

September 2022

Maynooth to Leixlip Project

Public Consultation
Constraints and Options



MAYNOOTH TO LEIXLIP PROJECT



Project Background and Description

Kildare County Council, in partnership with South Dublin County Council, Transport Infrastructure Ireland (TII) and the Department of Transport (DoT) are developing the Maynooth to Leixlip Project.

The project is included in the National Development Plan 2021–2030 and the draft Greater Dublin Area Transport Strategy 2022–2042. The network forms part of the Trans-European Transport Network (TEN-T) comprehensive network. The section of M4/N4 corridor under consideration includes the M4 mainline carriageway from Maynooth to Leixlip, the associated mainline junctions and the surrounding transport network.

The existing M4/N4 corridor is predominantly in County Kildare with 1.5km of the approximate 10km length in County Dublin.

The study area is largely greenfield agricultural land punctuated by the urban centres of Maynooth, Celbridge and Leixlip. The Rye Water Valley/Carton SAC (Special Area of Conservation) runs parallel to the line of the M4/N4 along the Rye River from Maynooth to Leixlip. The R157 and R406 allow for the transfer of strategic traffic from the M4/N4 to the M3 and M7 respectively.

National Road projects are typically progressed through TII Phases 0 to 7 (refer to Board 3). The need for intervention and project specific objectives were determined in Phase 1 (Concept and

Feasibility). The project is now at Phase 2 (Options Selection) where potential transport options to address the issues identified have been developed and are presented as part of this consultation. These options will be subject to a comparative assessment of their potential impacts, and their relative success in achieving the project objectives to determine the preferred option(s) for the project.

Who we are

Kildare County Council is the lead Local Authority and Sponsoring Agency for the project. The project is being developed in partnership with South Dublin County Council.

Kildare National Roads Office is the Client Project Manager for the project.

Transport Infrastructure Ireland (TII) is the Approving Authority.

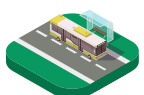
Arup is the Technical Advisor progressing the Planning and Design for the Project.

What are the issues? What is the need for intervention?

Existing Transport Situation and Initial Findings



Congestion on the M4, particularly at peak times. The average annual daily traffic between Junction 6 and Junction 8 increased by circa 19% between 2013 and 2019.users.



A sufficient modal shift from private car to public transport has not materialised. Bus services utilising the M4 must negotiate the same traffic volumes as private cars.



There are extensive public transport services in the study area. However, there is a relatively high dependency on private cars (>60% for Maynooth commuters).



Junction 7 Maynooth has constrained geometry and conflict issues exist between pedestrians/cyclists and road traffic.



The M4 currently serves both strategic traffic and local Greater Dublin Area traffic. This local traffic is impacting on the M4 capacity to act as a strategic route.



There is an opportunity to enhance or complement the existing and proposed bus infrastructure within the study area.



A number of options for improvement and enhancement may be required which are integrated and connected.



Options will need to support a dedicated modal shift from private car to public transport.

