effects on townscape for urban roads. It is assumed that appropriate street lighting will be used to minimise light pollution. The new river crossing may have negative visual impact, this will depend on the exact detail and location of the scheme, it is assumed they will be assessed in the EIA, if required.
6. To protect and enhance the cultural heritage		?	?	?	?	L	0	M	0	M	The effect on this SEA objective will depend on the location of the schemes and the works to be undertaken. It is not therefore possible to assess the effect on this SEA objective at this stage.

RTP Project Packages: Network Improvements

SEA Objective and Sub Objectives	Key Baseline Indicators and Targets (where applicable)	Spatial Scale		Temporal Scale		Certainty	Transboundary		Interrelationships		Commentary
		Local	TraCC Region	Short Term	Long Term		Significance	Certainty	Significance	Certainty	
7. To limit the effects of and adapt to climate change		-	0	-	0	L	0	M	0	M	It is assumed that the network improvements will largely involve alterations to the existing highway, which are not likely to increase the volume of traffic using them. The construction of new roads such as bypasses could lead an increase in traffic due to increased journey times and journey reliability, but there is likely to be a reduction in traffic on other routes. The increased journey time and journey reliability may encourage use of the private car and increase vehicle emissions. The highway improvements may also include improved provision for walkers and cyclists and will facilitate improved public transport movements.
8. Promote the development of a sustainable transport system		+/-	0	+/-	+/-	M	0	M	0	M	The project package largely involves improvement of existing highways may encourage use of private cars, due to increased journey times and journey reliability. The highway improvements may also include improved provision for walkers and cyclists and will facilitate improved public transport movement. The project package is therefore likely to have both positive and negative effect son this SEA objective. Traffic management and safety schemes slowing traffic through communities and improving sustainable linkages may encourage the numbers of people walking and cycling.
9. Provide inclusive access to all services and facilities and reduce severance		+	0	+	+	L	0	M	0	M	As it is assumed the majority of schemes will involve improvements to existing highway routes, they are unlikely to provide additional access to facilities and services. Traffic management and road safety schemes may however improve infrastructure and promote road safety. Traffic management schemes will reduce community severance, by slowing traffic.
10. Protect and promote the general physical and mental well being of the local population		+	0	+	+	M	0	M	0	M	It is assumed that the highways schemes will largely involve alteration to the existing highway e.g. improvements to alignment, junction improvements and lighting etc. which will improve road safety. Other schemes may also include improved provision for walkers and cyclists, this is likely to encourage people to use these and promote a healthier lifestyle.
11. Minimise transport related noise and vibration		+/-	0	-	+/-	L	0	M	0	M	It is assumed that the highways schemes will largely involve alteration to the existing highway e.g. improvements to alignment, junction improvements etc. the project package is not therefore likely to lead to more people being affected by noise and vibration issues. People along the existing highways are likely to be negatively affected in the short term during construction. In the long term, there is potential that the improvements could increase traffic using these highways routes and therefore increase noise and vibration effects. Where additional road links construction, e.g. to bypass town centres, the new route may become the preferred route, which will reduce the volume of through traffic in town centres, which would have a positive effect in terms of noise and vibration in the town but have a negative impact on the preferred route. However, traffic management and road safety schemes will reduce traffic speeds and community severance.

RTP Project Packages: Network Improvements

SEA Objective and Sub Objectives	Key Baseline Indicators and Targets (where applicable)	Spatial Scale		Temporal Scale		Certainty	Transboundary		Interrelationships		Commentary
		Local	TraCC Region	Short Term	Long Term		Significance	Certainty	Significance	Certainty	
12. Ensure the efficient use of natural resources		-/+	+/-	-	0	L	+/-	L	0	M	<p>Highway improvements will use natural resources, through materials required for construction, although as they are improvements to the existing highway the effect on natural resources is not likely to be as significant. It is assumed that principles in the <i>Environment Strategy for Wales</i> regarding use of natural resources will be adhered to, such as maximising the use of alternative materials, secondary and recycled aggregates, therefore minimising any effect.</p> <p>It is also assumed that the principle of avoid, reduce, reuse and recycle will be followed for highway construction related waste, therefore minimising the effects. These are likely to be short term effects during construction.</p> <p>Land take is likely to be minimal as the improvements are likely to largely follow the existing highway routes.</p> <p>Positive effects could be seen in the long term through reduced journey times and therefore a reduction in fuel consumption. It is also likely to encourage bus travel if journey times are shorter and the service more reliable. Highway improvements would also include improved provision for walking and cycling, this is likely to reduce private car use therefore reducing fuel use, although this is not likely to have a significant effect in terms of natural resource use.</p>