

Project Description & The Story So Far



Limerick City and County Council, in partnership with Cork County Council, Cork City Council, Transport Infrastructure Ireland (TII) and the Department of Transport (DoT) are developing the N/M20 Cork to Limerick Project.

The 2040 National Planning Framework (NPF) and the National Development Plan 2021-2030 (NDP) identify the cities of Cork, Limerick, Galway and Waterford as having population growth targets “enabling all four to significantly grow their population and jobs by 50-60% and become cities of a greater scale.”

Good transport links are essential for economic sustainability and development. Improving connectivity by reducing journey times, improving journey time reliability and improving safety will support the enhancement of economic growth. The NDP National Strategic Outcome 2 “seeks to enhance intra-regional accessibility through improving transport links between key urban centres of population and their respective regions, as well as improving transport links between the regions themselves.”

This is to be achieved by improving connectivity between the cities of Cork and Limerick, and ultimately Galway, by reduced land transport journey times; improved journey time reliability; and facilitating the safe and efficient movement of people, goods and services on the transport network both now and in the future.

In considering the NPF and NDP, the overarching project objective for the N/M20 Cork to Limerick Project is:

To enable national and regional planning policies, particularly those supporting the National Strategic Outcomes of the National Planning Framework to promote balanced regional development, through enhanced population and economic growth.

Phase 1 – Concept and Feasibility

The assessment undertaken in Phase 1 identified the preferred road-based scenario as being broadly within the N20 corridor via Charleville and Mallow. This road-based scenario performed best overall in relation to the project objectives following appraisal of seven road-based scenarios that included alternative scenarios along the N24/M8 and R513/M8 corridors. (For more detail, please see Project Website for Phase 1 Update - <https://corklimerick.ie/feb-2020-update/>).

As part of the assessment of alternative options, two rail-based scenarios were identified in Phase 1, one providing improved service frequency with through services at Limerick Junction on the existing line, the other providing a new direct line between Charleville and Limerick which would connect with the existing Cork to Charleville rail line. These two rail-based scenarios were taken forward to Phase 2 for further development and appraisal.

Phase 2 – Option Selection

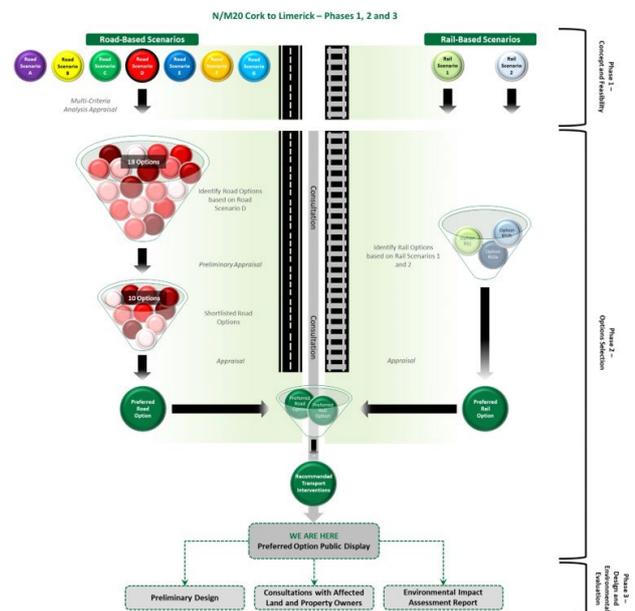
In Phase 2, the project team developed road-based and rail-based options in the broad N20 corridor identified in Phase 1 to improve connectivity between the cities of Cork and Limerick.

The Phase 2 Option Selection process comprises three stages.

Stage 1 – Preliminary Options Assessment,

Stage 2 – Project Appraisal Matrix, and

Stage 3 – Preferred Option.