Policy

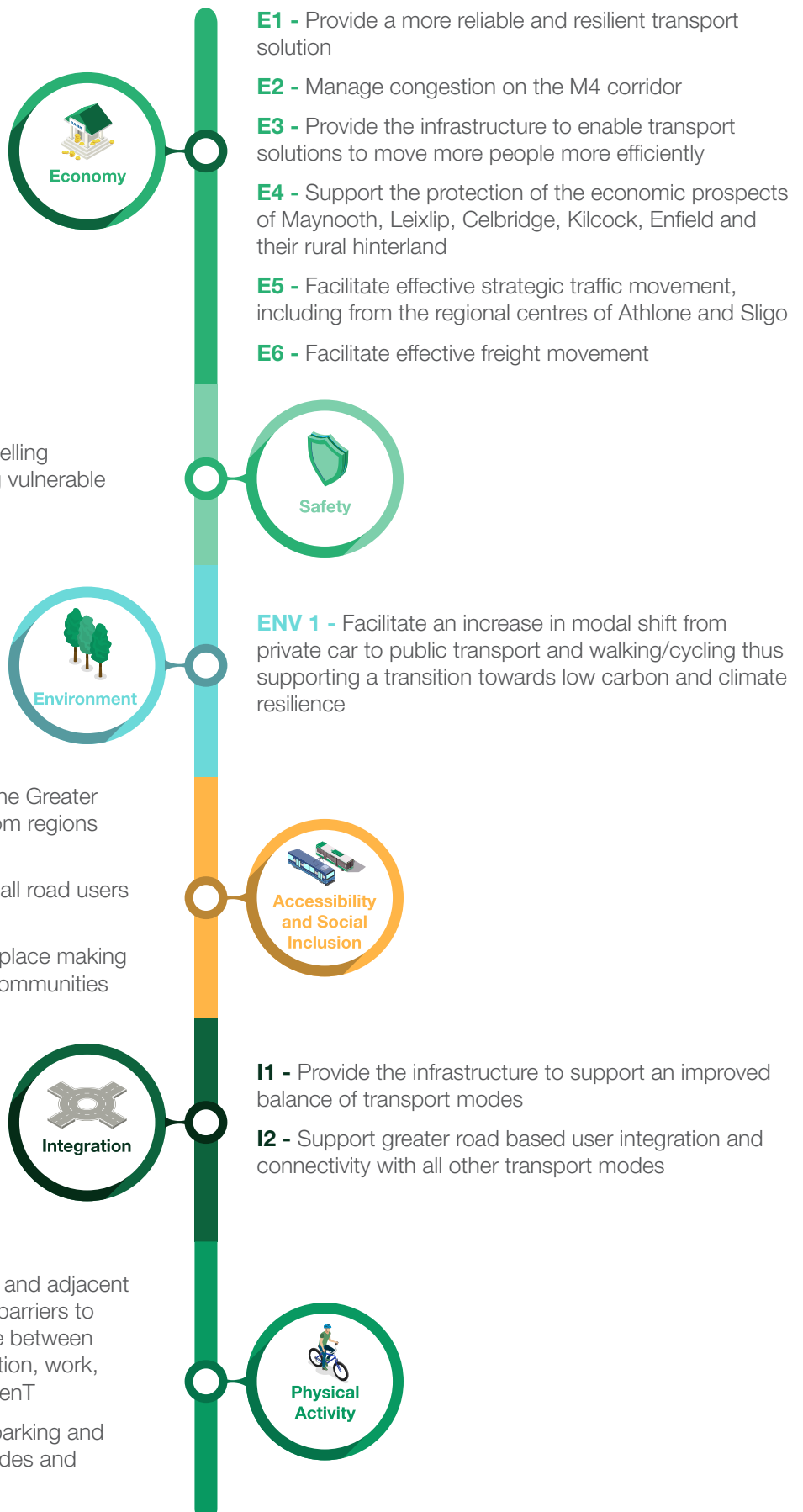


The M4/N4 is part of the TEN-T comprehensive network and is specifically noted in the National Planning Framework, National Development Plan and draft Greater Dublin Area Transport Strategy 2022 - 2042.



