Galway City Transport Project

N6 Galway City Ring Road

Response to Submissions made to An Coimisiún Pleanála with respect to **ABP-318220-23**

October 2025

An Roinn Iompair
Department of Transport

Bonneagar Iompair Éireann
Transport Infrastructure Ireland

Comhairle Cathrach na Gaillimhe
Galway City Council

Comhairle Chontae na Gaillimhe
Galway County Council

ARUP

Contents

0. Introduction

0.1 Overview – Responses to Submissions

This report has been prepared in response to the observations made by statutory consultees and third parties to An Coimisiún Pleanála (ACP) on the 2025 Request for Further Information Response with respect to the application for approval under Section 51 of the Roads Act 1993 (as amended) for the proposed N6 Galway City Ring Road (N6 GCRR), ACP Case Number: ABP-318220-23, hereafter referred to as the Section 51 Application. This report has been prepared in response to the invitation by ACP to Galway County Council on 16 September 2025 to make a submission on the observations received in relation to the application.

An individual response is provided to the following observations made on the Section 51 Application:

1. An Taisce (Section 1)
2. Brendan Mulligan (Section 2)
3. Cormac Michael Rabbitt (Section 3)
4. DAU (Section 4)
5. Enda McGovern (Section 5)
6. Friends of the Irish Environment (Section 6)
7. IDA Ireland (Section 7)
8. James O'Connell (Section 8)
9. Linda Rabbitte (Section 9)
10. Marian Rabbitte (Section 10)
11. Offaly County Council (Section 11)
12. Shane Foran (Section 12)
13. JFC Property Developments Ltd. (Section 13)
14. TII (Section 14)
15. Údarás na Gaeltachta (Section 15)

It is noted that the following submissions were received from persons who are also interested parties on the separate application, ACP Case No. ABP-318217-23 as they have an interest in lands being acquired by the N6 Galway City Ring Road Protected Road Scheme 2018 and/or N6 Galway City Ring Road Motorway Scheme 2018, but are included in this report in the response to the Section 51 Application as per the order they were received from ACP:

- Linda Rabbitte in the Motorway Scheme 2018 as Plot Ref. 584
- Marian Rabbitte in the Motorway Scheme 2018 as Plot Ref. 576
- JFC Property Developments Ltd. in Protected Road Scheme 2018 as Plot Ref. 238

0.2 Bat Derogation Licence for 2025 and Application for Bat Derogation Licence for 2026

As set out in the response to the submission made by the Galway City Harriers contained in the response report to the N6 Galway City Ring Road Protected Road Scheme 2018 and N6 Galway City Ring Road Motorway Scheme 2018, the NPWS have granted a derogation licence to permit the removal of the bat roost structures: licence DER/BAT 2024 – 96 which was granted on 10 April 2024, and licence DER-BAT-2025-287 which was granted on 29 August 2025 and one of its conditions was subsequently the subject of a minor amendment and an amended licence issued on 14 October 2025 as licence DER-BAT-2025-287 (amended). A copy of this Bat Derogation Licence DER-BAT-2025-287 (amended) is attached to the response to the Galway City Harriers submission (in Section 4 of the response report to the N6 Galway City Ring Road Protected Road Scheme 2018 and N6 Galway City Ring Road Motorway Scheme 2018). As can be seen this licence expires on 31 December 2025 and therefore Galway County Council had sought to have this licence extended into the calendar year 2026 as the scientific data presented within that licence application remains valid to cover 2026, but NPWS advised that given that all derogations and licences issued by NPWS can only be issued within the same calendar year and cannot extend into a new year due to EU reporting obligations in which the NPWS report on a yearly basis, a further derogation licence application to the NPWS for 2026 is required.

Therefore, a derogation licence application under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 has been made to the NPWS for the Project for the calendar year 2026, which is currently under consideration by the NPWS. The details in relation to the status of this application will be available on the NPWS website at ,where the applicant for the derogation licence is identified as Sean Devaney (Galway County Council). The requisite derogation licence should be granted by the NPWS before ACP comes to make any decision in relation to the Project. Once it has been granted, that derogation licence will be published, along with the application itself and any supporting documentation on the NPWS's website at .

Please note, ACP will be able to see when the Bat Derogation Licence is granted, and obtain a copy of the final granted licence, by clicking on the link above. If ACP has any difficulty at all in accessing a copy of the derogation licence, please contact Galway County Council, by email at sdevaney@galwaycoco.ie.

Therefore, ACP will be in a position to review the applicable derogation licence, and take it into account in its consideration of this Project before making any decision.

0.3 Climate Action Plan 2025

Further, as raised in a number of the submissions and in particular the submissions by Mr. Brendan Mulligan, An Taisce, and Friends of the Irish Environment CLG, at the time of the submission of the 2025 RFI Response on 14 April 2025, the Climate Action Plan 2024 ("**CAP24**") was the most recent approved Climate Action Plan for the purposes of section 15 of Climate Action and Low Carbon Development Act 2015 (as amended) (the "**2015 Act"**), and was considered in Part IV of the 2025 RFI Response (entitled "*Obligations under Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended) and submissions in relation to the Climate Action Plan 2024*") (the "**Section 15 Report**"). Subsequent to the submission of the 2025 RFI Response, the Climate Action Plan 2025 ("**CAP25**") was published and became the most recent approved climate action plan for the purposes of section 15 of the 2015 Act. As discussed in detail in the responses to a number of the submissions below, and in particular in the responses to the submissions by Mr. Brendan Mulligan, An Taisce, and Friends of the Irish Environment CLG, it is accepted that it is CAP25 by reference to which compliance with the obligation imposed by section 15 falls to be assessed (subject to the caveat that CAP25 is, for reasons explained below, to be read in conjunction with CAP24).

As the Commission will be aware, the obligation under section 15 of the 2015 Act is to perform its functions, insofar as practicable, in a manner consistent with, amongst other matters, the most recent approved Climate Action Plan at the time of the Commission's decision in relation to the proposed N6 GCRR. Currently, the most recent approved Climate Action Plan is CAP25. However, given that CAP25 is to be read in conjunction with CAP24, the Commission should not read CAP25 in isolation but in conjunction with CAP24. For the reasons set out in the Section 15 Report and discussed in detail in the responses to submissions below (and particularly in the responses to the submissions of Mr. Brendan Mulligan, An Taisce, and Friends of the Irish Environment CLG, the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions in a manner consistent with CAP25 (read in conjunction with CAP24), as well as the other plans and objectives specified in section 15 of the 2015 Act.

1. Response to ABP-318220-23: 01 An Taisce

1.1 Submission – Whole Scheme

The submission from An Taisce is made under four headings as follows:

1. Compatibility of the N6 Galway City Ring Road with the Climate Action Plan 2025
2. Compatibility of the Galway Transport Strategy and the Galway City and County Councils' Local Authority Climate Action Plans with the Climate Action Plan 2025
3. The N6 Galway City Ring Road will not be an effective solution to congestion in the Galway Metropolitan Area
4. The absence of a Galway Metropolitan Area Transport Strategy

Each section of the submission from An Taisce is addressed in this response.

1.2 Response to submission

1.2.1 Most recent approved Climate Action Plan

The submission states, at the outset, that: *"the RFI Response is stated to be based on the Climate Action Plan 2024"* and notes that the Climate Action Plan 2025 has now been published, and alleges that the applicant should provide an updated RFI Response *"against the Climate Action Plan2 2025"*.

Response

As the Commission is aware, pursuant to section 15(1)(a) of the Climate Action and Low Carbon Development Act 2015 (as amended) (the **"2015 Act"**), the Commission is required to perform its functions, in so far as practicable, in a manner consistent with *"the most recent approved Climate Action Plan"*.

The response to the request for further information was submitted to An Bord Pleanála (as it then was) on 14 April 2025 (the "**2025 RFI Response**"), prior to the publication of the Climate Action Plan 2025 (**"CAP25"**). Therefore, at the time of the submission of the RFI Response, the Climate Action Plan 2024 (**"CAP24"**) was the most recent approved Climate Action Plan for the purposes of section 15 of 2015 Act, and was considered in Part IV of the 2025 RFI Response (entitled *"Obligations under Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended) and submissions in relation to the Climate Action Plan 2024"*) (the **"Section 15 Report"**). Subsequent to the submission of the 2025 RFI Response, CAP25 was published and became the most recent approved climate action plan for the purposes of section 15 of the 2015 Act.

It is accepted that it is CAP25 by reference to which compliance with the obligation imposed by section 15 falls to be assessed, subject to the caveat that the provisions of CAP24 remain relevant for reasons explained below.

The provisions of CAP25 have been carefully considered and do not require any amendment to the analysis contained in Chapter 17 of the Updated EIAR that was submitted as Part VI of the 2025 RFI Response (the "**Updated EIAR**") or the analysis contained in the Section 15 Report.

This is because there is no change in CAP25 to the key performance indicators, relative to the transport sector, that are set out in CAP24. In particular, there is no change to the level of change required to meet the 50% reduction in overall emissions from transport by 2030 (relative to 2018 levels). These key targets (which remain unchanged in CAP25) include a 20% reduction in total vehicle kilometres travelled relative to the 2030 business-as-usual scenario, a 50% reduction in fuel usage, and significant increases to sustainable transport trips and modal share.

Therefore, the analysis as presented in the Section 15 Report, which clearly demonstrates how the delivery of the proposed N6 GCRR, as part of an overall transport solution for Galway, is consistent with CAP and with the achievement of the targets set out in CAP24 at a national level, applies with equal force in relation to CAP25, as no new measures or targets have been introduced in CAP25 that would in any way alter that position.

CAP25 states that it is to be read in conjunction with CAP24 'to facilitate a focus on the delivery of outstanding actions from CAP24 and high-impact legacy actions from CAP23'.

As mentioned above, the Commission's obligation under section 15 of the 2015 Act is to perform its functions, insofar as practicable, in a manner consistent with, amongst other matters, the most recent approved climate action plan, which is now CAP25. However, given that CAP25 is to be read in conjunction with CAP24, the Commission should not read CAP25 in isolation but in conjunction with CAP24 to facilitate the delivery of outstanding actions from CAP24 and high-impact legacy actions from CAP23.

In those circumstances, and for the reasons as are set out in the Section 15 Report, the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions in a manner consistent with the most recent approved Climate Action Plan, CAP25 (read in conjunction with CAP24), as well as the other plans and objectives specified in section 15 of the 2015 Act.

Further, it is clear from what is set out above and from the contents of the Section 15 Report that there is ample information before the Commission in relation to CAP24 and CAP25 in order for the Commission to make its determination in relation to the proposed N6 GCRR while complying with its obligations under section 15 of the 2015 Act, and there can be no suggestion that any further Request for Further Information is required in that regard as suggested in the submission.

1.2.2 Ireland's emission reduction obligations and the current state of progress

This submission states that:

> *"In the absence of immediate course correction and urgent measures, both the Climate Change Advisory Council and the Environmental Protection Agency (EPA project a failure to comply with Carbon Budget 1 (2021-2025) and most of its sectoral ceilings and indeed with Carbon Budget 2 (2026-2030) as well. Per the Climate Act, any overshoot of a carbon budget must be carried forward into the next budget period, thereby reducing that budget. The EPA's latest emissions report[1] published in May 2025, projects that Carbon Budget 1 for 2021-2025 (set at 295 Mt CO_{2eq}) will be exceeded by 8-12 Mt CO_{2eq}. Therefore, Carbon Budget 2 for the 2026-2030 period (currently set at 200 Mt CO_{2eq}) will have to be reduced by the amount of that overshoot of Carbon Budget 1. The EPA report also projects that Carbon Budget 2 will be exceeded by 77-114Mt CO_{2eq} (with carryover from Budget 1) and that the sectoral ceiling for electricity will be exceeded in Budget 2 as well. Even if full carbon budgets and sectoral ceiling compliance was achieved, each subsequent budget and its associated ceilings will become increasingly more stringent."*

The submission goes on to say that all emitting activities must be cut back to ensure compliance with budget and sectoral ceiling compliance.

Response – EPA report

Carbon budgets and sectoral emissions ceilings are set by the Government under sections 6A to 6D of the 2015 Act. Under section 6B(13), Ministers of the Government must *"as far as a practicable"* perform his or her functions in a manner consistent with a carbon budget. Under section 6C(9), the same is true for the sectoral emissions ceiling. However, that is an obligation which is specifically imposed on Ministers only, and public authorities including the Commission do not have the same obligation.

[1] https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/irelands-greenhouse-gas-emissions-projections-2024-2055.php

One of the main purposes of these carbon budgets and ceilings is to inform the making of the climate action plans. Section 4(2)(a) of the 2015 Act specifically provides that the Minister is required, when preparing a climate action plan, to *"ensure that the plan is consistent with the carbon budget programme"*. The Minister is also required under section 4(2)(b)(i) of the 2015 Act to set out in the climate action plan a roadmap of actions to include *"sector specific actions that are required to comply with the carbon budget and sectoral emissions ceiling for the period to which the plan relates"*. In accordance with section 4(8) of the 2015 Act, when preparing and approving a climate action plan, the Minister and the Government are required to have regard to a range of specified matters including at paragraph (g) the need to maximise employment, the attractiveness of the State for investment and the long term competitiveness of the economy, and at paragraph (m) the National Planning Framework, and the sophisticated balancing of these public interest factors is expressed in the Climate Action Plans. Accordingly, it is the climate action plan prepared by the Minister that gives concrete effect to the carbon budgets and sectoral emissions ceilings and which represents the result of the weighing of all of the factors specified in subsection (8).

It is clear, therefore, that the carbon budgets and sectoral emissions ceilings are set by government, and the Climate Action Plan then sets out the roadmap of actions, identified by the Minister and approved by the Government, that are required in order for each sector to meet its sectoral emissions ceilings, and for Ireland at a national level to comply with the carbon budgets. It follows, therefore, that once a given project aligns with and supports the relevant actions set out in the relevant Climate Action Plan, as the proposed N6 GCRR does for the reasons set out below in Section 1.2.3, an approval for that project would not just be consistent with the relevant Climate Action Plan, but also with the relevant carbon budgets and sectoral emissions ceilings.

The submission references the sectoral ceiling for electricity, which is not the applicable sectoral ceiling for the Project which is transport. In that regard, the balancing of priorities as between, for example, the Transport Sector and the Electricity Sector is the responsibility of Government in setting the relevant sectoral emissions ceilings, which determine how the Carbon Budgets are to be divided among the different sectors of the economy. Such balancing decisions have therefore already been made in the setting of sectoral emissions ceilings and are not a matter for the Commission, as any emissions that might arise from the construction and operation of the N6 GCRR, for example, would not have any impact on the sectoral emissions ceiling for the Electricity Sector. It would not be appropriate, therefore, for the Commission to seek to balance the emissions predicted to arise from the construction and operation of the N6 GCRR with any exceedance of the sectoral emissions ceiling for the Electricity Sector, as appears to be suggested in this submission. In relation to the sectoral emissions ceilings for the Transport Sector, which is the relevant sector for the proposed N6 GCRR and is not directly referenced in the submission, as outlined in Section 14.1.3 of CAP25:

> *According to the 2024 EPA projections, transport sectoral emissions are expected to reduce by 29% of 2018 levels by 2030. It is important to note that some proposed policy measures cannot be directly simulated in modelling approaches, such as certain demand management measures set out in CAP24. There are also emerging challenges for the transport sector in meeting its first carbon budget targets, which in turn will present resultant challenges for the second carbon budget targets.*
>
> *In light of this, the Department of Transport will engage with the National Transport Authority (NTA), Transport Infrastructure Ireland (TII) and wider stakeholders in the transport sector, to recalibrate their existing emissions modelling; develop refined proposals for amplified or additional decarbonisation policies; assess the decarbonisation potential of these proposed measures and set national targets for a renewed policy pathway; determine whether the transport sector can help address cross-sectoral 'unallocated savings' for second carbon budget period (2026-2030); and look forward to longer-term pathways for post 2030.*

Therefore, the Climate Action Plan 2024 and Climate Action Plan 2025 has identified a roadmap of actions which will ultimately lead to the State meeting the national climate objective of pursuing and achieving, by not later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

In July 2025, the EPA published its latest report on Ireland's greenhouse gas emissions 2025 (Quarter 1 Greenhouse Gas Emissions Indicator Report)[2]. One of three key findings is as follows:

> *The largest decrease in emissions occurred in the Transport (-121.0 kt CO2 eq) sector, followed by the Buildings (-20.5 kt CO2 eq) sector.*

The report states that the primary driver of the -4.1% (-121kt CO_{2eq}) decrease in emissions Quarter 1 2025 was decreased sales of diesel (-7.2%) compared to the same quarter last year, and increased biofuel blending rates for petrol (from 8.0% to 9.8% by volume).

The largest decrease in emissions occurred in the Road transportation (-134.5kt CO_{2eq}) sector.

This analysis demonstrates the downward trajectory of transport emissions in Ireland. This trajectory is based on a decrease in the use of diesel and increased use of biofuel.

In addition, the most recent SEAI publication, *First Look: Mid-Year Review of Ireland's Energy and Related Emissions in 2025*[3] for the period January to June 2025, estimates that emissions from the transport sector in the first six months of 2025 were 5.7 $MtCO_{2eq}$, down 2.0% on the same period in 2024 and also cites the fact that there were record levels of biofuel blending into the petrol and diesel used on our roads in this period. It also noted that if the current trend continues there will be an overshoot of 3.7 $MtCO_{2eq}$ in the 5-year period of the first carbon budget i.e. 57.7 $MtCO_{2eq}$ versus 54 $MtCO_{2eq}$. This is where CAP25 provides a solution to achieve the targets.

The EPA[4] reported on the impact of electric vehicles as follows in July 2025:

> *The impact of electric vehicles in reducing Transport emissions is still very small due to the low number in the vehicle fleet but they are projected to contribute substantially to emissions reductions towards the latter half of the 2020s. Evidence of this shift is notable in 2021, with new registrations of fully electric and plug-in hybrid electric cars increasing by almost double to a 19% share of all new registrations. This led to a 24% share of new registrations in 2022, a peak 29% share in 2023 and a 25% share in 2024.*

On 1 October 2025, the Society of the Irish Motor Industry (SIMI) reported that 22,382 new electric vehicles (EVs) have been registered in the first nine months of 2025, 28.8 per cent ahead of the same period last year.

In those circumstances, it is clear that the delivery of the proposed N6 GCRR alongside the measures set out in CAP24 (which are now re-stated in CAP25) and other national level measures, contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25), and there is no basis on which to suggest that this would not be consistent with Ireland complying with the relevant carbon budgets.

1.2.3 Compatibility of the N6 Galway City Ring Road with the Climate Action Plan 2025

1.2.3.1 Conclusion of the Environmental Impact Assessment and alignment with achieving national climate objectives

The submission quotes from Part IV of the 2025 RFI Response, which states that: *"The conclusion of the EIA Assessment, i.e. with and without the proposed Project only, is that the proposed Project when considered in isolation is expected to have a permanent moderate adverse residual effect on climate during over its lifecycle following implementation of construction phase mitigation",* and alleges that this conclusion *"is not compatible with achieving national climate objectives in the Climate Action Plan 2025".*

[2] Quarterly Greenhouse Gas Emissions Indicator Report 2025 Quarter 1 | Environmental Protection Agency

[3] https://www.seai.ie/sites/default/files/data-and-insights/seai-statistics/key-publications/energy-half-year-review/Half-Year-Review-of-Irelands-Energy-and-Related-Emissions.pdf

[4] https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/EPA-Provisional-1990-2024-GHG-Report-1716.pdf

Response

Chapter 17 (Climate) of the Updated EIAR submitted with the 2025 RFI Response assesses the climate effects of the proposed N6 GCRR in accordance with the EIA Directive. The conclusion of that EIA assessment, as set out in the Chapter 17 (Climate) of the Updated EIAR submitted with the RFI Response, is that the proposed Project when considered **in isolation** is expected to have a permanent moderate adverse residual effect on climate during its lifecycle following the implementation of construction phase mitigation.

However, the climate assessment for EIA purposes is quite a different exercise from that required to be undertaken by the Commission under section 15 of the 2015 Act when considering whether, by granting approval for the N6 GCRR, the Commission would be performing its functions, insofar as practicable, in a manner consistent with the matters specified in section 15(1). It is not correct, therefore, to say that the conclusion reached in the EIA Assessment *"is not compatible with achieving national climate objectives in the Climate Action Plan 2025"* as suggested in this submission.

In that regard, the Updated EIAR submitted as part of the RFI Response presents the assessment of effects on climate during the construction and operation phase of the Project by comparing the emissions in a scenario with the proposed Project to a scenario without the proposed Project. As the EIA assessment only considers the effects of the Project, it cannot account for emission reductions associated with additional commitments which will arise from the delivery of the Galway Transport Strategy (GTS) or the most recent approved climate action plan, which is now CAP25 (read in conjunction with CAP24).

The reductions in carbon emissions likely to arise from the GTS, CAP24, and CAP25 in conjunction with the Project were considered in detail in the Section 15 Report, which concluded that the delivery of the proposed N6 GCRR alongside the measures set out in CAP24 (which are now re-stated in CAP25) and other national level measures, contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25), and that the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved climate action plan, as well as the other plans and objectives specified in section 15 of the 2015 Act including the National Climate Objective.

1.2.3.2 Alignment with Climate Action Plan 2025 (CAP25) transport targets

The submission alleges that the outcomes of the modelling presented in Part IV of the 2025 RFI Response (which modelled the N6 Galway City Ring Road (GCRR) together with the various other measures included in the Galway Transport Strategy and a series of demand management measures for the city) are *"falsely claimed to be "aligned with CAP24""*.

The position adopted in this submission is that, because the results of this modelling do not show that the N6 GCRR could in its own right achieve the entire of the national "key performance indicators" for the transport sector set out in CAP24 (and now CAP25) (which as mentioned above are (i) a 50% reduction in transport-related emissions compared to 2018 levels by 2030, and (ii) a 20% reduction in total vehicle kilometres travelled compared to a 2030 Business-as-Usual (BAU) scenario), any claim that the results of the modelling are "aligned with CAP24" is false.

Response

As mentioned above, and as set out in Part IV of the 2025 RFI Response, the key targets for the transport sector from an operational perspective in the CAP24 (which are replicated in CAP25) are as follows:

- 20% reduction in total vehicle kilometres travelled relative to 2030 Business as Usual (BAU)
- 50% reduction in carbon emissions compared to 2018 levels
- Significant increases to sustainable transport trips and modal share

As noted throughout Part IV of the 2025 RFI Response[5], the above targets are national targets, for the entire country to achieve, and it is not incumbent on any individual project to achieve these targeted reductions in isolation.

However, while these are national level targets that cannot be applied to any individual project in isolation, updated transport modelling was undertaken to inform the Section 15 Report included in the 2025 RFI Response (based on the same transport modelling approach and assumptions as those used in the modelling undertaken by the Department of Transport to inform CAP23 and CAP24 (and now also CAP25)), to assess the overall benefits of delivering the N6 GCRR, as an integral part of the GTS, against these key performance indicators set out in CAP24, and to consider whether the delivery of the N6 GCRR would be consistent with CAP24.

The results of this updated transport modelling (which considered the N6 Galway City Ring Road (GCRR) together with the various other measures included in the Galway Transport Strategy and a series of demand management measures for the city) are documented in section 5.2 of Part IV of the 2025 RFI Response and demonstrate that the delivery of the proposed N6 GCRR alongside the measures identified in CAP24 (and now CAP25) results in:

- A 16% reduction in total kilometres travelled in 2030 within the area of influence of the N6 GCRR, when compared to the 2030 BAU scenario
- A 43% reduction in carbon emissions from transport within the area of influence of the proposed N6 GCRR in 2030, when compared to 2018 levels

These outcomes are, as set out in Part IV of the 2025 RFI Response, *"aligned with CAP24"* and, indeed, are equally aligned with CAP25. There is simply no basis on which to suggest that this statement is in any way false as contended in this submission.

In that regard, the basis for the allegation made in the submission appears to be that: (i) "*The target in CAP24 (and CAP25) is a 20% reduction, not 16%"*, and (ii) "*The target in CAP24 (and CAP25) is a 50% reduction, not 43%."* However, this does not reflect the fact that the targets set out in CAP24 (and replicated in CAP25) are national level targets, to be achieved by Ireland as a whole, and cannot be applied to individual projects.

This is directly addressed in the Updated EIAR submitted. As outlined in Section 17.10.1.2 of Chapter 17:

> *"When comparing the CAP DS scenario to the base 2018 scenario, an approximate 43% reduction in vehicle emissions in the study area is predicted to occur. While this figure falls short of meeting the 50% target set out in CAP24, it does show that a significant emissions reduction can be achieved with the Project in place, whilst also catering for an approximate 30% increase in the population level across the metropolitan area by 2030, versus 2016 levels."*

Further, as outlined in Section 17.10.1.3 of Chapter 17 of the Updated EIAR:

> *"When comparing the CAP DS to the BAU scenario, the reduction in car kilometres is predicted to be 18%, while the total vehicle kilometre reduction predicted is 16%. Again, whilst these figures fall just short of the 20% national target set out in CAP24, they do show a significant reduction."*

The contention made in this submission that the Section 15 Report falsely claims alignment with CAP24 (and now CAP25) is fundamentally incorrect and is based on a misunderstanding of the nature of the targets set out in CAP25 (and previously in CAP24), and of the analysis set out in the Section 15 Report. The statement that the two sets of data 'align' is entirely appropriate and correct. The outcomes of the modelling presented in the Section 15 Report are very clearly aligned with the targets and key performance indicators set out in CAP25 (and previously CAP24), and while no individual project can be expected to meet these overall national level targets, the gap to target between (i) what can be achieved in Galway by the delivery of the proposed N6 GCRR alongside the measures identified in CAP25 (and previously CAP24) and (ii) the overall national level targets, is clearly described in the Updated EIAR. There is no basis for contending that, where a project is aligned with and contributes to achieving the targets set out in CAP but falls short of fully

[5] https://www.n6galwaycityringroad.ie/sites/default/files/media/Part%20IV%20of%202025%20RFI%20Response%20CAP-%20web.pdf

achieving those national targets, the project cannot be approved or is not consistent with the CAP. Such an approach would be counterproductive and actually undermine progress towards achieving Ireland's national decarbonisation targets.

It should also be noted that, as part of the modelling exercise carried out by the NTA and SYSTRA, to inform the Climate Action Plan 2023 (CAP23), which in turn informed CAP24 and now CAP25, it was shown that the 20% vehicle reduction target compared to the 2030 BAU, and the targeted 50% reduction in carbon emissions from transport compared to 2018 levels, could be achieved at a national level.

It is notable that the BAU scenario which was modelled as part of that exercise includes several major infrastructure projects, including the N6 GCRR. Therefore, the exercise showed that the targets (emission reduction and vehicle kilometre reduction) set out in CAP23 and CAP24 (and now set out again in CAP25) at a national level could be achieved with the inclusion of the N6 GCRR. Therefore, the delivery of the N6 GCRR as part of an overall transport solution for Galway, is consistent with CAP and with the achievement of the targets set out in CAP25 (and previously CAP24) at a national level.

1.2.3.3 2030 Electric Vehicle market share assumptions

The submission challenges the assumption, made in the traffic modelling carried out to inform the preparation of the Section 15 Report, that 30% of the car fleet will be electric vehicles by 2030 (which assumption was taken from CAP24). The submission challenges the level of commitment to achieving this KPI noted in Table 15.5 in CAP24, which is unchanged in CAP25, on the basis of a footnote in CAP24 which states that private car EV targets are kept under ongoing review and may be subject to recalculation. The submission also alleges that, by the end of 2024, the total stock of battery electric vehicles in the national fleet was 72,640 (referring to the Climate Change Advisory Council's Annual Review, 2025, Page 7).

Response

While the submission questions the electric vehicles assumptions used in the assessment, the Department of Transport issued a press release[6] on 2 October, 2025 to state that Ireland had already met its target for the end of 2025 in the Climate Action Plan to reach 195,000 electric vehicles on the roads. The 2025 Key Performance Indicator in the Climate Action Plan was stated to be 175,000 passenger electric vehicles and 20,000 commercial Light Goods Vehicles (195,000 total) and the DoT press release confirmed that the country had surpassed this total figure by 1,000 at the beginning of October, with three months of the year to spare.

Mr. Mulligan alleges that the Section 15 Report assumes that 30% of the total car fleet will be EVs from 2030 and 100% of private vehicle registrations will be BEVs after 2029, and he criticises reliance on those assumptions.

For clarity the assumptions in relation to electric vehicles in the modelling are set out below:

- The NTA's ENEVAL tool has been used to calculate the level of emissions arising from the scheme in isolation, in the climate chapter (Chapter 17) of the Updated EIAR. For this assessment in the EIAR, it was assumed that 24% of the total car fleet would be electric by the Opening Year of 2031 in ENEVAL. This figure was calculated based on the current trajectory of electric vehicles within the national fleet and so represents a conservative and reasonable estimate of the likely make-up of the car fleet in 2031.
- In the Section 15 Report, a separate modelling exercise was undertaken to assess the scheme in the context of the Government's Climate Action Plan. Therefore, for this exercise, the 2030 target of 30% electric vehicles which is set out within the Climate Action Plan was used.
- The submission also questioned the assumption in the Section 15 Report, that by 2030, 100% of the new vehicle registrations would be electric vehicles. This assumption was adopted for consistency with the earlier modelling exercise which was done by the NTA on behalf of the Department of Transport, to

[6] https://www.gov.ie/en/department-of-transport/press-releases/ireland-reaches-major-milestone-in-the-transition-to-electric-with-196000-evs-now-on-irish-roads/

inform the 2023 version of the Climate Action Plan, and subsequent CAP24 and CAP25. Therefore, it is a realistic assumption contrary to what the submission claims.

- And as mentioned above, in the Department of Transport's press release[18] on 2 October 2025, Ireland had already met its target for the end of 2025 in the Climate Action Plan to reach 195,000 electric vehicles on the roads and therefore are on still on target for the 2030 target of 30% of the fleet to be electric.

1.2.3.4 Mode Share and Consistency with Local Authority Climate Action Plans

The submission refers to the results of the mode share analysis set out in the Section 15 Report, (i.e. Part IV of the 2025 RFI Response), and claims that the conclusions reached in the Section 15 Report are not supported by the data presented, and that the outcomes are not consistent with the targets in Galway County Council's and Galway City Council's adopted Local Authority Climate Action Plans.

Response

With regard to the contention that the outcomes of the traffic modelling undertaken in respect of the proposed N6 GCRR *"are not consistent with"* the targets set out in both Galway County Council's and Galway City Council's Local Authority Climate Action Plans, those targets are outlined in Section 17.2.2.5 of Chapter 17 of the Updated EIAR as follows:

> *"the Galway City Council Climate Action Plan 2024-2029 aims to create a low carbon and climate resilient City, by delivering and promoting best practice in climate action, at the local level. The vision for the Plan is to be a climate resilient, biodiversity rich, environmentally sustainable and carbon neutral city by no later than the end of 2050, including a commitment by Galway City Council to reduce its emissions by 51% versus a 2018 baseline by 2030. This will be achieved by delivering transformative change and measurable climate action within GCC's organisation and services and across Galway City, through leadership, example, and mobilising action at a local level. The Plan lists as an action to "support the development of greater accessibility, modal shift and active travel throughout Galway City through implementation of work programmes and Galway Transport Strategy (GTS)" which includes the Project.*
>
> *The Galway County Council Climate Action Plan 2024-2029 aims to deliver and support best practice in climate action, at the local level. The Plan sets out a clear vision and mission and aligns with Ireland's National Climate Objective, aiming for a climate-resilient, biodiversity-rich, environmentally sustainable, and climate-neutral economy by 2050. The Mission Statement outlines how Galway County Council will meet that vision. Internally, the ambition is to meet its own emissions and energy efficiency targets. They are seeking a 51% reduction versus a 2018 baseline in GHG emissions and a 50% improvement in energy efficiency by 2030."*

It is clear from what is set out in this response, and in both the Section 15 Report and Chapter 17 of the Updated EIAR that the outcomes of the traffic modelling and climate impact assessment carried out in relation to the proposed N6 GCRR are fully consistent with and support the above targets.

The submission also challenges the conclusion reached in the Section 15 Report that the proposed N6 GCRR *"will also facilitate significant increases in sustainable transport trip and modal share"*, and alleges that this is not supported by what is set out in section 5.2.3 (Improved Mode Share) of the Section 15 Report.

In that regard, the submission includes a screenshot of Plate 5.5 of the Section 15 Report[7], which is reproduced below for ease of reference. This figure shows the mode share comparison, for the 'Business As Usual' (BAU) scenario, which is used as benchmark against which the 20% reduction in vehicle kilometre target is assessed, and the CAP Do-Something scenarios. The 'CAP Do-Something' scenario includes various demand management scenarios which were modelled and were adopted from a modelling exercise which was undertaken to inform the Government's 2023 update of the Climate Action Plan.