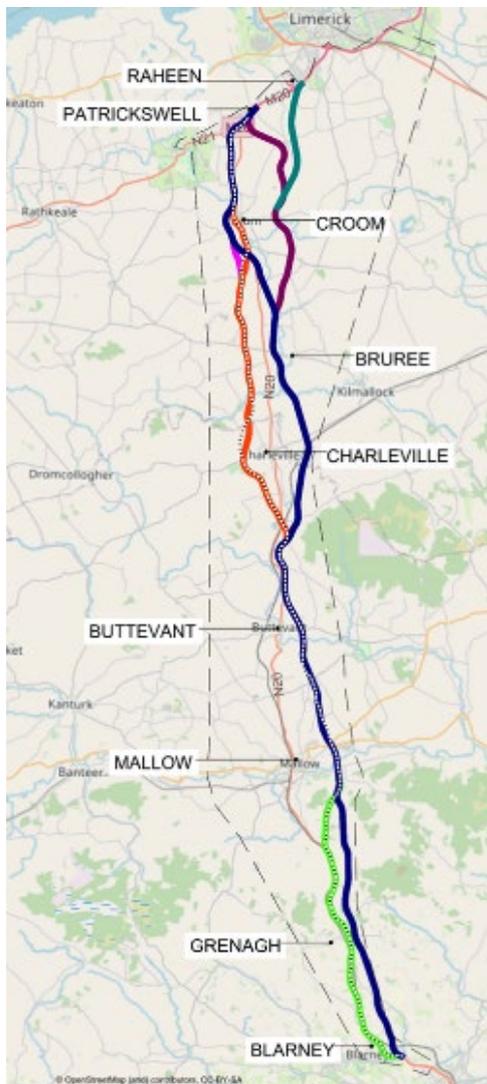
Option Appraisal

The Phase 2 option selection process adopts a systematic, evidence-based approach to examine feasible options and alternatives against defined criteria to identify the Preferred Option.

The appraisal of the rail-based options is covered in a separate banner.

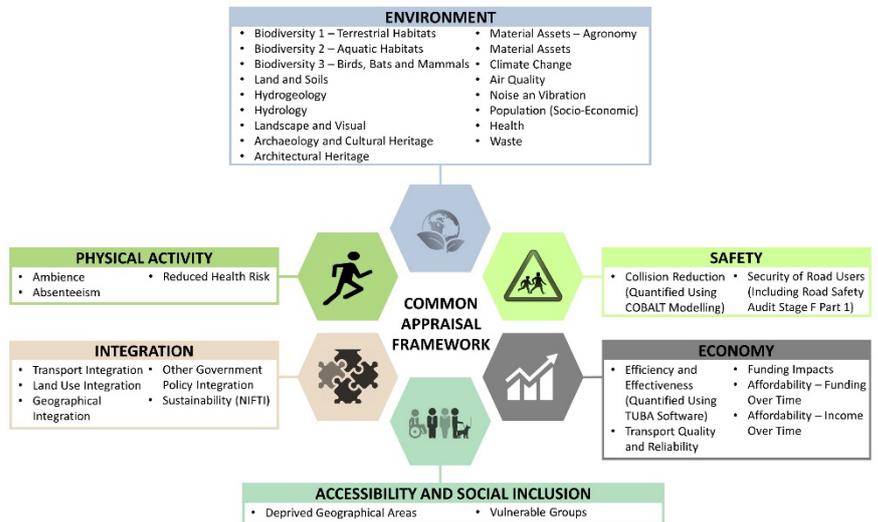
For the road-based options the selection process comprised two stages, with public consultation feedback informing the second stage.

In Stage 1, the project team considered the identified constraints to develop a range of technically feasible road-based options within the study area. 18 road-based options between the outskirts of Cork and Limerick were initially assessed under three criteria; Engineering, Environment and Economy. The assessments enabled the better performing road-based options to be identified, and also determined that a number of options would not be given further consideration.



A Public Consultation was held in November 2020, (<https://corklimerick.ie/november-2020-update/>) inviting feedback on the shortlisted road-based and rail-based options proposed, for further examination.

In Stage 2 eight end-to-end road corridor options were examined in addition to the two traffic management alternatives. A multi-criteria analysis using the Common Appraisal Framework was undertaken to determine the best performing option. Common Appraisal Framework criteria used at this stage are shown in the image below.



LEGEND

- 2010 M20 SCHEME
- - - - - STUDY AREA
- TOWN/ VILLAGE CENTRE

ROAD-BASED OPTIONS

NAVY	PINK
GREEN	PLUM
AMBER	TEAL

The Stage 2 assessment has led to the identification of the best performing option which is being taken forward as the preferred option for design development in Phase 3.