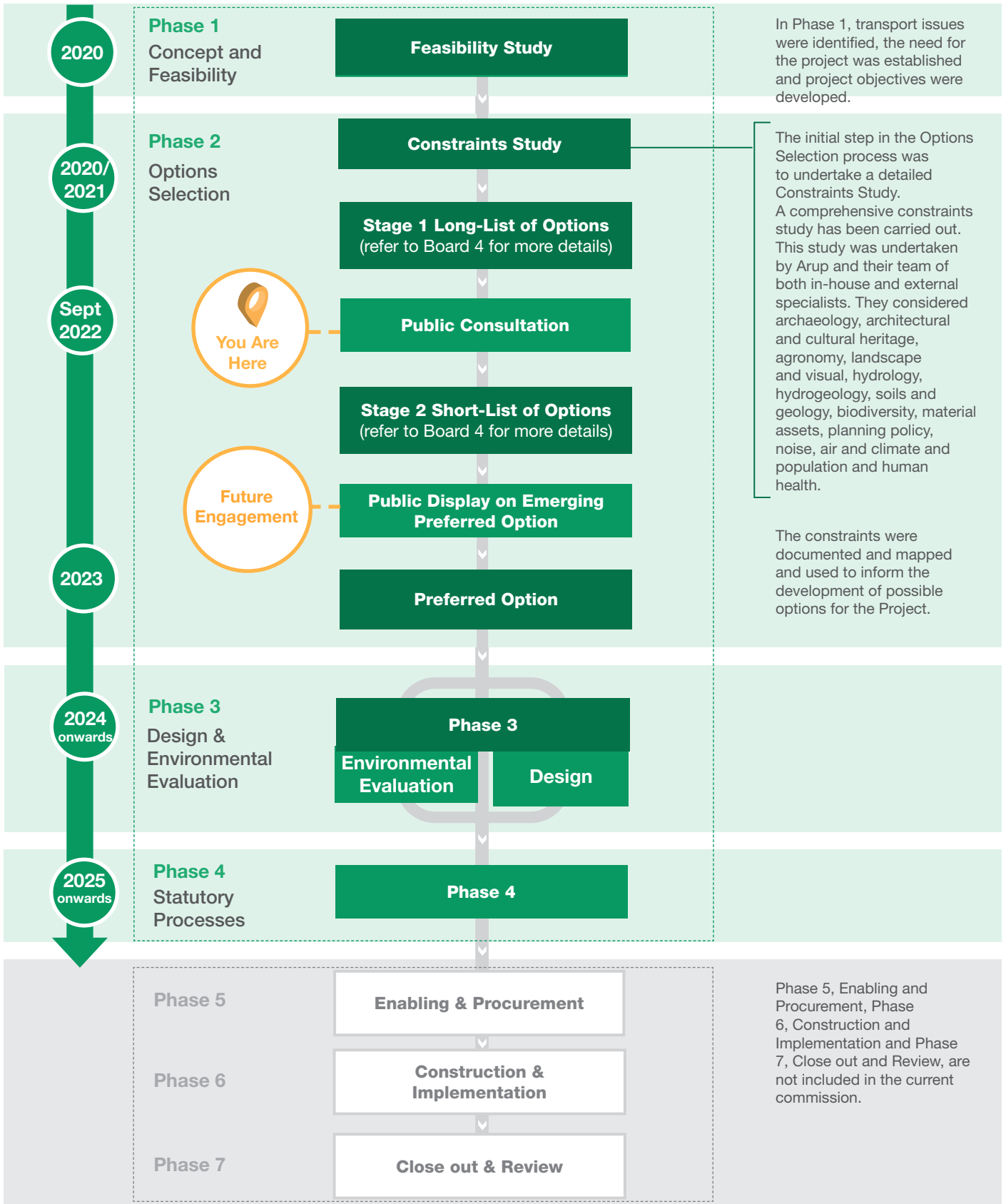
Local policy documents reinforce the requirement to improve the safety and operational efficiency of Junction 7 Maynooth and the optimisation and protection of Junction 6 Celbridge.