[7] https://www.n6galwaycityringroad.ie/sites/default/files/media/Part%20IV%20of%202025%20RFI%20Response%20CAP-%20web.pdf

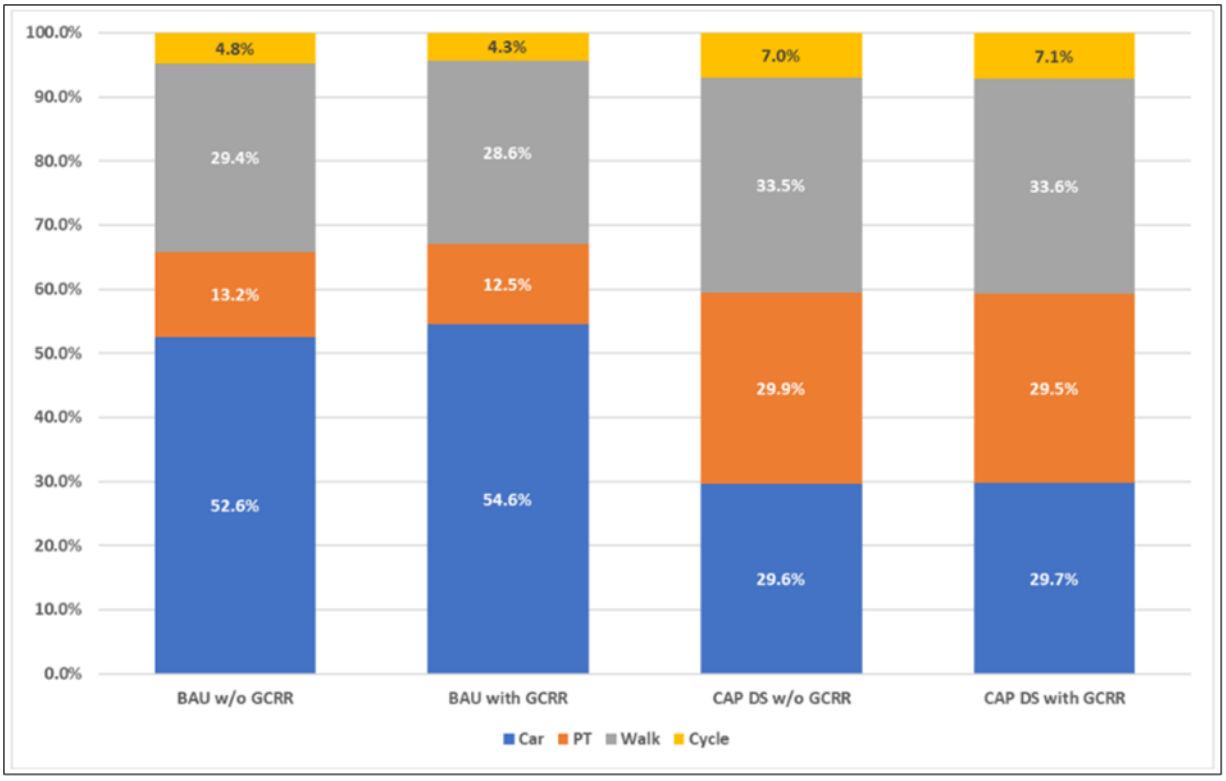

Plate 1.1 Mode Share Results, BAU vs CAP (with and without N6 GCRR) (extract from Part IV of 2025 RFI Response

Both of these scenarios ('Business as Usual' ("**BAU**") and 'CAP Do-Something' ("**CAP DS**")) were modelled with and without the N6 GCRR in place. The figure shows that, in the BAU scenarios, the N6 GCRR leads to an increase in the car mode share of 2%, which is also consistent with the mode share analysis set out in Chapter 6 of the Updated EIAR. In that regard, section 6.8 of Chapter 6 of the Updated EIAR details what induced traffic is and outlines the various types of induced traffic and the benefits/outcome of each type, and explains the increased car mode share (in the absence of CAP demand management measures) as follows:-

> *"The results of the analysis indicate that the implementation of the Project in the `Do-Something' scenario will result in an approx. 2% increase in car use (after the 50% increase in the city's population) when compared to the `Do-Minimum' Scenario. What is not evident from reading this table in isolation are the factors behind the choice of mode decisions. In the Do-Minimum Scenario, significant levels of traffic congestion create a barrier to travel, constraining the economic growth of the city. The overall delay on the road network in the Do-Minimum Scenario is between 40% - 60% higher than the Do-Something Scenario with the Project in place. This highlights the positive impact of the project, in terms of reducing the level of congestion in the city, which would increase in the future as the city's population grows.*
>
> *In the Do-Minimum scenario, movements across the city for both car traffic and public transport are significantly constrained and would severely restrict the sustainable growth of the city, as set out in the NPF.*
>
> *However, with the implementation of the Project, these restrictions on connectivity and growth are removed resulting in significant positive impacts, including:*
>
> - *It will facilitate sustainable modes of travel, and create a favourable environment for sustainable travel, by removing car and HGV traffic volumes from the city centre*
> - *It will provide a safer environment for vulnerable road users*
> - *It will lead to a healthier environment for residents and visitors to Galway due to a reduction in harmful emissions in the city centre"*

The submission also highlights (in a summary table to accompany Plate 5.5) that the demand management measures assessed in the CAP DS scenario result in a significant reduction in car mode share (reduced to approximately 30%) both with and without the N6 GCRR included. In this regard, as set out in the Section 15 Report, the inclusion of the proposed N6 GCRR in this scenario, with the CAP24 measures (fourth bar in graph), effectively results in no change in this car mode share (29.7%), thus giving an equivalent significant reduction in the car mode share. The fact that the introduction of the proposed N6 GCRR in the CAP DS Scenario does not lead to an increase in car mode share demonstrates that, under the CAP DS scenario and as part of an overall transport strategy, the proposed N6 GCRR is not inducing additional traffic, and therefore the additional capacity in the network created by the construction of the proposed N6 GCRR is being used for strategic traffic movements and traffic movements that are not conducive to walking, cycling or public transport as a mode choice, thereby freeing up road space elsewhere for public transport to operate optimally and active modes to travel safely.

Sections 5.2.4 to 5.2.6 of the Section 15 Report, details the benefits of introducing the N6 GCRR alongside the demand management measures included in the assessment, and how the N6 GCRR enables the full implementation of these measures.

For example, Section 5.2.4 examines the daily traffic demand crossing the River Corrib under the BAU and CAP DS scenarios. By 2030, the CAP DS scenario is forecast to show approximately 78,000 vehicles crossing the river each day. This CAP DS scenario includes three of the current four bridges being restricted for general traffic. This is because Wolfe Tone and O'Briens Bridges will be restricted due to demand management measures for the city centre, and the Salmon Weir Bridge will be converted to a sustainable transport corridor, with only the Quincentenary Bridge remaining fully open. However, the Quincentenary Bridge currently suffers from severe congestion issues, especially during peak hours and has approx. 40,000 vehicles using it on an average workday. Therefore, if another river crossing was not provided in the CAP DS scenario, the Quincentenary Bridge would have to cater for double the volume which it caters for today and would grind to a halt due to congestion, with all the attendant air quality impacts. Therefore, the additional bridge crossing provided by the proposed N6 GCRR is the key enabler for the implementation of the closure of the Salmon Weir Bridge and the further restrictions on Wolfe Tone and O'Briens Bridges as part of the CAP demand management measures, as the city would grind to a halt if these were introduced without the proposed N6 GCRR.

Currently, there is demand for approximately 80,000 vehicles crossing the river each day across all four bridges. The modelled 78,000 figure in the CAP DS is 2,000 lower than the present-day figure, whilst also catering for an approximate 30% increase in population across the Metropolitan Area by 2030 as set out under the National Planning Framework. This demonstrates that the N6 GCRR forms an integral part of the Galway Transport Strategy and is consistent with helping to achieve the objectives of CAP25, by accommodating the necessary movements of strategic traffic across the Galway Metropolitan Area, whilst facilitating the closure of Salmon Weir Bridge and restrictions on Wolfe Tone and O'Briens Bridges to general traffic, thereby creating a safer and more attractive city centre. It also aligns with the targets in Galway's County Council's and Galway City Council's adopted Local Authority Climate Action Plans.

Essentially, the N6 GCRR is the key enabler for the introduction of these restrictions on private car traffic through the city centre as to introduce all of these restrictions on all three bridges without the additional bridge, and accommodate the expected growth in population in the city (aligned with targets (50% growth from 2016 levels) from the Government's National Planning Framework), it would result in even more significant congestion than is evidenced in the delay on the network in the Do-Minimum.

It follows therefore, that it would not be sensible to implement the CAP demand management measures without the introduction of the proposed N6 GCRR, contrary to what the submission claims.

1.2.3.5 Objectives of the N6 GCRR

The submission quotes Chapter 3 of the Updated EIAR stating that the need for the proposed road development *"arise directly from the necessity to address the very serious transport issues facing Galway City and its environs. A transport solution has been developed and the proposed road development forms an essential part of this solution."*

The submission then states that *'the stated primary objective of the proposed N6 Galway City Ring Road is to create additional road infrastructure in the Galway Metropolitan Area, not to reduce transport emissions and therefore not to support the objectives of the Climate Action Plan 2025.'*

Response – Objective of the N6 GCRR

The primary objective of the proposed N6 GCRR is not "*to create additional road infrastructure in the Galway Metropolitan Area"* as suggested in the submission. That is a fundamental mischaracterisation of the detailed and comprehensive objectives set out for the N6 GCRR, which are framed around national policy as set out in Chapter 2 of the Updated EIAR and designed to ensure that the project meets the need for a transport solution as defined in Chapter 3, Section 3.3 of the Updated EIAR.

The full list of Project Objectives are set out in detail in Section 3.7 of Chapter 3 of the Updated EIAR under a number of headings. The Updated EIAR in Section 3.7 sets out the primary objective of the project as follows: "*The overall ambition of the Project, i.e., the proposed N6 GCRR and the Galway Racecourse development, is to achieve specific objectives under a number of multi-criteria categories specifically in relation to supporting the economic performance of Galway and integrating the principles of proper planning and sustainable development."*

The text goes on to explain that the criteria developed to evaluate the project and inform the project objectives are drawn from the Department of Transport's *Guidelines on a Common Appraisal Framework for Transport Projects and Programme* (March 2016) (CAF). Identifying objectives under these headings ensures a project which is attractive to all, delivers the key enabling road component of the overall transport solution for Galway and its environs, as identified in the GTS, provides benefit to the local and the larger regional population of Galway and the western region and is cognisant of the sensitive environment into which it is interwoven (which of course includes climate issues and complying with relevant legislation in relation to climate action).

Matters relating to climate are addressed under the "Environment" heading, and a number of objectives include express reference to the Climate Action Plans. In particular, the first objective identified under the "Environment" heading, on page 119 of the Updated EIAR, is *"Support the delivery of an integrated sustainable transport solution for Galway aligned with the most recent Climate Action Plan"*.

Further, the second objective under the *"Environment"* heading is to *"Improve air quality aligned with Climate Action Plan"*, and a number of other objectives directly support the objectives of the Climate Action Plan and the delivery of CAP targets, such as, for example, *"Support the provision of safer urban roads and streets across Galway City,* ***particularly for active travel*** *and vulnerable road users", "****Improve opportunities for walking*** *in the core city centre area,* ***creating more walkable environments*** *through the removal of significant traffic volumes", "Facilitate the continued rea****llocation of road space for the provision of additional cycling facilities*** *on less congested urban streets", "Implement* ***sustainable transport policies*** *for shorter commutes",* and *"Support the improvement of the* ***public transport hub*** *linking Galway to other Gateways"* (emphasis added).

It is therefore entirely incorrect to say that the objectives of the proposed N6 GCRR are *"not to support the objectives of the Climate Action Plan 2025"* as is claimed in the submission. The objectives of the Climate Action Plan are directly supported by a number of the objectives of the proposed N6 GCRR, and the delivery of the proposed N6 GCRR alongside the measures set out in CAP24 (which are now re-stated in CAP25) and other national level measures, contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25).

1.2.3.6 Predicted Emissions from the Construction Phase

The submission queried the change in total emissions over the construction period as presented in the Updated EIAR versus that presented at the oral hearing.

Response

The reduction in the calculated carbon emissions arising during the construction phase of the N6 GCRR as set out in the Updated EIAR when compared to the figures presented at the oral hearing in 2020 is due to the use of a new and more accurate model, with revised emission factors.

In that regard, the basis of the emissions calculations presented at the oral hearing in 2020 was outlined in Section 6.1.2 of the Statement of Evidence of Sinead Whyte[8] as follows:- *'the construction carbon assessment included in Chapter 16 of the Updated EIAR was prepared using the UK Environment Agency Carbon Calculator, which bases emission factors on the 2010 Inventory of Carbon and Energy (ICE) database, which is one of the world's leading sources of embodied energy and carbon data. In November 2019, the University of Bath published an update to this database. Using the updated emission factors from the November 2019 ICE database and using the CESMM4 Carbon & Price Book 2013 database, the carbon emissions from the construction phase of the proposed road development have since been re-evaluated."*

Since those calculations were prepared in 2020, Transport Infrastructure Ireland (TII) has, in 2022, developed an online tool for the purposes of calculating construction phase carbon emissions for transport infrastructure schemes. This new tool has been used as the basis of the calculations set out in the Updated EIAR, which is explained as follows in Section 17.2.5.1 of the EIAR:

> *"The TII Carbon Assessment Tool (Version 3) (TII 2022) (hereafter referred to as the TII Carbon Tool) has been used to calculate the embodied carbon of materials, which incorporates the energy used in the mining or processing of the raw material and its manufacture, in terms of CO2eq. The TII Carbon Tool uses emission factors from recognised sources including the Civil Engineering Standard Method of Measurement (CESSM) Carbon and Price Book database (CESSM, 2013). For a small number of materials not covered by the TII Carbon Tool, the UK Environment Agency's (UKEA) Carbon Calculator has been used to estimate carbon emissions due to construction activities in terms of CO2eq. In addition, the UKEA Carbon Calculator has been used to estimate embodied carbon associated with the transportation of materials to and from site. The carbon emissions are calculated by multiplying the emission factor by the quantity of the material that will be used over the construction phase. The varying, relevant transport distances have been included in the calculations for the transportation of materials to and from site."*

TII developed this tool as it found that existing tools were not sufficiently specific to meet the requirements of TII, either in their scope and boundary of reporting, or for use in Ireland. The Tool is designed to provide the specificity required for use in Ireland and presents a more robust and accurate calculation of the construction phase carbon emissions arising from the proposed N6 GCRR that was previously possible using the UK Environment Agency Carbon Calculator. Sources of information specific to the Irish situation include Sustainable Energy Authority of Ireland (2019), Conversion Factors.

In those circumstances, the reduction in the predicted construction phase carbon emissions arising from the proposed N6 GCRR since the oral hearing in 2020 is to be expected, and reflects the use of this new, more accurate model and the revised emission factors as well as the additional mitigation measures which were included in the Updated EIAR, for example the use of steel which comprises a minimum of 70% recycled steel.

Further, in relation to the suggestion that the carbon emissions arising from the construction of the N6 GCRR would have to be balanced "by a reduction elsewhere", and that it could be necessary to forgo the building of houses, as is clearly set out above, the balancing of priorities as between the Transport Sector and the Residential Built Environment Sector is the responsibility of Government in setting the relevant sectoral emissions ceilings, which determine how the Carbon Budgets are to be divided among the different sectors of the economy. Therefore the carbon emissions arising from the construction of the N6 GCRR will have no impact on the sectoral emissions ceiling for the Residential Built Environment Sector or the available carbon budget for the construction of housing, and there is no basis for the suggestion that the construction of the N6 GCRR could lead to a reduction in construction of new homes.

[8] https://www.n6galwaycityringroad.ie/sites/default/files/media/GCRR_4.03_34.3.6_BoE_AQ%20and%20Climate.pdf

1.2.3.7 Predicted emissions from the operation of the proposed scheme

The submission queries the change in total emissions from the operation of the proposed scheme in the various submissions by the applicant from 2018 to 2025 and asks for a comprehensive explanation for what is claimed to be the remarkably low increase in the predicted CO_{2eq} emissions included in the Updated EIAR compared to the predictions included in previous submissions. Other queries on the data in the Updated EIAR are also raised.

Response – Decrease in annual emissions between the 2031 and 2046 assessment years

The submission reproduces Table 17.8 of Chapter 17 Climate[9] of the Updated EIAR, which sets out the predicted operational phase CO2 emissions for the Design Year (2031) and Opening Year (2046), and alleges that the assumptions behind the predicted reduction in annual emissions between the 2031 and 2046 assessment years are not stated.

This is incorrect. Table 17.8 of the Updated EIAR sets out that the predicted annual emissions in the Do-Minimum Scenario would be 493,796 tonnes of CO_{2eq} in 2031, reducing to 125,392 tonnes of CO_{2eq} in 2046, while in the Do-Something Scenario the emissions reduce from 498,381 tonnes of CO_{2eq} in 2031, to 126,054 tonnes of CO_{2eq} in 2046. The reason for this reduction is clearly set out in Chapter 17 of the Updated EIAR, which states, immediately below Table 17.8, that: *"It is noted that increases in CO_{2eq} emissions are significantly lower in 2046 when compared to 2031. This is due to future projections of reduced CO_{2eq} emissions resulting from EU regulation and increased electric vehicle use."* In particular, this predicted reduction in emissions between 2031 and 2046 can be attributed to the assumptions made regarding the change in fleet/transition to electric vehicles, which is expected to have occurred by 2046. By 2046, the ENEVAL traffic model assumes that the car fleet is 91% electric, given the target to achieve net zero emissions by 2050 at the latest.

In those circumstances, it is clear from what is set out above and in section 17.5.2.2.1 of the Updated EIAR that the predicted carbon emissions in 2031 and 2046 (which have been calculated using the ENEVAL model) are robust and conservative predictions of future carbon emissions, and that the basis for the predicted reduction in overall transport emissions between 2031 and 2046 has been clearly set out both in the Updated EIAR and in this response, and there can be no suggestion that a further Request for Further Information is required in that regard as suggested in the submission.

Response – Extraordinarily high emissions from operation of the proposed N6 GCRR

The submission goes on to suggest that the figure of 498,371 tonnes of CO_{2eq}, which is the predicted annual emissions of CO2eq in the Do-Something Scenario as set out in Table 17.8 of the Updated EIAR represents emissions *'arising from the operation of the proposed road development"* and says that this *"appears to be extraordinarily high'.*

It appears that there is a misunderstanding that the figure of 498,371 tonnes of CO_{2eq} can be attributed to the operational performance of the N6 GCRR, which is not the case.

In fact, the value of 498,371 tonnes quoted represents the total tonnes of CO_{2eq} emitted from transport across the entire area used for the calculation of emissions. The area used is shown in Plate 5.4 of Part IV of 2025 RFI Response[10] as reproduced below and equates to approx. 3,110 km^2. This area was selected as it is the area which the proposed N6 GCRR has an influence on traffic movements; outside of this area, there is no change.

[9] https://www.n6galwaycityringroad.ie/sites/default/files/media/Updated%20EIAR%20Chapter%2017.pdf

Plate 1.2 N6 GCRR Area of Influence - used for emissions assessment

This quantum of emissions arising across such a wide area of County Galway cannot be attributed to the operation of the N6 GCRR and, therefore, the comparisons drawn in the submission between this overall emissions figure and the 2018 baseline emissions figures in Galway County Council's Local Authority Climate Action Plan 2024-2029 and Galway City Council's Local Authority Climate Action Plan 2024-2029 are not relevant and do not align with the study area of the climate assessment. The study area shown in Plate 1.2 represents an area where changes in traffic may arise due to the implementation of the proposed Project. It has been selected to ensure that all traffic variations (direct and indirect) arising are captured in the assessment. This allows for a full representation of the potential traffic and associated climate effects. There is no anomaly in this respect as suggested in the submission. The Galway City CAP provides baseline emissions in Table 3 for 2018. The data includes for all sources of emissions from sectors such as industry, residential agriculture and transport. The emissions are computed from sources within the Galway City boundary only. Similarly, the Galway County CAP, in Table 3 of the Plan provides baseline emissions for 2018. The data includes for all sources of emissions from sectors such as industry, residential agriculture and transport. The emissions are computed from sources within the Galway County boundary only (excluding Galway City). Both CAPs commit to achieving a 51% reduction in emissions by 2030 relative to 2018 baseline.

There is no basis for the suggestion in this submission that*: "The applicant has stated that the proposed N6 Galway City Ring Road will generate 498,381 tonnes of CO2eq in the DS Scenario in 2031."* The 'Change DM to DS' value set out in table 17.8 of 4,584 tonnes of CO_{2eq} is the difference between the Do-Minimum Scenario and the Do-Something Scenario which equates to 0.0764% of Ireland's transport budget in 2030. This is the quantum of emissions that can be attributed to the operational performance of the N6 GCRR, as it represents the change in emissions as a result of the scheme becoming operational i.e. introduced into the Do-Something and not being present in the Do-Minimum.

As set out in Table 17.8 of the EIAR, this amounts to a predicted increase in emissions of 0.93% in 2031. The suggestion in the submission that the increase in emissions is "extraordinarily high" is without any substance.

Response – Change in operational emissions between Do-Something and Do-Minimum between the 2018 EIAR and the Updated EIAR

The submission highlights that the predicted operational phase emissions set out in the Updated EIAR submitted as Part VI of the 2025 RFI Response are substantially less than those previously submitted by the applicant, and asks for an explanation for this reduction. A comprehensive explanation of the various factors that lead to this decrease in predicted emissions is set out below, which fully addresses the issue raised in this regard.

The reduction arises due to the following reasons, each of which is addressed in more detail below:

- Change in infrastructure assumptions in the Do-Minimum/Without Scheme scenario
- Increase in population figures which have been used in the Updated EIAR
- Adoption of updated guidance and associated tools

Change in infrastructure assumptions in the Do-Minimum/Without Scheme scenario

The first reason for the reduction in operational phase emissions is the change in infrastructure assumptions in the Do-Minimum/Without Scheme scenario between the 2018 EIAR and the Updated EIAR. The Do-Minimum scenario needs to include planned and committed schemes. Since the preparation of the 2018 EIAR, the status of certain projects has changed and they have become committed or have been submitted for approval and therefore have been included in the Do-Minimum Scenario in the Updated EIAR. This change in status of projects is taken into account in both the Do-Minimum and the Do-Something scenarios and has a big impact on the levels of congestion experienced in the Do-Minimum scenario in particular, and on the average speeds of vehicles in that scenario. This means that the overall emissions predicted in the Do-Minimum scenario have increased since the 2018 EIAR due to increased levels of congestion, and the operation of the N6 GCRR in the Do-Something scenario, which operates to relieve that congestion, now results in a significantly smaller net increase in emissions. This is explained in more detail below.

In Section 6.4.5 of Chapter 6 of the Updated EIAR, the details of the schemes included in the Do-Minimum scenario are provided. These include elements of the Galway Transport Strategy including the roll-out of the BusConnects programme for the city, for example the Dublin Road scheme and the Cross-City Link scheme. Previously, for the purposes of Sections 5.2.2, 6.2.2, 6.3.2, 6.4.3 and Table 7.4.7 of Appendix A.6.1 Traffic Modelling Report of the 2018 EIAR,[11] these schemes were considered in the context of a sensitivity test rather than as part of the Do-Minimum scenario in circumstances where they were not committed projects at that time.

The addition of these schemes into the Do-Minimum scenario in the Updated EIAR represents a change from previous submissions. The BusConnects Cross-City Link scheme, which was approved by An Bord Pleanála (now An Coimisiún Pleanála) in October 2024, will restrict access to general traffic on the Salmon Weir Bridge between the hours of 7a.m. and 7p.m. on weekdays. This restriction will help to create a sustainable transport corridor through the Eyre Square area and help facilitate the large increase in cross-city bus services planned as part of the BusConnects programme for the city (a 50% increase in services) (the increase in bus services will be further enhanced by the reduction in traffic flows along key bus routes that will arise from the operation of the N6 GCRR, as set out in table 5.5 of the Section 15 Report).

As stated in Section 6.3.2 of Chapter 6 of the Updated EIAR, during the hours of 7a.m. and 7p.m. on weekdays, the Salmon Weir bridge carries traffic volumes of approximately 12,000 which accounts for ~20% of the traffic volumes across all four bridges during those hours. A significant portion of these 12,000 vehicles would be likely to use the Quincentenary Bridge instead in the future to cross the city, notwithstanding that the Quincentenary Bridge itself suffers from severe congestion issues, especially during peak hours.

[11] https://www.n6galwaycityringroad.ie/sites/default/files/media/A.6.1.pdf

Consequently, by closing the Salmon Weir Bridge to general traffic in the Do-Minimum scenario, without providing any additional river crossing, the current significant traffic issues which are experienced in the city are likely to get worse. When this Salmon Weir Bridge closure (in the Do-Minimum scenario) is combined with the expected growth in population in the city (aligned with targets (50% growth from 2016 levels) from the Government's National Planning Framework), congestion levels are observed to rise significantly in comparison to figures previously submitted by the applicant. Consequently, this increased congestion contributes to reducing the difference in stated emissions between the Do-Something (with N6 GCRR) and the Do-Minimum (without N6 GCRR), compared to previous figures submitted.

The below figure illustrates the effect of the increased congestion, in terms of the amount of emissions produced per km at differing speeds, for different Euro standard petrol cars. The figure shows that the highest emissions are produced at lower speeds <20km/h, which would likely be the speeds travelled in high levels of congestion. For example, at the aforementioned speeds, there is an 31% increase in emissions produced per kilometre at the Do-Minimum speed, relative to the higher Do-Something (with GCRR) speed, for Euro 6 standard petrol cars.

In the morning peak hour, the average speed in the Opening Year (2031) Do-Minimum scenario (without N6 GCRR) is 19km/h in the Updated EIAR. In Table 6.12 of Chapter 6 of the Updated EIAR, with the N6 GCRR included in the (2031) Do-Something scenario, the average speed increases from 19km/h to 27km/h. Both of these speeds are shown on the figure below by dotted lines. At 19km/h, for each Euro standard petrol car, more emissions are produced per kilometre than at 27km/h.

By comparison, in the 2018 EIAR, the equivalent value in the morning peak hour for the average speed for the Design Year, 2039 Do-Minimum scenario, is 28.7 km/h, as in the Do-Minimum scenario modelled at that time, the Salmon Weir Bridge was open and still catering for through traffic, so there was less congestion, which resulted in lower emissions, and noting that it is 8 years later than the 2031 Do-Minimum currently assessed for the Opening Year.

The average speed in the (2031) Do-Minimum scenario now modelled in the Updated EIAR is 33% lower than the value in the 2018 EIAR for the morning peak hour in 2039 as the Salmon Weir Bridge has restrictions on traffic and the N6 GCRR is not included in the (2031) Do-Minimum to relieve the congestion.

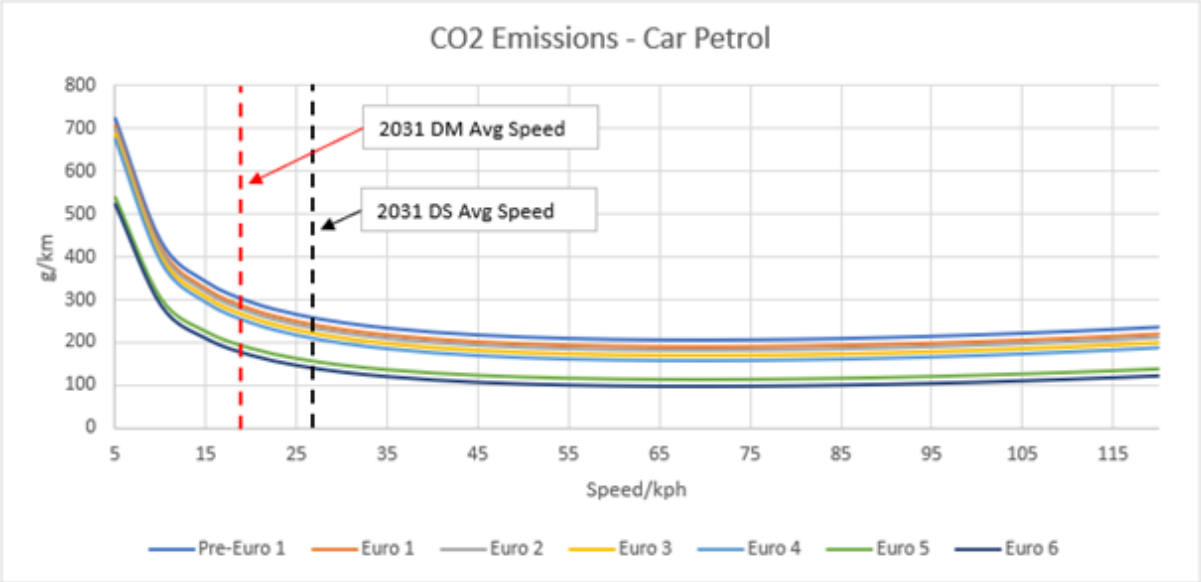

Plate 1.3 CO_2 Emissions rate at different speeds for 2031 Do-Minimum and Do-Something[12]

[12] Transport Research Laboratory (TRL) rates

The table below shows a direct comparison of the CO_2 emissions produced in both the (2031) Do-Minimum and (2031) Do-Something scenarios, for different Euro standard petrol cars. There are more trips in the (2031) Do-Something scenario than the (2031) Do-Minimum scenario. However, the figures show that at the more congested speed in the morning peak hour which is more prevalent in the (2031) Do-Minimum, more emissions are produced per kilometre and this therefore contributes to a smaller difference in the overall emissions between the Do-Minimum (without N6 GCRR) and Do-Something (with N6 GCRR) scenarios, relative to previous figures submitted by the applicant.

Table 1.1 CO_2 emissions in the (2031) Do-Minimum and (2031) Do-Something scenarios for different Euro standard petrol cars

Type	CO2 Emissions per km from DM Average Speed (grams)	CO2 Emissions per km from DS Average Speed (grams)	Reduction in Emissions with N6 GCRR	Difference (%)
Pre-Euro 1	311	257	53	21%
Euro 1	296	243	53	22%
Euro 2	288	234	53	23%
Euro 3	274	221	53	24%
Euro 4	262	209	53	26%
Euro 5	199	155	44	28%
Euro 6	185	141	44	31%

Increase in population figures which have been used in the Updated EIAR

The second reason contributing to the differences, which is connected to the first point, is that the 2025 assessment takes a higher level of population for the city into consideration. As outlined in Table 6.1 of the Updated EIAR, the population figure assessed was approximately 135,000 which is an increase of ~ 14,000 over the 2019 RFI and an increase of approx. 50,000 over the 2018 EIAR.

For context, the population within the Galway City Council boundary, according to the 2022 Census, was approximately 84,000. The population increase to 135,000 would represent an increase of 51,000 or a 61% increase relative to 2022. These population forecasts are aligned to the National Transport Authority's NPF Reference Case scenario for the city. This increase in population means more trips are placed on the network and, thus, feeds into the first point above, which results in more congestion on the network and increased emissions in the Do-Minimum (without N6 GCRR) scenario.

Adoption of updated guidance and associated tools

The third and most fundamental reason for the changes in the outputs of the assessment is the changes in the modelling tools and the inputs used to inform those models.

The UK DMRB regional model was used for the purposes of calculating changes in carbon emissions to inform the preparation of the 2018 EIAR. The model was developed in 2007 and was used in the absence of any Irish modelling tool. The model only forecast emissions up to 2020, so 2020 forecasts were used for the future years 2024 and 2039 resulting in highly conservative assumptions. The assessment considered links where projected increases in AADT of greater than 5% were predicted to arise. It did not consider links where reductions in traffic volumes are predicted. A total of approximately 50 links were considered in the assessment. This is very different to the methodology used in the Updated EIAR assessment contained in Chapter 17. The operational phase assessment included a much greater extent of affected links – including those where decreases in volumes occurred. In addition, as mentioned above the reduction in emissions can be attributed to the assumptions made regarding the change in fleet/transition to electric vehicles, which is expected to have occurred by 2046 (where previously a Design Year of 2039 was used). By 2046, ENEVAL,

the new Irish specific large scale model that has become available since the submission of the EIAR in 2018, assumes the car fleet is 91% electric, given the target to achieve net zero emission by 2050 at the latest. The approach of utilising the full modelled traffic area using the most recent emission factors and fleet assumptions generates a much more robust assessment which is significantly more accurate than that prepared in 2018.

In that regard, the assessment tools used to calculate the operational emissions in the various submissions between 2018 and 2025, and how these have evolved over time, are outlined in Table 1.2. Section 17.2.6 of the Updated EIAR also provides a summary comparison of the methodologies used in the 2018 EIAR and the Updated EIAR, accounting for the adoption of updated guidance and associated tools used for calculating and estimating carbon emissions.

Table 1.2 Operational phase climate assessments

Assessment	Modelling Tool	Comment
2018 EIAR (Chapter 16)	UK DMRB Regional Model	The UK DMRB regional model was used for the purposes of calculating changes in carbon emissions. The model was developed in 2007 and was used in the absence of any Irish modelling tool. The model only forecast emissions up to 2020 – so 2020 forecasts were used for the future years 2024 and 2039 resulting in highly conservative assumptions. The assessment considered links where projected increases in AADT of greater than 5% were predicted to arise. It did not consider links where reductions in traffic volumes are predicted. A total of approximately 50 links were considered in the assessment.
2019 RFI	UK DMRB Regional Model	This is the same as the UK DMRB Regional Model mentioned above, but was updated as part of the 2019 RFI Response based on revised traffic data.
2020 Oral Hearing	UK DMRB Regional Model	Again, this is the same UK DMRB Regional Model, but was further updated at the oral hearing, as additional data was provided on carbon emissions due to the increased use of EVs
Updated EIAR (2025)	ENEVAL NTA Model	The ENEVAL model is a tool developed by the NTA to assess the emissions from different scenarios. The emissions outputs from the ENEVAL model cover the full extent of the transport model, ensuring that all direct, indirect, positive and adverse effects are accounted for – resulting in a better representation of emission projections. Carbon emissions for all scenarios directly outputted from the transport model allowing a greater representation of impacts across a wider study area. The study area, as pertains to the traffic analysis and, subsequently air quality modelling, is described in Plate 5.4 of Part IV of 2025 RFI Response. This area equates to approximately 3,110km^2.

For completeness, we have set out in Table 1.3 below, a version of the table included on page 8 of this submission, and set out in summary form, the reason for each change in predicted emissions identified by the submission.

Table 1.3 Reasons for difference in emissions

Assessment	Year	Percentage of EVs in the car fleet	Change in emissions DM to DS (tonnes /annum)	Reason for Change
2018 EIAR (Chapter 16)	2024	0%	+26,059	Using UK DMRB Regional Model (2007)
	2039	0%	+35,776	Using UK DMRB Regional Model (2007)
2019 RFI	2039	0%	+55,783	Increased due to revised traffic data arising from publication of NPF, which significantly increased the population in Galway
	2039	0%	+54,402	Increased, due to revised traffic data arising from publication of NPF which significantly increased the population in Galway
2020 Oral Hearing	2039	0%	+45,627[13]	As per the 2019 RFI with updates to links considered, resulting in a reduction in predicted emissions
	2039	22%	+37,214	As per the 2019 RFI, however, additional data was provided on carbon emissions due to the increased use of EVs, resulting in a further reduction in predicted emissions
	2039	32%	+33,435	As per the 2019 RFI, however, additional data was provided on carbon emissions due to the increased use of EVs, resulting in a further reduction in predicted emissions
Updated EIAR (2025)	2031	24%	+4,584	Calculated using the new, more accurate, and Irish focussed ENEVAL model Carbon emissions for all scenarios directly outputted from the transport model allowing a greater representation of impacts across a wider study area. The study area, as pertains to the traffic analysis and, subsequently air quality modelling, is described in Plate 5.4 of Part IV of 2025 RFI Response This results in a much more accurate and robust calculation of the predicted carbon emissions, and a smaller increase in emissions is predicted for all of the reasons described above
	2046	91%	+662	As immediately above

Therefore, in light of what is set out above, the reason for the reduction in predicted carbon emissions in the 2025 Updated EIAR, when compared against those predicted in the 2018 EIAR and subsequent submissions, has been clearly set out and there is no ambiguity or lack of clarity in relation to the source of those reductions. This fully addresses the queries raised in the submission in this regard.

1.2.3.8 Source of GGBS

The submission raised a query as to the source of granulated blast furnace slag (GGBS) proposed in the mitigation measures and the quantum of GGBS currently available.

Response – Source of GGBS

As noted in the submission, one of the mitigation measures identified for the construction phase of the proposed N6 GCRR, to reduce the embodied carbon emissions associated with construction, is the use of 50% of cement to be Ground Granulated Blast Furnace Slag (GGBS) cement. This mitigation measures results in a reduction c.1,034 tonnes of CO_{2eq} and is directly aligned with Climate Action Plan policies in

[13] Updated from the data presented in the RFI response taking account of all affected roads within the model zone as opposed to the roads where there is a 5% increase in traffic predicted.

relation to green public procurement and reducing embodied carbon in construction materials, as set out in further detail below.