Rail-Based Options

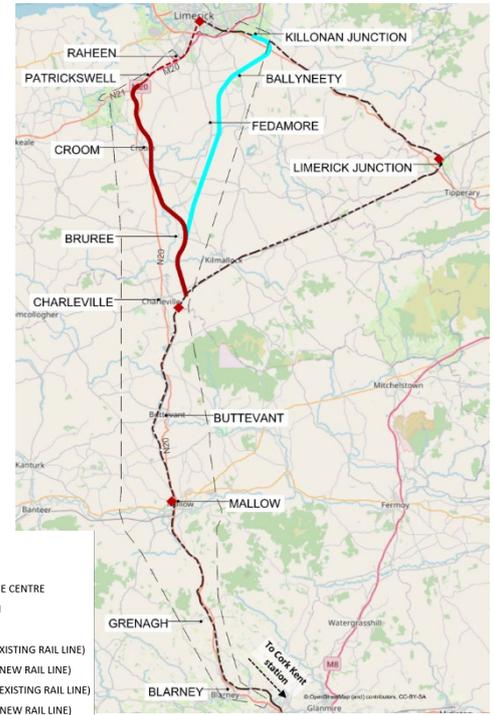
Existing Services

- An average of 200 daily rail journeys were made in 2019 between Cork and Limerick.
- These trips are served by an hourly train service.
- There is a requirement to change trains at Limerick Junction Station.
- The average journey time (including changeover) is 1 hour 43 minutes.
- Irish Rail are progressing proposals to improve line speeds that will result in this journey time improving to around 1 hour 31 minutes.
- Bus services are the dominant public transport mode carrying three times more passengers than rail with similar end-to-end journey times.

Rail-based Options

Three options for providing a new (no-change) train service between Cork and Limerick have been examined. Provision of this new hourly service effectively results in availability of a train leaving each city for the other every 30 minutes.

- RS1 – service via Limerick Junction using existing lines with a journey time of 1 hour 21 minutes.
- RS2a – service using new line from Charleville to Patrickswell to join the currently closed Foynes line into Limerick with a journey time of 1 hour 6 minutes.
- RS2b – service using new line from Charleville to Killonan Junction and join the existing lines into Limerick with a journey time of 1 hour 4 minute.



Appraisal

- Modelling of future demand shows that an RS1 service would generate around 700 extra journeys per day between the cities.
- RS2a and RS2b would further increase this to around 1,800 journeys per day due to the shorter journey time.
- For all three options, the new passengers are primarily transferring from existing bus services.
- There is no significant reduction in road traffic volumes using the N20 corridor for any of the options.
- The infrastructure costs for RS2a and RS2b are almost seven times higher than RS1.



Based on our assessment, RS1 is being recommended by the project team for consideration within the All Island Strategic Rail Review.

Provision of the new rail service will accord with the N/M20 overarching objective of improving connectivity and will provide greater opportunities for travel between central Cork and central Limerick. The new service (RS1 option) is being recommended by the project team for consideration within the All Island Strategic Rail Review.

Active Travel

The Active Travel Strategy is a key part of the N/M20 Cork to Limerick Project and has the potential to deliver 80km of safe walking and cycling routes benefiting communities and visitors in the region

Community Links

The Active Travel strategy focuses on the opportunities to:

- Maintain and improve connections between communities, and
- Facilitate improved connectivity within communities.