Project Objectives



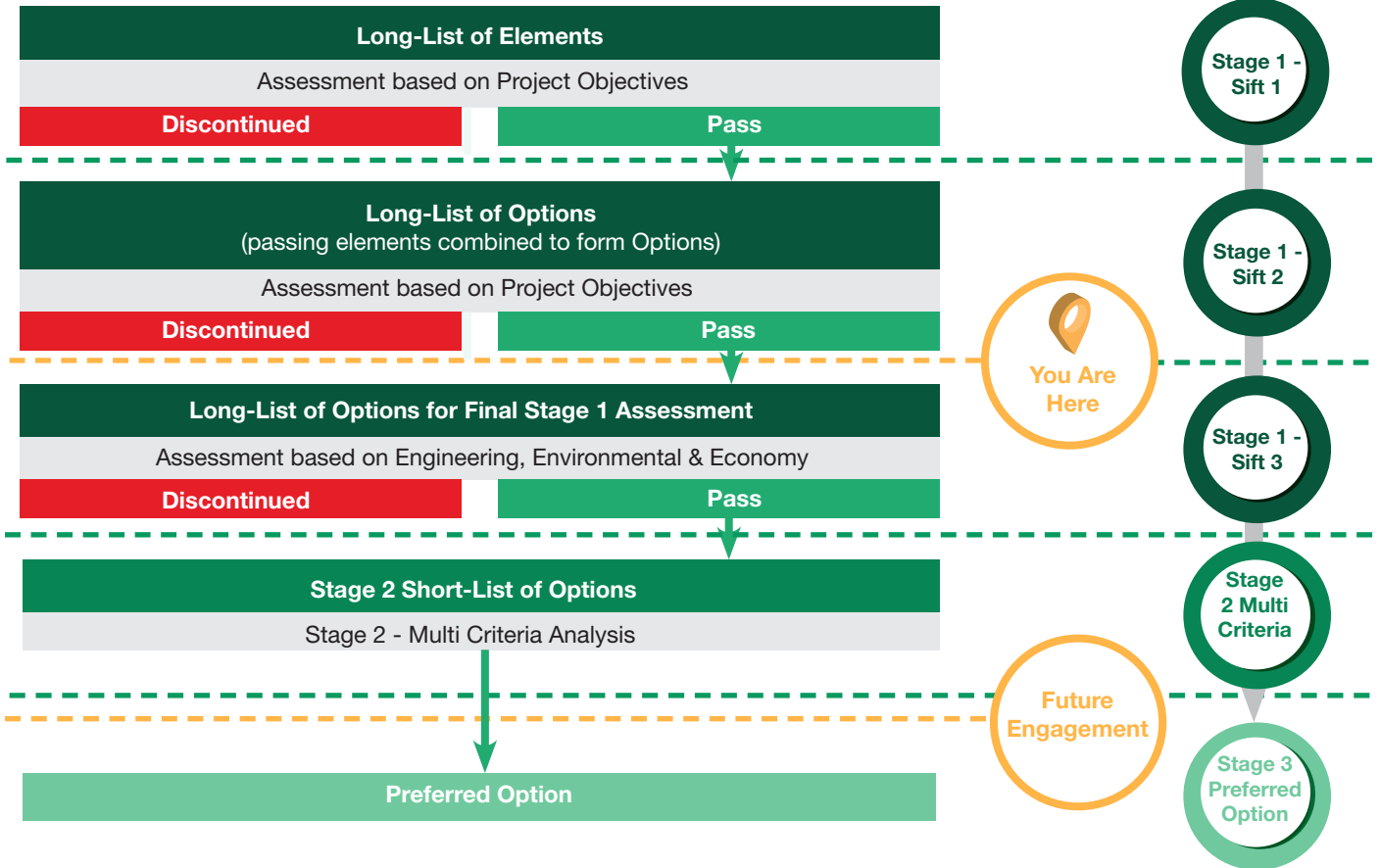
Project Objectives

The current commission is to progress the project to the completion of Phase 4, Statutory Processes, of the TII Project Management Guidelines. Phase 5, Enabling and Procurement, Phase 6, Construction and Implementation and Phase 7, Close out and Review, are not included in the current commission.



Project Objectives

Overview



Possible Components of the Transport Options



Options Versus Considerations

Options

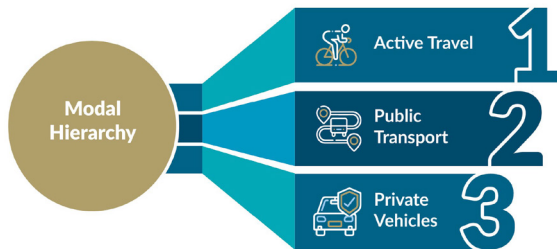
are potential interventions being assessed and if chosen as the preferred option, would typically be delivered under the scope of this project.

Considerations

are potential solutions that would complement this project but would not typically be within the scope of this project to deliver. For example, under Rail, the DART+West benefits have been factored into the traffic projection. Under NTA Park & Ride considerations, potential NTA Park & Ride sites would be considered on the preferred option to complement each project, as appropriate.

Overview

The current commission is to progress the project to the completion of Phase 4, Statutory Processes, of the TII Project Management Guidelines. Phase 5, Enabling and Procurement, Phase 6, Construction and Implementation and Phase 7, Close out and Review, are not included in the current commission.

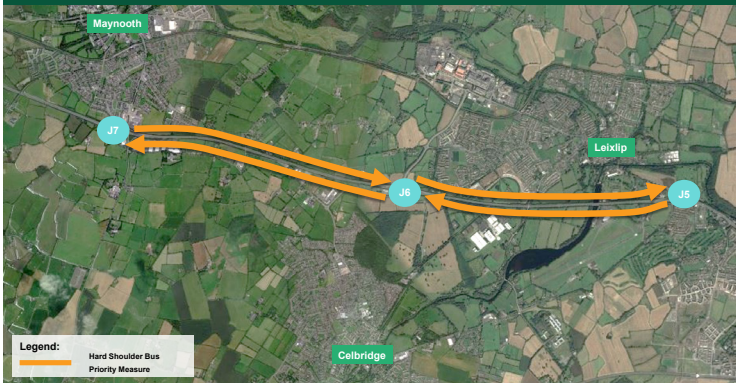


Corridor Options (Corridors contain Bus and Road based Options)

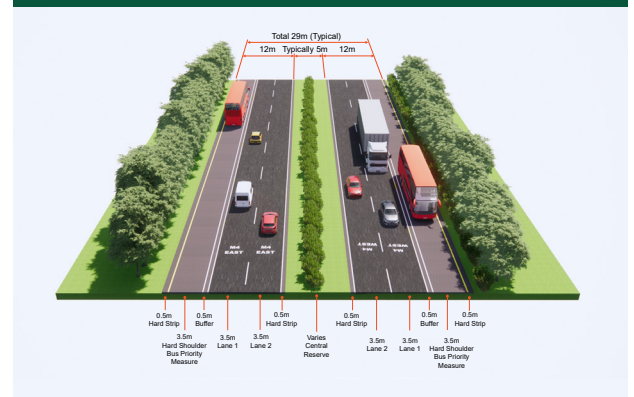
Potential Transport Options that have been shortlisted and will be taken forward for further assessment

Corridor Option 1

Corridor Option 1 consists of proposed hard shoulder bus priority measures within the hard shoulder in both the eastbound and westbound directions. Land required is within the current road reserve boundary.