In 2022, the Department of Enterprise, Trade and Employment (DETE) published the document 'Reducing Embodied Carbon in Cement and Concrete Through Public Procurement'. This document was prepared in response to the Climate Action Plan 2023 target to *"Decrease embodied carbon in construction materials produced and used in Ireland by at least 30%"* and develops "*a fresh approach to green public procurement for cement and concrete*". It sets out recommendations for how public bodies can reduce embodied carbon emissions from cement and concrete, by including appropriate procurement approaches for projects and programmes. CAP25 mandates the public sector to reach climate targets by specifying *low carbon construction methods and low carbon cement material as far as practicable as per guidance issued by Department of Enterprise, Trade and Employment for directly procured or supported construction projects from 2024.* Further information on relevant measures contained in this document is outlined in Section 17.6.2 of the Updated EIAR.

In relation to GGBS, the 2022 DETE report states that *"in Ireland, industry consultations suggested that there are some 500,000 tonnes of GGBS available which are not being used in the domestic market. While some operators use up to 70% GGBS in their concrete mix on certain projects, the majority do not use GGBS as much as they could. The GGBS supply chain is well established."*

Further, this demonstrates that the use of GGBS is an appropriate mitigation measure and that there is sufficient GGBS available to accommodate the construction of the proposed N6 GCRR, and supports the use of steel manufacturing furnace slag in the construction phase as a substitute for cement in the carbon modelling for the construction phase.

Section 12.2.1 of CAP25 references the 2024 DETE report in highlighting the purchasing power of the State to drive the demand-side of low carbon cement and concrete. It states that this demand for low carbon products will incentivise material producers, developers and builders to reduce embodied carbon in construction.

It is clear, therefore, that there is sufficient GGBS available for use in the construction phase of the proposed N6 GCRR and there can be no suggestion that a further Request for Further Information is required in that regard as suggested in the submission.

1.2.3.9 2024 Baseline Details

An Taisce suggests that, given the significance of the claimed reductions, that the applicant be asked (by way of a Further Information Request) as to what are the 2024 baseline details for tonnes equivalent of CO_{2eq} as well as detailed information with sources used of each assumption made upon including its numerical contribution to the overall reductions.

Response

The EIA Directive, as amended, requires *'a description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.'* Therefore, an environmental impact assessment report to be provided by the developer for a project should include an outline of the likely evolution of the current state of the environment without implementation of the project (baseline scenario), as a means of improving the quality of the environmental impact assessment process and of allowing environmental considerations to be integrated at an early stage in the project's design.

Section 17.3.1 of the Updated EIAR provides a description of the receiving environment as it relates to baseline greenhouse gas emissions. Table 17.6 outlines the projected baseline emissions for 2028 (worst-case construction year), 2031 (Opening Year) and 2046 (Design Year). This data provides the future baseline in tonnes equivalent of CO_{2eq} in accordance with the EIA Directive. On this basis, it is not appropriate to refer to 2024 baseline emission levels as is suggested in the submission.

As explained in Section 17.2.5.2 of the Updated EIAR, the GHG emissions due to operational phase traffic changes have been assessed using the NTA Environmental Appraisal Module, ENEVAL. The NTA ENEVAL model was developed by Systra Ltd. in 2015 on behalf of the NTA and incorporates the official EU vehicle standard emission factor database, termed COPERT, and the emission data from the UK National Atmospheric Emissions Inventory (NAEI - The UK National Atmospheric Emissions Inventory (NAEI) | National Atmospheric Emissions Inventory). Additionally, this software is recommended by the Codema in the publication Developing CO2 baselines – A Step-by-Step Guide for Your Local Authority. The traffic data on which the operational carbon emissions are based on are provided in Section 6.2 of the Updated EIAR.

To ensure that the traffic modelling, and by extension the carbon emissions predictions are robust, a baseline review in relation to the existing traffic situation was undertaken. The baseline review comprised of a review of the existing road network and the operating transport conditions for vehicular traffic/walking/cycling infrastructure and public transport services, consultation with Galway City and County Councils, Transport Infrastructure Ireland (TII) and National Transport Authority (NTA) and a review of demographic information and latest Census data (2022) to understand existing levels of travel demand and traffic patterns on the surrounding road infrastructure. Refer to the Traffic Modelling Report included in Appendix A.6.1 of the Updated EIAR. A project specific Local Area Model (LAM) was built as the existing available Western Regional Model WRM has a base year of 2016. By building a LAM on the basis of traffic surveys undertaken in November 2023 (as verified in November 2024), ensures that the traffic assessment is representative of current traffic levels and conditions within Galway City. Full validation of the new road model was completed to ensure a good match between the observed data and the modelled traffic characteristics, and to meet the TII robust calibration and validation criteria (refer to Appendix A.6.1 Traffic Modelling Report of the updated EIAR). Therefore, the baseline figures used for the traffic modelling are current and robust.

In those circumstances, it is clear that the Commission has all of the relevant information before it in relation to the baseline greenhouse gas emissions profile and the likely GHG emissions arising from the operation of the proposed N6 GCRR, and there can be no suggestion that any further Request for Further Information is required in that regard as suggested in the submission.

1.2.3.10 Additional queries requiring answers

Questions which An Taisce sees as being unanswered include whether the Do-Minimum (DM) scenario or Do-Something (DS) scenarios include assumptions about emissions generated by (a) private vehicles versus public transport, (b) use of petrol vehicles. diesel vehicles, hybrid vehicles and electric-only vehicles, and (c) cycling and walking versus private vehicles/ public transport.

Response

Table 17.8 of the updated EIAR, shows a comparison of the total emissions produced for the Do-Minimum (without N6 GCRR) scenario and the Do-Something (with N6 GCRR) scenario. These figures include the emissions produced by all vehicles e.g. private vehicles (all types), goods vehicles and buses. Table 1.4 and Table 1.5 show the breakdown of those total emissions by vehicle class for both forecast years.

Table 1.4 2031 Breakdown of CO_2eq emissions by vehicle class

Vehicle Type	Do-Minimum (tonnes/yr.)	Do-Something (tonnes/yr.)	Difference (tonnes/yr.)	Difference (%)
Cars	312,160	317,258	5,098	1.6%
Good vehicles	173,211	172,831	-380	-0.2%
Buses	8,425	8,292	-133	-1.6%
Total	**493,796**	**498,381**	**4,584**	**0.9%**

Table 1.5 2046 Breakdown of CO_{2eq} emissions by vehicle class

Vehicle Type	Do-Minimum (tonnes/yr.)	Do-Something (tonnes/yr.)	Difference (tonnes/yr.)	Difference (%)
Cars	41,831	42,751	920	2.2%
Goods vehicles	75,009	74,911	-98	-0.1%
Buses	8,552	8,392	-160	-1.9%
Total	**125,392**	**126,054**	**662**	**0.5%**

Table 1.6 below presents the vehicle splits which are assumed to be in place by each forecast year, in ENEVAL. By 2031, it is assumed that 24% of the car fleet will be electric, noting that this is less than the target within the Climate Action Plan of 30% by 2030. This 24% figure is calculated by NTA in the development of the ENEVAL tool, based upon the current trajectory of electric vehicles in the country and therefore the allegation that the ENEVAL tool is based on *"highly optimistic assumptions about electric vehicle uptake"* and *"full delivery of the Climate Action Plan 2024"* is simply not correct.

By 2046, this figure is required to increase to 91%, given the goal to achieve net zero by 2050, at the latest. The assumed 24% ENEVAL figure by 2030 is not, therefore, considered to be 'highly optimistic' about EV uptake and full delivery of CAP25. Indeed, it is noted that the Department of Transport issued a press release[14] on 2 October 2025 to state that Ireland had already met its target for the end of 2025 in the Climate Action Plan to reach 195,000 electric vehicles on the roads. The 2025 Key Performance Indicator in the Climate Action Plan was stated to be 175,000 passenger electric vehicles and 20,000 commercial Light Goods Vehicles (195,000 total) and the DoT press release confirmed that the country had surpassed this total figure by 1,000 at the beginning of October, with three months of the year to spare.

The stated targets of 30% EV share of the national car fleet by 2030 and onwards to net zero by 2050 remain embedded in the Climate Action Plan 2025.

Table 1.6 Assumed split of vehicles in each year, in ENEVAL emissions calculations

Vehicle Type		2031	2046
Car	EV	24%	91%
	Petrol	32%	2%
	Diesel	44%	7%
Light Goods Vehicles	EV	24%	98%
	Petrol	0%	0%
	Diesel	76%	2%

In both Table 1.4 and Table 1.5 above, the emissions produced by both goods vehicles and buses are expected to decrease in the Do-Something scenario, with the N6 GCRR in place. This is caused by reduced congestion in both years. In Section 6.4.5 of Chapter 6 of the Updated EIAR, the details of the schemes included in the Do-Minimum scenario are provided. These include elements of the Galway Transport Strategy including the roll-out of the BusConnects programme for the city e.g. the Dublin Road scheme and the Cross-City Link scheme.

[14] https://www.gov.ie/en/department-of-transport/press-releases/ireland-reaches-major-milestone-in-the-transition-to-electric-with-196000-evs-now-on-irish-roads/

The submission also questions if the Do-Minimum (DM) scenario or Do-Something (DS) scenarios include assumptions about emissions generated by (c) cycling and walking versus private vehicles/public transport. Table 1.4 and Table 1.5 above show the breakdown of emissions for each vehicle type but no emissions are assumed to be generated by walking or cycling trips, as no emissions are produced by walking or cycling. Tables 6.28 and 6.29 of the updated EIAR, show the mode shares for the with and without N6 GCRR scenarios and these show the mode shares for both walking and cycling as these come from the NTA's Western Regional Model which is a multi-modal model and therefore the assessments includes forecasts of walking, cycling, public transport, car, LGV and HGV trips. But the emissions results in Table 17.8 of the updated 2025 EIAR, are only based on vehicle trips, given walking and cycling trips do not produce emissions. Also. Plate 5.5 of Part IV of the 2025 RFI response, show the mode shares, when the N6 GCRR is added alongside demand management measures.

In light of all of the above, there can be no suggestion that the matters raised in the submission are "unanswered" as suggested in the submission. All of the relevant information in relation to these matters was set out in the Updated EIAR and has been summarised above in response to the queries raised in the submission.

1.2.3.11 Additional query re Speed Limit

The submission also states that 'there would be carbon emissions reductions through the implementation of a speed limit of 100km/hr which is less than the 120km/hr that usually applies to motorway schemes. The applicant doesn't have the authority to set speed limits on national roads.

An Taisce submits that claiming emission reductions for something not done (reducing the speed limit on the N6 Galway City Ring Road from 120km/hr to 100km/hr) is flawed logic as such reductions would arise from national policies on speed limits rather than design considerations.'

Response – Authority to set speed limits

The submission notes that Chapter 17 (not Section 17) of the Updated EIAR refers to the implementation of a 100km/h speed limit on the proposed N6 GCRR, which will reduce the carbon emissions arising in the operational phase. While the submission alleges that the applicant does not have the authority to set speed limits on national roads, this is not the case.

The speed limits that apply to roads by default (depending on the type of road in question) are set out at sections 5 to 8 of the Road Traffic Act 2004 (as amended) (the "2004 Act"). In that regard, pursuant to section 7 of the 2004 Act, the default speed limit in respect of national roads is 100km/h, and under section 8 of the 2004 Act, the default speed limit in respect of motorways is 120km/h.

Therefore, the motorway section of the proposed N6 GCRR will be subject to a default speed limit of 120km/h. However, section 9(1) of the 2004 Act provides that:-

> *"A county council or a city council may make bye-laws specifying in respect of any specified public road or specified part of a public road or specified carriageway or lane of a public road other than a national managed road, part of a national managed road or carriageway or lane of a national managed road within its administrative area the speed limit which shall be the speed limit on that road or those roads for mechanically propelled vehicles."*

In that regard, section 9(2)(e) of the 2004 Act provides that a speed limit of 100km/h may be specified as a Special Speed Limit (and for the avoidance of doubt, the proposed N6 GCRR is not *a "national managed road"* within the meaning of the 2004 Act). Therefore, Galway City Council and Galway County Council each have the statutory power to make Special Speed Limit Bye-Laws in respect of the parts of the proposed N6 GCRR within their functional area and no difficulty arises in that regard as suggested in this submission.

Response – Design considerations

It is entirely incorrect to suggest that the reductions in emissions arising from the application of a 100km/h speed limit on the proposed N6 GCRR "*would arise from national policies on speed limits rather than design considerations"*.

First, the speed limit applicable to the proposed N6 GCRR is not a matter of national policy as suggested in the submission but is, for the reasons set out above, a matter within the control of Galway City Council and Galway County Council in the exercise of their functions under the Road Traffic Act 2004 (as amended).

Further, the intended maximum speed of traffic on a proposed road is an integral part of the design of any road, and a fundamental consideration at the design stage. In that regard, TII standard DN-GEO-03031, states '*that road alignment shall be designed so as to ensure that standards of curvature, visibility, superelevation, etc. provide for a Design Speed which shall be consistent with the anticipated vehicle speeds on the road. Design speed is related to road characteristics and is not directly related to mandatory speed limits'*. In the case of the motorway section of the proposed N6 GCRR, the alignment is constrained by the surrounding natural and built environment and hence, the curvature, both horizontal and vertical, has been optimised for a design speed of 100km/h to balance the environmental impacts versus the design speed. Therefore, the geometry and alignment design are in line with the design speed of 100km/h as set out in Table 1.3 of DN-GEO-03031, and does not facilitate a design speed of 120km/h.

Therefore, as the motorway section of the proposed N6 GCRR has been designed for a design speed of 100km/h, that is the speed limit that will apply on the proposed N6 GCRR. This demonstrates that the design speed of the road is a fundamental design consideration and an integral part of the project, and the suggestion in the submission that highlighting the carbon emissions reductions arising from that design decision represents "*claiming emission reductions for something not done"* is fundamentally incorrect. The emissions reductions arising from the decision to apply a lower design speed to the motorway section of the proposed N6 GCRR are a result of key decisions made in the design of the proposed N6 GCRR and are properly reflected in the Updated EIAR.

1.2.4 Climate Act Obligations on Relevant Bodies

The submission sets out the text of section 15(1) of the 2015 Act, and states that An Coimisiún Pleanála is *"bound to perform their planning decision making functions in a manner consistent with the budgets and sectoral ceilings."*

Response

As set out above, An Coimisiún Pleanála as a relevant body is obliged under section 15 of the 2015 Act to perform its functions, insofar as practicable, in a manner consistent with the matters specified in section 15(1) of the 2015 Act, which are as set out in the submission:

a) the most recent approved climate action plan (which for the reasons discussed above is currently CAP25, read in conjunction with CAP24)

b) the most recent approved national long term climate action strategy

c) the most recent approved national adaptation framework and approved sectoral adaptation plans

d) the furtherance of the national climate objective

e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State

Indeed, for the reasons set out above and in the Section 15 Report, the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions in a manner consistent with the most recent approved Climate Action Plan, CAP25 (read in conjunction with CAP24), as well as the other plans and objectives specified in section 15 of the 2015 Act.

It is not correct, however, to say as set out in the submission that the Commission is required to perform its functions "*in a manner consistent with the budgets and sectoral ceilings"*.

Carbon budgets and sectoral emissions ceilings are set by the Government under sections 6A to 6D of the 2015 Act. Under section 6B(13), Ministers of the Government must *"as far as a practicable"* perform his or her functions in a manner consistent with a carbon budget. Under section 6C(9), the same is true for the sectoral emissions ceiling. However, that is an obligation which is specifically imposed on Ministers, and public authorities, including the Commission, do not have the same obligation.

One of the main purposes of these carbon budgets and ceilings is to inform the making of the climate action plans. Section 4(2)(a) of the 2015 Act specifically provides that the Minister is required, when preparing a climate action plan, to *"ensure that the plan is consistent with the carbon budget programme"*. The Minister is also required under section 4(2)(b)(i) of the 2015 Act to set out in the climate action plan a roadmap of actions to include *"sector specific actions that are required to comply with the carbon budget and sectoral emissions ceiling for the period to which the plan relates"*. In accordance with section 4(8) of the 2015 Act, when preparing and approving a climate action plan, the Minister and the Government are required to have regard to a range of specified matters including at paragraph (g) the need to maximise employment, the attractiveness of the State for investment and the long term competitiveness of the economy, and at paragraph (m) the National Planning Framework, and the sophisticated balancing of these public interest factors is expressed in the Climate Action Plans. Accordingly, it is the climate action plan prepared by the Minister that gives concrete effect to the carbon budgets and sectoral emissions ceilings and which represents the result of the weighing of all of the factors specified in subsection (8).

It is clear, therefore, that the carbon budgets and sectoral emissions ceilings are set by government, and the Climate Action Plan then sets out the roadmap of actions, identified by the Minister and approved by the Government, that are required in order for each sector to meet its sectoral emissions ceilings, and for Ireland at a national level to comply with the carbon budgets. It follows, therefore, that once a given project aligns with and supports the relevant actions set out in the relevant Climate Action Plan, as the N6 GCRR does for the reasons set out above, an approval for that project would not just be consistent with the relevant Climate Action Plan, but also with the relevant carbon budgets and sectoral emissions ceilings.

There is therefore no obligation on a relevant body to perform its functions in a manner consistent with the carbon budgets and sectoral emissions ceilings. Rather, a relevant body such as the Commission is obliged to perform its functions, insofar as practicable, in a manner consistent with the most recent approved climate action plan, and the other matters specified in section 15(1) of the 2015 Act.

1.2.5 Compatibility of the Galway City Climate Action Plan and the Galway Transport Strategy with the Climate Action Plan 2025

Both Galway City and County Councils have a Local Authority Climate Action Plan, and both of these documents state the goal of achieving a 51% reduction in greenhouse gas emissions relative to a 2018 baseline by 2030, which is in line with the target set out in CAP25 (and previously CAP24). Both plans support the implementation of the GTS. The submission states that supporting such measures '*is not the same as accepting responsibility for achieving any measurable reductions in emissions,*' and also states that the GTS preceded the publication of any of the Climate Action Plans and, therefore, cannot claim to be aligned with CAP25.

Response

It should be noted that the 51% figure is not broken down by sector within these Local Authority Plans, unlike CAP25 which is sector-specific, and so it is not possible to identify from these plans what level of reduction in emissions is required to be achieved in the Transport Sector.

However, as mentioned above, the overall target in each plan of achieving a 51% reduction in greenhouse gas emissions relative to a 2018 baseline by 2030 is aligned with CAP25 (and previously CAP24). The analysis set out in the Section 15 Report clearly demonstrates how the delivery of the proposed N6 GCRR, as part of an overall transport solution for Galway, is consistent with the achievement of the targets set out in CAP25 (and previously CAP24) at a national level. As the target in these Local Authority Climate Action Plans is the same as the overall national target set out in CAP25 (and previously CAP24), it follows that the delivery of the proposed N6 GCRR is also consistent with the Local Authority Climate Action Plans.

In that regard, as clearly set out in the Section 15 Report, the development of the proposed N6 GCRR aligns with the principles of sustainable road development and supports the reallocation of existing road

infrastructure for active travel modes and public transport routes, all of which aligns with NIFTI and CAP25 (and previously CAP24). In particular, the updated transport modelling undertaken for the purposes of the Section 15 Report and the Updated EIAR has shown that the proposed N6 GCRR is still required as an integral part of the GTS, and that when the proposed N6 GCRR is delivered alongside a series of demand management measures identified in CAP25 (and previously CAP24), there will be a 43% reduction in carbon emissions from transport by 2030 within the area of influence of the proposed N6 GCRR when compared to 2018 levels.

This is clearly fully aligned with the targeted 51% reduction set out in the Local Authority Climate Action Plans, and there is no basis for suggesting that, where a project is aligned with and contributes to achieving the targets set out in the Local Authority Climate Action Plans, but falls short of fully achieving those targets, that project cannot be approved or is not consistent with the Local Authority Climate Action Plans.

Indeed, included in the Galway City Council Climate Action Plan is a stated target to deliver a Decarbonisation Zone (DZ) within the local authority area to act as a test bed for a range of climate action measures, which will assist in the delivery of the National Climate Objectives. There is also an action within the plan to conduct a demand management study for the zone, to identify opportunities to reduce car travel. The timeframe for this study is 2-3 years and the plan covers the period 2024 - 2029.

This upcoming study is likely to build upon the measures which were assessed alongside the N6 GCRR and detailed in the Section 15 Report. Those measures were adopted from the modelling exercise undertaken to inform CAP23, and further measures that may be identified under this study would assist in meeting the gap to target in terms of emissions reductions. Any such further measures would be enhanced and supported by the delivery of the proposed N6 GCRR which will free up road space in the city centre to encourage and facilitate modal shift to active travel and public transport, and the effective implementation of demand management measures in the city centre.

The allegation in the submission that the GTS *"cannot therefore claim to be aligned with the Climate Action Plan 2025"* is fundamentally misconceived. While clearly the GTS was prepared before the preparation of the various climate action plans, that does not mean that it is not aligned with CAP25. Indeed, as noted above, the analysis set out in the Section 15 Report clearly demonstrates that the delivery of the proposed N6 GCRR alongside the demand management measures set out in Part IV of the RFI Response document and other national level measures, contributes significantly towards the achievement of these national level targets, and that the proposed N6 GCRR as an integral part of the GTS is consistent with CAP25 (and previously CAP24).

As the modelling that informed this analysis included both the proposed N6 GCRR and the other measures set out in the GTS, it demonstrates that the GTS, while it pre-dates the preparation of the Climate Action Plans, is fully aligned with and supports the delivery of the measures set out in CAP25 (and previously CAP24) and contribute significantly to the achievement of the national targets set out therein.

1.2.5.1 Alignment of GTS with the goals of Climate Action Plan 2025

The Galway Transport Strategy includes radial bus priority measures, higher frequency bus services, active travel measures - cycling, walking& etc. and the N6 Galway City Ring Road. An Taisce submission states:

> *"The N6 Galway City Ring Road is included as one of several projects included in the Galway Transport Strategy, including radial bus priority measures, higher frequency bus services, active travel measures - cycling, walking& etc.*
>
> *None of these projects, including the N6 Galway City Ring Road, have any stated emission reduction potential. The Galway Transport Strategy has no stated measurable goals for emission reductions. When a route selection analysis was undertaken which led to the preferred route of the N6 Galway City Ring Road, all possible routes were required to commence at Briar Hill and end at the R336 west of Bearna. Road infrastructure solely for the purpose of creating a new river crossing or improving access to Parkmore Business Park were not assessed. The route selection process was based on a criterion of reducing emissions in the city centre rather than in Galway Metropolitan Area.*
>
> *In conclusion, An Taisce submits that the Galway Transport Strategy cannot be stated to be a significant effort by the applicant to achieving the goals of the Climate Action Plan 2025."*

Response – Route selection dictated by start and end points

A very detailed alternatives assessment was carried out as part of the route selection process prior to determining the need for an intervention such as new road infrastructure. This commenced with the analysis of the Do-Nothing and then moved to considering the Do-Minimum. As set out in Chapter 4 of the Updated EIAR, Section 4.5:

"The 'Do-Minimum' alternative for the proposed N6 GCRR is one which included planned and likely transportation schemes, including numerous active travel measures, and provided a realistic overview of the transportation networks of Galway City and its environs in the event that the proposed N6 GCRR is not implemented. This approach aligns with the intervention hierarchy, as set out in the National Investment Framework for Transport in Ireland (NIFTI) policy, of prioritising active modes ahead of private car before introducing road options. Equally once it was clear that new infrastructure was necessary, the first analysis undertaken was to consider an upgrade of the existing infrastructure."

Section 4.5 of Chapter 4 continues to describe the detail of the key proposals included in the Do-Minimum alternative, noting that there is no reference to a new road or no mention of starting at Briar Hill and ending at Bearna:

- BusConnects Network Redesign which increases bus services in Galway City by approx. 50%
- BusConnects Cross-City Link which includes a Public Transport Corridor through the city centre along the Salmon Weir Bridge, Eglington Street and College Road and involves restricting access to general traffic on the Salmon Weir Bridge between 7a.m. and 7p.m. (which was granted planning consent on 3 October 2024, but is subject to judicial review, (ref. no HA61.314597[15])
- BusConnects Galway Dublin Road[16]
- Additional other sections of bus lanes with provision for cyclists
- 30km/h limit in city centre and other changes to speed limits on national roads

The 'Do-Minimum' alternative was reassessed as part of this Updated EIAR taking account of the GTS measures, including the BusConnects projects listed above. All the outcomes of this assessment are set out on page 138 of Chapter 4 of the Updated EIAR. The Do-Minimum Minimum' alternative was not considered further as it does not meet the project objectives for the reasons noted.

The next step in the hierarchy of intervention is the introduction of Do-Something Non Road Alternatives and the full analysis of these are set out in Section 4.6 of Chapter 4 of the updated EIAR. These include:

- Local road safety improvements
- Fiscal or traffic control measures to manage demand
- Public transport priority, capacity and/or public transport services
- Improvements to pedestrian and/or cycling provision
- Technology Solutions such as Intelligent Transport Systems (ITS) to improve reliability, safety and operation capacity
- Galway Transport Strategy (the non road based elements of this Strategy and does not include an orbital route)
- Public Transport Only (buses)
- Light Rail

[15] https://www.pleanala.ie/en-ie/case/314597

[16] BusConnects Galway Dublin Road was submitted to ABP on 14 February 2025. A test without it in the Do-Minimum and the Do-Something is provided in Chapter 6 given that it has not been granted permission as of yet.

- Climate Action Plan/Demand Management Measures

Therefore extensive analysis of alternatives was undertaken before determining that major infrastructure was required, and this analysis is set out in detail in Chapter 4 of the Updated EIAR.

Response – Route selection based on criterion of reducing emissions in the city centre only

It is not correct to state that the route selection was based on criterion of reducing emissions in the city centre. The air and climate assessment of options was based on the lengths of the options (climate) and the number of sensitive receptors in proximity to each route option. Refer to Table 4.7 of the Updated EIAR which includes an appraisal of alternatives under all environmental disciplines including air and climate. For the purposes of consideration of carbon emissions, the route selection process did not differentiate between city centre or the wider area. Carbon emissions are not considered at a local level and are measured at a regional, national or global level. As outlined above, the Climate Action Plan and demand management measures were assessed through the consideration of non-road alternatives.

Response - Stated emission reduction potential of the projects in GTS and Galway Transport Strategy makes a significant effort to achieving the goals of the Climate Action Plan 2025

The results of the assessment of the N6 Galway City Ring Road (GCRR) together with the various other measures included in the Galway Transport Strategy and a series of demand management measures for the city are documented in the Section 15 Report and are as follows:

- A 16% reduction in total kilometres travelled in 2030, when compared to the 2030 BAU scenario (the target in CAP25 is a 20% reduction nationally)
- A 43% reduction in carbon emissions from transport within the area of influence of the proposed N6 GCRR in 2030, when compared to 2018 levels (the target in CAP25 is a 50% reduction nationally)

The assessment includes schemes from the GTS as that is the current adopted transport strategy for the city, and also included demand management measures required to achieve the targets in CAP24 (and now CAP25).

The outcomes of the modelling presented in the Section 15 Report are very clearly aligned with the targets and key performance indicators set out in CAP25 (and previously CAP24), and while no individual project can be expected to meet these overall national level targets, the gap to target between (i) what can be achieved in Galway by the delivery of the GTS including the proposed N6 GCRR alongside the measures identified in CAP25 (and previously CAP24) and (ii) the overall national level targets, is clearly described in the Updated EIAR.

It should also be noted that, as part of the modelling exercise carried out by the NTA and SYSTRA, to inform the Climate Action Plan 2023 (CAP23), which in turn informed CAP24 and now CAP25, it was shown that the 20% vehicle reduction target compared to the 2030 BAU, and the targeted 50% reduction in carbon emissions from transport compared to 2018 levels, could be achieved at a national level. It is notable that the BAU scenario which was modelled as part of that exercise includes several major infrastructure projects, including the N6 GCRR. Therefore, the exercise showed that the targets (emission reduction and vehicle kilometre reduction) set out in CAP23 and CAP24 (and now set out again in CAP25) at a national level could be achieved with the inclusion of the N6 GCRR. Therefore, the delivery of the N6 GCRR as part of an overall transport solution for Galway, is consistent with CAP and with the achievement of the targets set out in CAP25 (and previously CAP24) at a national level.

As discussed above, the analysis set out in the Section 15 Report clearly demonstrates that the delivery of the proposed N6 GCRR alongside the measures set out in CAP25 (and previously CAP24) and other national level measures, contributes significantly towards the achievement of these national level targets, and that the proposed N6 GCRR as an integral part of the GTS is consistent with CAP25 (and previously CAP24).

As the modelling that informed this analysis included both the proposed N6 GCRR and the other measures set out in the GTS, it demonstrates that the GTS, while it pre-dates the preparation of the Climate Action Plans, is fully aligned with and supports the delivery of the measures set out in CAP25 (and previously CAP24) and contribute significantly to the achievement of the national targets set out therein.

1.2.6 The N6 Galway City Ring Road will not be an effective solution to congestion in the Galway Metropolitan Area

The submission refers to the recently published 'The Economic Cost of Congestion in the Regional Cities' paper, by the Department of Transport (DoT) in May of 2025 (the **"DoT Paper"**). The submission proceeds to discuss the findings of this paper in detail, with specific references made to sections of the DoT paper that are *'to the effect that the bypass will not fix the congestion problem'*.

Response

In order to respond to this particular section of the submission, it is necessary to provide some context regarding the DoT Paper. This research represents a continuation of analysis undertaken in the Greater Dublin Area (GDA) in 2017 (and later updated in 2023), with a similar methodology being applied to the regional cities (Galway, Limerick, Cork, and Waterford). While the paper does conclude that congestion will increase in the regional cities modelled in the report, namely Galway, Cork and Waterford, in the coming three decades, driven by population and economic growth, and states that ' *increased congestion is an unavoidable consequence of continued economic and population growth',* in order to understand that conclusion, it is necessary to first understand the purpose of the DoT Paper, and the nature of the analysis undertaken to inform it.

First and foremost, the modelling undertaken to inform the DoT Paper above does not account for the demand management measures contained within CAP25 (and previously CAP24) in the regional cities. That is because the paper was prepared, not to assess the likely future scenario with demand management measures in place, but to inform the preparation of demand management strategies and to help identify the scale of demand management measures likely to be required. In that regard, the paper clearly states in the *Introduction* section that: '*The results of this study will help inform the scale of interventions required to address issues associated with congestion and provide an evidence base for policy development'*. Again, in Section 2.2 (relating to Climate Policy) the paper states that: '*This analysis will help set out the extent of congestion being experienced across the regional cities and help inform the degree of intervention required to address it'*.

The submission seeks to use certain statements in the DoT Paper to argue that the N6 GCRR *"will not be an effective solution to congestion"* in Galway, but that is not the correct approach to this paper. The DoT Paper does not, and is not intended to, reflect the impacts of the N6 GCRR when delivered as part of an overall transport solution for Galway. Accordingly, contrary to what is suggested, it does not support the position advanced in the submission.

The NPF 2018 growth projections formed the basis of a 2040 'Core' scenario and a 2040 'Alternative Future' scenario. This 'Alternative Future' scenario is based on research undertaken by the NTA and published in November of 2020 relating to potential future trends in remote working seen to emerge prior to Covid-19 and which were expected to continue. This alternative scenario is based on assumed reductions to trip generation across various user classes (i.e. journey to work, journey to education, etc.). The NTA research outlining this 'Alternative Future' scenario is available at https://www.nationaltransport.ie/wp-content/uploads/2021/03/Alternative-Scenario-Development-Note-v-6.1_Final.pdf . It is noted that this research was published prior to CAP24 and CAP25.

In the DoT Paper, the 'Alternative Future' scenario assessed is the only additional demand management/behavioural change measure that has been investigated as a potential mitigation or response to the expected increase in congestion in the regional cities. The analysis is based on the prevailing transport strategies in place in each of the cities (with the Galway Transport Strategy (GTS) in place for Galway City).

Therefore, both the 2040 Core Scenario and the 2040 Alternative Future Scenario considered in the DoT Paper include the delivery of infrastructure including the N6 GCRR, but neither scenario accounts for the delivery of the extensive additional demand management measures necessitated by the Climate Action Plans 2024 and 2025. The traffic modelling for Cork City in the DoT Paper was undertaken by Systra, who also are responsible for the transport assessment for the proposed N6 GCRR, and as the methodology was the same for the modelling for all three cities in the DoT Paper, Systra are confident that the 2040 Core Scenario and the 2040 Alternative Future Scenario considered in the DoT Paper do not account for the demand management measures contained within CAP25 (and previously CAP24).

The analysis concludes that planned infrastructure developments in Galway in the period between 2030 and 2040 are seen to relieve congestion, but the population and economic growth planned sees the overall cost of congestion increase. The GCRR is included in the analysis as an infrastructural element of the GTS. The analysis states that *'the bypass will provide alleviation from congestion in the short-term…….however, increased transport demand will eventually result in the bypass becoming congested without further intervention'*. This is unsurprising in circumstances where the demand management measures required to deliver CAP targets alongside this significant population growth are not included in the analysis.

As indicated in the DoT Paper, the purpose of the research is to help to determine the level of further intervention required to mitigate the increase in congestion and associated economic costs of same, and to provide an evidence base for policy development in support of same. The significant impact of the 'Alternative Future' scenario, which contains one specific demand management measure (greater uptake of remote working) shows that demand management measures are a critical item to consider in tandem with infrastructure investment in order to address congestion, and underscores the significant role that demand management measures can play in relieving congestion when delivered in tandem with the necessary infrastructure development required to free up road space for public transport and active modes.

In that regard, in April 2024, the Government published 'Moving Together – A Strategic Approach to the Improved Efficiency of the Transport System in Ireland' in draft form for consultation. The Minister's Foreword states that '*Moving Together goes hand-in-hand with the extensive range of Government investment and supports already in place or planned for public transport, walking, cycling, and electric vehicles. It will support an incremental change in travel behaviour for people who already have alternatives to the car or for those who will have more choice when investments in infrastructure are fully realised over the next few years'*.

It further states that *'that the benefits of current and future Government investment and supports in public transport, walking, cycling and electric vehicles cannot be fully realised while current levels of congestion remain.'* The introduction of the report also states that *'The Strategy is intended to provide an overarching framework for the delivery of a range of potential demand management measures that can be deployed to bridge this gap in a fair and equitable manner'* (the 'gap' referred to is the gap in emissions required to be bridged in order to meet the Climate Action Plan targets).