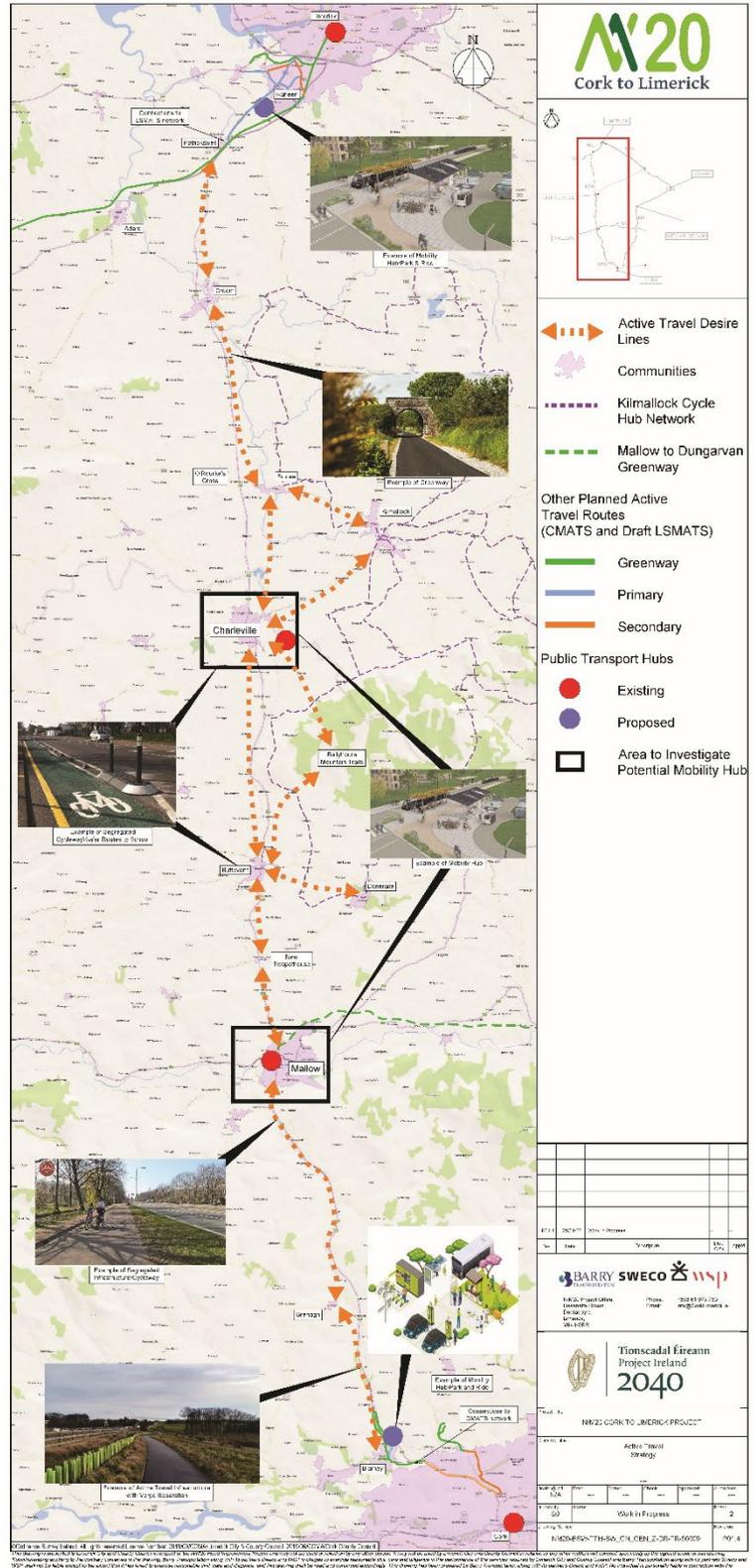
Improving connectivity to Mallow and Charleville bus / rail stations and the proposed Park & Ride sites at Raheen and Blarney has the potential to form “Mobility Hubs”. These multi-modal interchanges have the opportunity to improve integration with electric bikes and scooters, secure cycle parking and electric charge points to facilitate local trips.

The project provides the opportunity to reallocate sections of the existing N20 to cycling due to the reduced traffic flows and transfer of traffic to the new road infrastructure. These cycle routes would comprise segregated cycle lanes linking communities across the study area.

The reduced traffic volumes in communities on the existing N20 would provide a safer environment in which to cycle. This, coupled with the Safe Routes to School Programme which enhances the locality to encourage active travel to and from school, has the potential to lead to an uptake in walking and cycling.

Greenways

Greenways are trails built to be used exclusively by cyclists, pedestrians and other forms of non-motorised transport. They are predominantly traffic free routes which improves safety and broadens accessibility. There are numerous examples in Ireland that have been successfully implemented including the Limerick Greenway and Waterford Greenway. As part of this project, there is an opportunity to create Greenways between Cork and Limerick to facilitate walking and cycling and capitalise on the growing recreation tourism sector, as well as encouraging commuting through e-bike and e-scooter use. The feasibility of options including the abandoned Charleville to Patrickswell rail line will be investigated.