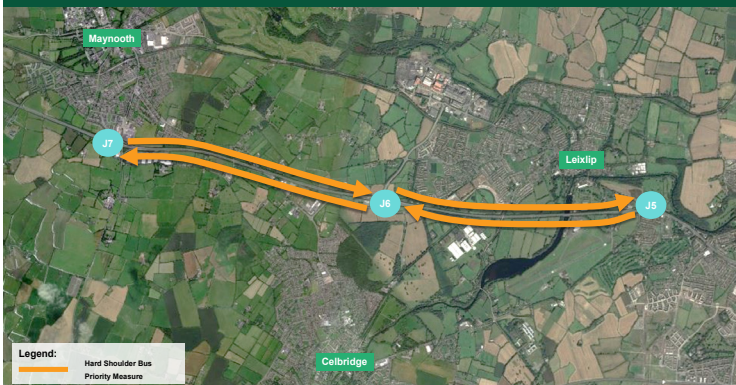


Typical detail of hard shoulder bus priority measure eastbound & westbound

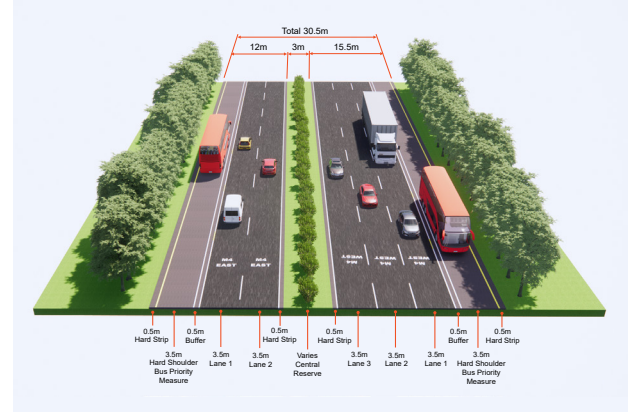


Corridor Option 2

Corridor Option 2 consists of proposed hard shoulder bus priority measures within the hard shoulder in both the eastbound and westbound directions. However, it differs to Corridor Option 1 in that it includes an additional third traffic lane in the westbound direction. Land required is within the current road reserve boundary.



Typical detail of hard shoulder bus priority measure eastbound & westbound & 3rd lane westbound

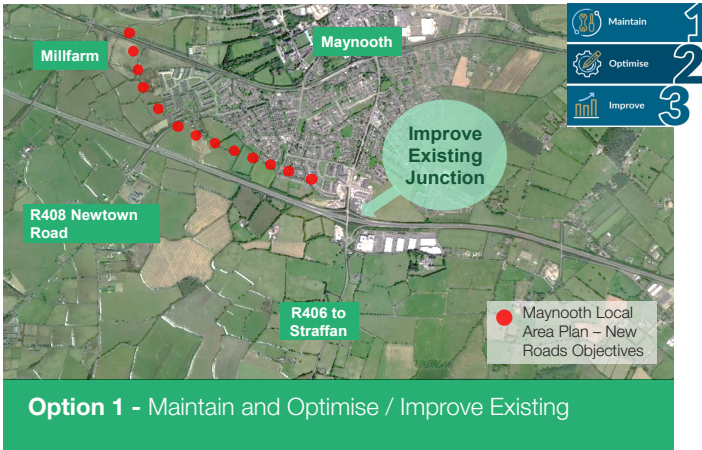


Junctions / Bridges Options

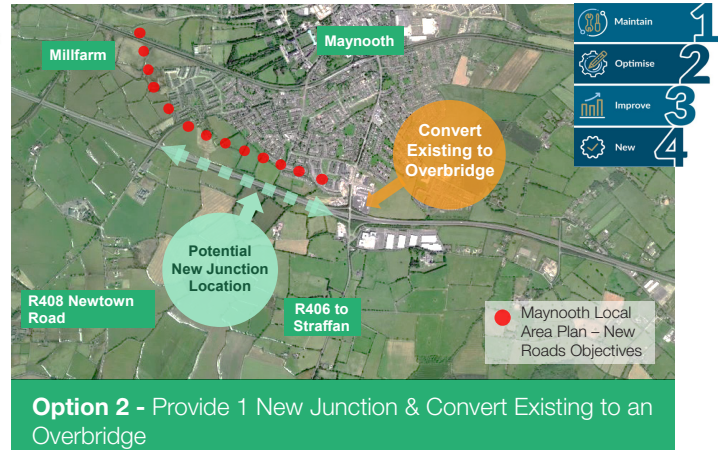
Potential Transport Options that have been shortlisted and will be taken forward for further assessment

Active Travel options are being considered at all junction and bridge locations shown.