The draft report makes specific reference to the 2023 GDA Cost of Congestion Study, stating that the 'Alternative Future' scenario '*demonstrates that behavioural change interventions can have significant impacts in reducing the cost of congestion over the long-term'*. Indeed, the report also discussed modelling undertaken to inform the 2023 Climate Action Plan by the National Transport Authority, stating that the measures included in this analysis *'are not an exhaustive list of possible measures – they are those measures that are amenable for modelling……other measures are in the scope of this Strategy but will require further policy design. There are also a range of potential measures which are considered as part of this strategy which do not feature in the modelling assumptions but have strong potential to impact in reducing vehicle kms.'*

'Moving Together' was published for consultation in April 2024 in draft form. A final version of the Strategy is yet to be published. It is however clear that the strategy will, when published, set out a clear framework for implementation of a significant range of demand management measures and behavioural change measures intended to complement planned infrastructure investment and to ensure that the benefits of infrastructural investment can be fully unlocked. The DoT Paper on the Cost of Congestion in the Regional Cities therefore reaffirms the requirement for policy-led demand management measures to be delivered in tandem with planned infrastructure investment and to ensure that capacity that is unlocked is utilised in the most appropriate manner.

The findings of the DoT analysis are therefore entirely consistent with the findings of the 2016 Galway Transport Strategy development and of the updated analysis provided in the Updated EIAR and the Section 15 Report. The N6 GCRR is an effective and vital component of the overall transport strategy for Galway as part of a multi-modal overarching transport strategy for the overall Galway Metropolitan Area.

In that regard, the DoT Paper reaffirms the need for the pending National Demand Management Strategy (Moving Together) to establish the complementary demand management and behavioural change interventions that will be needed across the country in order to complement planned infrastructure investment and support the achievement of our stated climate action plan targets, which will include measures such as those considered and modelled alongside the proposed N6 GCRR in the Section 15 Report. The analysis contained in the Section 15 Report clearly indicates that the demand management measures assessed in the 'CAP Do-Something' scenario result in a significant reduction in car mode share – reduced to approximately 30% both with and without the N6 GCRR included. Importantly, this highlights that when, the N6 GCRR is implemented alongside demand management measures, the car mode share remains effectively unchanged. This demonstrates that the delivery of the N6 GCRR, when aligned with demand management measures, is a complementary approach, with no resultant increase in vehicle mode share.

In particular, as set out in the Section 15 Report, the delivery of the proposed N6 GCRR as an integral part of the GTS will:-

- *Enable potential demand management measures within the city like car free areas and congestion charges, and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP24, supporting potential road space reallocation for sustainable modes and encourage a shift from private car trips in line with CAP24 (and now CAP25) and public realm improvements.*
- *Facilitate demand management measures to help achieve CAP24 (and now CAP25) targets whilst ensuring a level of mobility for residents on both sides of the city.*
- *Enable a better performing network for all modes by reducing delays across the network by 50% compared with 2023 levels, whilst not increasing the level of car trips within the metropolitan area.*
- *Facilitate the BusConnects programme for the city, by providing another river crossing to offset restrictions on Salmon Weir bridge and enable potential restrictions on other city centre bridges via car free urban areas and congestion charges which encourages the shift from private car trips to public transport in line with CAP24 (and now CAP25).*
- *Accommodate the significant planned growth within city and environs in line with NPF targets (50% increase in population by 2040, compared to 2016 levels).*
- *Reduce the need for HGVs to travel within the city, achieving a 25% reduction in the level of HGV kilometres within the NWR338 cordon of the city which accounts for approx. 60% of the city's current population. This will benefit pedestrians, cyclists and public transport users and will result in improved air quality and supporting a safer environment for active travel trips.*

Further, as set out above, the key targets for the transport sector remain unchanged in CAP25 and so the analysis by reference to CAP24 above applies with equal force in relation to CAP25, as no new measures or targets have been introduced in CAP25 that would in any way alter that position. Therefore, while it is acknowledged that the N6 GCRR is not, in and of itself and without the delivery of demand management measures, a standalone solution to the problem of congestion in Galway (and was never intended to be so), and so the predictions in the DoT Paper in that regard are unsurprising, the delivery of the N6 GCRR is an integral element of any overall transport solution to address the issues identified in the DoT Paper.

Further, because the N6 GCRR was included as planned infrastructure in both the Core Scenario and the Alternative Future scenario, the DoT Paper does not give any indication of the likely cost of congestion in Galway in the future if the N6 GCRR is not delivered. In that regard, the impacts of the proposed N6 GCRR on congestion are considered and assessed in Chapter 6 of the Updated EIAR, which clearly demonstrates that the provision of the N6 GCRR is hugely beneficial for reducing traffic congestion in Galway City in both the AM and PM Peak and for reducing journey times on key routes. While not modelled in the DoT Paper, there is little doubt that, in the absence of the N6 GCRR, the cost of congestion in Galway would increase significantly more than is predicted in the DoT Paper.

Indeed, as shown in Figure 14 of the DoT Paper (reproduced below) and as stated – *'The cost of congestion decreases slightly between 2030 and 2040. This result indicates that planned infrastructural developments between 2030 and 2040 could relieve some congestion in the GMA'.* The infrastructural elements of the Galway Transport Strategy, including the N6 GCRR are seen to support planned population and economic growth in the period from 2030-2040 whilst simultaneously reducing the cost of congestion slightly in the same period.

Figure 14 - Annual Cost of Congestion

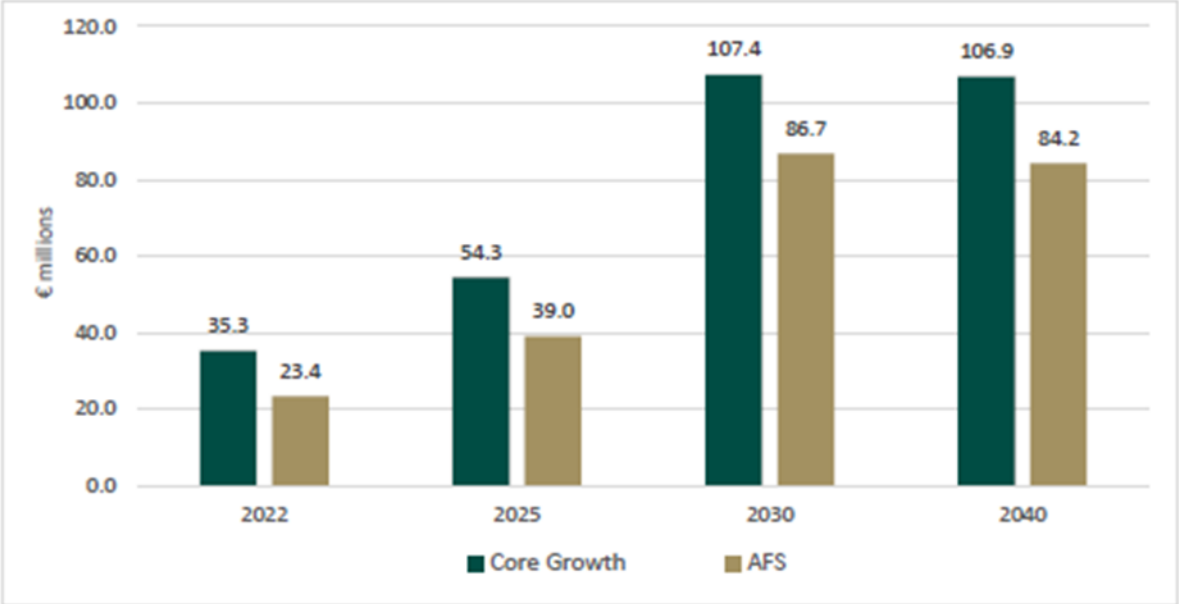

Plate 1.4 DoT Cost of Congestion in Galway (Extract Figure 14)

Therefore, in light of what is set out above, the contention advanced in the submission that the N6 GCRR is not an effective solution for congestion in Galway is not correct, and the reliance in that regard on the DoT Paper is based on a misunderstanding of the purpose and findings of that paper. It has been clearly demonstrated in this response, and in the totality of the documents before the Commission including the Updated EIAR and the Section 15 Report, that the delivery of the proposed N6 GCRR as an integral part of the GTS is a key enabler of the demand management measures that will be required to address the issues identified in the DoT Paper and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP25 (and previously CAP24).

1.2.7 The Galway Metropolitan Area Transport Strategy (GMATS)

The submission claims that the appropriate sustainable transport solution for the Galway Metropolitan Area should be informed by the Galway Metropolitan Area Transport Strategy (GMATS), which is not yet finalised.

Response

As set out in Chapter 2 of the Updated EIAR, at present the GTS is the current adopted transport strategy for Galway and its recommendations are incorporated into the Galway City Development Plan 2023-2029. The assessment of the proposed N6 GCRR has, therefore, been undertaken with regard to the infrastructure contained in the GTS. The approach in the GTS is to deliver significant improvements in active travel and develop a high quality public transport network to support the city's planned growth by encouraging the use of other sustainable transport modes and to facilitate the efficient movement of private vehicles and freight. The GTS consists of a number of proposed measures combined under an overall vision *"to create a connected city region driven by smarter mobility"*. It is recognised within the National Planning Framework as key to achieving the 50% population growth targeted for the Galway Metropolitan Area by 2040 in the form of compact urban growth supported by sustainable transport.

The delivery of the GTS is underway, and the local authorities remain committed to the implementation of the GTS. Substantial progress has been made in advancing major elements of the strategy with an emphasis upon the delivery of sustainable measures such as cycling, walking and public transport funded by the National Transport Authority and the Urban Regeneration and Development Fund under the NDP, and Galway City Council has undertaken a wide range of important projects under the GTS since the adoption of the strategy in 2016, as detailed in Table 2.1 of Chapter 2 of the Updated EIAR. In those circumstances, the GTS is the appropriate transport strategy against which to consider and assess the applications for approval of the proposed N6 GCRR.

Further, a series of demand management measures were assessed along with the GTS (which includes the N6 GCRR) in the Section 15 Report, meaning that the consideration of how the N6 GCRR, as part of an overall package of measures, aligns with CAP24 (and now CAP25) considered not only the provisions of the GTS itself, but also future demand management measures necessitated by the Climate Action Plans.

Therefore, the 2025 RFI Response takes cognisance of all current policies, including the GTS. Whist the GTS was published in 2016, it is a 20-year framework that runs to 2036. Each subsequent plan and policy since 2016 takes cognisance of the same principles under which the GTS was developed, and the GTS is embedded in statutory plans at all levels of the hierarchy of planning policy. Factually, the development of any future policy documents will of course be required to align with the current planning policy at each of these planning tiers at the point at which it is developed, and therefore the Commission is already fully apprised of the relevant policy hierarchy.

This well established policy hierarchy, together with the clear support for the proposed N6 GCRR set out in the GTS (which remains the current adopted transport strategy for Galway), and the findings of the Section 15 Report clearly demonstrate how all of the measures set out in the GTS, including the proposed N6 GCRR, align with and support the delivery of CAP25 (and previously CAP24). It also provides a comprehensive and robust basis for the Commission to make its determination in relation to the proposed N6 GCRR. There is simply no basis to argue that it would have been preferable for the GMATS to be completed first as suggested in this submission.

1.2.8 Conclusion

1.2.8.1 Context

The conclusion claims that in the absence of further information and clarification, and a current Metropolitan Area Transport Strategy, *"the permission sought for the proposed road development should be refused."*

Response

For all of the reasons set out above, the issues raised in this submission have been fully addressed in this response, and there is nothing in this submission that would warrant a decision to refuse to grant the approvals sought for the Proposed N6 GCRR as suggested in this submission or at all. In particular, as is clear from what is set out above, there can be no suggestion that any further information is required in relation to any of the matters raised in this submission, and there is simply no basis to argue that it would have been preferable for the GMATS to be completed before making a decision in relation to the proposed N6 GCRR as suggested in this submission.

Indeed, the Commission can be satisfied that in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved climate action plan, as well as the other plans and objectives specified in Section 15 of the 2015 Act including the National Climate Objective.

2. Response to ABP-318220-23: 02 Mr. Brendan Mulligan

2.1 Submission – Whole Scheme

This submission includes a number of opening comments which are addressed in Section 2.2.1, and is then divided into four headings as follows:

1. Compatibility of the N6 Galway City Ring Road with the Climate Action Plan 2025 (which is addressed in Section 2.2.2)
2. Compatibility of the Galway Transport Strategy and the Galway City and County Councils' Local Authority Climate Action Plans with the Climate Action Plan 2025 (which is addressed in Section 2.2.3)
3. Whether the N6 Galway City Ring Road will be an effective solution to congestion in the Galway Metropolitan Area (which is addressed in Section 2.2.4)
4. The absence of a Galway Metropolitan Area Transport Strategy (which is addressed in Section 2.2.5)

2.2 Response to submission

2.2.1 Opening Comments

2.2.1.1 Most Recent Approved Climate Action Plan

The submission states, at the outset, that: "The RFI Response is stated to be based on the Climate Action Plan 2024. It is the Climate Action Plan 2025, approved by the Government on 15 April 2025, against which the project must be assessed."

Response

As the Commission is aware, pursuant to section 15(1)(a) of the Climate Action and Low Carbon Development Act 2015 (as amended) (the **"2015 Act"**), the Commission is required to perform its functions, in so far as practicable, in a manner consistent with *"the most recent approved Climate Action Plan"*.

The response to the request for further information was submitted to An Bord Pleanála (as it then was) on 14 April 2025 (the "**2025 RFI Response**"), prior to the publication of the Climate Action Plan 2025 (**"CAP25"**). Therefore, at the time of the submission of the RFI Response, the Climate Action Plan 2024 (**"CAP24"**) was the most recent approved Climate Action Plan for the purposes of section 15 of 2015 Act, and was considered in Part IV of the 2025 RFI Response (entitled *"Obligations under Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended) and submissions in relation to the Climate Action Plan 2024"*) (the **"Section 15 Report"**). Subsequent to the submission of the 2025 RFI Response, CAP25 was published and became the most recent approved climate action plan for the purposes of section 15 of the 2015 Act.

It is accepted that it is CAP25 by reference to which compliance with the obligation imposed by section 15 falls to be assessed, subject to the caveat that the provisions of CAP24 remain relevant for reasons explained below.

The provisions of CAP25 have been carefully considered and do not require any amendment to the analysis contained in Chapter 17 of the Updated EIAR that was submitted as Part VI of the 2025 RFI Response (the "**Updated EIAR**") or the analysis contained in the Section 15 Report.

This is because there is no change in CAP25 to the key performance indicators, relative to the transport sector, that are set out in CAP24. In particular, there is no change to the level of change required to meet the 50% reduction in overall emissions from transport by 2030 (relative to 2018 levels). These key targets (which remain unchanged in CAP25) include a 20% reduction in total vehicle kilometres travelled relative to the 2030 business-as-usual scenario, a 50% reduction in fuel usage, and significant increases to sustainable transport trips and modal share.

Therefore, the analysis as presented in the Section 15 Report, which clearly demonstrates how the delivery of the proposed N6 GCRR, as part of an overall transport solution for Galway, is consistent with CAP and with the achievement of the targets set out in CAP24 at a national level, applies with equal force in relation to CAP25, as no new measures or targets have been introduced in CAP25 that would in any way alter that position.

CAP25 states that it is to be read in conjunction with CAP24 'to facilitate a focus on the delivery of outstanding actions from CAP24 and high-impact legacy actions from CAP23'.

As mentioned above, the Commission's obligation under section 15 of the 2015 Act is to perform its functions, insofar as practicable, in a manner consistent with, amongst other matters, the most recent approved climate action plan, which is now CAP25. However, given that CAP25 is to be read in conjunction with CAP24, the Commission should not read CAP25 in isolation but in conjunction with CAP24 to facilitate the delivery of outstanding actions from CAP24 and high-impact legacy actions from CAP23.

In those circumstances, and for the reasons as are set out in the Section 15 Report, the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions in a manner consistent with the most recent approved Climate Action Plan, CAP25 (read in conjunction with CAP24), as well as the other plans and objectives specified in section 15 of the 2015 Act.

2.2.1.2 Carbon Budgets and Sectoral Emissions Ceilings

The submission states that: "There is a legally binding obligation to comply with the carbon budgets and corresponding sectoral emissions ceilings under the Climate Action and Low Carbon Development Act 2015", and goes on to say that the Climate Change Advisory Council (the **"CCAC"**) and Environmental Protection Agency (the **"EPA"**) have both predicted a failure to comply with Carbon Budget 1 and Carbon Budget 2.

The submission goes on to state that carbon budgets must be used sparingly, and that difficult decisions must be made about prioritising the spending of carbon budgets. It emphasises the need to invest in *"the most efficient, most necessary and most appropriate infrastructure"* and highlights the need for investment in water and wastewater infrastructure to support the delivery of housing needed to accommodate anticipated population growth.

Response

Carbon budgets and sectoral emissions ceilings are set by the Government under sections 6A to 6D of the 2015 Act. Under section 6B(13), Ministers of the Government must *"as far as a practicable"* perform his or her functions in a manner consistent with a carbon budget. Under section 6C(9), the same is true for the sectoral emissions ceiling. However, that is an obligation which is specifically imposed on Ministers only, and public authorities including the Commission do not have the same obligation.

One of the main purposes of these carbon budgets and ceilings is to inform the making of the climate action plans. Section 4(2)(a) of the 2015 Act specifically provides that the Minister is required, when preparing a climate action plan, to *"ensure that the plan is consistent with the carbon budget programme"*. The Minister is also required under section 4(2)(b)(i) of the 2015 Act to set out in the climate action plan a roadmap of actions to include *"sector specific actions that are required to comply with the carbon budget and sectoral emissions ceiling for the period to which the plan relates"*. In accordance with section 4(8) of the 2015 Act, when preparing and approving a climate action plan, the Minister and the Government are required to have regard to a range of specified matters including at paragraph (g) the need to maximise employment, the attractiveness of the State for investment and the long term competitiveness of the economy, and at paragraph (m) the National Planning Framework, and the sophisticated balancing of these public interest factors is expressed in the Climate Action Plans. Accordingly, it is the climate action plan prepared by the Minister that gives concrete effect to the carbon budgets and sectoral emissions ceilings and which represents the result of the weighing of all of the factors specified in subsection (8).

It is clear, therefore, that the carbon budgets and sectoral emissions ceilings are set by government, and the Climate Action Plan then sets out the roadmap of actions, identified by the Minister and approved by the Minister, that are required in order for each sector to meet its sectoral emissions ceilings, and for Ireland at a national level to comply with the carbon budgets. It follows, therefore, that once a given project aligns with and supports the relevant actions set out in the relevant Climate Action Plan, as the N6 GCRR does for the reasons set out above, an approval for that project would not just be consistent with the relevant Climate Action Plan, but also with the relevant carbon budgets and sectoral emissions ceilings.

This submission makes the point that difficult decisions must be made in prioritising *"spending of carbon budgets"*, and refers to, for example, the need for investment in other types of infrastructure such as water and wastewater infrastructure to support the delivery of housing. While it may be the case that difficult decisions are required in this area, the balancing of priorities as between, for example, the Transport Sector and the Residential Built Environment Sector is the responsibility of Government in setting the relevant sectoral emissions ceilings, which determine how the Carbon Budgets are to be divided among the different sectors of the economy. Such balancing decisions have therefore already been made in the setting of sectoral emissions ceilings and are not a matter for the Commission, as any emissions that might arise from the construction and operation of the N6 GCRR, for example, would not have any impact on the sectoral emissions ceiling for the Residential Built Environment Sector or the available carbon budget for the construction of housing.

The submission is seeking to compare investment in and utilisation of carbon budgets in residential development versus transport with a view to balancing the overall budget, when these are two entirely different budgets, both carbon and financial budgets. It would not be appropriate, therefore, for the Commission to seek to balance the emissions predicted to arise from the construction and operation of the N6 GCRR with any future carbon emissions that may be caused by development in the Residential Built Environment Sector, as appears to be suggested in this submission.

Galway City and County Councils fully support investment in public transport and active travel and the GTS sets out the plan to do that, with significant progress made on a number of GTS projects since the oral hearing in 2020, the most significant projects being the completion of the construction of the Salmon Weir Pedestrian and Cycle Bridge in 2023 and the grant of planning for two major Galway BusConnects projects namely the Cross-City Link and the Dublin Road schemes. As set out in Section 6.6.1.2 of Chapter 6 of the Updated EIAR, in the Do-Minimum scenario, significant levels of traffic congestion create a barrier to travel, constraining the economic growth of the city and the overall delay on the road network in the Do-Minimum scenario is between 30% - 45% higher than the Do-Something scenario with the Project in place. This highlights the positive impact of the project, in terms of reducing the level of congestion in the city, which would increase in the future as the city's population grows. Section 6.7.1.1 of the Updated EIAR shows '*significant AADT reductions on both sides of the city when the Project is in place and illustrate the benefits which the Project can have in reducing traffic volumes along bus routes which would need to travel alongside general traffic. These reductions would help provide more reliable journey times for bus users across the city where there is no current or planned bus priority infrastructure'*. Therefore, the proposed N6 GCRR is required to fully realise the benefits of that investment in public transport by freeing up space in the city centre for public transport and active travel modes and is a key part of the overall transport solution.

2.2.2 Compatibility of the N6 Galway City Ring Road with the Climate Action Plan 2025

2.2.2.1 Conclusion of the Environmental Impact Assessment and alignment with achieving national climate objectives

The submission quotes from Part IV of the 2025 RFI Response, which states that: *"The conclusion of the EIA Assessment, i.e. with and without the proposed Project only, is that the proposed Project when considered in isolation is expected to have a permanent moderate adverse residual effect on climate during over its lifecycle following implementation of construction phase mitigation"*, and alleges that this conclusion *"is not compatible with achieving national climate objectives in the Climate Action Plan 2025"*.

Response

Chapter 17 of the Updated EIAR submitted with the 2025 RFI Response assesses the climate effects of the proposed N6 GCRR in accordance with the EIA Directive. The conclusion of that EIA assessment, as set out in the Chapter 17 of the Updated EIAR submitted with the RFI Response, is that the proposed Project when considered **in isolation** is expected to have a permanent moderate adverse residual effect on climate during its lifecycle following the implementation of construction phase mitigation.

However, the climate assessment for EIA purposes is quite a different exercise from that required to be undertaken by the Commission under section 15 of the 2015 Act when considering whether, by granting approval for the N6 GCRR, the Commission would be performing its functions, insofar as practicable, in a manner consistent with the matters specified in section 15(1). It is not correct, therefore, to say that the conclusion reached in the EIA Assessment *"is not compatible with achieving national climate objectives in the Climate Action Plan 2025"* as suggested in this submission.

In that regard, the Updated EIAR submitted as part of the RFI Response presents the assessment of effects on climate during the construction and operation phase of the Project by comparing the emissions in a scenario with the proposed Project to a scenario without the proposed Project. As the EIA assessment only considers the effects of the Project, it cannot account for emission reductions associated with additional commitments which will arise from the delivery of the Galway Transport Strategy (GTS) or the most recent approved climate action plan, which is now CAP25 (read in conjunction with CAP24).

The reductions in carbon emissions likely to arise from the GTS, CAP24, and CAP25 in conjunction with the Project were considered in detail in the Section 15 Report, which concluded that the delivery of the proposed N6 GCRR alongside the measures set out in CAP24 (which are now re-stated in CAP25) and other national level measures, contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25), and that the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved climate action plan, as well as the other plans and objectives specified in section 15 of the 2015 Act including the National Climate Objective.

2.2.2.2 Alignment with Climate Action Plan 2025 (CAP25) transport targets

The submission alleges that the outcomes of the modelling presented in Part IV of the 2025 RFI Response (which modelled the N6 Galway City Ring Road (GCRR) together with the various other measures included in the Galway Transport Strategy and a series of demand management measures for the city) are *"falsely claimed to be "aligned with CAP24""*.

The position adopted in this submission is that, because the results of this modelling do not show that the N6 GCRR could in its own right achieve the entire of the national "key performance indicators" for the transport sector set out in CAP24 (and now CAP25) (which as mentioned above are (i) a 50% reduction in transport-related emissions compared to 2018 levels by 2030, and (ii) a 20% reduction in total vehicle kilometres travelled compared to a 2030 Business-as-Usual (BAU) scenario), any claim that the results of the modelling are "aligned with CAP24" is false.

Response

As mentioned above, and as set out in Part IV of the 2025 RFI Response, the key targets for the transport sector from an operational perspective in the CAP24 (which are replicated in CAP25) are as follows:

- 20% reduction in total vehicle kilometres travelled relative to 2030 Business as Usual (BAU)
- 50% reduction in carbon emissions compared to 2018 levels
- Significant increases to sustainable transport trips and modal share

As noted throughout Part IV of the 2025 RFI Response[17], the above targets are national targets, for the entire country to achieve, and it is not incumbent on any individual project to achieve these targeted reductions in isolation.

However, while these are national level targets that cannot be applied to any individual project in isolation, updated transport modelling was undertaken to inform the Section 15 Report included in the 2025 RFI Response (based on the same transport modelling approach and assumptions as those used in the modelling undertaken by the Department of Transport to inform CAP23 and CAP24 (and now also CAP25)), to assess the overall benefits of delivering the N6 GCRR, as an integral part of the GTS, against these key performance indicators set out in CAP24, and to consider whether the delivery of the N6 GCRR would be consistent with CAP24.

The results of this updated transport modelling (which considered the N6 Galway City Ring Road (GCRR) together with the various other measures included in the Galway Transport Strategy and a series of demand management measures for the city) are documented in section 5.2 of Part IV of the 2025 RFI Response and demonstrate that the delivery of the proposed N6 GCRR alongside the measures identified in CAP24 (and now CAP25) results in:

- A 16% reduction in total kilometres travelled in 2030 within the area of influence of the N6 GCRR, when compared to the 2030 BAU scenario
- A 43% reduction in carbon emissions from transport within the area of influence of the proposed N6 GCRR in 2030, when compared to 2018 levels

These outcomes are, as set out in Part IV of the 2025 RFI Response, *"aligned with CAP24"* and, indeed, are equally aligned with CAP25. There is simply no basis on which to suggest that this statement is in any way false as contended in this submission.

In that regard, the basis for the allegation made in the submission appears to be that: (i) "*The target in CAP24 (and CAP25) is a 20% reduction, not 16%"*, and (ii) "*The target in CAP24 (and CAP25) is a 50% reduction, not 43%."* However, this does not reflect the fact that the targets set out in CAP24 (and replicated in CAP25) are national level targets, to be achieved by Ireland as a whole, and cannot be applied to individual projects.

This is directly addressed in the Updated EIAR submitted. As outlined in Section 17.10.1.2 of Chapter 17:

> *"When comparing the CAP DS scenario to the base 2018 scenario, an approximate 43% reduction in vehicle emissions in the study area is predicted to occur. While this figure falls short of meeting the 50% target set out in CAP24, it does show that a significant emissions reduction can be achieved with the Project in place, whilst also catering for an approximate 30% increase in the population level across the metropolitan area by 2030, versus 2016 levels."*

Further, as outlined in Section 17.10.1.3 of Chapter 17 of the Updated EIAR:

> *"When comparing the CAP DS to the BAU scenario, the reduction in car kilometres is predicted to be 18%, while the total vehicle kilometre reduction predicted is 16%. Again, whilst these figures fall just short of the 20% national target set out in CAP24, they do show a significant reduction."*

The contention made in this submission that the Section 15 Report falsely claims alignment with CAP24 (and now CAP25) is fundamentally incorrect and is based on a misunderstanding of the nature of the targets set out in CAP25 (and previously in CAP24), and of the analysis set out in the Section 15 Report. The statement that the two sets of data 'align' is entirely appropriate and correct. The outcomes of the modelling presented in the Section 15 Report are very clearly aligned with the targets and key performance indicators set out in CAP25 (and previously CAP24), and while no individual project can be expected to meet these overall national level targets, the gap to target between (i) what can be achieved in Galway by the delivery of the proposed N6 GCRR alongside the measures identified in CAP25 (and previously CAP24) and (ii) the overall national level targets, is clearly described in the Updated EIAR. There is no basis for contending that, where a project is aligned with and contributes to achieving the targets set out in CAP but falls short of fully

[17] https://www.n6galwaycityringroad.ie/sites/default/files/media/Part%20IV%20of%202025%20RFI%20Response%20CAP-%20web.pdf

achieving those national targets, the project cannot be approved or is not consistent with the CAP. Such an approach would be counterproductive and actually undermine progress towards achieving Ireland's national decarbonisation targets.

It should also be noted that, as part of the modelling exercise carried out by the NTA and SYSTRA, to inform the Climate Action Plan 2023 (CAP23), which in turn informed CAP24 and now CAP25, it was shown that the 20% vehicle reduction target compared to the 2030 BAU, and the targeted 50% reduction in carbon emissions from transport compared to 2018 levels, could be achieved at a national level.

It is notable that the BAU scenario which was modelled as part of that exercise includes several major infrastructure projects, including the N6 GCRR. Therefore, the exercise showed that the targets (emission reduction and vehicle kilometre reduction) set out in CAP23 and CAP24 (and now set out again in CAP25) at a national level could be achieved with the inclusion of the N6 GCRR. Therefore, the delivery of the N6 GCRR as part of an overall transport solution for Galway, is consistent with CAP and with the achievement of the targets set out in CAP25 (and previously CAP24) at a national level.

2.2.2.3 2030 Electric Vehicle market share assumptions

The submission challenges the assumption, made in the traffic modelling carried out to inform the preparation of the Section 15 Report, that 30% of the car fleet will be electric vehicles by 2030 (which assumption was taken from CAP24). The submission challenges the level of commitment to achieving this KPI noted in Table 15.5 in CAP24, which is unchanged in CAP25, on the basis of a footnote in CAP24 which states that private car EV targets are kept under ongoing review and may be subject to recalculation. The submission also alleges that, by the end of 2024, the total stock of battery electric vehicles in the national fleet was 72,640 (referring to the Climate Change Advisory Council's Annual Review, 2025, Page 7).

Response

While the submission questions the electric vehicles assumptions used in the assessment, the Department of Transport issued a press release[18] on 2 October, 2025 to state that Ireland had already met its target for the end of 2025 in the Climate Action Plan to reach 195,000 electric vehicles on the roads. The 2025 Key Performance Indicator in the Climate Action Plan was stated to be 175,000 passenger electric vehicles and 20,000 commercial Light Goods Vehicles (195,000 total) and the DoT press release confirmed that the country had surpassed this total figure by 1,000 at the beginning of October, with three months of the year to spare.

Mr. Mulligan alleges that the Section 15 Report assumes that 30% of the total car fleet will be EVs from 2030 and 100% of private vehicle registrations will be BEVs after 2029, and he criticises reliance on those assumptions.

For clarity the assumptions in relation to electric vehicles in the modelling are set out below:

- The NTA's ENEVAL tool has been used to calculate the level of emissions arising from the scheme in isolation, in the climate chapter (Chapter 17) of the Updated EIAR. For this assessment in the EIAR, it was assumed that 24% of the total car fleet would be electric by the Opening Year of 2031 in ENEVAL. This figure was calculated based on the current trajectory of electric vehicles within the national fleet and so represents a conservative and reasonable estimate of the likely make-up of the car fleet in 2031.
- In the Section 15 Report, a separate modelling exercise was undertaken to assess the scheme in the context of the Government's Climate Action Plan. Therefore, for this exercise, the 2030 target of 30% electric vehicles which is set out within the Climate Action Plan was used.
- The submission also questioned the assumption in the Section 15 Report, that by 2030, 100% of the new vehicle registrations would be electric vehicles. This assumption was adopted for consistency with the earlier modelling exercise which was done by the NTA on behalf of the Department of Transport, to

[18] https://www.gov.ie/en/department-of-transport/press-releases/ireland-reaches-major-milestone-in-the-transition-to-electric-with-196000-evs-now-on-irish-roads/

inform the 2023 version of the Climate Action Plan, and subsequent CAP24 and CAP25. Therefore, it is a realistic assumption contrary to what the submission claims.

- And as mentioned above, in the Department of Transport's press release[18] on 2 October 2025, Ireland had already met its target for the end of 2025 in the Climate Action Plan to reach 195,000 electric vehicles on the roads and therefore are on still on target for the 2030 target of 30% of the fleet to be electric.

2.2.2.4 Mode Share and Consistency with Local Authority Climate Action Plans

The submission refers to the results of the mode share analysis set out in the Section 15 Report, (i.e. Part IV of the 2025 RFI Response), and claims that the conclusions reached in the Section 15 Report are not supported by the data presented, and that the outcomes are not consistent with the targets in Galway County Council's and Galway City Council's adopted Local Authority Climate Action Plans.

Response

With regard to the contention that the outcomes of the traffic modelling undertaken in respect of the proposed N6 GCRR *"are not consistent with"* the targets set out in both Galway County Council's and Galway City Council's Local Authority Climate Action Plans, those targets are outlined in Section 17.2.2.5 of Chapter 17 of the Updated EIAR as follows:

> "*the Galway City Council Climate Action Plan 2024-2029 aims to create a low carbon and climate resilient City, by delivering and promoting best practice in climate action, at the local level. The vision for the Plan is to be a climate resilient, biodiversity rich, environmentally sustainable and carbon neutral city by no later than the end of 2050, including a commitment by Galway City Council to reduce its emissions by 51% versus a 2018 baseline by 2030. This will be achieved by delivering transformative change and measurable climate action within GCC's organisation and services and across Galway City, through leadership, example, and mobilising action at a local level. The Plan lists as an action to "support the development of greater accessibility, modal shift and active travel throughout Galway City through implementation of work programmes and Galway Transport Strategy (GTS)" which includes the Project.*
>
> *The Galway County Council Climate Action Plan 2024-2029 aims to deliver and support best practice in climate action, at the local level. The Plan sets out a clear vision and mission and aligns with Ireland's National Climate Objective, aiming for a climate-resilient, biodiversity-rich, environmentally sustainable, and climate-neutral economy by 2050. The Mission Statement outlines how Galway County Council will meet that vision. Internally, the ambition is to meet its own emissions and energy efficiency targets. They are seeking a 51% reduction versus a 2018 baseline in GHG emissions and a 50% improvement in energy efficiency by 2030."*

It is clear from what is set out in this response, and in both the Section 15 Report and Chapter 17 of the Updated EIAR that the outcomes of the traffic modelling and climate impact assessment carried out in relation to the proposed N6 GCRR are fully consistent with and support the above targets.

The submission also challenges the conclusion reached in the Section 15 Report that the proposed N6 GCRR *"will also facilitate significant increases in sustainable transport trip and modal share"*, and alleges that this is not supported by what is set out in section 5.2.3 (Improved Mode Share) of the Section 15 Report.

In that regard, the submission includes a screenshot of Plate 5.5 of the Section 15 Report[19], which is reproduced below for ease of reference. This figure shows the mode share comparison, for the 'Business As Usual' (BAU) scenario, which is used as benchmark against which the 20% reduction in vehicle kilometre target is assessed, and the CAP Do-Something scenarios. The 'CAP Do-Something' scenario includes various demand management scenarios which were modelled and were adopted from a modelling exercise which was undertaken to inform the Government's 2023 update of the Climate Action Plan.