Public Transport

Bus public transport opportunities are linked to new infrastructure providing new and improved bus services

Public Transport - Bus

Bus is the dominant form of public transport in the project area, comprising between 8 and 9% of all commuting trips. Between Cork and Limerick, approximately 210,000 trips were made on bus services during 2019. Current journey times between Cork and Limerick range from 1 hour 30 minutes to 1 hour 50 minutes, depending on the operator.

Service Improvements

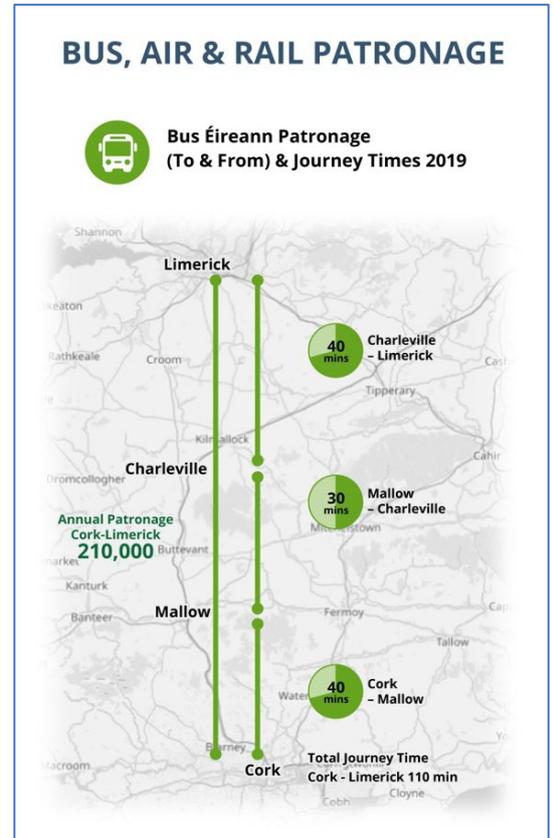
The project has the potential to reduce bus journey times between the two cities to 1 hour 6 minutes. The improved road infrastructure would also lead to increased journey time reliability. This is vital considering that the N20 forms part of the strategic European TEN-T Network.

There is the potential to implement additional express services between the two cities to capitalise on the improved infrastructure and journey times. Bus Eireann are exploring the opportunity for Cork to Galway services with a target journey time of 2 hours 30 minutes, which can be facilitated by the N/M20 Project.

The preferred option provides an opportunity to improve accessibility to jobs, key facilities and social opportunities, most notably for those without access to cars or with mobility and sensory impairments. This would be through reduced journey times and potential for additional services.

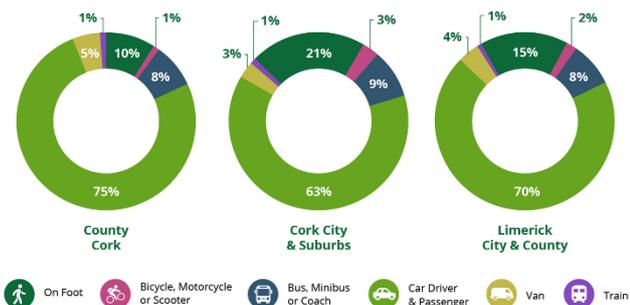
Mobility Hubs / Park & Rides / Rail

Improved services have the potential to integrate with Mallow and Charleville rail stations to form "Mobility Hubs" where users have the opportunity to change transport mode between car, bus, rail, bike and Scooter. There are also proposals for Park & Ride facilities at Raheen and Blarney which would offer similar opportunities for modal change.