Junction 7 Maynooth Option 1



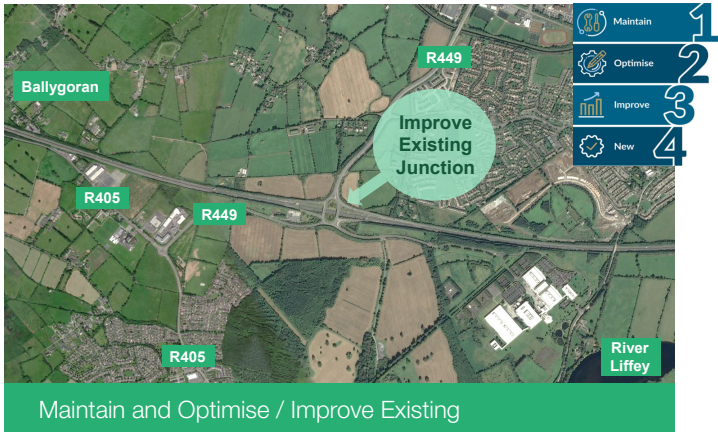
Junction 7 Maynooth Option 2



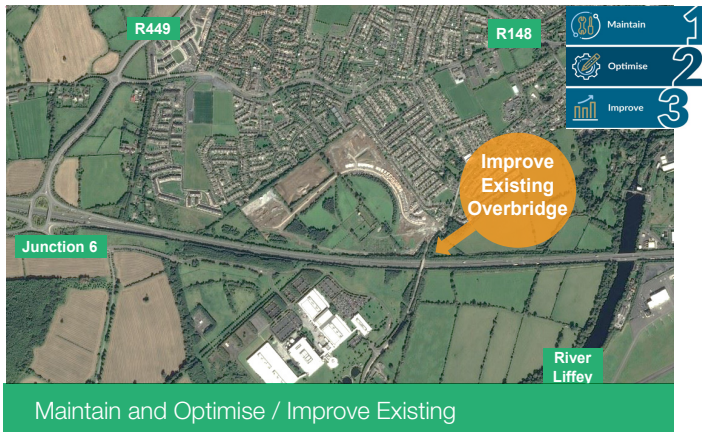
R405 Ballygoran Overbridge



Junction 6 Celbridge



R404 Overbridge

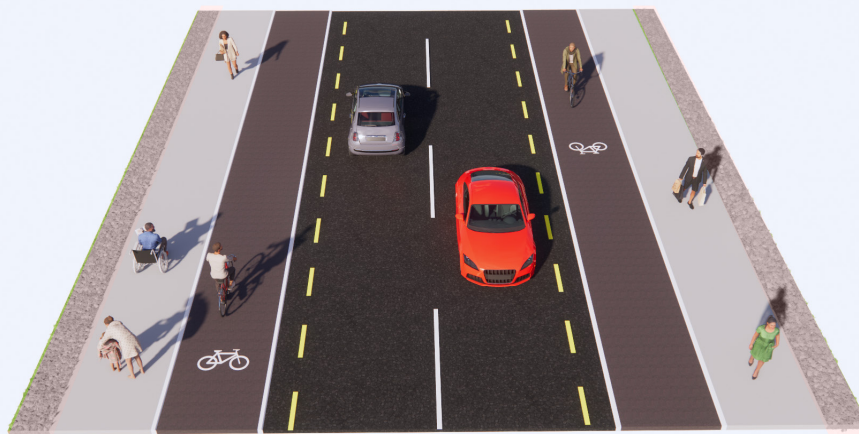


Junction 5 Leixlip





Active Travel means walking or cycling as part of a purposeful journey. Walking as part of a commute to work, cycling to the shop, or scooting to school are all considered Active Travel. Active Travel is included in all junction and bridge options.



Cycle Parking

Provision for cycle parking and infrastructure will be a consideration on the preferred option.

Demand Management, Enhanced Bus, Rail and NTA Park and Ride

Potential Transport Options & Considerations that have been shortlisted and will be taken forward for further assessment



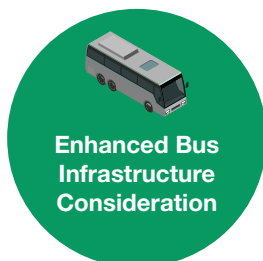
Demand management includes measures to optimise the operational efficiency of the transport network.

A number of options will be taken forward for consideration on the preferred option.

In addition, two options have been shortlisted for further assessment at the next stage of assessment before being considered on the preferred option, these include:

- Congestion Charges, Road Pricing and Tolling; and
- Ramp Metering/Junction Access Control Signals

As per the GDA Transport Strategy 2022 – 2042, the NTA are currently developing a Park & Ride Strategy for the M4/ N4 corridor. The Park & Ride Strategy is separate to the Maynooth to Leixlip Project. However, any proposals by the NTA for Park & Ride locations on the M4/ N4 corridor will be accounted for within the Maynooth to Leixlip Project.



This will be considered on the preferred option in consultation with the NTA.

