

Project Appraisal Balance Sheet

Part D: PABS Summary Table

Project Title		PRS Reference Number	0	Project Description						Scheme Cost (€m)	Date			
N2 Rath Roundabout to Kilmoon Cross		Modelling Base Year	2011	Road improvement scheme to upgrade the N2 between Rath Roundabout and Kilmoon Cross.						€ 98.20	17/12/2021			
		Scheme Opening Year	2030											
Criteria	Quantitative Statement	Summary of Keys Impacts (Qualitative Assessment)			Quantitative Assessment					Monetised (€m over 30 yrs.)				
Environment	Air Quality and Climate	Slightly Positive	Net benefit in terms of air quality compared to the Do Minimum Scenario on the current alignment, as traffic is diverted away from the higher number of sensitive residential receptors on the current alignment. NOx Exposure Index 2030: 71743, PM10 Exposure Index 2030: 1998. Emerging Preferred Option will not result in a positive operational phase impact to climate compared to the Do Minimum Scenario on the current alignment due to the longer length and lower projected traffic volumes. CO2 Emission Rate (tonnes/yr) 2030: 16553			Additional CO ₂ (Tonnes)		5197			Value of Change in Emissions (€m)			
						Ratio of CO ₂ Do-Min/Do-Some		1.46				€0.000		
	No. of Sensitive Locations Experiencing Impacts That Are:			Index of Overall Change in Exposure NO ₂		Small Positive Index								
				Index of Overall Change in Exposure PM ₁₀		Small Positive Index								
				Sub Ben.	Mod Ben	Sli Ben.	Negligible			Sli Adv.	Mod Adv.	Sub Adv.		
			0	0	9	13		2		0	0			
Noise and vibration		Moderately Negative	PIR for the Emerging Preferred Option is 140. The number of properties likely requiring mitigation is 29.			No. of Sensitive Receptors Requiring Mitigation				4.23 per Km				
						No. of Sensitive Receptors Requiring Mitigation (Not Feasible)			Not yet assessed					
Waste		Moderately Negative	Overall requirement of fill material to be brought in estimated to be circa. 555,960 m3. No cut volume for disposal as waste. The Emerging Preferred Option traverses the soft ground at the Hurley river floodplain, some of which may have to be disposed of as waste. The Emerging Preferred Option also involves sections of online widening of the existing N2 so contaminated material is more likely to be encountered and would need to be disposed of as waste. Other potential contaminants include agricultural land, buildings, a former quarry, a commercial haulage firm, and a cemetery. Minor negative environmental impact associated with the transportation of fill material to the site.			Unacceptable Material/Contaminated Land/Hazardous Waste to be ...								
						Disposed of Off Site	U1 [m ³]	U2 [m ³]	Left in Situ [m ³ land waste]	N/A				
						N/A	N/A							
Landscape & Visual Amenity (incl. Light)		Moderately Negative	The Emerging Preferred Option involves a section of online widening which will be beneficial and reduce landscape and visual effects in the study area as it confines these to the existing N2 road corridor. The western offline section is relatively short and close to the existing N2 corridor and will affect a number of residential properties along the R155 to either side of the route alignment. The Emerging Preferred Option passes through the viewshed of the locally significant protected View 73 (Country Road between Robinson's Cross Roads on R108 and Windmill Hill), which includes "Extensive views to the north east, mid distance heavily wooded. Dwellings, infrastructure and agriculture on left hand side. View to skyline with distinctive tower is locally distinctive" as stated in Meath County Development Plan 2013-2019,											
			No. Of Impacts That Are:			PP	Sig P	Mod P	Sli P	I	Sli N	Mod N	Sig N	PN
						0	0	0	0	0	2	2	0	