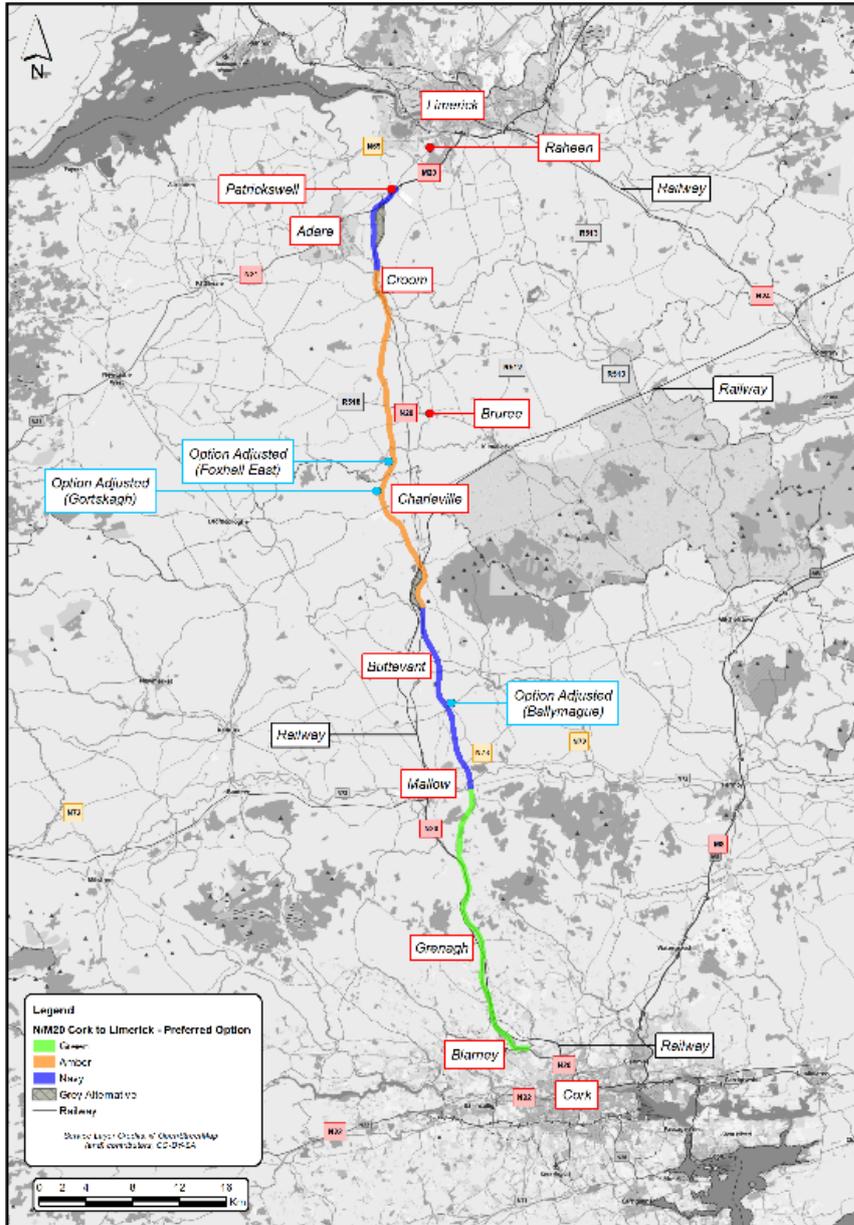


MODAL SPLIT

Commuting - Population aged 5 years and over by means of travel to work, school or college



Preferred Option



The preferred road-based option is a combination of green, navy, amber and navy elements. The option in which the design will be developed is 500 metres wide. Also shown are alternative options (shaded grey) where reuse of the existing N20 will be further investigated in phase 3.

The preferred option commences just south of the Blarney junction and remains largely online to maximise the reuse of the N20 until it diverges eastward near Mourneabbey. Remaining to the east of the N20 it crosses the River Blackwater, the N72, the N73 and the River Awbeg as it bypasses to the east of Mallow and Buttevant until it converges with the existing N20 north of Buttevant. It then remains close to the N20 until it diverges westwards near Ballyhea, bypassing to the west of Charleville, before re-joining the N20 south of Croom. The preferred option reuses the N20 Croom Bypass and then diverges at Garranroe and runs west of the existing N20 until it reaches its tie in point with the existing M20/N21 at Attyflin.

In addressing feedback from the Public Consultation, held in November 2020, the corridor was refined at Ballymague, Gortskagh and Foxhall East and the refinements have been adopted as part of this preferred option.



Environmental Integration

The statutory Environmental Impact Assessment process is the framework within which environmental considerations are integrated into transport project planning. This is complemented by the TII's National Roads Project Management Guidelines which emphasise the identification and avoidance of environmental impacts in the early stages of project planning and design. This process occurs prior to taking the project through the statutory procedures and includes the preparation of the Environmental Impact Assessment Report (EIAR). A key objective is to ensure the efficient delivery of the national roads programme in a manner that minimises adverse environmental effects and respects all relevant legislation. Constraints and option selection studies are two components of the EIAR process primarily concerned with the early identification and avoidance of significant adverse environmental impacts and the consideration of alternative route options.