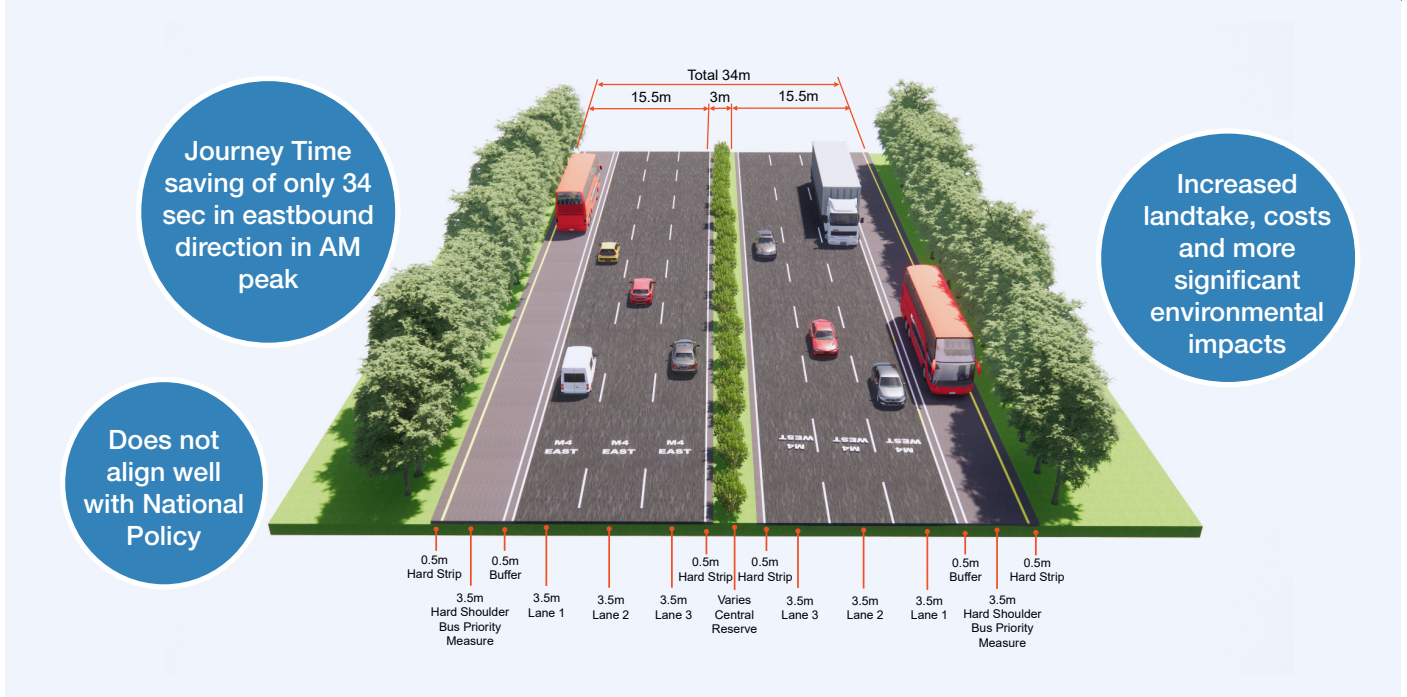
The DART+ West Project is a project proposed by Irish Rail and separate to the Maynooth to Leixlip Project. However, the potential benefits and impacts of the DART+ West Project will be accounted for within the Maynooth to Leixlip Project.

Draft Discounted Options

Corridor Option 3 consisted of proposed hard shoulder bus priority measures within the hard shoulder in both the eastbound and westbound directions. However, it differed to Corridor Option 1 and 2 in that it included an additional third traffic lane in both the eastbound and westbound directions. Therefore, it had wider extents than either Corridor Option 1 or Corridor Option 2. The typical width of this option was circa 34m.

This option was not shortlisted following Stage 1 Engineering, Environment and Economy Assessment and did not align well with national policy, therefore it has been discounted.

Corridor Option 3 - Draft Discounted

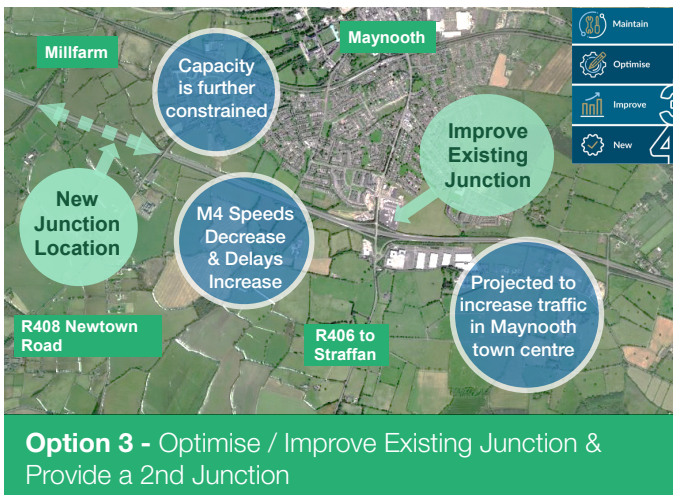


Hard Shoulder Bus Priority Measure Eastbound & Westbound and 3rd Lane in Both Directions

Draft Discounted Options

Junction 7 Option 3 and 4 were not shortlisted following Stage 1 Engineering, Environment and Economy Assessment and did not align well with national policy, therefore they have been discounted.