		Appendix 12. While existing roadside vegetation can obscure partially or fully a number of views along the L5003, partial views towards the route alignment of the Emerging Preferred Option will become visible due to required vegetation removal. The landscape effects are considered Medium and the significance of landscape effects is considered Moderate Adverse. The magnitude of visual effects is considered High to Very High along the offline sections, particularly due to the proximity to a number of residential receptors. The significance of visual effects will be Significant Adverse.	<i>No. of Profound/Significant Impacts on Sites Of:</i>	National	0	County	2	Other	2			
Biodiversity, Flora & Fauna	Slightly Negative	The online section of the Emerging Preferred Option will limit the area of direct habitat loss in the area of wet grassland on either side of the existing N2. The loss of some wet grassland habitat along the existing N2 is considered to be a Slightly Negative Impact. The installation of a modern surface water drainage system will lead to a positive impact on water quality in the Hurley River, however this may be offset by the construction of a wider bridge and the works on the flood plain. Overall the impact on the Hurley River is considered to be imperceptible.			II	NI	CI	LI(H)	LI(L)			
			Number of Positive Impacts		0	0	0	0	0			
		Number of Negative Impacts		0	0	0	0	0				
Agriculture	Slightly Negative	The Emerging Preferred Option is predicted to have the lowest impact overall. It has a low land-take and severance impact. While the route does not impact on farmyards, the wider corridor impacts show that there is the potential to impact on highly sensitive enterprises and farmyards within the wider corridor. Affecting relatively larger land parcels it will take approx. 5% of affected area which represents a minor or slightly negative impact.	Impact on Agricultural Holdings that are:									
			Sig P	Mod P	Sli P	I	Sli N	Mod N	Sig N	PN		
				0	0	0	9	8	3	9	3	
Non-Agricultural Properties	Highly Negative	Potential service suspension during construction and possible diversion works. Potential full acquisition and demolition of 4 residential properties along the route line. In addition to the potential partial acquisition of a number of residential properties, which may result in changes to the property access. The wider corridor for the Emerging Preferred Option could potentially directly or indirectly impact circa 41 (including junction/tie in elements) residential properties, as well as a number of commercial properties.	Impact on Non-Agricultural Properties									
			Sig P	Mod P	Sli P	I	Sli N	Mod N	Sig N	PN		
				N/A	N/A	N/A	N/A	N/A	N/A	N/A	4 to 41	
Architectural Heritage	Moderately Negative	The Emerging Preferred Option will impact on the least amount of previously undisturbed greenfield land and has the potential to have a direct impact on only one identified cultural heritage site (CH 65).	<i>No. of Impacts That Are:</i>		Sig P	Mod P	Sli P	I	Sli N	Mod N	Sig N	PN
			<i>No. of Impacts on Sites of National Importance That Are:</i>		0	0	0	3	1	2	0	0
					0	0	0	0	0	0	0	0
Archaeological and Cultural Heritage	Moderately Negative	The Emerging Preferred Option will impact on the least amount of previously undisturbed greenfield land and has the potential to have a direct impact on only one identified cultural heritage site (CH 65).	<i>No. of Impacts That Are:</i>		Sig P	Mod P	Sli P	I	Sli N	Mod N	Sig N	PN
			<i>No. of Impacts on Sites of National Importance That Are:</i>		0	0	0	2	1	11	1	0
					0	0	0	0	0	0	0	0
Soils & Geology	Slightly Negative	The Emerging Preferred Option passes through an area of soft / compressible ground (alluvium and lacustrine deposits) associated with the Hurley River. The option has earthworks including embankments over soft ground at the Hurley River Crossing approach. The Emerging Preferred Option has one of the shortest sections of offline construction; consequently, it is anticipated that this option will have the least impact to groundwater. This option will also involve the development of some sections of offline roads above the 'Locally Important Aquifer – Lm'.	Number of Impacts That Are:									
			PP	Sig P	Mod P	Sli P	I	Sli N	Mod N	Sig N	PN	
				0	0	0	0	0	0	0	0	0
Hydrology	Slightly Negative	There is potential for the Emerging Preferred Option to have a positive impact on water quality resulting from the construction of new surface water drainage in line with current design standards. However, there is also potential for a minor impact on the flood plain of the Hurley River north of Ashbourne to occur due to online widening.	Number of Impacts That Are:									
			PP	Sig P	Mod P	Sli P	I	Sli N	Mod N	Sig N	PN	
				0	0	0	0	0	0	0	0	0
Hydrogeology	Slightly Negative	The Emerging Preferred Option overlies a 'Locally Important Aquifer – Lm' and traverses a Public Supply Source Protection Area. Groundwater vulnerability underneath the Emerging Preferred Option varies from 'Low' to 'Extreme'.	Number of Impacts That Are:									
			PP	Sig P	Mod P	Sli P	I	Sli N	Mod N	Sig N	PN	