Environmental Considerations

Environmental considerations are considered from the start of the process to minimise the impact of options on their environs. These 17 environmental criteria, as shown below, are considered as part of the appraisal process.

ENVIRONMENT	
• Biodiversity 1 – Terrestrial Habitats	• Material Assets – Agronomy
• Biodiversity 2 – Aquatic Habitats	• Material Assets
• Biodiversity 3 – Birds, Bats and Mammals	• Climate Change
• Land and Soils	• Air Quality
• Hydrogeology	• Noise and Vibration
• Hydrology	• Population (Socio-Economic)
• Landscape and Visual	• Health
• Archaeology and Cultural Heritage	• Waste
• Architectural Heritage	

In developing options, the objective is to avoid environmental constraints where possible, including:

- Settlements and economic centres – cities, towns, villages, residential properties, businesses and agricultural enterprises,
- Physical topography – high ground and deep valleys,
- National Parks & Wildlife Services Designated Sites – Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Natural Heritage Areas (NHA),
- Cultural heritage (archaeological and architectural heritage) sites,
- Locally important sites – historical, recreational or services,
- Floodplains, and
- Groundwater and geology – water source protection and karst features.

Preferred Option

The preferred road-based option strongly aligns with the scheme's environmental objectives. The preferred option seeks to minimise waste generation and it has one of the lowest comparative impacts on air quality and climate, noise, biodiversity (flora and fauna), waste, hydrogeology, agriculture and cultural heritage (archaeological and architectural). It avoids significant impact on landscape and visual, hydrology and material assets – non-agricultural properties.

Phase 3 Design & Environmental Evaluation

The next phase of the project – Design and Environmental Evaluation – will involve further development of the project, including design of the road, cycle lanes and junctions, identification of the land required, detailed environmental evaluation and the preparation of an Environmental Impact Assessment Report. During this phase, further engagement with landowners and interested parties will be undertaken as part of the ongoing design process.

Note on Climate

The National Development Plan (NDP) has been designed to ensure that it supports the Government's climate ambitions. As a key project of the NDP, climate change considerations have been fully incorporated in the N/M20 assessment process to date. Up-to-date guidance from the Institute of Environmental Management and Assessment will be utilised to assess the greenhouse gas emissions and climate change reliance and adaptation of the preferred transport solution.

Next Steps

Our Transport Solution



Phase 3 – Design and Environmental Evaluation

Following selection of the preferred transport solution, Phase 3 will commence subject to approvals. This is programmed to take two years with the key deliverables being the Design Report, the Environmental Impact Assessment Report, the Statutory Process Documentation and the Business Case. Subject to Government approval, the formal planning submission is then made to An Bord Pleanála in Phase 4.



Throughout the Phase 3 process, the N/M20 project team is committed to proactively engaging with members of the public and those who are impacted directly and indirectly by the project. The design process and the identification of impacts on land and property will take some time and we seek your continuing patience and engagement with the project team.

In order to inform the design process, the N/M20 project team will undertake a range of engineering and environmental surveys. The team will be in contact with land and property owners regarding these surveys. As the design reaches a level of maturity where informed discussions can take place, the N/M20 project team will consult directly with potentially impacted land and property owners on the developing design.

Meetings with land and property owners will be facilitated through online and/or face to face meetings by prior appointment. This is to ensure that the appropriate members of the project team are available and are suitably prepared for productive discussions.

All feedback will be reviewed and amendments considered, before finalising the design and land requirements.

Phase 4 (Statutory Processes)

The purpose of Phase 4 is to compile documentation and participate in Oral Hearing(s) as required by the Statutory Processes to ensure that the proposed project is developed in accordance with planning, environmental and other relevant legislation. The planning documentation is submitted to An Bord Pleanála, who facilitate the holding of an Oral Hearing, which provides the opportunity for members of the public to raise their comments on the project. Following the Oral Hearing, An Bord Pleanála can approve, approve with conditions or reject a project.