[19] https://www.n6galwaycityringroad.ie/sites/default/files/media/Part%20IV%20of%202025%20RFI%20Response%20CAP-%20web.pdf

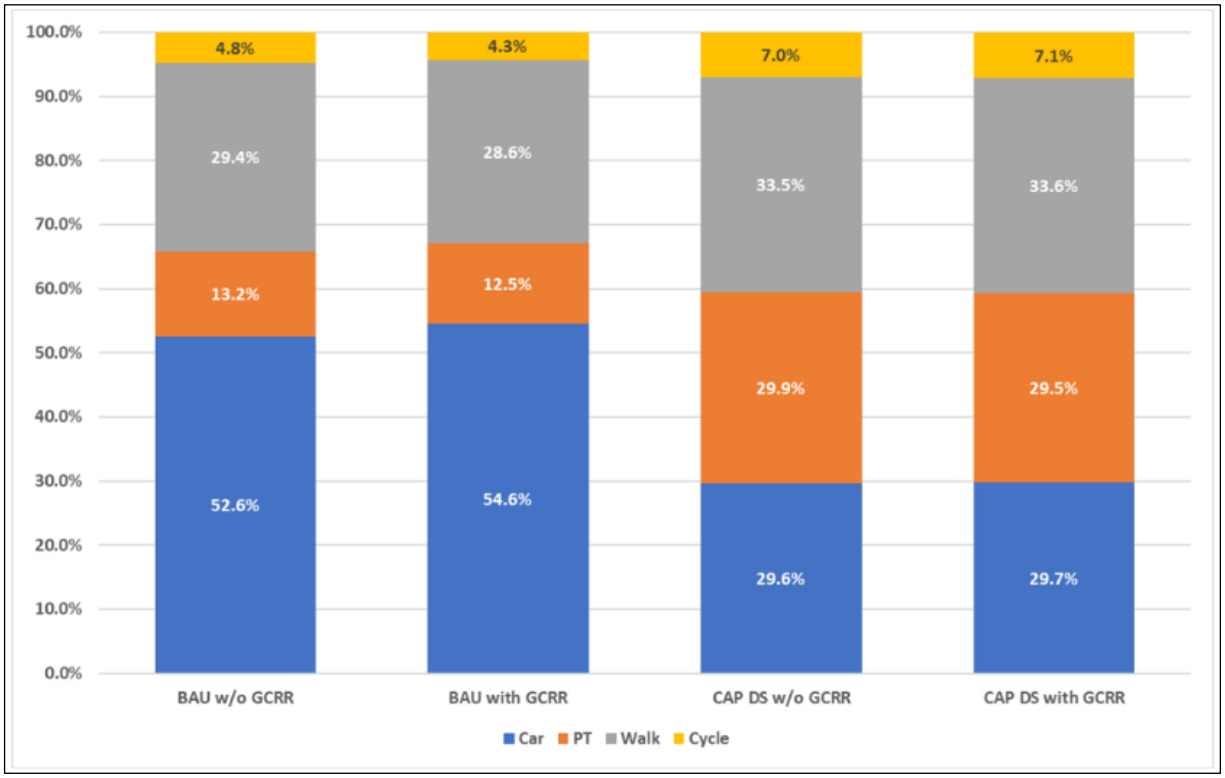

Plate 5.5 Mode Share Results, BAU vs CAP (with and without N6 GCRR) (extract from Part IV of 2025 RFI Response)

Both of these scenarios ('Business as Usual' ("**BAU**") and 'CAP Do-Something' ("**CAP DS**")) were modelled with and without the N6 GCRR in place. The figure shows that, in the BAU scenarios, the N6 GCRR leads to an increase in the car mode share of 2%, which is also consistent with the mode share analysis set out in Chapter 6 of the Updated EIAR. In that regard, Section 6.8 of Chapter 6 of the Updated EIAR details what induced traffic is and outlines the various types of induced traffic and the benefits/outcome of each type, and explains the increased car mode share (in the absence of CAP demand management measures) as follows:-

> *"The results of the analysis indicate that the implementation of the Project in the `Do-Something' scenario will result in an approx. 2% increase in car use (after the 50% increase in the city's population) when compared to the `Do-Minimum' Scenario. What is not evident from reading this table in isolation are the factors behind the choice of mode decisions. In the Do-Minimum Scenario, significant levels of traffic congestion create a barrier to travel, constraining the economic growth of the city. The overall delay on the road network in the Do-Minimum Scenario is between 40% - 60% higher than the Do-Something Scenario with the Project in place. This highlights the positive impact of the project, in terms of reducing the level of congestion in the city, which would increase in the future as the city's population grows.*
>
> *In the Do-Minimum scenario, movements across the city for both car traffic and public transport are significantly constrained and would severely restrict the sustainable growth of the city, as set out in the NPF.*
>
> *However, with the implementation of the Project, these restrictions on connectivity and growth are removed resulting in significant positive impacts, including:*
>
> - *It will facilitate sustainable modes of travel, and create a favourable environment for sustainable travel, by removing car and HGV traffic volumes from the city centre*
> - *It will provide a safer environment for vulnerable road users*
> - *It will lead to a healthier environment for residents and visitors to Galway due to a reduction in harmful emissions in the city centre"*

The submission also highlights (in a summary table to accompany Plate 5.5) that the demand management measures assessed in the CAP DS scenario result in a significant reduction in car mode share (reduced to approximately 30%) both with and without the N6 GCRR included. In this regard, as set out in the Section 15 Report, the inclusion of the proposed N6 GCRR in this scenario, with the CAP24 measures (fourth bar in graph), effectively results in no change in this car mode share (29.7%), thus giving an equivalent significant reduction in the car mode share. The fact that the introduction of the proposed N6 GCRR in the CAP DS Scenario does not lead to an increase in car mode share demonstrates that, under the CAP DS scenario and as part of an overall transport strategy, the proposed N6 GCRR is not inducing additional traffic, and therefore the additional capacity in the network created by the construction of the proposed N6 GCRR is being used for strategic traffic movements and traffic movements that are not conducive to walking, cycling or public transport as a mode choice, thereby freeing up road space elsewhere for public transport to operate optimally and active modes to travel safely.

Sections 5.2.4 to 5.2.6 of the Section 15 Report, details the benefits of introducing the N6 GCRR alongside the demand management measures included in the assessment, and how the N6 GCRR enables the full implementation of these measures.

For example, Section 5.2.4 examines the daily traffic demand crossing the River Corrib under the BAU and CAP DS scenarios. By 2030, the CAP DS scenario is forecast to show approximately 78,000 vehicles crossing the river each day. This CAP DS scenario includes three of the current four bridges being restricted for general traffic. This is because Wolfe Tone and O'Briens Bridges will be restricted due to demand management measures for the city centre, and the Salmon Weir Bridge will be converted to a sustainable transport corridor, with only the Quincentenary Bridge remaining fully open. However, the Quincentenary Bridge currently suffers from severe congestion issues, especially during peak hours and has approx. 40,000 vehicles using it on an average workday. Therefore, if another river crossing was not provided in the CAP DS scenario, the Quincentenary Bridge would have to cater for double the volume which it caters for today and would grind to a halt due to congestion, with all the attendant air quality impacts. Therefore, the additional bridge crossing provided by the proposed N6 GCRR is the key enabler for the implementation of the closure of the Salmon Weir Bridge and the further restrictions on Wolfe Tone and O'Briens Bridges as part of the CAP demand management measures, as the city would grind to a halt if these were introduced without the proposed N6 GCRR.

Currently, there is demand for approximately 80,000 vehicles crossing the river each day across all four bridges. The modelled 78,000 figure in the CAP DS is 2,000 lower than the present-day figure, whilst also catering for an approximate 30% increase in population across the Metropolitan Area by 2030 as set out under the National Planning Framework. This demonstrates that the N6 GCRR forms an integral part of the Galway Transport Strategy and is consistent with helping to achieve the objectives of CAP25, by accommodating the necessary movements of strategic traffic across the Galway Metropolitan Area, whilst facilitating the closure of Salmon Weir Bridge and restrictions on Wolfe Tone and O'Briens Bridges to general traffic, thereby creating a safer and more attractive city centre. It also aligns with the targets in Galway's County Council's and Galway City Council's adopted Local Authority Climate Action Plans.

Essentially, the N6 GCRR is the key enabler for the introduction of these restrictions on private car traffic through the city centre as to introduce all of these restrictions on all three bridges without the additional bridge, and accommodate the expected growth in population in the city (aligned with targets (50% growth from 2016 levels) from the Government's National Planning Framework), it would result in even more significant congestion than is evidenced in the delay on the network in the Do-Minimum.

It follows therefore, that it would not be sensible to implement the CAP demand management measures without the introduction of the proposed N6 GCRR, contrary to what the submission claims.

2.2.2.5 Predicted Emissions from the Construction Phase

The submission notes the change in total emissions over the construction period as presented in the Updated EIAR versus that presented at the oral hearing, and alleges that, because national carbon budgets are fixed, the carbon emissions arising from the construction of the N6 GCRR would be balanced by a reduction elsewhere.

Response

The reduction in the calculated carbon emissions arising during the construction phase of the N6 GCRR as set out in the Updated EIAR when compared to the figures presented at the oral hearing in 2020 is due to the use of a new and more accurate model, with revised emission factors.

In that regard, the basis of the emissions calculations presented at the oral hearing in 2020 was outlined in Section 6.1.2 of the Statement of Evidence of Sinead Whyte[20] as follows:- *"the construction carbon assessment included in Chapter 16 of the Updated EIAR was prepared using the UK Environment Agency Carbon Calculator, which bases emission factors on the 2010 Inventory of Carbon and Energy (ICE) database, which is one of the world's leading sources of embodied energy and carbon data. In November 2019, the University of Bath published an update to this database. Using the updated emission factors from the November 2019 ICE database and using the CESMM4 Carbon & Price Book 2013 database, the carbon emissions from the construction phase of the proposed road development have since been re-evaluated."*

Since those calculations were prepared in 2020, Transport Infrastructure Ireland (TII) has, in 2022, developed an online tool for the purposes of calculating construction phase carbon emissions for transport infrastructure schemes. This new tool has been used as the basis of the calculations set out in the Updated EIAR, which is explained as follows in Section 17.2.5.1 of the EIAR:

> *"The TII Carbon Assessment Tool (Version 3) (TII 2022) (hereafter referred to as the TII Carbon Tool) has been used to calculate the embodied carbon of materials, which incorporates the energy used in the mining or processing of the raw material and its manufacture, in terms of CO2eq. The TII Carbon Tool uses emission factors from recognised sources including the Civil Engineering Standard Method of Measurement (CESSM) Carbon and Price Book database (CESSM, 2013). For a small number of materials not covered by the TII Carbon Tool, the UK Environment Agency's (UKEA) Carbon Calculator has been used to estimate carbon emissions due to construction activities in terms of CO2eq. In addition, the UKEA Carbon Calculator has been used to estimate embodied carbon associated with the transportation of materials to and from site. The carbon emissions are calculated by multiplying the emission factor by the quantity of the material that will be used over the construction phase. The varying, relevant transport distances have been included in the calculations for the transportation of materials to and from site."*

TII developed this tool as it found that existing tools were not sufficiently specific to meet the requirements of TII, either in their scope and boundary of reporting, or for use in Ireland. The Tool is designed to provide the specificity required for use in Ireland and presents a more robust and accurate calculation of the construction phase carbon emissions arising from the proposed N6 GCRR that was previously possible using the UK Environment Agency Carbon Calculator. Sources of information specific to the Irish situation include Sustainable Energy Authority of Ireland (2019), Conversion Factors.

In those circumstances, the reduction in the predicted construction phase carbon emissions arising from the proposed N6 GCRR since the oral hearing in 2020 is to be expected, and reflects the use of this new, more accurate model and the revised emission factors as well as the additional mitigation measures which were included in the Updated EIAR, for example the use of steel which comprises a minimum of 70% recycled steel.

Further, in relation to the suggestion that the carbon emissions arising from the construction of the N6 GCRR would have to be balanced "by a reduction elsewhere", and that it could be necessary to forgo the building of houses, as is clearly set out above, the balancing of priorities as between the Transport Sector and the Residential Built Environment Sector is the responsibility of Government in setting the relevant sectoral emissions ceilings, which determine how the Carbon Budgets are to be divided among the different sectors of the economy. Therefore the carbon emissions arising from the construction of the N6 GCRR will have no impact on the sectoral emissions ceiling for the Residential Built Environment Sector or the available carbon budget for the construction of housing, and there is no basis for the suggestion that the construction of the N6 GCRR could lead to a reduction in construction of new homes.

[20] https://www.n6galwaycityringroad.ie/sites/default/files/media/GCRR_4.03_34.3.6_BoE_AQ%20and%20Climate.pdf

2.2.2.6 Predicted emissions from the operation of the proposed N6 GCRR

The submission queries the change in total emissions from the operation of the proposed N6 GCRR in the various submissions by the applicant from 2018 to 2025 and asks for a comprehensive explanation for what is claimed to be the remarkably low increase in the predicted CO_{2eq} emissions included in the Updated EIAR compared to the predictions included in previous submissions. Other queries on the data in the Updated EIAR are also raised.

Decrease in annual emissions between the 2031 and 2046 assessment years

The submission reproduces Table 17.8 of Chapter 17 Climate[21] of the Updated EIAR, which sets out the predicted operational phase CO2 emissions for the Design Year (2031) and Opening Year (2046), and alleges that the assumptions behind the predicted reduction in annual emissions between the 2031 and 2046 assessment years are not stated.

This is incorrect. Table 17.8 of the Updated EIAR sets out that the predicted annual emissions in the Do-Minimum Scenario would be 493,796 tonnes of CO_{2eq} in 2031, reducing to 125,392 tonnes of CO_{2eq} in 2046, while in the Do-Something Scenario the emissions reduce from 498,381 tonnes of CO_{2eq} in 2031, to 126,054 tonnes of CO_{2eq} in 2046. The reason for this reduction is clearly set out in Chapter 17 of the Updated EIAR, which states, immediately below Table 17.8, that: *"It is noted that increases in CO_{2eq} emissions are significantly lower in 2046 when compared to 2031. This is due to future projections of reduced CO_{2eq} emissions resulting from EU regulation and increased electric vehicle use."* In particular, this predicted reduction in emissions between 2031 and 2046 can be attributed to the assumptions made regarding the change in fleet/transition to electric vehicles, which is expected to have occurred by 2046. By 2046, the ENEVAL traffic model assumes that the car fleet is 91% electric, given the target to achieve net zero emissions by 2050 at the latest.

Response – Quantum of emissions arising from the operation of the proposed N6 GCRR

The submission goes on to suggest that the figure of 498,371 tonnes of CO_{2eq}, which is the predicted annual emissions of CO2eq in the Do-Something Scenario as set out in Table 17.8 of the Updated EIAR represents emissions *"arising from the operation of the proposed road development"* and says that this *"appears to be extraordinarily high"*.

It appears that Mr. Mulligan has misunderstood this figure and believes that the figure of 498,371 tonnes of CO_{2eq} can be attributed to the operational performance of the N6 GCRR, which is not the case.

In fact, the value of 498,371 tonnes quoted represents the total tonnes of CO_{2eq} emitted from transport across the entire area used for the calculation of emissions. The area used is shown in Plate 5.4 of Part IV of 2025 RFI Response[22] as reproduced below and equates to approx. 3,110km^2. This area was selected as it is the area which the proposed N6 GCRR has an influence on traffic movements; outside of this area, there is no change.

[21] https://www.n6galwaycityringroad.ie/sites/default/files/media/Updated%20EIAR%20Chapter%2017.pdf

[22] https://www.n6galwaycityringroad.ie/sites/default/files/media/Part%20IV%20of%202025%20RFI%20Response%20CAP-%20web.pdf

Plate 2.1 N6 GCRR Area of Influence - used for emissions assessment

This quantum of emissions arising across such a wide area of County Galway cannot be attributed to the operation of the N6 GCRR and, therefore, the comparisons drawn in the submission between this overall emissions figure and the 2018 baseline emissions figures in Galway County Council's Local Authority Climate Action Plan 2024-2029 and Galway City Council's Local Authority Climate Action Plan 2024-2029 are not relevant and do not align with the study area of the climate assessment. The study area shown in Plate 2.1 represents an area where changes in traffic may arise due to the implementation of the proposed Project. It has been selected to ensure that all traffic variations (direct and indirect) arising are captured in the assessment. This allows for a full representation of the potential traffic and associated climate effects. There is no anomaly in this respect as suggested in the submission. The Galway City CAP provides baseline emissions in Table 3 for 2018. The data includes for all sources of emissions from sectors such as industry, residential agriculture and transport. The emissions are computed from sources within the Galway City boundary only. Similarly, the Galway County CAP, in Table 3 of the Plan provides baseline emissions for 2018. The data includes for all sources of emissions from sectors such as industry, residential agriculture and transport. The emissions are computed from sources within the Galway County boundary only (excluding Galway City). Both CAPs commit to achieving a 51% reduction in emissions by 2030 relative to 2018 baseline.

There is no basis for the suggestion in this submission that: *"The applicant has stated that the proposed N6 Ring Road will generate 498,381 tonnes of CO2eq in the DS Scenario in 2031."* The 'Change DM to DS' value set out in table 17.8 of 4,584 tonnes of CO_{2eq} is the difference between the Do-Minimum Scenario and the Do-Something Scenario which equates to 0.0764% of Ireland's transport budget in 2030. This is the quantum of emissions that can be attributed to the operational performance of the N6 GCRR, as it represents the change in emissions as a result of the scheme becoming operational i.e. introduced into the Do-Something and not being present in the Do-Minimum.

As set out in Table 17.8 of the Updated EIAR, this amounts to a predicted increase in emissions of 0.93% in 2031. The suggestion in the submission that the increase in emissions is "extraordinarily high" is without any substance.

Response – Change in operational emissions between Do-Something and Do-Minimum between the 2018 EIAR and the Updated EIAR

The submission highlights that the predicted operational phase emissions set out in the Updated EIAR submitted as Part VI of the 2025 RFI Response are substantially less than those previously submitted by the applicant, and asks for an explanation for this reduction. A comprehensive explanation of the various factors that lead to this decrease in predicted emissions is set out below, which fully addresses the issue raised in this regard.

The reduction arises due to the following reasons, each of which is addressed in more detail below:

- Change in infrastructure assumptions in the Do-Minimum/Without Scheme scenario
- Increase in population figures which have been used in the Updated EIAR
- Adoption of updated guidance and associated tools

Change in infrastructure assumptions in the Do-Minimum/Without Scheme scenario

The first reason for the reduction in operational phase emissions is the change in infrastructure assumptions in the Do-Minimum/Without Scheme scenario between the 2018 EIAR and the Updated EIAR. The Do-Minimum scenario needs to include planned and committed schemes. Since the preparation of the 2018 EIAR, the status of certain projects has changed and they have become committed or have been submitted for approval and therefore have been included in the Do-Minimum Scenario in the Updated EIAR. This change in status of projects is taken into account in both the Do-Minimum and the Do-Something scenarios and has a big impact on the levels of congestion experienced in the Do-Minimum scenario in particular, and on the average speeds of vehicles in that scenario. This means that the overall emissions predicted in the Do-Minimum scenario have increased since the 2018 EIAR due to increased levels of congestion, and the operation of the N6 GCRR in the Do-Something scenario, which operates to relieve that congestion, now results in a significantly smaller net increase in emissions. This is explained in more detail below.

In Section 6.4.5 of Chapter 6 of the Updated EIAR, the details of the schemes included in the Do-Minimum scenario are provided. These include elements of the Galway Transport Strategy including the roll-out of the BusConnects programme for the city, for example the Dublin Road scheme and the Cross-City Link scheme. Previously, for the purposes of Sections 5.2.2, 6.2.2, 6.3.2, 6.4.3 and Table 7.4.7 of Appendix A.6.1 Traffic Modelling Report of the 2018 EIAR,[23] these schemes were considered in the context of a sensitivity test rather than as part of the Do-Minimum scenario in circumstances where they were not committed projects at that time.

The addition of these schemes into the Do-Minimum scenario in the Updated EIAR represents a change from previous submissions. The BusConnects Cross-City Link scheme, which was approved by An Bord Pleanála (now An Coimisiún Pleanála) in October 2024, will restrict access to general traffic on the Salmon Weir Bridge between the hours of 7a.m. and 7p.m. on weekdays. This restriction will help to create a sustainable transport corridor through the Eyre Square area and help facilitate the large increase in cross-city bus services planned as part of the BusConnects programme for the city (a 50% increase in services) (the increase in bus services will be further enhanced by the reduction in traffic flows along key bus routes that will arise from the operation of the N6 GCRR, as set out in Table 5.5 of the Section 15 Report).

As stated in Section 6.3.2 of Chapter 6 of the Updated EIAR, during the hours of 7a.m. and 7p.m. on weekdays, the Salmon Weir bridge carries traffic volumes of approximately 12,000 which accounts for ~20% of the traffic volumes across all four bridges during those hours. A significant portion of these 12,000 vehicles would be likely to use the Quincentenary Bridge instead in the future to cross the city, notwithstanding that the Quincentenary Bridge itself suffers from severe congestion issues, especially during peak hours.

[23] https://www.n6galwaycityringroad.ie/sites/default/files/media/A.6.1.pdf

Consequently, by closing the Salmon Weir Bridge to general traffic in the Do-Minimum scenario, without providing any additional river crossing, the current significant traffic issues which are experienced in the city are likely to get worse. When this Salmon Weir Bridge closure (in the Do-Minimum scenario) is combined with the expected growth in population in the city (aligned with targets (50% growth from 2016 levels) from the Government's National Planning Framework), congestion levels are observed to rise significantly in comparison to figures previously submitted by the applicant. Consequently, this increased congestion contributes to reducing the difference in stated emissions between the Do-Something (with N6 GCRR) and the Do-Minimum (without N6 GCRR), compared to previous figures submitted.

The below figure illustrates the effect of the increased congestion, in terms of the amount of emissions produced per km at differing speeds, for different Euro standard petrol cars. The figure shows that the highest emissions are produced at lower speeds <20km/h, which would likely be the speeds travelled in high levels of congestion. For example, at the aforementioned speeds, there is an 31% increase in emissions produced per kilometre at the Do-Minimum speed, relative to the higher Do-Something (with GCRR) speed, for Euro 6 standard petrol cars.

In the morning peak hour, the average speed in the Opening Year (2031) Do-Minimum scenario (without N6 GCRR) is 19km/h in the Updated EIAR. In Table 6.12 of Chapter 6 of the Updated EIAR, with the N6 GCRR included in the (2031) Do-Something scenario, the average speed increases from 19km/h to 27km/h. Both of these speeds are shown on the figure below by dotted lines. At 19km/h, for each Euro standard petrol car, more emissions are produced per kilometre than at 27km/h.

By comparison, in the 2018 EIAR, the equivalent value in the morning peak hour for the average speed for the Design Year, 2039 Do-Minimum scenario, is 28.7 km/h, as in the Do-Minimum scenario modelled at that time, the Salmon Weir Bridge was open and still catering for through traffic, so there was less congestion, which resulted in lower emissions, and noting that it is 8 years later than the 2031 Do-Minimum currently assessed for the Opening Year.

The average speed in the (2031) Do-Minimum scenario now modelled in the Updated EIAR is 33% lower than the value in the 2018 EIAR for the morning peak hour in 2039 as the Salmon Weir Bridge has restrictions on traffic and the N6 GCRR is not included in the (2031) Do-Minimum to relieve the congestion.

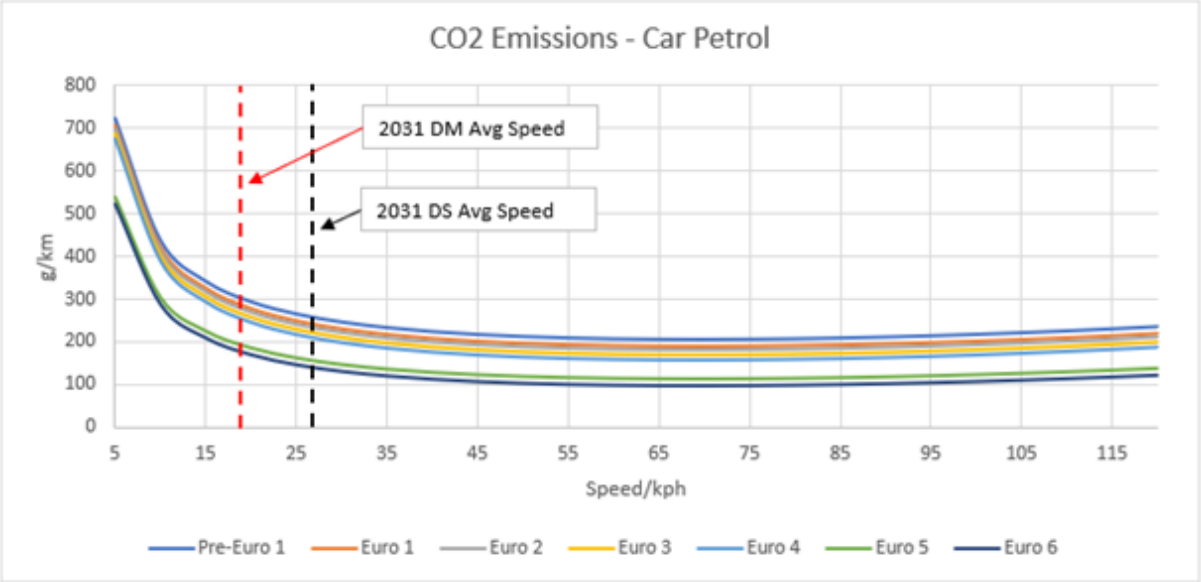

Plate 2.2 CO_2 Emissions rate at different speeds for 2031 Do-Minimum and Do-Something[24]

The table below shows a direct comparison of the CO_2 emissions produced in both the (2031) Do-Minimum and (2031) Do-Something scenarios, for different Euro standard petrol cars. There are more trips in the (2031) Do-Something scenario than the (2031) Do-Minimum scenario. However, the figures show that at the more congested speed in the morning peak hour which is more prevalent in the (2031) Do-Minimum, more

[24] Transport Research Laboratory (TRL) rates

emissions are produced per kilometre and this therefore contributes to a smaller difference in the overall emissions between the Do-Minimum (without N6 GCRR) and Do-Something (with N6 GCRR) scenarios, relative to previous figures submitted by the applicant.

Table 2.1 CO_2 emissions in the (2031) Do-Minimum and (2031) Do-Something scenarios for different Euro standard petrol cars

Type	CO2 Emissions per km from DM Average Speed (grams)	CO2 Emissions per km from DS Average Speed (grams)	Reduction in Emissions with N6 GCRR	Difference (%)
Pre-Euro 1	311	257	53	21%
Euro 1	296	243	53	22%
Euro 2	288	234	53	23%
Euro 3	274	221	53	24%
Euro 4	262	209	53	26%
Euro 5	199	155	44	28%
Euro 6	185	141	44	31%

Increase in population figures which have been used in the Updated EIAR

The second reason contributing to the differences, which is connected to the first point, is that the 2025 assessment takes a higher level of population for the city into consideration. As outlined in Table 6.1 of the Updated EIAR, the population figure assessed was approximately 135,000 which is an increase of ~ 14,000 over the 2019 RFI and an increase of approx. 50,000 over the 2018 EIAR.

For context, the population within the Galway City Council boundary, according to the 2022 Census, was approximately 84,000. The population increase to 135,000 would represent an increase of 51,000 or a 61% increase relative to 2022. These population forecasts are aligned to the National Transport Authority's NPF Reference Case scenario for the city. This increase in population means more trips are placed on the network and, thus, feeds into the first point above, which results in more congestion on the network and increased emissions in the Do-Minimum (without N6 GCRR) scenario.

Adoption of updated guidance and associated tools

The third and most fundamental reason for the changes in the outputs of the assessment is the changes in the modelling tools and the inputs used to inform those models.

The UK DMRB regional model was used for the purposes of calculating changes in carbon emissions to inform the preparation of the 2018 EIAR. The model was developed in 2007 and was used in the absence of any Irish modelling tool. The model only forecast emissions up to 2020, so 2020 forecasts were used for the future years 2024 and 2039 resulting in highly conservative assumptions. The assessment considered links where projected increases in AADT of greater than 5% were predicted to arise. It did not consider links where reductions in traffic volumes are predicted. A total of approximately 50 links were considered in the assessment. This is very different to the methodology used in the Updated EIAR assessment contained in Chapter 17. The operational phase assessment included a much greater extent of affected links, including those where decreases in volumes occurred. In addition, as mentioned above the reduction in emissions can be attributed to the assumptions made regarding the change in fleet/transition to electric vehicles, which is expected to have occurred by 2046 (where previously a Design Year of 2039 was used). By 2046, ENEVAL, the new Irish specific large scale model that has become available since the submission of the EIAR in 2018, assumes the car fleet is 91% electric, given the target to achieve net zero emission by 2050 at the latest. The approach of utilising the full modelled traffic area using the most recent emission factors and fleet assumptions generates a much more robust assessment which is significantly more accurate than that prepared in 2018.

In that regard, the assessment tools used to calculate the operational emissions in the various submissions between 2018 and 2025, and how these have evolved over time, are outlined in Table 2.2. Section 17.2.6 of the Updated EIAR also provides a summary comparison of the methodologies used in the 2018 EIAR and the Updated EIAR, accounting for the adoption of updated guidance and associated tools used for calculating and estimating carbon emissions.

Table 2.2 Operational phase climate assessments

Assessment	Modelling Tool	Comment
2018 EIAR (Chapter 16)	UK DMRB Regional Model	The UK DMRB regional model was used for the purposes of calculating changes in carbon emissions. The model was developed in 2007 and was used in the absence of any Irish modelling tool. The model only forecast emissions up to 2020 – so 2020 forecasts were used for the future years 2024 and 2039 resulting in highly conservative assumptions. The assessment considered links where projected increases in AADT of greater than 5% were predicted to arise. It did not consider links where reductions in traffic volumes are predicted. A total of approximately 50 links were considered in the assessment.
2019 RFI	UK DMRB Regional Model	This is the same as the UK DMRB Regional Model mentioned above but was updated as part of the 2019 RFI Response based on revised traffic data.
2020 Oral Hearing	UK DMRB Regional Model	Again, this is the same UK DMRB Regional Model, but was further updated at the oral hearing, as additional data was provided on carbon emissions due to the increased use of EVs.
Updated EIAR (2025)	ENEVAL NTA Model	The ENEVAL model is a tool developed by the NTA to assess the emissions from different scenarios. The emissions outputs from the ENEVAL model cover the full extent of the transport model, ensuring that all direct, indirect, positive and adverse effects are accounted for – resulting in a better representation of emission projections. Carbon emissions for all scenarios directly outputted from the transport model allowing a greater representation of impacts across a wider study area. The study area, as pertains to the traffic analysis and, subsequently air quality modelling, is described in Plate 5.4 of Part IV of 2025 RFI Response. This area equates to approximately 3,110km^2.

For completeness, we have set out in Table 2.3 below, a version of the table included on page 7 of this submission, and set out in summary form, the reason for each change in predicted emissions identified by the submission.

Table 2.3 Reasons for differences in emissions

Assessment	Year	Percentage of EVs in the car fleet	Change in emissions DM to DS (tonnes/annum)	Reason for Change
2018 EIAR (Chapter 16)	2024	0%	+26,059	Using UK DMRB Regional Model (2007)
	2039	0%	+35,776	Using UK DMRB Regional Model (2007)
2019 RFI	2039	0%	+55,783	Increased due to revised traffic data arising from publication of NPF, which significantly increased the population in Galway
	2039	0%	+54,402	Increased, due to revised traffic data arising from publication of NPF which significantly increased the population in Galway
2020 Oral Hearing	2039	0%	+45,627[25]	As per the 2019 RFI with updates to links considered, resulting in a reduction in predicted emissions
	2039	22%	+37,214	As per the 2019 RFI, however, additional data was provided on carbon emissions due to the increased use of EVs, resulting in a further reduction in predicted emissions
	2039	32%	+33,435	As per the 2019 RFI, however, additional data was provided on carbon emissions due to the increased use of EVs, resulting in a further reduction in predicted emissions
Updated EIAR (2025)	2031	24%	+4,584	Calculated using the new, more accurate, and Irish focussed ENEVAL model Carbon emissions for all scenarios directly outputted from the transport model allowing a greater representation of impacts across a wider study area. The study area, as pertains to the traffic analysis and, subsequently air quality modelling, is described in Plate 5.4 of Part IV of 2025 RFI Response This results in a much more accurate and robust calculation of the predicted carbon emissions, and a smaller increase in emissions is predicted for all of the reasons described above
	2046	91%	+662	As immediately above

Therefore, in light of what is set out above, the reason for the reduction in predicted carbon emissions in the 2025 Updated EIAR, when compared against those predicted in the 2018 EIAR and subsequent submissions, has been clearly set out and there is no ambiguity or lack of clarity in relation to the source of those reductions. This fully addresses the queries raised in the submission in this regard.

Response – Power to Implement a 100km/h Speed Limit

The submission notes that Chapter 17 of the Updated EIAR refers to the implementation of a 100km/h speed limit on the proposed N6 GCRR, which will reduce the carbon emissions arising in the operational phase. While the submission alleges that the applicant does not have the authority to set speed limits on national roads, this is not the case.

[25] Updated from the data presented in the RFI response taking account of all affected roads within the model zone as opposed to the roads where there is a 5% increase in traffic predicted.

The speed limits that apply to roads by default (depending on the type of road in question) are set out at sections 5 to 8 of the Road Traffic Act 2004 (as amended) (the "2004 Act"). In that regard, pursuant to section 7 of the 2004 Act, the default speed limit in respect of national roads is 100km/h, and under section 8 of the 2004 Act, the default speed limit in respect of motorways is 120km/h.

Therefore, the motorway section of the proposed N6 GCRR will be subject to a default speed limit of 120km/h. However, section 9(1) of the 2004 Act provides that:-

> *"A county council or a city council may make bye-laws specifying in respect of any specified public road or specified part of a public road or specified carriageway or lane of a public road other than a national managed road, part of a national managed road or carriageway or lane of a national managed road within its administrative area the speed limit which shall be the speed limit on that road or those roads for mechanically propelled vehicles."*

In that regard, section 9(2)(e) of the 2004 Act provides that a speed limit of 100km/h may be specified as a Special Speed Limit (and for the avoidance of doubt, the proposed N6 GCRR is not *a "national managed road"* within the meaning of the 2004 Act). Therefore, Galway City Council and Galway County Council each have the statutory power to make Special Speed Limit Bye-Laws in respect of the parts of the proposed N6 GCRR within their functional area and no difficulty arises in that regard as suggested in this submission.

2.2.3 Compatibility of the Galway City and County Councils' Local Authority Climate Action Plans and the Galway Transport Strategy with the Climate Action Plan 2025

Both Galway City and County Councils have a Local Authority Climate Action Plan, and both of these documents state the goal of achieving a 51% reduction in greenhouse gas emissions relative to a 2018 baseline by 2030, which is in line with the target set out in CAP25 (and previously CAP24). Both plans support the implementation of the GTS. The submission states that supporting such measures '*is not the same as accepting responsibility for achieving any measurable reductions in emissions,*' and also states that the GTS preceded the publication of any of the Climate Action Plans and, therefore, cannot claim to be aligned with CAP25.