Junction 7 Maynooth Option 3 - Draft Discounted



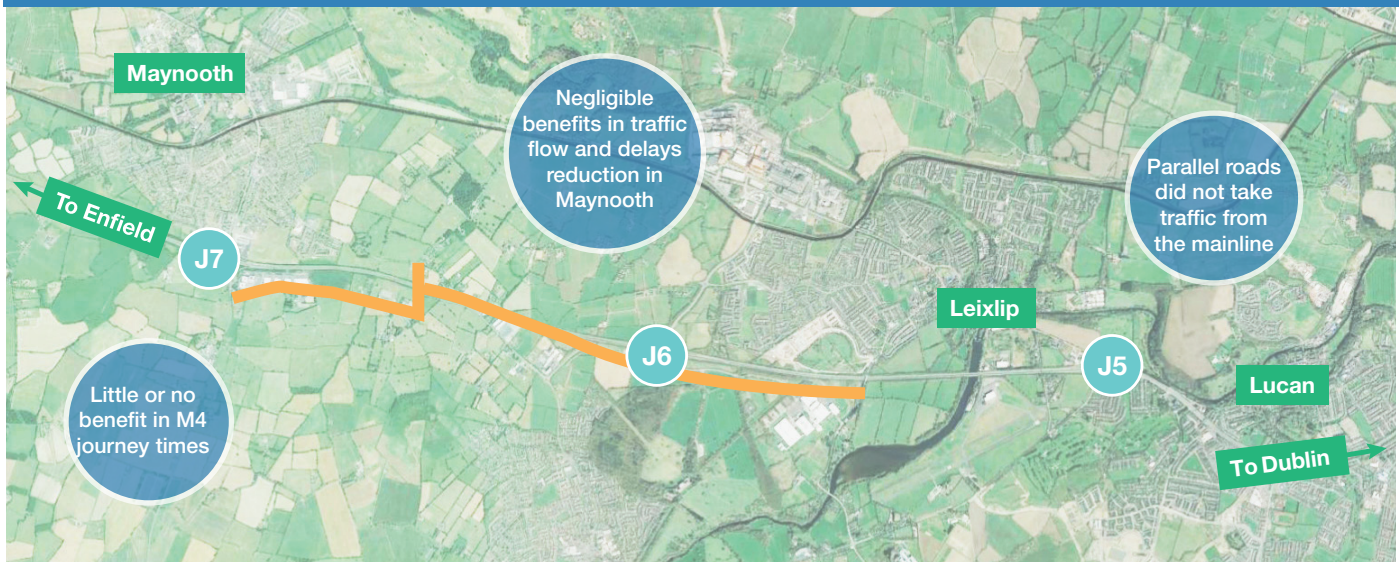
Junction 7 Maynooth Option 4 - Draft Discounted



Parallel Roads - Draft Discounted



A comparative assessment of the three options was carried out, whereby Option 2 Southern Parallel Road was preferred over Option 1 Northern Parallel Road and Option 3 Combination of Northern and Southern Parallel Roads. Therefore, Option 2 Southern Parallel Road was brought forward for further assessment. However, this option did not meet the project objectives when assessed at the subsequent Sift 2, therefore it has been discounted.



What transport options within the scope of the project do you think we should consider and why?

What potential transport option shown do you prefer and why?

What do you think matters?



Together with a virtual consultation taking place from Thursday 8th September 2022 to Thursday 22nd September 2022, a two-day in-person event is being held at the Springfield Hotel, Leixlip, Co. Kildare W23 W280, as follows:

Wednesday 14th September 2022 from 2pm to 8pm

Thursday 15th September 2022 from 2pm to 8pm

If you have any questions and would like to meet with a member of the design team please come along to one of our in-person events. Alternatively you can send us an email at the address below.



Your opinion counts – Tell us what you think! Please complete the feedback form

Contact

Website

www.maynoothleixlip.ie

Phone

+353 86 128 5719

Email

maynoothleixlip@arup.com

Post

Arup
50 Ringsend Road,
Dublin
D04 T6X0