				0	0	0	0	0	1	0	0	0
Safety	Collision Reduction	Highly Positive	The reduction in collisions as a result of the scheme will be a positive benefit. All classifications of collisions will experience a reduction in numbers compared to the DoMin, base case.	Collision Reduction Over 30 Years					Value of Change (€m)			
	Security	Moderately Positive	Moderate security benefits are expected, where aspects of users' personal safety, perceptions of risk and ambience will be improved. The existing N2 will be favourable for active modes due to the lower traffic flows along this route.	Collisions	Casualties	Fatal	Serious	Minor				
				47	64.6	0.1	2.3	62.3	€0.9			
Physical Activity	Ambience	Highly Positive	The emerging preferred option will include the provision of NMU facilities segregated from the proposed mainline along the existing N2, which are likely to encourage further cycling and walking trips to be made within the area. These facilities will allow for an extension of existing planned networks that being developed south of the study area, and the proposed segregation will reduce the perceived danger by NMUs. Value of benefits have not been determined at this stage.									€0.0
	Absenteeism	Slightly Positive	The emerging preferred option has the potential to facilitate the uptake of walking and cycling through the provision of segregated facilities, including on sections involving online widening. The resultant physical activity will help reduce health risks and the more NMUs using the proposed route, the greater the benefits. Value of benefits have not been determined at this stage.									€0.0
	Reduced Health Risk	Moderately Positive	The emerging preferred option has the potential to facilitate the uptake of walking and cycling through the provision of segregated facilities, including on sections involving online widening. The resultant physical activity will help reduce health risks and the more NMUs using the proposed route, the greater the benefits. Value of benefits have not been determined at this stage.									€0.0
Economy	Transport Efficiency and Effectiveness		The efficiency and effectiveness benefits have been monetised, where reasonable, and primarily include journey time benefits for several trip purposes. The Emerging Preferred Option delivers positively in the economic sense, providing monetary benefits to both users and the wider economy. The BCR is positive meaning a positive return on investment.					Commute	Business	Other	Value of Change	
	Wider Economic Impact	Slightly Positive	Benefits will be widespread (spatially, in several industry sectors and for residents). Positive business, industry and personal impacts will be attributable to the Emerging Preferred Option from its improved transport accessibility, including active modes and public transport.					€25	€42	€30		
	Funding	Neutral	This project is expected to be Exchequer funded, given its widespread benefits and the Project Ireland 2040 goal to, among others, improve connectivity and accessibility to the regions and north-west.					PSP	Indirect Tax	Res. Value	€172	
				Expected Percentage of Non-Exchequer Funding				€0.0	-	€0.3	€75	
Accessibility and Social Inclusion	Deprived Geographic Areas	Neutral	The Emerging Preferred Option is considered to have a neutral score, as there are no deprived geographical areas within the study area. However, it is noted that the option has the potential to improve accessibility for disadvantaged groups from deprived geographic areas that are further afield such as those in Navan, Slane, Drogheda and the Greater Dublin Area.	Impact on Deprived Areas								
	Vulnerable Groups	Moderately Positive	The Emerging Preferred Option is considered to have a moderately positive impact. This is due to improvements in accessibility to employment, education, healthcare in Ashbourne and the wider Dublin region as well as Dublin airport for all social groups, in particular vulnerable groups. As a result of decreased congestion and reduced journey times, the subsequent reduction of travel costs would also encourage and support investment and employment in the wider region.	Neutral								
				Impact on Access to Employment or Vital Infrastructure								
				Moderately Positive								
Integration	Transport Integration	Highly Positive	The Emerging Preferred Option will have a highly positive impact overall. This is due to improving connectivity to the strategic road network including the M50, M3 and M1, as well as other transport modes such as the proposed Finglas LUAS Park & Ride. This option is also expected to incorporate improvements to walking and cycling facilities on the residual road network and will facilitate improvements to the reliability and attractiveness of road based public transport options. This will also improve access to key port and airport destinations at Dublin Port, Dublin Airport, Belfast City and International Airports, and major ports in Belfast and Larne.	Highly Positive								

	Land-Use Integration	Moderately Positive	The Emerging Preferred Option will have a moderately positive impact on achieving the policies and objectives of the Meath County Development Plan 2013 – 2019, Draft Meath County Council Development Plan 2021-2027, Fingal County Development Plan 2017 – 2023, and Ashbourne Local Area Plan 2009 – 2015. This option will also have a moderately positive impact on the provision of strategic connectivity for long distance routes, although is considered to have a neutral impact with regards to mitigating the risks of urban sprawl.		Moderately Positive														
	Geographical Integration	Moderately Positive	The Emerging Preferred Option will have a moderately positive impact on improving connectivity between regions for growth within Ireland, connectivity to Northern Ireland and connectivity key linkages to Europe and the rest of the world by improving access to major road/motorway networks, ports/airports and the TEN-T network. This option will support National Strategic Objectives (NSO) 2, 3 and 7 from the National Planning Framework (NPF), particularly NSO 2 as this will enhance accessibility between key urban centres of population and their regions.		Moderately Positive														
	Integration with Other Government Policies	Slightly Positive	The Emerging Preferred Option will contribute to balanced regional development transport through improved links between Ashbourne and Slane and other urban centres in County Meath and the Greater Dublin Area. This will also improve access from County Meath to Northern Ireland, as well as access to Dublin Port and Dublin Airport.		Slightly Positive														
Overall Scale of Impact	Environmental	Moderately Negative	Economy	Slightly Positive	<table border="1"> <thead> <tr> <th colspan="4">Summary of Benefits</th> </tr> </thead> <tbody> <tr> <td>Present Value of Benefits (PVB, million)</td> <td>€172</td> <td>Net Present Value (NPV, million)</td> <td>€118</td> </tr> <tr> <td>Present Value of Costs (PVC, million)</td> <td>€54</td> <td>Benefit to Cost Ratio (BCR)</td> <td>3.2</td> </tr> </tbody> </table>			Summary of Benefits				Present Value of Benefits (PVB, million)	€172	Net Present Value (NPV, million)	€118	Present Value of Costs (PVC, million)	€54	Benefit to Cost Ratio (BCR)	3.2
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Safety	Highly Positive	Accessibility & Social Incl.	Slightly Positive																
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