Response

It should be noted that the 51% figure is not broken down by sector within these Local Authority Plans, unlike CAP25 which is sector-specific, and so it is not possible to identify from these plans what level of reduction in emissions is required to be achieved in the Transport Sector.

However, as mentioned above, the overall target in each plan of achieving a 51% reduction in greenhouse gas emissions relative to a 2018 baseline by 2030 is aligned with CAP25 (and previously CAP24). The analysis set out in the Section 15 Report clearly demonstrates how the delivery of the proposed N6 GCRR, as part of an overall transport solution for Galway, is consistent with the achievement of the targets set out in CAP25 (and previously CAP24) at a national level. As the target in these Local Authority Climate Action Plans is the same as the overall national target set out in CAP25 (and previously CAP24), it follows that the delivery of the proposed N6 GCRR is also consistent with the Local Authority Climate Action Plans.

In that regard, as clearly set out in the Section 15 Report, the development of the proposed N6 GCRR aligns with the principles of sustainable road development and supports the reallocation of existing road infrastructure for active travel modes and public transport routes, all of which aligns with NIFTI and CAP25 (and previously CAP24). In particular, the updated transport modelling undertaken for the purposes of the Section 15 Report and the Updated EIAR has shown that the proposed N6 GCRR is still required as an integral part of the GTS, and that when the proposed N6 GCRR is delivered alongside a series of demand management measures identified in CAP25 (and previously CAP24), there will be a 43% reduction in carbon emissions from transport by 2030 within the area of influence of the proposed N6 GCRR when compared to 2018 levels.

This is clearly fully aligned with the targeted 51% reduction set out in the Local Authority Climate Action Plans, and there is no basis for suggesting that, where a project is aligned with and contributes to achieving the targets set out in the Local Authority Climate Action Plans, but falls short of fully achieving those targets, that project cannot be approved or is not consistent with the Local Authority Climate Action Plans.

Indeed, included in the Galway City Council Climate Action Plan is a stated target to deliver a Decarbonisation Zone (DZ) within the local authority area to act as a test bed for a range of climate action measures, which will assist in the delivery of the National Climate Objectives. There is also an action within the plan to conduct a demand management study for the zone, to identify opportunities to reduce car travel. The timeframe for this study is 2-3 years and the plan covers the period 2024 - 2029.

This upcoming study is likely to build upon the measures which were assessed alongside the N6 GCRR and detailed in the Section 15 Report. Those measures were adopted from the modelling exercise undertaken to inform CAP23, and further measures that may be identified under this study would assist in meeting the gap to target in terms of emissions reductions. Any such further measures would be enhanced and supported by the delivery of the proposed N6 GCRR which will free up road space in the city centre to encourage and facilitate modal shift to active travel and public transport, and the effective implementation of demand management measures in the city centre.

The allegation in the submission that the GTS *"cannot therefore claim to be aligned with the Climate Action Plan 2025"* is fundamentally misconceived. While clearly the GTS was prepared before the preparation of the various climate action plans, that does not mean that it is not aligned with CAP25. Indeed, as noted above, the analysis set out in the Section 15 Report clearly demonstrates that the delivery of the proposed N6 GCRR alongside the demand management measures set out in Part IV of the RFI Response document and other national level measures, contributes significantly towards the achievement of these national level targets, and that the proposed N6 GCRR as an integral part of the GTS is consistent with CAP25 (and previously CAP24).

As the modelling that informed this analysis included both the proposed N6 GCRR and the other measures set out in the GTS, it demonstrates that the GTS, while it pre-dates the preparation of the Climate Action Plans, is fully aligned with and supports the delivery of the measures set out in CAP25 (and previously CAP24) and contribute significantly to the achievement of the national targets set out therein.

2.2.4 Whether the N6 Galway City Ring Road will be an effective solution to congestion in the Galway Metropolitan Area

The submission refers to the recently published 'The Economic Cost of Congestion in the Regional Cities' paper, by the Department of Transport (DoT) in May of 2025 (the **"DoT Paper"**). The submission proceeds to discuss the findings of this paper in detail, with specific references made to sections of the DoT paper that are *'to the effect that the bypass will not fix the congestion problem'*.

Response

In order to respond to this particular section of the submission, it is necessary to provide some context regarding the DoT Paper. This research represents a continuation of analysis undertaken in the Greater Dublin Area (GDA) in 2017 (and later updated in 2023), with a similar methodology being applied to the regional cities (Galway, Limerick, Cork, and Waterford). While the paper does conclude that congestion will increase in the regional cities modelled in the report, namely Galway, Cork and Waterford, in the coming three decades, driven by population and economic growth, and states that ' *increased congestion is an unavoidable consequence of continued economic and population growth',* in order to understand that conclusion, it is necessary to first understand the purpose of the DoT Paper, and the nature of the analysis undertaken to inform it.

First and foremost, the modelling undertaken to inform the DoT Paper above does not account for the demand management measures contained within CAP25 (and previously CAP24) in the regional cities. That is because the paper was prepared, not to assess the likely future scenario with demand management measures in place, but to inform the preparation of demand management strategies and to help identify the scale of demand management measures likely to be required. In that regard, the paper clearly states in the *Introduction* section that: '*The results of this study will help inform the scale of interventions required to address issues associated with congestion and provide an evidence base for policy development'*. Again, in Section 2.2 (relating to Climate Policy) the paper states that: '*This analysis will help set out the extent of congestion being experienced across the regional cities and help inform the degree of intervention required to address it'*.

The submission seeks to use certain statements in the DoT Paper to argue that the N6 GCRR *"will not be an effective solution to congestion"* in Galway, but that is not the correct approach to this paper. The DoT Paper does not, and is not intended to, reflect the impacts of the N6 GCRR when delivered as part of an overall transport solution for Galway. Accordingly, contrary to what is suggested, it does not support the position advanced in the submission.

The NPF 2018 growth projections formed the basis of a 2040 'Core' scenario and a 2040 'Alternative Future' scenario. This 'Alternative Future' scenario is based on research undertaken by the NTA and published in November of 2020 relating to potential future trends in remote working seen to emerge prior to Covid-19 and which were expected to continue. This alternative scenario is based on assumed reductions to trip generation across various user classes (i.e. journey to work, journey to education, etc.). The NTA research outlining this 'Alternative Future' scenario is available at https://www.nationaltransport.ie/wp-content/uploads/2021/03/Alternative-Scenario-Development-Note-v-6.1_Final.pdf. It is noted that this research was published prior to CAP24 and CAP25.

In the DoT Paper, the 'Alternative Future' scenario assessed is the only additional demand management/behavioural change measure that has been investigated as a potential mitigation or response to the expected increase in congestion in the regional cities. The analysis is based on the prevailing transport strategies in place in each of the cities (with the Galway Transport Strategy (GTS) in place for Galway City).

Therefore, both the 2040 Core Scenario and the 2040 Alternative Future Scenario considered in the DoT Paper include the delivery of infrastructure including the N6 GCRR, but neither scenario accounts for the delivery of the extensive additional demand management measures necessitated by the Climate Action Plans 2024 and 2025. The traffic modelling for Cork City in the DoT Paper was undertaken by Systra, who also are responsible for the transport assessment for the proposed N6 GCRR, and as the methodology was the same for the modelling for all three cities in the DoT Paper, Systra are confident that the 2040 Core Scenario and the 2040 Alternative Future Scenario considered in the DoT Paper do not account for the demand management measures contained within CAP25 (and previously CAP24).

The analysis concludes that planned infrastructure developments in Galway in the period between 2030 and 2040 are seen to relieve congestion, but the population and economic growth planned sees the overall cost of congestion increase. The GCRR is included in the analysis as an infrastructural element of the GTS. The analysis states that *'the bypass will provide alleviation from congestion in the short-term…….however, increased transport demand will eventually result in the bypass becoming congested without further intervention'*. This is unsurprising in circumstances where the demand management measures required to deliver CAP targets alongside this significant population growth are not included in the analysis.

As indicated in the DoT Paper, the purpose of the research is to help to determine the level of further intervention required to mitigate the increase in congestion and associated economic costs of same, and to provide an evidence base for policy development in support of same. The significant impact of the 'Alternative Future' scenario, which contains one specific demand management measure (greater uptake of remote working) shows that demand management measures are a critical item to consider in tandem with infrastructure investment in order to address congestion, and underscores the significant role that demand management measures can play in relieving congestion when delivered in tandem with the necessary infrastructure development required to free up road space for public transport and active modes.

In that regard, in April 2024, the Government published 'Moving Together – A Strategic Approach to the Improved Efficiency of the Transport System in Ireland' in draft form for consultation. The Minister's Foreword states that '*Moving Together goes hand-in-hand with the extensive range of Government investment and supports already in place or planned for public transport, walking, cycling, and electric vehicles. It will support an incremental change in travel behaviour for people who already have alternatives to the car or for those who will have more choice when investments in infrastructure are fully realised over the next few years'*.

It further states that '*that the benefits of current and future Government investment and supports in public transport, walking, cycling and electric vehicles cannot be fully realised while current levels of congestion remain.*' The introduction of the report also states that *'The Strategy is intended to provide an overarching framework for the delivery of a range of potential demand management measures that can be deployed to bridge this gap in a fair and equitable manner'* (the 'gap' referred to is the gap in emissions required to be bridged in order to meet the Climate Action Plan targets).

The draft report makes specific reference to the 2023 GDA Cost of Congestion Study, stating that the 'Alternative Future' scenario '*demonstrates that behavioural change interventions can have significant impacts in reducing the cost of congestion over the long-term'*. Indeed, the report also discussed modelling undertaken to inform the 2023 Climate Action Plan by the National Transport Authority, stating that the measures included in this analysis *'are not an exhaustive list of possible measures – they are those measures that are amenable for modelling……other measures are in the scope of this Strategy but will require further policy design. There are also a range of potential measures which are considered as part of this strategy which do not feature in the modelling assumptions but have strong potential to impact in reducing vehicle kms.'*

'Moving Together' was published for consultation in April 2024 in draft form. A final version of the Strategy is yet to be published. It is however clear that the strategy will, when published, set out a clear framework for implementation of a significant range of demand management measures and behavioural change measures intended to complement planned infrastructure investment and to ensure that the benefits of infrastructural investment can be fully unlocked. The DoT Paper on the Cost of Congestion in the Regional Cities therefore reaffirms the requirement for policy-led demand management measures to be delivered in tandem with planned infrastructure investment and to ensure that capacity that is unlocked is utilised in the most appropriate manner.

The findings of the DoT analysis are therefore entirely consistent with the findings of the 2016 Galway Transport Strategy development and of the updated analysis provided in the Updated EIAR and the Section 15 Report. The N6 GCRR is an effective and vital component of the overall transport strategy for Galway as part of a multi-modal overarching transport strategy for the overall Galway Metropolitan Area.

In that regard, the DoT Paper reaffirms the need for the pending National Demand Management Strategy (Moving Together) to establish the complementary demand management and behavioural change interventions that will be needed across the country in order to complement planned infrastructure investment and support the achievement of our stated climate action plan targets, which will include measures such as those considered and modelled alongside the proposed N6 GCRR in the Section 15 Report. The analysis contained in the Section 15 Report clearly indicates that the demand management measures assessed in the 'CAP Do-Something' scenario result in a significant reduction in car mode share – reduced to approximately 30% both with and without the N6 GCRR included. Importantly, this highlights that when, the N6 GCRR is implemented alongside demand management measures, the car mode share remains effectively unchanged. This demonstrates that the delivery of the N6 GCRR, when aligned with demand management measures, is a complementary approach, with no resultant increase in vehicle mode share.

In particular, as set out in the Section 15 Report, the delivery of the proposed N6 GCRR as an integral part of the GTS will:-

- Enable potential demand management measures within the city like car free areas and congestion charges, and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP24, supporting potential road space reallocation for sustainable modes and encourage a shift from private car trips in line with CAP24 (and now CAP25) and public realm improvements

- Facilitate demand management measures to help achieve CAP24 (and now CAP25) targets whilst ensuring a level of mobility for residents on both sides of the city
- Enable a better performing network for all modes by reducing delays across the network by 50% compared with 2023 levels, whilst not increasing the level of car trips within the metropolitan area
- Facilitate the BusConnects programme for the city, by providing another river crossing to offset restrictions on Salmon Weir bridge and enable potential restrictions on other city centre bridges via car free urban areas and congestion charges which encourages the shift from private car trips to public transport in line with CAP24 (and now CAP25)
- Accommodate the significant planned growth within city and environs in line with NPF targets (50% increase in population by 2040, compared to 2016 levels)
- Reduce the need for HGVs to travel within the city, achieving a 25% reduction in the level of HGV kilometres within the NWR338 cordon of the city which accounts for approx. 60% of the city's current population. This will benefit pedestrians, cyclists and public transport users and will result in improved air quality and supporting a safer environment for active travel trips

Further, as set out above, the key targets for the transport sector remain unchanged in CAP25 and so the analysis by reference to CAP24 above applies with equal force in relation to CAP25, as no new measures or targets have been introduced in CAP25 that would in any way alter that position. Therefore, while it is acknowledged that the N6 GCRR is not, in and of itself and without the delivery of demand management measures, a standalone solution to the problem of congestion in Galway (and was never intended to be so), and so the predictions in the DoT Paper in that regard are unsurprising, the delivery of the N6 GCRR is an integral element of any overall transport solution to address the issues identified in the DoT Paper.

Further, because the N6 GCRR was included as planned infrastructure in both the Core Scenario and the Alternative Future scenario, the DoT Paper does not give any indication of the likely cost of congestion in Galway in the future if the N6 GCRR is not delivered. In that regard, the impacts of the proposed N6 GCRR on congestion are considered and assessed in Chapter 6 of the Updated EIAR, which clearly demonstrates that the provision of the N6 GCRR is hugely beneficial for reducing traffic congestion in Galway City in both the AM and PM Peak and for reducing journey times on key routes. While not modelled in the DoT Paper, there is little doubt that, in the absence of the N6 GCRR, the cost of congestion in Galway would increase significantly more than is predicted in the DoT Paper.

Indeed, as shown in Figure 14 of the DoT Paper (reproduced below) and as stated – '*The cost of congestion decreases slightly between 2030 and 2040. This result indicates that planned infrastructural developments between 2030 and 2040 could relieve some congestion in the GMA*'. The infrastructural elements of the Galway Transport Strategy, including the N6 GCRR are seen to support planned population and economic growth in the period from 2030-2040 whilst simultaneously reducing the cost of congestion slightly in the same period.

Figure 14 - Annual Cost of Congestion

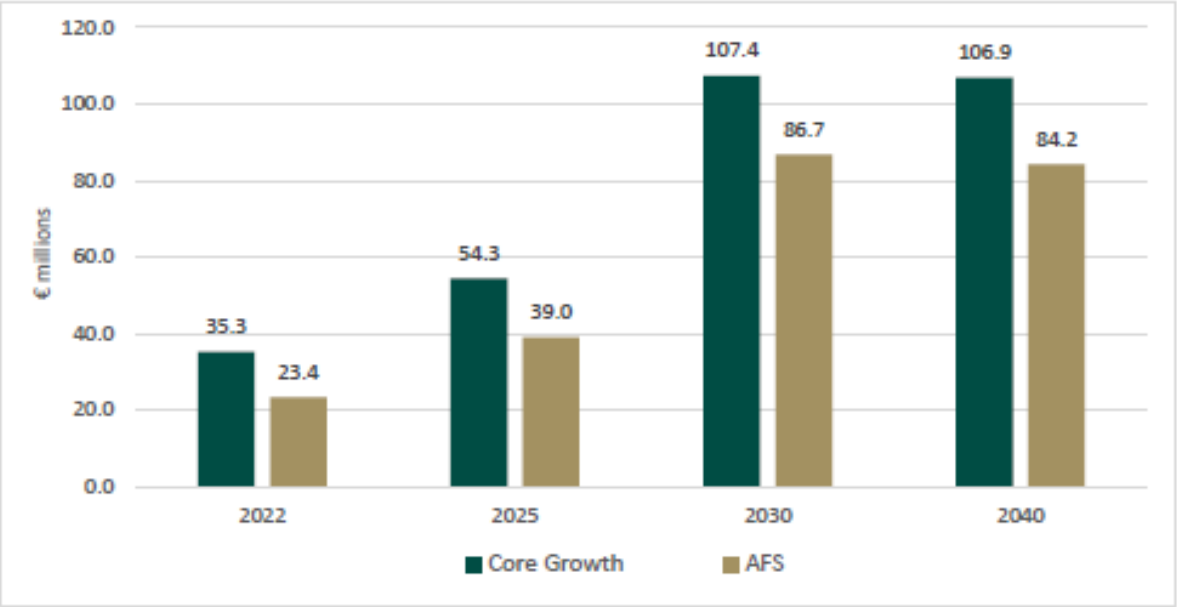

Plate 2.3 DoT Cost of Congestionin Galway (Extract Figure 14)

Therefore, in light of what is set out above, the contention advanced in the submission that the N6 GCRR is not an effective solution for congestion in Galway is not correct, and the reliance in that regard on the DoT Paper is based on a misunderstanding of the purpose and findings of that paper. It has been clearly demonstrated in this response, and in the totality of the documents before the Commission including the Updated EIAR and the Section 15 Report, that the delivery of the proposed N6 GCRR as an integral part of the GTS is a key enabler of the demand management measures that will be required to address the issues identified in the DoT Paper and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP25 (and previously CAP24).

2.2.5 The Galway Metropolitan Area Transport Strategy (GMATS)

The submission claims that the appropriate sustainable transport solution for the Galway Metropolitan Area should be informed by the Galway Metropolitan Area Transport Strategy (GMATS), which is not yet finalised.

Response

As set out in Chapter 2 of the Updated EIAR, at present the GTS is the current adopted transport strategy for Galway and its recommendations are incorporated into the Galway City Development Plan 2023-2029. The assessment of the proposed N6 GCRR has, therefore, been undertaken with regard to the infrastructure contained in the GTS. The approach in the GTS is to deliver significant improvements in active travel and develop a high-quality public transport network to support the city's planned growth by encouraging the use of other sustainable transport modes and to facilitate the efficient movement of private vehicles and freight. The GTS consists of a number of proposed measures combined under an overall vision *"to create a connected city region driven by smarter mobility"*. It is recognised within the National Planning Framework as key to achieving the 50% population growth targeted for the Galway Metropolitan Area by 2040 in the form of compact urban growth supported by sustainable transport.

The delivery of the GTS is underway, and the local authorities remain committed to the implementation of the GTS. Substantial progress has been made in advancing major elements of the strategy with an emphasis upon the delivery of sustainable measures such as cycling, walking and public transport funded by the National Transport Authority and the Urban Regeneration and Development Fund under the NDP, and Galway City Council has undertaken a wide range of important projects under the GTS since the adoption of the strategy in 2016, as detailed in Table 2.1 of Chapter 2 of the Updated EIAR. In those circumstances, the GTS is the appropriate transport strategy against which to consider and assess the applications for approval of the proposed N6 GCRR.

Further, a series of demand management measures were assessed along with the GTS (which includes the N6 GCRR) in the Section 15 Report, , meaning that the consideration of how the N6 GCRR, as part of an overall package of measures, aligns with CAP24 (and now CAP25) considered not only the provisions of the GTS itself, but also future demand management measures necessitated by the Climate Action Plans.

Therefore, the 2025 RFI Response takes cognisance of all current policies, including the GTS. Whist the GTS was published in 2016, it is a 20-year framework that runs to 2036. Each subsequent plan and policy since 2016 takes cognisance of the same principles under which the GTS was developed, and the GTS is embedded in statutory plans at all levels of the hierarchy of planning policy. Factually, the development of any future policy documents will of course be required to align with the current planning policy at each of these planning tiers at the point at which it is developed, and therefore the Commission is already fully apprised of the relevant policy hierarchy.

This well established policy hierarchy, together with the clear support for the proposed N6 GCRR set out in the GTS (which remains the current adopted transport strategy for Galway), and the findings of the Section 15 Report clearly demonstrate how all of the measures set out in the GTS, including the proposed N6 GCRR, align with and support the delivery of CAP25 (and previously CAP24). It also provides a comprehensive and robust basis for the Commission to make its determination in relation to the proposed N6 GCRR. There is simply no basis to argue that it would have been preferable for the GMATS to be completed first as suggested in this submission.

2.2.6 Conclusion

2.2.6.1 Various points

The conclusion reiterates the various points made throughout the submission which have been fully addressed and responded to above.

Response

The conclusion to this submission points to the overall conclusion of the EIA assessment set out in Chapter 17 of the Updated EIAR (as discussed above) and refers to the impacts of the proposed N6 GCRR in isolation, and of the proposed demand management measures set out in CAP25 (and previously CAP24). However, what is not addressed in this part of the conclusion is the essential role played by the N6 GCRR in supporting and facilitating the delivery of the demand management measures set out in the climate action plans, and how the proposed N6 GCRR operates as a critical part of the overall transport solution. In particular, as discussed above, the proposed N6 GCRR is the key enabler for the introduction of the restrictions on private car traffic through the city centre as to introduce all of these restrictions without the proposed N6 GCRR, yet also accommodate the expected growth in population in the city aligned with targets (50% growth from 2016 levels) from the NPF would result in very significant congestion to the point of grid-lock.

The conclusion refers once more to the recently published '*The Economic Cost of Congestion in the Regional Cities'* paper (i.e. the DoT Paper considered in Section 2.2.4 above) but, for the reasons set out above, the reliance on the DoT Paper is based on a misunderstanding of the purpose and findings of that paper. As demonstrated above, the delivery of the proposed N6 GCRR as an integral part of the GTS will enable the adoption of the demand management measures that will be required to address the issues identified in the DoT Paper and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP25 (and previously CAP24).

It is clear, therefore, that contrary to what is set out in the conclusion section, the proposed N6 GCRR will contribute significantly to the achievement of the objectives set out in CAP25 (and previously CAP24) and will assist in relieving congestion in Galway.

Finally, while the conclusion again suggests that further clarification is required in relation to the certain of the carbon emissions calculations set out in the Update EIAR, this clarification has been fully set out in Section 2.2.2.6 above and no issue arises in that regard.

Therefore, for all of the reasons set out above, the issues raised in the submission have been full addressed in this response, and there is nothing in the submission that would warrant a decision to refuse to grant to approvals sought for the proposed N6 GCRR as suggested in the submission.

Indeed, the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions, insofar as practicable, in a manner consistent with CAP25, as well as the other plans and objectives specified in section 15 of the 2015 Act including the National Climate Objective.

3. Response to ABP-318220-23: 03 Cormac Michael Rabbitt

3.1 Submission – Whole Scheme

The submission proposes an alternative alignment to the proposed N6 Galway City Ring Road (GCRR) and refers to this alternative as the "Modified Galway City Ring Road (Modified GCRR)". The submission identifies the proposed modifications and provides a comparison of the impacts of those modifications with the proposed N6 GCRR. Essentially, the Modified GCRR comprises three parts, a western section, a central section and an eastern section which are described further in Section 3.3.

For context the central section of this Modified GCRR was presented by Mr. Cormac Rabbitt, who with Mr. Stephen Dowds represented the N6 Action Group, at the 2020 Oral Hearing on Day 17, Tuesday 20 October 2020, and a copy of the submission was presented to An Bord Pleanála (now known as An Coimisiún Pleanála) at that time, refer to Page 122 of 675 of ABP's Inspector's Report for ABP-302848-18 and ABP 302885-18 dated 22 June 2021. This proposal was also presented to Galway County Council (GCC) in July 2020 during the period of adjournment of the oral hearing due to COVID and was considered by the design team in the interim prior to the resumption of the oral hearing in October 2020. This alternative for the central section, which was presented and discussed at the oral hearing in 2020 on Day 17, is referenced as Amendment 4a in this response. The design team outlined the issues with this alternative at the oral hearing and presented graphics showing Mr. Cormac Rabbitt's alternative overlaid on constraints, which are used again in the response presented in this report. Mr. Dowds acting for the N6 Action Group conceded that the proposed alternative was not perfect but noted that it merited consideration given that it avoids impacting dwellings. ABP's Inspector concluded in their report dated 22 June 2021 at paragraph 10.6.33 on pages 122-123, as follows on it:

> *"I am persuaded that while this option would address some of the traffic problems facing Galway, it would not address all of the issues that are required to be addressed as detailed in the EIAR and addressed throughout this report. In ABP-302885-18 & ABP-302848-18 Inspector's Report Page 123 of 675 particular, I am persuaded that the junction with the N59 would be problematic in terms of primacy."*

For completeness, this alternative for the central section was looked at as part of the alternatives chapter in Section 4.7.6 of Chapter 4 in the Updated EIAR given that it was raised at the oral hearing in 2020. As documented therein it was never considered by Galway County Council as a reasonable alternative due to the significant biodiversity and cultural heritage impacts associated with it, and further detail on the issues is provided in this response. However, given that this submission has presented it again, the evidence is provided in this response to demonstrate that it does not merit inclusion as a reasonable alternative for consideration.

Mr. Rabbitt's submission to the 2025 RFI Response seeks to address the issues raised by the design team, with respect to the significant impact on the existing constraints set out during the oral hearing by introducing a further proposal for the central section which is referred to by him as Amendment 4b. In addition, Mr. Rabbitt's submission adds a western section and an eastern section to the central section, so that the Modified GCRR seeks to represent an "alternative" for the full extents of the proposed N6 GCRR.

The submission also purports to provide an "assessment of Compliance with EIAR" report. This report includes the same headings as the Updated EIAR and commentary under each heading and Mr. Rabbitt outlines how he believes the Modified GCRR better aligns with legal obligations, planning framework, and public interest objectives. This response considers the contents of the submission and provides An Coimisiún Pleanála for completeness and as far as is possible, given the very little technical and other detail provided in this submission, with an analysis of the Modified GCRR put forward by Mr. Rabbitt and to explain how this is simply not a reasonable or feasible or workable alternative and why that is so.

3.2 Requirements of EIA Directive

Prior to providing an analysis of Mr. Rabbitt's alternative, it is useful to consider the obligation on Galway County Council in respect of the consideration of alternatives as set out in Article 5(1)(d) of the EIA Directive. This requires that an EIAR contains:

> "*a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment"*.

The obligation therefore on An Coimisiún Pleanála is to be satisfied that the Updated EIAR contains a description of the "reasonable alternatives" studied by Galway County Council which are relevant to the Project as presented in the 2025 RFI Response and its specific characteristics and also contains an indication of the main reasons for the option chosen taking into account the effects of the Project on the environment.

The obligation on An Coimisiún Pleanála is to be satisfied that this information that has been included in respect of the requirements of Article 5(1)of the EIA Directive in the Updated EIAR primarily addresses all likely significant effects of the option chosen, both direct and indirect, long term, short term and cumulative, on the environment and to have sufficient information as to the procedure/process followed in respect of the formulation of the Project through the consideration of reasonable alternatives.

There is no basis under the EIA Directive or at all for the proposition that any option or alternative which is identified, as in this case of the Modified GCRR as presented by Mr. Rabbitt in his submission on the 2025 RFI Response submitted by GCC and as raised by Mr. Rabbitt along with Mr. Dowds on behalf of the N6 Action Group at the oral hearing on 20 October 2020, must be subject to the same type of analysis or to the procedures provided for in Article 5(1)(d) of the EIA Directive as is required of GCC in relation to the reasonable alternatives studied by it, and there is no such provision for any such obligation or requirement on the Commission either. There is no requirement nor could it ever be appropriate to adopt an approach in respect of an alternative proposed by any third party as if the requirements of Article 5(1)(d) apply or require an alternative proposed by a third party to be subject to a procedure similar to that which was required to be complied with by GCC in terms of showing a rational and appropriate basis for its determination in respect of the particular alternative chosen.

3.3 Modified Galway City Ring Road

The route of the "Modified Galway City Ring Road (Modified GCRR)" included in the submission is a combination of (i) a section of the route of the 2006 Galway City Outer Bypass (2006 GCOB), (ii) a section of the proposed N6 Galway City Ring Road (N6 GCRR) and (iii) a new section in the central section (for which he proposes two alternatives which are referred to as Amendment 4a and Amendment 4b in this submission). Plate 3.1 shows the 2006 GCOB and the proposed N6 GCRR so that ACP can understand how Mr. Rabbitt developed the Modified GCRR by 'cutting and pasting' of what he sees as the best of these two routes and combining the two pieces then with his proposed amendment to create the Modified GCRR.

Plate 3.1 N6 Galway City Ring Road (N6 GCRR) and 2006 Galway City Outer Bypass (2006 GCOB)

The Project Description provided in Section 5.4 of the submission confirms:

1. The route of the Modified GCRR follows the route of the 2006 Galway City Outer Bypass (2006 GCOB) from the River Corrib crossing east to Garraun (Junction 4 on Plate 3.1) but the Modified GCRR adds a junction for the N83 Tuam Road which is required to fulfil the traffic distribution function.
2. The route of the Modified GCRR follows the exact same route as the proposed N6 GCRR west of the Letteragh Road (Junction 4 on Plate 3.1).
3. Two alternative routes are proposed for the Modified GCRR in the central section between the Letteragh Road (Junction 4 on Plate 3.1) and the River Corrib, which the submission claims is the flawed section of the proposed N6 GCRR.

Using the Project Description presented in Section 5.4 and the graphics shown as Amendment 4a and Amendment 4b respectively in Appendix 5 of the submission, we have prepared the route of the Modified GCRR as accurately as we can, given the quality of the graphics. The Modified GCRR, with the two options for the central section between Letteragh Road and the River Corrib, are presented on Plate 3.2 and Plate 3.3 respectively. Both proposed amendments cross the River Corrib further north than the proposed N6 GCRR with the mainline connection to the N59 prioritising traffic travelling towards Moycullen and beyond. Traffic destined for west of Galway City and Bearna is catered for via a new link road connected to the mainline by a free-flow junction.

The submission confirms that the Modified GCRR route to the east of the River Corrib is the same route as the 2006 GCOB but with the addition of a junction on the N83 Tuam Road. With the addition of the N83 Junction on the Tuam Road to the route of the 2006 GCOB, this eastern section of the Modified GCRR is the exact same as the Cyan Route Option assessed as part of the options selection process for the proposed N6 GCRR. This is included as Appendix A.4.2[26] and accompanying figures[27] of the Updated EIAR as part of the 2025 RFI Response. Therefore, an analysis of this eastern section of the Modified GCRR has already been undertaken and is utilised in this response (referred to as the eastern section).

[26] https://www.n6galwaycityringroad.ie/sites/default/files/media/Appendix%20A.4.2%20Cyan%20Route%20Option.pdf

[27] https://www.n6galwaycityringroad.ie/eiar-appendix-a42-figures

The submission confirms that the Modified GCRR route west of Letteragh is the same route as the proposed N6 GCRR for which the Updated EIAR included in the 2025 RFI Response has documented the impact assessment of it. Therefore, the information from the Updated EIAR is utilised in this response for the section of the Modified GCRR to the west of Letteragh (referred to as the western section).

The amendments to the central section proposed by Mr. Rabbitt are referred to as Amendment 4a and Amendment 4b. These are overlain on the existing constraints to inform the analysis of the central section of the Modified GCRR (referred to as the central section).

Plate 3.2 and Plate 3.3 below have been developed to show both versions of the Modified GCRR proposed by Mr. Rabbitte as described in the preceding paragraphs and to assist in analysing it and for the purposing of explaining why it is not a reasonable or feasibly alternative.

Plate 3.2 Modified Galway City Ring Road - Amendment 4a

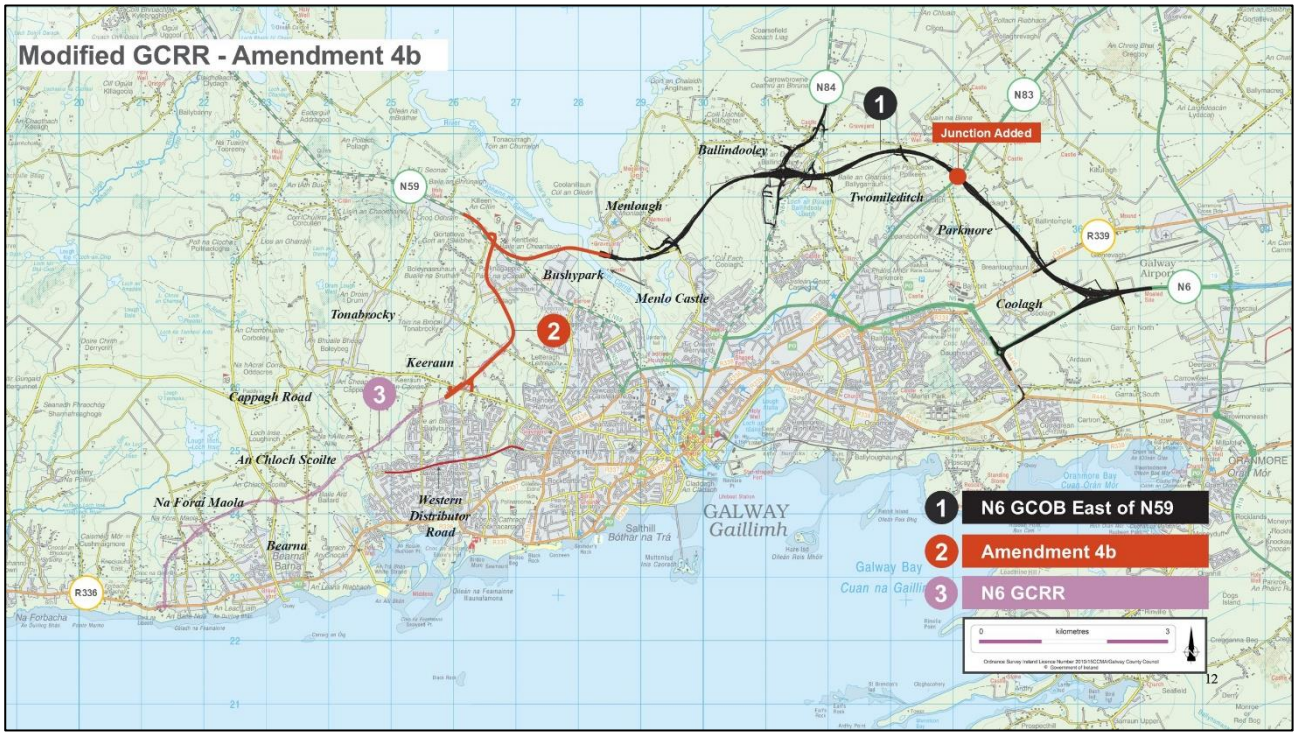

Plate 3.3 Modified Galway City Ring Road - Amendment 4b

3.4 Analysis of the Modified GCRR put forward by Mr. Rabbitt using the same format as presented by Mr. Rabbitt

3.4.1 Overview

As noted above, the submission is set out under the same headings as the Updated EIAR. This response follows the same format but splits chapters into three sections, where necessary, to describe key differences between the Modified GCRR and the proposed N6 GCRR. The three sections which form the Modified GCRR are the western section, the central section and the eastern section. The final three chapters, Chapters 21, 22 and 23, are summary chapters and reiterate the assessments undertaken in the earlier twenty chapters, and therefore another comparison of these chapters is not provided in this response.

While Mr. Rabbitt purports to call has been done by him an "assessment of Compliance with EIAR", this is not what it is and in fact Mr. Rabbitt nowhere states what expertise he has in purporting to conduct such an assessment and it will be evident from what is set out below that his "assessment of Compliance with EIAR" is fundamentally flawed. It is essentially a tick box exercise under every heading of the Updated EIAR stating that the Modified GCRR is better without factual analysis to support these claims, but instead a high-level statement to that effect.

It is also evident from what is set out below that this Modified GCRR is not a feasible alternative for the following reasons:

- There will be significant impacts on Annex I habitat within the Lough Corrib SAC and as such an adverse effect on the site integrity of the Lough Corrib SAC. There is no justification to progress the Modified GCRR alternative as there is a very clear alternative that does not affect the site integrity of Lough Corrib SAC, i.e. the proposed N6 GCRR
- Amendment 4a and Amendment 4b restore primacy to the N59/N6 traffic movement (giving priority to traffic on the N6 travelling westbound to Moycullen/Clifden and traffic from Clifden is free flow eastbound) which does not reflect the demand
- The dispersion of conflicting traffic movements in the western suburbs is non-existent due to the elimination of a number of critical links in the Modified GCRR

- The dispersion of traffic in the eastern section of the Modified GCRR is not effective as the junction on the N83 on the Modified GCRR only serves to relocate the traffic to the N83 and does not connect directly into the key employment centres of Parkmore and Ballybrit Business Parks and the 10,000 employees working there
- The Modified GCRR impacts significantly on heritage constraints on both sides of the River Corrib

3.4.2 Chapter 1: Introduction

The Updated EIAR for the proposed N6 GCRR utilises the most up to date data available including an update of environmental surveys between 2023 and 2025, updated traffic modelling with an updated base year of 2023, updated Census data, updated population forecasts, updated planned and committed projects for traffic modelling, updated Climate Action Plan targets, and a review of cumulative impacts up to the date of submission of the 2025 RFI Response. Mr. Rabbitt copied the format of the Updated EIAR in the 2025 RFI Response documentation to prepare his submission on 'Compliance with EIAR' but it lacks technical detail, technical analysis, ecological survey data along the Amendments 4a and 4b, any assessment of the ecological environment along the Amendments 4a and 4b, any representation of the impacts on cultural heritage along the Amendments 4a and 4b, to mention a few of the critical omissions. The submission incorrectly states that the Modified GCRR resolves the conflicts encountered with the Natura 2000 site impacts, and this issue is dealt with in Section 3.4.9 of Chapter 8 - Biodiversity below.

3.4.3 Chapter 2: Planning and Policy Objectives

The submission assesses compliance with policy on the ability to deliver a project which is publicly acceptable and avoids legal risks and community opposition, but there is no supporting data in this "chapter" to demonstrate this fact. It incorrectly purports to achieve better compliance with EU Directives on Habitats, Biodiversity (refer to Chapter 8 discussion) and better integration with public transport infrastructure and reduced reliance on private car travel (refer to Chapter 6 Traffic for discussion).

The submission claims that the Modified GCRR protects the integrity of the Ardaun LAP as well as avoiding *'housing delivery zones'*. Galway City Council made the Ardaun Local Area Plan 2018-2024 for lands situated at the area known as Ardaun on the east side of the city (164ha) on 9 April 2018. The Core Strategy of the current Galway City Development Plan 2023-2029 includes an action to '*Review Ardaun Local Area Plan to ensure consistency with the Core Strategy and policies and objectives of the 2023-29 Development Plan'.* The Galway City Development Plan supports the development at Ardaun as a strategic growth area for the region.

Densification and compact growth within the built-up footprint of existing urban areas based on sustainable mobility are the key tenets of the planning strategy in the Galway City Development Plan. The strategic aims adopt these principles and recognise that the integration of land use and transport including, importantly, the transport projects in the Galway Transport Strategy (including the proposed N6 GCRR) is necessary to deliver smart and sustainable mobility.

Galway City is identified as one of the four designated cities outside Dublin in the National Planning Framework (NPF) and has been allocated ambitious population growth targets with at least half of the new homes to be delivered in the existing built-up footprint. This focus on scale and settlement pattern is reflected in the objectives in Regional Spatial and Economic Strategy for the Northern and Western Region 2020-2032 (i.e., the NWRSES) and the Galway Metropolitan Area Strategic Plan (the "MASP") which require this planned growth to be compact, smart and sustainable. The MASP is in Volume 2 of the Galway County Development Plan 2022-2028.

The Core Strategy acknowledges the broader spatial context of the MASP which identifies Strategic Growth Areas and the infrastructure, services and facilities required for sustainable city growth. Plate 3.4 is the Core Strategy Map (Figure 1.6 in the Galway City Development Plan 2023-2029). It is significant that the alignment of the proposed N6 GCRR, extending from Ardaun on the east to the suburbs on the west side of Galway City, is clearly marked on the Core Strategy Map, illustrating the strategic function of the proposed N6 GCRR. This clearly shows that the proposed N6 GCRR is aligned closely to the existing N6 as it approaches the Coolagh Roundabout and the N6 as it approaches the Briarhill Junction and minimises intrusion and severance of the Ardaun lands. It equally aligns with the northern edge of lands zoned for housing in so far as possible given the other existing constraints.

Plate 3.4 Core Strategy Map from Galway City Development Plan 2023-2029

The MASP highlights the importance of the aligning infrastructural investment and the provision of employment with supporting services and amenities to cater for growth in a coherent and planned way. Section 1.9.6 of the MASP identifies the delivery of the measures in the GTS and specifically the proposed N6 GCRR as critical to the future development of the Galway Metropolitan Area.

> *"Other critical pieces of infrastructure that are required to secure the development of the Metropolitan Area include the provisions set out within the Galway Transport Strategy and Galway County Transport Strategy and the delivery of the Galway City Ring Road."*

Accordingly, it is absolutely clear that the proposed N6 GCRR is entirely consistent with and, indeed, is a significant enabler of the implementation of the objectives in the Metropolitan Area of County Galway. The Modified GCRR is set at a further distance from the city in the central section around Bushypark/Dangan area and the section to the east of the River Corrib is up to 2km further from the city making it less effective in integration with land use and supports a less compact city development. Therefore, the Modified GCRR aligns less effectively with the Galway City and County Development Plans.

3.4.4 Chapter 3: Need for the Project

The submission acknowledges and agrees that there is an urgent need for an orbital route around Galway City to improve regional connectivity. The Modified GCRR also acknowledges the need for a junction on the N83 and includes such a junction. The submission states the need to present a scheme which has fewer legal risks and takes on board previous legal challenges. It states that it more directly targets the root problems of radial congestion, unreliable journey times and limited western access without providing any supporting data or evidence of such.

The radial congestion, journey times and access to the west are addressed equally on the western section of the Modified GCRR and the proposed N6 GCRR as it is the same route (See Plate 3.2 and Plate 3.3 above).

In the central section of the Modified GCRR on both Amendments 4a and 4b, the radial congestion is addressed less effectively as there is no new link from the Letteragh Junction south to the heart of Knocknacarra and Salthill area. A direct connection is proposed from the Modified GCRR to both the Letteragh Road and the Rahoon Road, and traffic is funnelled down these existing roads, both of which are local roads undulating over bog terrain with very limited capacity to safely cater for such traffic. Journey times are likely to be longer on the Modified GCRR due to the narrow sub-standard connections back to the existing network. Access to the west is served equally in both the Modified GCRR and the proposed N6 GCRR as there is a junction serving the N59 in both options.

The radial congestion and journey times in the eastern section of the Modified GCRR are less effective as the junction on the N83 on the Modified GCRR only serves to connect the N83, whereas the N83 Junction on the proposed N6 GCRR is a split junction directly connecting Parkmore and Ballybrit Business Parks to the proposed N6 GCRR. There are approximately 10,000 employees combined in these business parks for which the proposed N6 GCRR provides a much more efficient connection.

3.4.5 Chapter 4: Alternatives Considered

The submission's analysis on the alternatives chapter does not present any new "alternative" other than the Modified GCRR and again suggests that this Modified GCRR is informed by *'legal rulings, policy evolution and stakeholder feedback'*, but there is no additional or new stakeholder engagement on this purported route, other than any engagement undertaken by the author of the submission.

The submission claims that the Modified GCRR corrects a legacy planning oversight due to the lack of a junction on the N83 Tuam Road. It is true that the 2006 GCOB did not have a junction or connection to the N83 Tuam Road. However, Section 4.7 of the submission is incorrect in stating that the proposed N6 GCRR failed to consider a critical junction at Tuam Road near Parkmore. This is clear from Figure 5.1.10 of the Updated EIAR which presents the proposed N83 Tuam Road Junction which also serves Parkmore and Ballybrit Business Parks.

The submission claims that the Galway Racecourse is '*better resolved by the Modified GCRR ensuring operational continuity'* with no further explanation as to how this is so. The proposed N6 GCRR ensures operational continuity of Galway Racecourse and further provides an enhanced access to the racecourse via the Parkmore Link Road Junction. It is notable that Galway Racecourse have not made any submission on the Response to the RFI about impacts on its operations which Mr. Rabbitt is concerned with.

Section 4.7.6 of Chapter 4 of the Updated EIAR considers the alternative presented by Mr. Rabbitt on behalf of the N6 Action Group during the oral hearing in 2020, as shown on Plate 3.5, which is the central section of the Modified GCRR referred to as Amendment 4a in the current submission. As set out on behalf of Galway County Council during the oral hearing in 2020, there are significant ecological constraints (refer to Chapter 8 discussion) and architectural heritage constraints (refer to Chapter 13 discussion) along the route of this alternative. In addition, Amendment 4a (and likewise Amendment 4b) do not meet the key functional objectives of the proposed N6 GCRR (refer to Chapter 6 discussion on traffic).

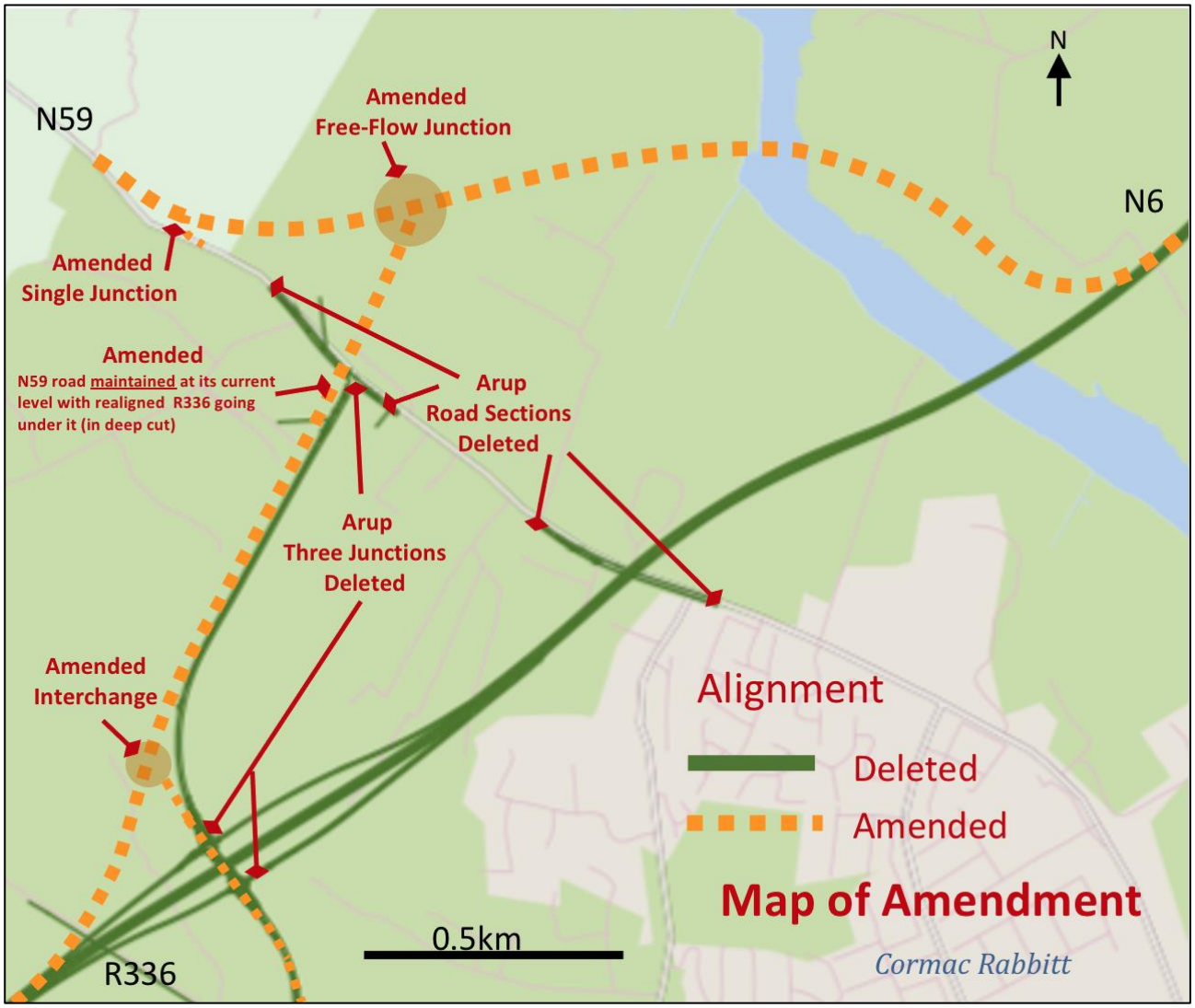

Plate 3.5 Alternative presented by Mr. Rabbitt at 2020 Oral Hearing (Amendment 4a in current submission)

3.4.6 Chapter 5: Project Description

The submission's analysis on the Project Description chapter does not present a detailed description of the Modified GCRR, but it outlines the differences of the Modified GCRR from the proposed N6 GCRR. It claims that the Modified GCRR utilises the existing section of the M6 from Oranmore to Garraun which maximises the earlier investment in the M6. However, the proposed N6 GCRR represents better value for money as it utilises an additional 1.8km of existing M6/N6 between Garraun overbridge to the Coolagh Roundabout.

As set out in Chapter 5 of the Updated EIAR, the proposed N6 GCRR comprises of approximately 5.6km of a single carriageway from the western side of Bearna as far as the Ballymoneen Road and approximately 11.9km of dual carriageway from Ballymoneen Road to the eastern tie in with the existing N6 at Coolagh, Briarhill, total length of 17.5km. The Modified GCRR is longer at approximately 21km and contains 1.7km of tunnel construction. The construction of this length of tunnel is considered very significant from an embodied carbon perspective due to the excavation works, disposal of material and volumes of structural concrete and steel for construction. The operational phase of a tunnel of this length also has very high carbon emissions associated with the daily operation and maintenance of them. The inclusion of approximately 1.7km of tunnels is not considered more sustainable than the proposed N6 GCRR. Both tunnels proposed as part of the proposed N6 GCRR are less than 250m and therefore are not subject to the operational requirements i.e. ventilation and fire safety measures, proposed in the Modified GCRR.

3.4.7 Chapter 6: Traffic

The submission states that the Modified GCRR meets and improves upon the traffic-related goals of the EIAR, delivering a more sustainable, cost-effective, and strategically beneficial solution for Galway's future.

From a traffic perspective, the western section of the Modified GCRR is the same as the proposed N6 GCRR.

The central section of the Modified GCRR is very different to the proposed N6 GCRR as both Amendment 4a and Amendment 4b restore primacy to the N59/N6 traffic movement (giving priority to traffic on the N6 travelling westbound to Moycullen/Clifden and traffic from Clifden is free flow eastbound), whereas the primary demand on the N59 is actually from the N59 towards the city, rather than towards the existing bridge crossing and to the east. As noted in Section 3.1, the Inspector was concerned about the form of this N59 junction and noted that he was concerned '*that the junction with the N59 would be problematic in terms of primacy'*. In Amendment 4a and Amendment 4b in the Modified GCRR, all N59 southbound traffic which seeks to access the western suburbs of the city, including UoG and UHG, will be forced to cross all N59 westbound traffic coming from the R336 and all N6 westbound traffic at the at-grade junction in Glenlo Abbey. These proposed amendments do not address the traffic issue trying to be resolved as connectivity back to the city is key which the N6GCRR does achieve. The dispersion of conflicting traffic movements in the western suburbs which is offered by the proposed N6 GCRR junction arrangement is non-existent in these proposals for the central section of the Modified GCRR (in either Amendment 4a or Amendment 4b).

Furthermore, the central section of the Modified GCRR (i.e. both Amendments 4a and 4b) does not meet the functionality that will be achieved by the proposed N6 GCRR due to the elimination of a number of critical links, which are necessary to solve the transport problem. The proposal in the Modified GCRR removes the proposed link road from the N59 to the Letteragh Road and onwards to the Rahoon Road which is a critical missing link in the existing road infrastructure. In doing so, this proposal reduces accessibility to Galway City and results in longer journeys for shorter commutes.

The eastern section of the Modified GCRR does not perform as well as the proposed N6 GCRR in the removal of traffic congestion from within Galway City and its environs as there is less transfer of the existing and future traffic from the existing road network to the new road infrastructure. This is outlined in the assessment of traffic on the four existing city centre bridges in the Cyan Route Option (which was an option assessed as part of the options selection process for the proposed N6 GCRR) in Appendix A.4.2 of the Updated EIAR which shows that the proposed N6 GCRR offers the potential for greater relief of congestion in the city centre than the Cyan Route Option, which is essentially the eastern section of the Modified GCRR. As outlined earlier, traffic distribution in the eastern section of the Modified GCRR is less effective as the junction on the N83 on the Modified GCRR only serves to connect the N83, whereas the N83 Junction on the proposed N6 GCRR is a split junction directly connecting to the key employment centres of Parkmore and Ballybrit Business Parks.

The traffic modelling for the Cyan Route Option was used for the purposes of the traffic assessment of the Modified GCRR as the Cyan Route Option is exactly the same route as the Modified GCRR east of the River Corrib and the exact same route as the Modified GCRR west of Letteragh Road, with the only difference to the Modified GCRR being in the central section. The central section on the Modified GCRR (i.e. both Amendments 4a and 4b) provides much less connectivity to the city than the Cyan Route Option, ergo the Modified GCRR will perform less well than the Cyan Route Option in transfer of traffic from the city to the central section. Therefore, the length of the overall Modified GCRR would not deliver the optimum intermodal transport solution as traffic modelling for the Cyan Route Option (set out in Appendix A.4.2) showed that it would not deliver relief to congestion to the same level as the proposed N6 GCRR due to the lower transfer of traffic from the existing urban centre, and it follows that the Modified GCRR would perform even worse than the Cyan Route Option as has less connectivity to the city in the central section. As a result, less road space would be freed up for reallocation to more sustainable modes such as walking, cycling and public transport with the Modified GCRR. By allowing for this freeing up of road space and reallocation to sustainable modes, the N6 GCRR allows for the more sustainable growth of Galway in line with the National Planning Framework and Ireland 2040.

3.4.8 Chapter 7: Construction Activities

The submission states that the Modified GCRR (i.e. both Amendments 4a and 4b) significantly reduces the intensity and scale of construction activities in sensitive locations, delivering a lower-risk and more manageable construction profile and achieves better proportionality of environmental disturbance and increased safety near residential and Natura 2000 areas.

The construction activities associated with the western section of the Modified GCRR are the same as the proposed N6 GCRR.

The construction activities associated with the central section of the Modified GCRR (i.e. both Amendments 4a and 4b) are of a significantly larger scale than the proposed N6 GCRR due to the construction of a 1km long cut and cover tunnel beneath the River Corrib as shown on Plate 3.6 (which figure is taken directly from Appendix 5 of the submission). The impacts arising from using this construction method would have very significant impacts on so many receptors from habitats, aquatic life, underwater archaeology, downstream drinking water abstraction, amenity, to mention but a few, and considering that the River Corrib is part of the Lough Corrib SAC protected by the EU Habitats Directive. It is not practical or feasible to construct this river crossing or to seek permission for such construction at this location where there are other more viable alternatives.

The proposed N6 GCRR by contrast spans the River Corrib with a bridge at its narrowest section, requires no in-stream works and minimises any interference with the river banks.

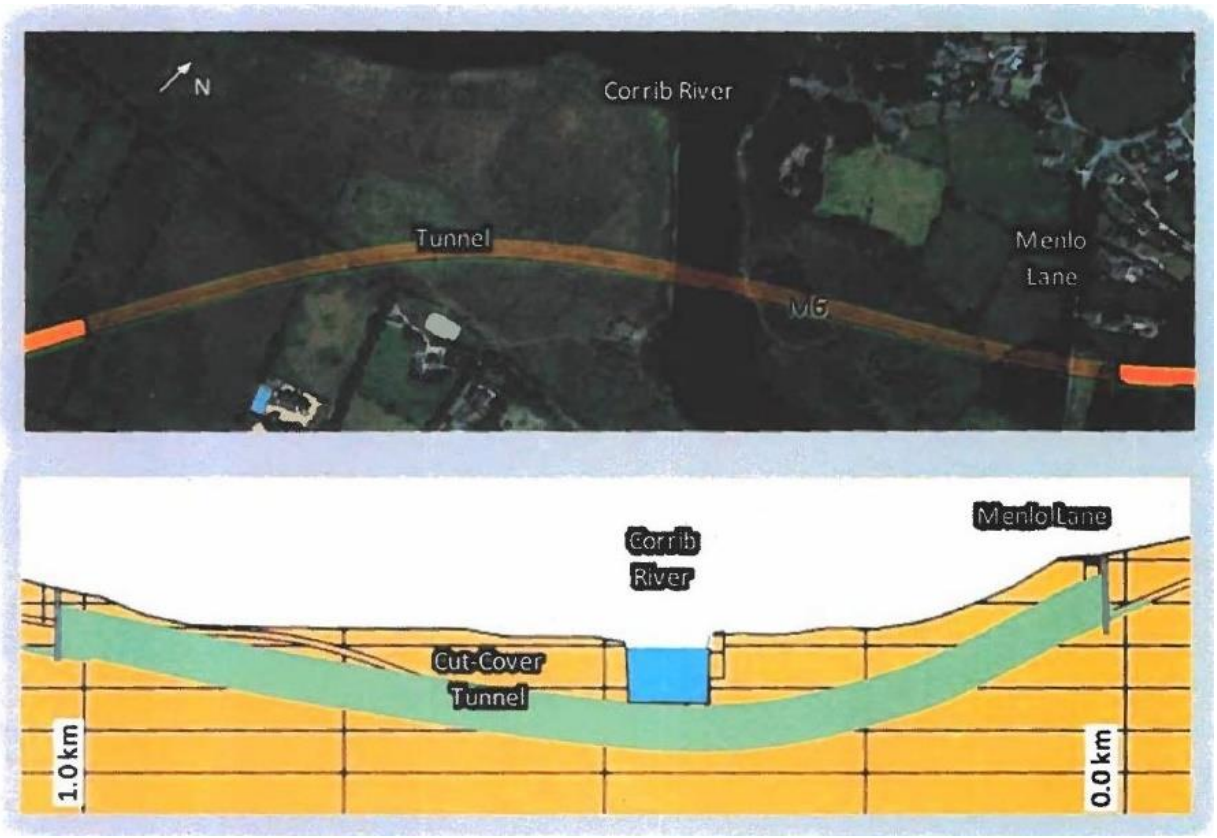

Plate 3.6 Extract from Appendix 5 of submission to 2025 RFI Response

The central section of the Modified GCRR also includes a significant interchange in the grounds of Bushypark House in Amendment 4a and proposes going under the N59 as it proceeds south to connect back to the Letteragh Road. The plan and profile of Amendment 4a, provided in the submission, are shown on Plate 3.7 and Plate 3.8. A portion of the proposed N6 GCRR profile is also included on this graphic provided by Mr. Rabbitt.

These graphics show that there will be a deep cut severing large parts of the Bushypark estate. The R336 alignment severs the driveway of Bushypark House, but it is assumed that it will be carried over the +7m cut identified at the crossing of the existing N59 via an overbridge. The entrance hall to Bushypark House faces south-east and will be looking directly at the +7m cut identified on Plate 3.8. The conservatory on the northern side of Bushypark House will be looking directly onto the proposed N6/N59 – R336 Interchange.

The entrance to Glenlo Abbey is severed by Amendment 4a also and is relocated south to the at-grade junction with the existing N59 junction. Plate 3.7 (which was presented at the oral hearing in 2020) states that this at-grade junction can be upgraded to an interchange in the future but there is no graphical representation of how/where this interchange would be located or what form it would take. It is physically not possible to put it at the same location as the at-grade junction proposed in the Amendment 4a as there is insufficient distance between it and the proposed N6/N59-R336 Interchange.

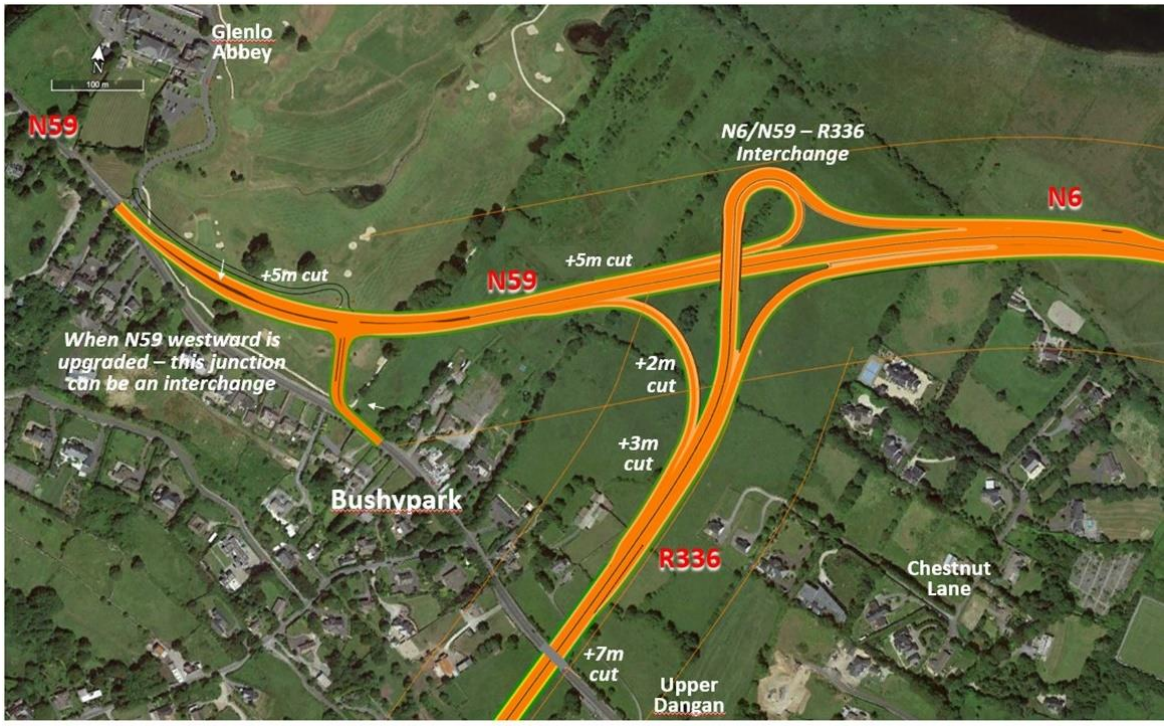

Plate 3.7 Amendment 4a as presented at 2020 Oral Hearing

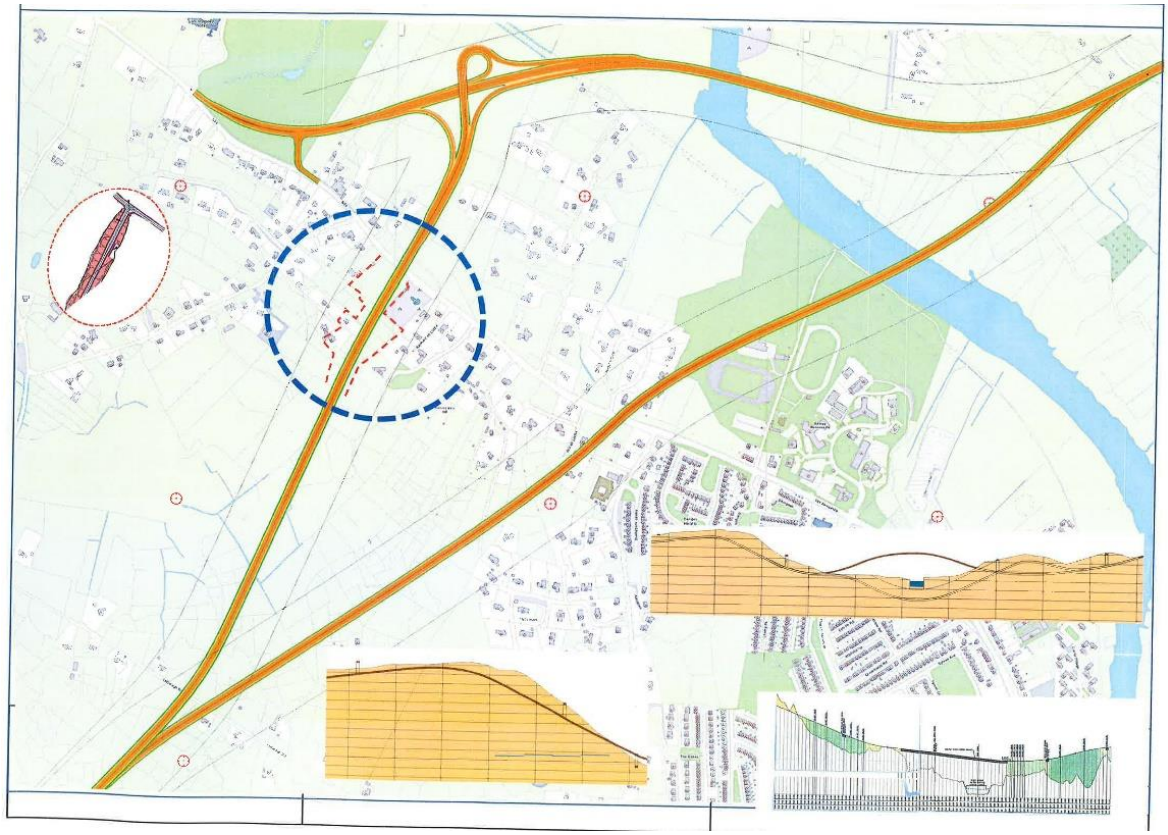

Plate 3.8 Plan and Profile of Amendment 4a

The construction activities associated with Amendment 4b are equally disruptive as it too includes the 1km cut and cover tunnel and includes a parallel alignment of the N59 in the Glenlo Abbey estate and a junction on the N59 immediately west of the newly completed lodges and wedding venue at Glenlo Abbey. It is also not clear as to how access to Glenlo Abbey is provided in Amendment 4b as the proposed mainline removes the existing wall and gated entrance to the property.

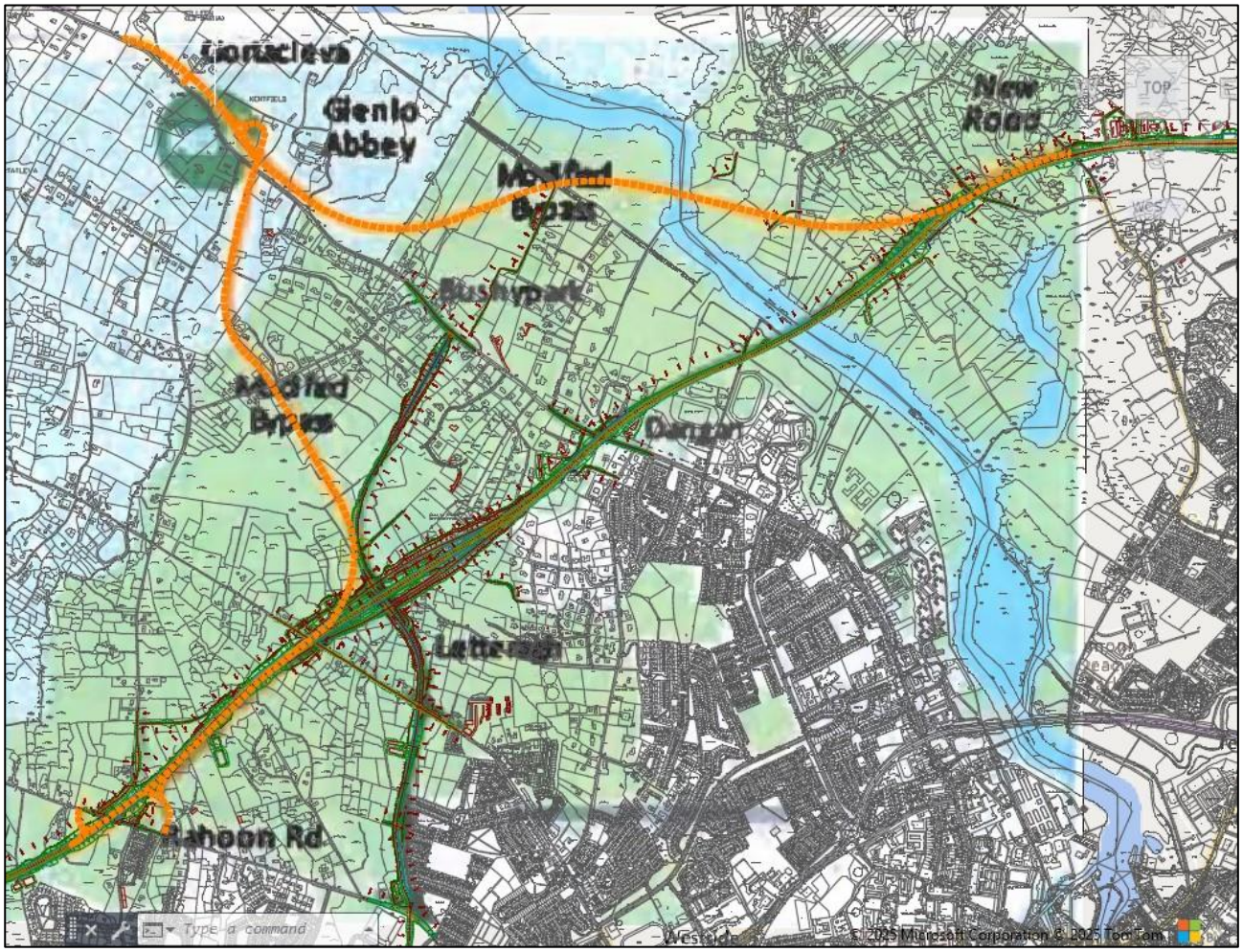

Plate 3.9 Amendment 4b overlain on OS Mapping

The construction activities on the eastern section of the Modified GCRR are very different to the proposed N6 GCRR. Immediately to the east of the River Corrib, there will be equally significant impacts, associated with the Modified GCRR, arising from the tunnel section using the same construction method as on the western side of the river discussed above. The eastern section then follows the Cyan Route Option (i.e. the same route as 2006 GCOB but with the addition of a junction on the N83) through the Lough Corrib SAC over a 1km length as shown on Figure 3.2.2 of Appendix A.4.2 of the Updated EIAR. The proposed N6 GCRR by contrast crosses the Lough Corrib SAC at the narrowest location and utilises the existing disused quarry to construct a tunnel beneath the Lough Corrib SAC to avoid impacting on its site integrity. Full detail of the Lackagh Tunnel construction is provided in Appendix A.7.3 of the Updated EIAR.

It is acknowledged that the construction activities on the eastern section of the Modified GCRR from the N83 east to Garraun may be less impactful on the Racecourse and Briarhill area than the proposed N6 GCRR as the Modified GCRR is more rural over this extent. However, the Modified GCRR will impact on other areas such as the eastern fringes of Parkmore East Industrial Estate and the community of Coolagh.

The construction activities associated with the Modified GCRR described here, which is based on the graphics for the Modified GCRR presented in the submission, inform the subsequent analysis of the Modified GCRR.

3.4.9 Chapter 8: Biodiversity

The biodiversity impacts associated with the western section of the Modified GCRR are the same as the proposed N6 GCRR.

The submission incorrectly states that the Modified GCRR improves compliance with the EU Habitats Directive as it states that it minimises encroachment on sensitive habitats and claims any unavoidable impacts are justified under the Imperative Reasons of Overriding Public Interest (IROPI) associated with Ireland's national motorway programme, thereby making the Modified GCRR a more ecologically compliant alternative. This interpretation of the Habitats Directive and the use of IROPI is factually incorrect as the project can only be advanced through planning under Article 6(4) of the Habitats Directive in the absence of alternatives, and clearly the proposed N6 GCRR is an alternative which does not have the significant impacts on the Lough Corrib SAC that the Modified GCRR has (which is discussed in more detail below).

The Inspector noted this same point in his report on Page 118 as follows:

> *"Notwithstanding the fact that it is the Board who determines if a project should be progressed for reasons of IROPI, I am of the view that there is not an absence of alternative solutions as referred to in Article 6(4) – the option before the Board is an alternative solution - and therefore proceeding with the 2006 GCOB under Article 6(4) would be likely to fail at the first test."*

The impacts of the cut and cover tunnel in Amendment 4a of the central section of the Modified GCRR are very significant as there will be an impact on Annex I habitat within the Lough Corrib SAC as shown on Plate 3.10 and as such an adverse impact on the site integrity of the Lough Corrib SAC. The impacts will be the same as shown on Plate 3.10 for Amendment 4b as the crossing point of the river is the same for both proposed amendments. Furthermore, the submission includes no evidence to demonstrate that a tunnel beneath Lough Corrib SAC will not impact on groundwater flow feeding water dependent QI habitat within the Lough Corrib SAC.

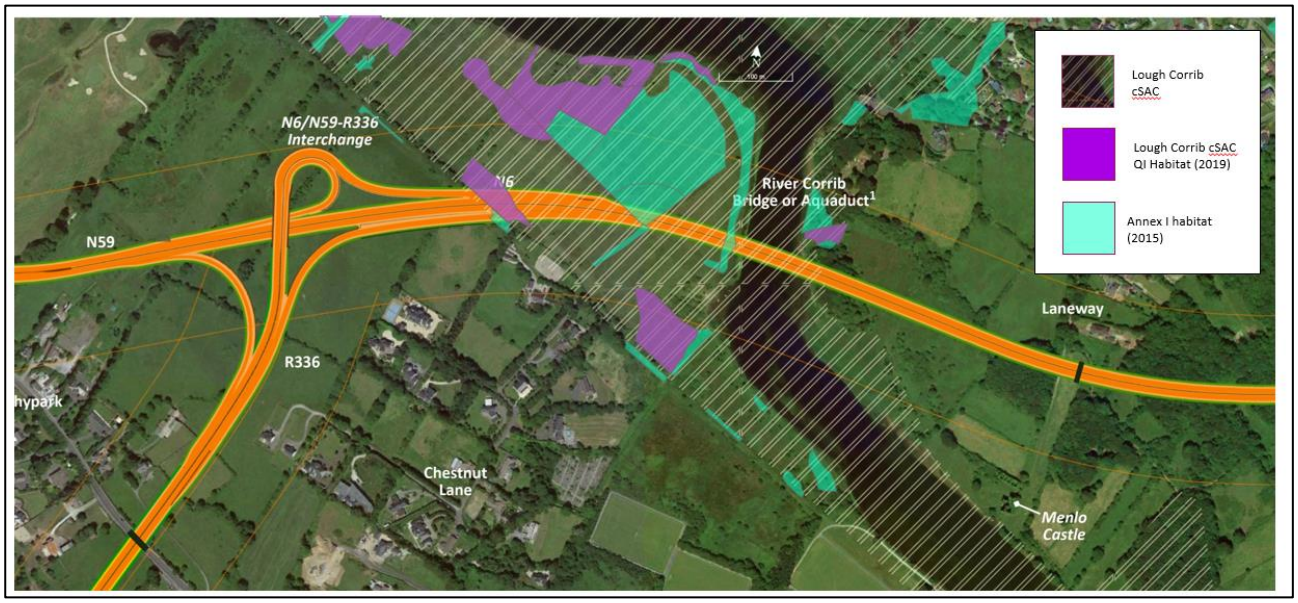

Plate 3.10 Amendment 4a overlain on biodiversity constraints in central section of Modified GCRR (presented by GCC at the 2020 Oral Hearing)

The design team overlaid the Amendment 4a on the ecological constraints and Plate 3.10 was used at the oral hearing to explain that this Amendment 4a would likely impact on the integrity of the Lough Corrib SAC on Day 17 of the oral hearing.

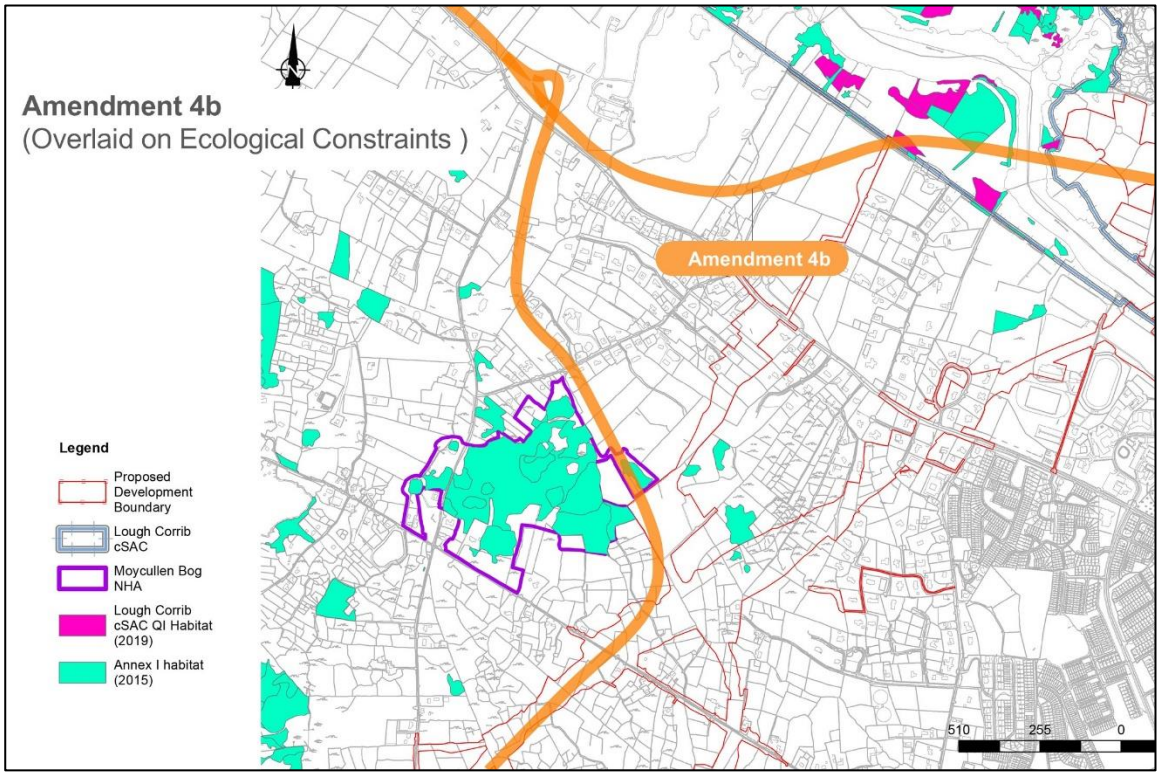

Plate 3.11 Amendment 4b overlain on biodiversity constraints in central section of Modified GCRR

Plate 3.11 shows the additional impacts of Amendment 4b on the Moycullen Bog NHA. The extent of the drawdown of the significant cut in this area are not quantified in the submission but are likely to have an impact on the Annex I habitat in this area based on the evidence and data included in the detailed response on the Moycullen Bogs NHA which was prepared[28] during the 2020 Oral Hearing. It is clear that the Amendment 4b alignment cuts through the Moycullen Bogs NHA and also impacts directly on Annex I habitat shown on Plate 3.12.

[28] https://www.n6galwaycityringroad.ie/sites/default/files/media/GCRR-4.03.34.18%20Eco-hydrogeology%20Summary%20Report%20Moycullen%20Bogs_I2.pdf

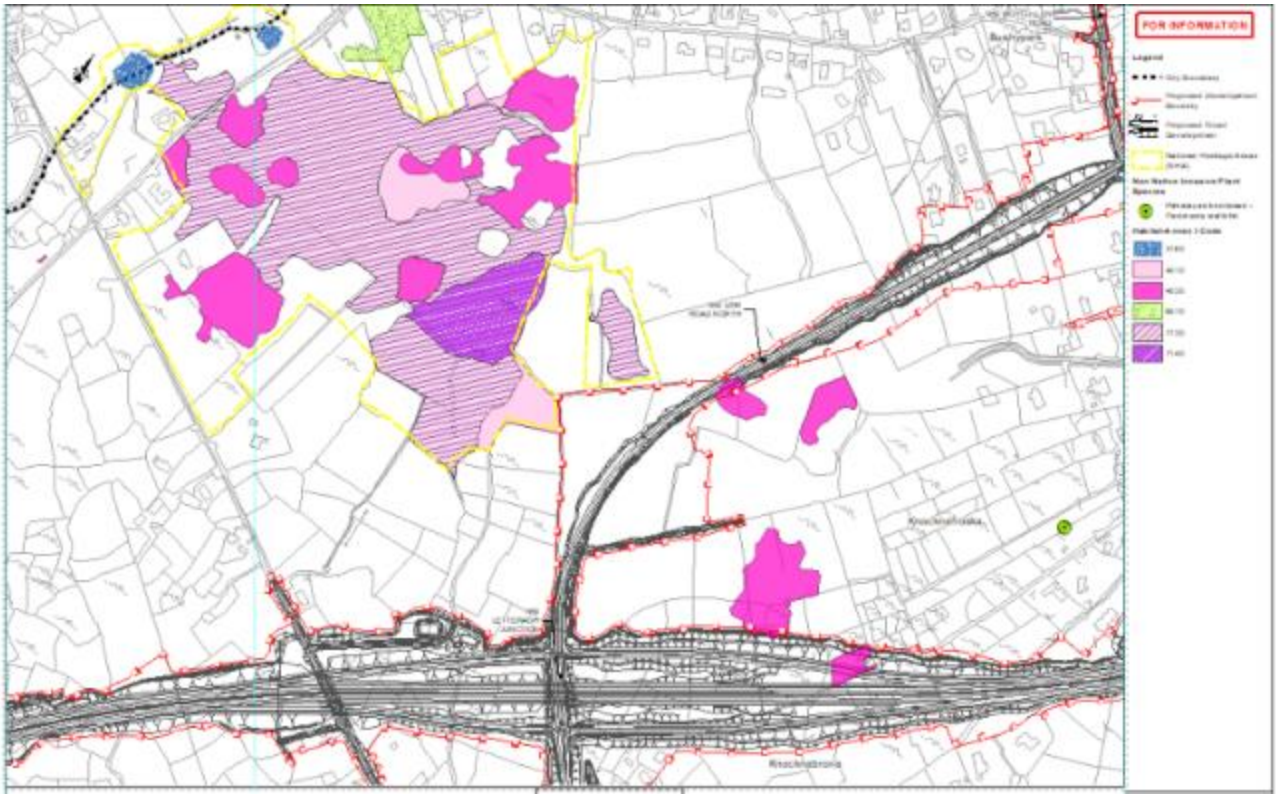

Plate 3.12 Annex I Classification of the habitat within Moycullen Bogs NHA at Letteragh[28]

The assessment of the impacts on the eastern section of the Modified GCRR are documented in Appendix A.4.2 and the figures accompanying that appendix in the Updated EIAR because as noted earlier the eastern section of the Modified GCRR is the exact same as the Cyan Route Option. There will be a significant impact on Annex I habitat, Limestone pavement [* 8240] within the Lough Corrib SAC and as such an adverse impact on the site integrity of the Lough Corrib SAC. As per the European Court decision this route could only be progressed in the absence of all alternatives pursuant to Article 6(4) of the Habitats Directive. The submission claims that the Modified GCRR avoids the sensitive ecological corridor that triggered the annulment of the 2006 GCOB. However, as shown on Plate 3.13 the Cyan Route Option (assessed as part of the options selection process for the proposed N6 GCRR) and the eastern section of the Modified GCRR traverses and impacts the exact same Natura 2000 site, namely the Lough Corrib SAC, that triggered the annulment of the 2006 GCOB. The submission claims that IROPI can be utilised for this eastern section of the Modified GCRR given the completion of the M6 corridor is a national motorway priority. As noted above, this is not the correct application of IROPI given that there is a viable alternative over this section of the route, which is the proposed N6 GCRR.

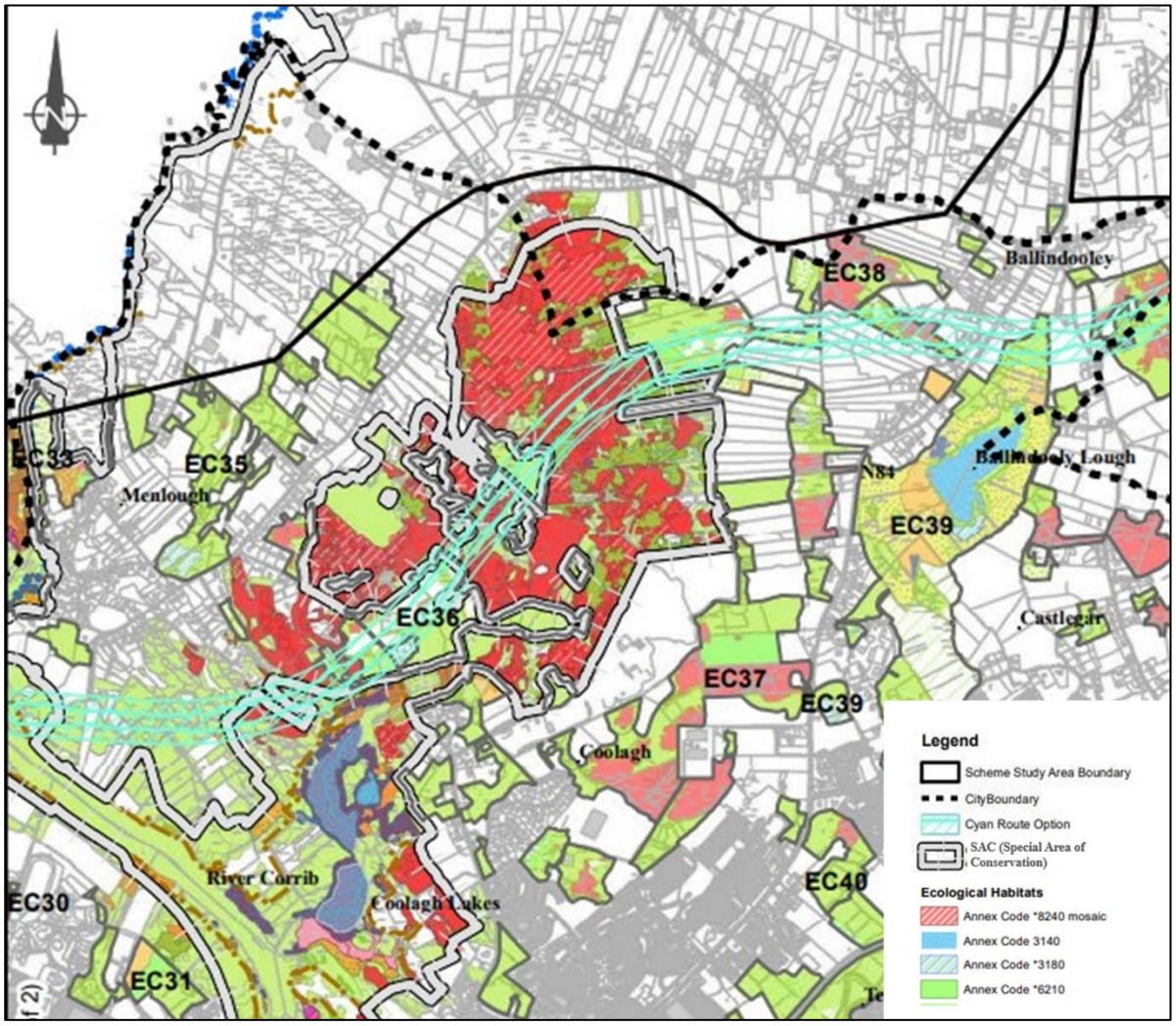

Plate 3.13 Habitat constraints on Cyan Route Option / eastern section of Modified GCRR (Extract from Figure 3.2.2 of Appendix A.4.2 Figures of the Updated EIAR)

Further, following the decision of the European Court on the 2006 GCOB, the Cyan Route Option (in terms of its eastern section) would result in adverse impacts on the integrity of the Lough Corrib SAC (Limestone Pavement).

To ensure all options are considered in respect of the eastern section of the Modified GCRR, an option of tunnelling under the Limestone Pavement in the Lough Corrib SAC along the alignment of the 2006 GCOB was also considered and is documented in Section 4.7.2.5 of Chapter 4 of the Updated EIAR. The 2006 GCOB route with the Tunnel Option is not viable for the reasons as detailed in the Updated EIAR and as discussed at the oral hearing in 2020 and a specific response document was prepared on it, refer to *Response to Queries Raised in Module 2 of the N6 Galway City Ring Road Oral Hearing in respect of consideration of the N6 Galway City Outer Bypass as a solution to the transport problem in Galway City and its environs*[29]. Section 6 of this report sets out why the 2006 GCOB could not be engineered to resolve its issues relating to Lough Corrib SAC. Essentially the scale of the works to deal with the issues relating to the eastern section of the 2006 GCOB Route Option involve a tunnel length comprising twin bore tunnels in excess of 2km in length, with significant cuttings of the order of 50m diameter to construct the launch pit at either side. A further area would be required to provide access ramps up and down to the pit, plus a working area. The total area required at each pit would be approximately 15m wide by 100m in length and will generate significant earthwork volumes. This would pose a significant challenge in the marginal ground conditions around the River Corrib, and the underlying karst limestone with a variable rockhead and complex hydrogeological

[29] https://www.n6galwaycityringroad.ie/sites/default/files/media/GCRR-4.03.34.13.1%20Response%20to%202006%20GCOB%20Q_Issue%201.pdf

regime along the length of the 2006 GCOB Route Option, all of which have the very real potential to have adverse impacts on the integrity of the Lough Corrib SAC.

Based on (i) the length of tunnel required at this location, (ii) the presence of karst bedrock (with a variable rockhead), and (iii) the complex hydrogeology and sensitive receptors, it was determined that the type of tunnelling required along the alignment of the 2006 GCOB Route Option would require a Tunnel Boring Machine (TBM). The invert level of a tunnel along the alignment of the 2006 GCOB Route Option would be at a level of approximately (minus) -10.00m AOD at its lowest point and approximately 6m below the water level of the River Corrib at the western portal. As outlined in Section 4.7.3.2 of Chapter 4 of the Updated EIAR "*a tunnel on the alignment of the 2006 GCOB Route Option under the extent of the Limestone pavement within the Lough Corrib SAC was not advanced because of the following reasons:*

- *initial ground investigations to inform the hydrogeological and geological ground model had the potential to adversely impact the integrity of the Lough Corrib SAC*
- *construction of a significant tunnel length in a karst area with hydrogeological conditions had the potential to adversely the integrity of Lough Corrib SAC*
- *tunnel length exceeding 2km in length and large construction footprint at both portals would significantly increase the construction period*
- *tunnel length would have generated more than 380,000m³ of spoil potentially not suitable for reuse within the proposed N6 GCRR*
- *a tunnel of this length is not a sustainable solution and would result in very significant additional carbon emissions both during construction and during operation*
- *very significant operational costs due to fire safety and ventilation requirements of a tunnel of this length*
- *resilience would require duplication of a tunnel maintenance building"*

Full details of the assessment of the 2006 GCOB is provided in Appendix A.4.1 of the Updated EIAR.

In contrast, Lackagh Quarry offered the opportunity of using the existing quarry face to launch the tunnel construction resulting in a much shorter tunnel length of 230m along the route of the proposed N6 GCRR. The proposed N6 GCRR route was then capable of being developed into a solution which most effectively meets the project objectives and would not adversely affect the integrity of the Lough Corrib SAC whereas it was clear for the reasons set out above that a tunnelling option on the alignment of the 2006 GCOB Route Option would do the very same thing it was seeking to avoid namely have the very real potential to adversely impact the integrity of the Lough Corrib SAC.

The entire assessment under biodiversity in the submission relies on justifying very significant ecological impacts within the Lough Corrib SAC on the basis of IROPI. However, such impacts have already been deemed to impact on the integrity of the Lough Corrib SAC by the European Courts and given there is an alternative to avoid these impacts and deliver on the project objectives by way of the N6 GCRR, this eastern section of the Modified GCRR cannot be advanced.

3.4.10 Chapter 9: Soils and Geology

The submission states that the Modified GCRR will result in lower excavation volumes and that Impacts such as spoil disposal, embankment settling, or groundwater disruption are largely avoided or well contained.

The impacts on soils and geology associated with the western section of the Modified GCRR are the same as the proposed N6 GCRR.

The construction activities in the central section of the Modified GCRR (both Amendments 4a and 4b) are very different to the N6 GCRR resulting in very different volumes of excavation. Along the western bank of the River Corrib, the Modified GCRR is underlain by soft calcareous or organic clay and peat over limestone bedrock. The excavation for the cut and cover tunnel on the west back of the River Corrib will generate significant volumes of material which will not be reusable in the construction of the Modified GCRR. As noted above, the variable ground conditions in this area will involve significant sheet piling to construct this tunnel, as well as impacts on the groundwater regime and hydrology.

Upon crossing the River Corrib, the route of the Modified GCRR encounters an area of Limestone rock outcrop on the eastern side of the banks which extends approximately 3.1km east past the townland of Menlough. Construction of the cut and cover tunnel on the eastern bank will involve significant rock excavation in this area.

Therefore, the Modified GCRR is more impactful on soils and geology due to the extent of excavations than the proposed N6 GCRR particularly due to the cut and cover tunnel.

3.4.11 Chapter 10: Hydrogeology

The hydrogeology impacts associated with the western section of the Modified GCRR are the same as the proposed N6 GCRR.

The Modified GCRR will be more impactful on hydrogeology in the central section for both Amendments 4a and 4b and eastern sections of the Modified GCRR than the proposed N6 GCRR due to the scale of the excavation for the cut and cover tunnel and associated dewatering during construction and permanent drawdown in the operation phase of the Modified GCRR. No information detailing the hydrogeological ground modelling is provided in this submission. However, based on the extensive hydrogeological modelling undertaken for the proposed N6 GCRR, it is very clear that the sensitivity of the karst limestone is not considered in the submission, and the assessment of the permanent hydrogeological impacts on groundwater dependent ecosystems has not been presented for the Modified GCRR.

The submission incorrectly states that excavation depth is reduced, and construction activities are limited near critical groundwater features, whereas instead the significant tunnel construction is proposed in the most critical area of consideration of groundwater features i.e. the karst limestone from the River Corrib to Ballindooley. It also claims that the risk to potable water supplies is reduced which is wholly inaccurate given the scale of construction across the River Corrib which is located upstream of the major potable water supply for Galway City just south of the Quincentenary Bridge.

3.4.12 Chapter 11: Hydrology

Again, the western section of the Modified GCRR is the same as the proposed N6 GCRR.

However, the central and eastern sections of the Modified GCRR are very different from a hydrological perspective to the N6 GCRR. The cut and cover tunnel on Amendment 4a and 4b, is located in the floodplain of the River Corrib as shown in Plate 3.14, with the associated flood risk. The flood risk associated with the Modified GCRR is far greater than the risk on the proposed N6 GCRR as the crossing involves a 500m to 600m wide crossing of the Lough Corrib SAC. By contrast the proposed N6 GCRR crosses the floodplain at the narrower location further south at the sports pitches in UoG.

There is also the potential for hydrological regime change and potential for changes to water quality and water chemistry of aquatic habitats, arising from localised dewatering and potential for flooding or water quality impact by the Modified GCRR.

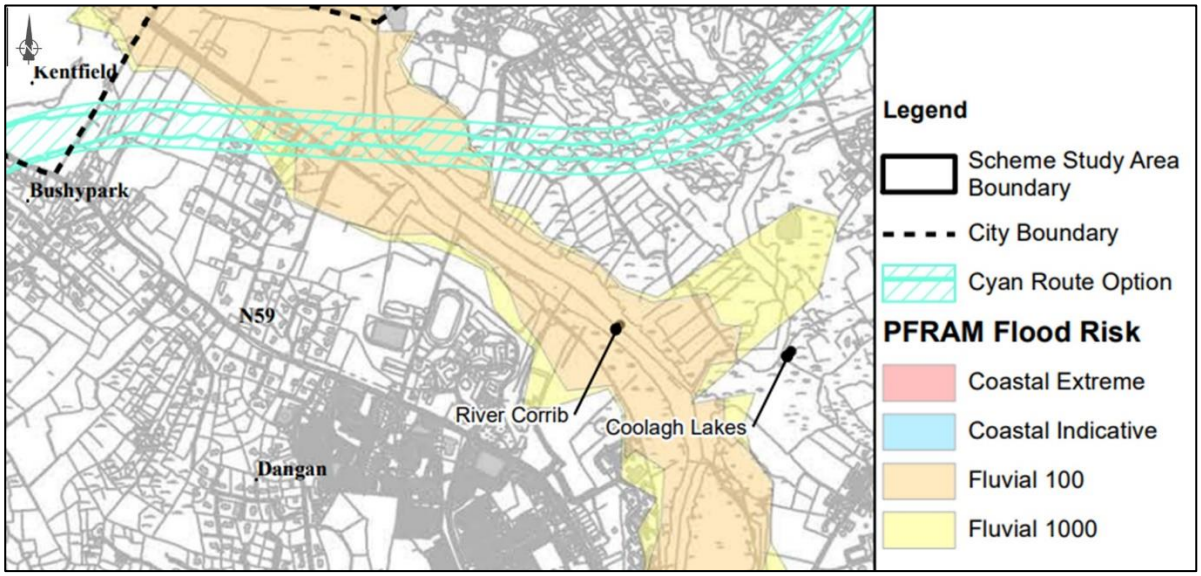

Plate 3.14 Fluvial and Coastal Flood Risk Mapping on Cyan Route Option i.e. central and eastern section of Modified GCRR (Extract from Figure 3.5.5 of Appendix A.4.2 Figures of the Updated EIAR)

The submission claims that lower run off volumes and sediment transport impacts are expected on the Modified GCRR. However, the Modified GCRR is longer at approximately 21km than the proposed N6 GCRR at approximately 18km and will have a similar cross-section and will be designed using the same TII drainage standards, and therefore, it is unclear on what basis the submission claims that the drainage infrastructure is reduced and simplified in the Modified GCRR and no information or data had s been put forward in this regard.

3.4.13 Chapter 12: Landscape and Visual

The submission claims that the Modified GCRR reduces adverse visual effect and enhances integration with surrounding landscape. It is acknowledged that the western section of the Modified GCRR is the same as the proposed N6 GCRR and that the eastern section of the Modified GCRR follows a more rural route than the proposed N6 GCRR and may have less incidence of significant visual impacts on properties.

However, the central section of the Modified GCRR with Amendment 4a will have significantly greater visual impacts on the setting of Bushypark House due to the construction of an interchange in the grounds of Bushypark House which totally destroys the estate setting and landscape it currently enjoys. Likewise Amendment 4a impacts significantly on Glenlo Abbey as the gated entrance and approximately 320m of its curtilage and boundary wall from the gated entrance to its eastern boundary are removed, and the entrance is relocated to the at-grade junction on the N59. The Modified GCRR with Amendment 4a is much more impactful from a landscape and visual perspective than the N6 GCRR.

Likewise, the Modified GCRR with Amendment 4b will cut through the landscape and estate setting of Bushypark House, albeit to a lesser extent than Amendment 4a, and will have a greater impact on Glenlo Abbey setting than Amendment 4a as it removes the front boundary and gated entry over the full extent of the property, with no clarity provided on the alternative access arrangements for Glenlo Abbey. The Modified GCRR with Amendment 4b has very significant impacts on Glenlo Abbey and significant impacts on Bushypark House compared to the proposed N6 GCRR.

3.4.14 Chapter 13: Cultural Heritage

The submission claims that the Modified GCCR improves compliance with the cultural heritage requirements of the EIA by avoiding significant heritage constraints and reducing the risk on monuments and historic landscapes.

The western section of the Modified GCRR is the same as the proposed N6 GCRR from a cultural heritage perspective.

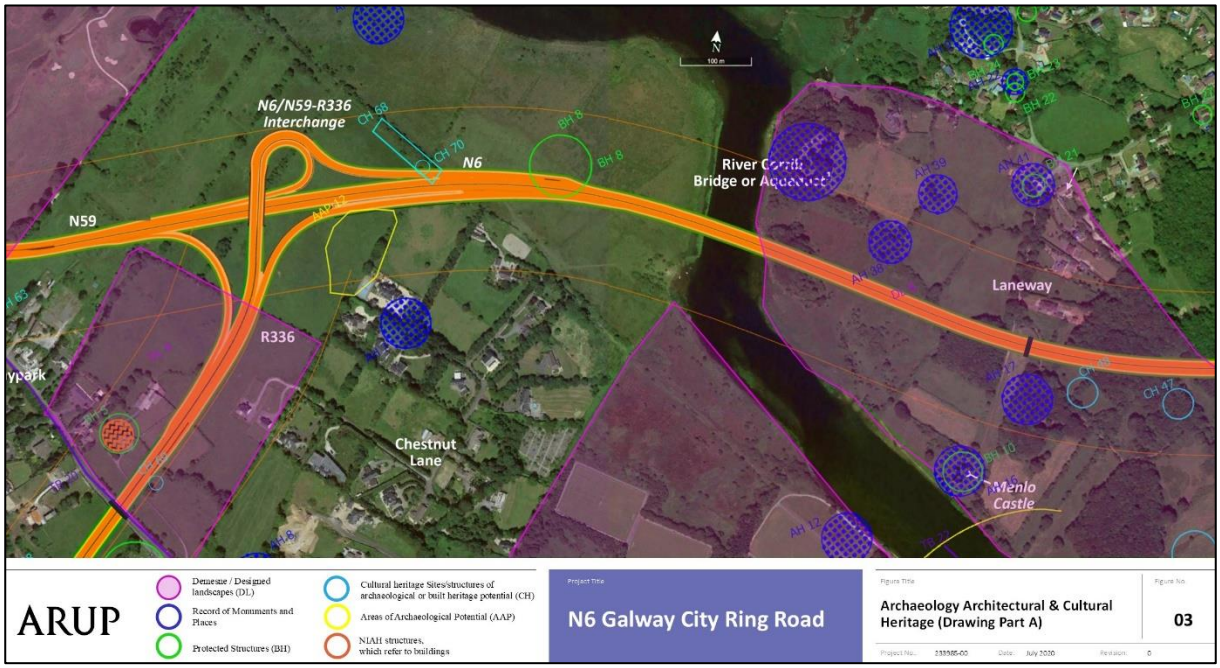

Plate 3.15 Archaeology, Architectural & Cultural Heritage on Modified GCRR with Amendment 4a (presented by GCC at 2020 Oral Hearing)

The impacts on cultural heritage in the central section of the Modified GCRR with Amendment 4a are shown on Plate 3.15, and clearly are significantly more than the impacts assessed on the proposed N6 GCRR. The Modified GCRR with Amendments 4a and 4b impacts significantly on the following heritage constraints due to the construction of a free flow interchange and the realignment of the existing N59 leading to the free flow interchange:

- Bushypark House (Recorded Protected Structure (RPS_1504)
- Bushypark House (National Inventory of Architectural Heritage No. 30408203)
- Bushypark Demesne
- Glenlo Abbey Demesne Designated Landscape

The impacts on Bushypark House and Glenlo Abbey from a cultural heritage perspective are significantly greater than the cultural heritage impacts of the proposed N6 GCRR.

The Modified GCRR with Amendment 4a includes a deep cut severing large parts of the Bushypark estate, severance of the entrance driveway of Bushypark House, a +7m cut identified on Plate 3.8 within 60m of the entrance hall to Bushypark House, the northern aspect of Bushypark House looking directly onto the proposed N6/N59 – R336 Interchange, severance of a portion of the Glenlo Abbey estate and relocation of their entrance. The impacts of the Modified GCRR with Amendment 4a are significantly greater than the proposed N6 GCRR from a cultural heritage perspective.

The Modified GCRR with Amendment 4b includes a deep cut severing large parts of the Bushypark estate, severance of a portion of the Glenlo Abbey estate, removal of the full extents of their roadside boundary wall and relocation of their entrance. The impacts of the Modified GCRR with Amendment are significantly greater than the proposed N6 GCRR from a cultural heritage perspective.

The impacts on cultural heritage in the eastern section of the Modified GCRR are also shown on Plate 3.15, with significant impacts on the following constraints:

- Menlo Castle (RPS 5702 and Recorded Monument GA082-064/001)
- Menlo Castle Gate Lodge (RPS 5703 and Recorded Monument GA082-070)
- Menlo Castle Demesne

As set out in the impact assessment of the eastern section of the River Corrib Cyan Route Option in Appendix A.4.2 of the Updated EIAR (i.e. which is the same as the eastern section of the Modified GCRR), the impact at Menlo Castle demesne is considered to be very significant negative as the route option runs in close proximity to the castle itself and severely truncates the principal structure from the attendant features. This is a greater impact than the proposed N6 GCRR on Menlo Castle, which is situated 140m to the south of Menlo Castle, thus avoiding any direct impacts to the castle itself and post mitigation the operational phase of the proposed N6 GCRR will have an indirect negative effect on the castle of moderate significance (refer to Section 13.7.3 of the Updated EIAR).

3.4.15 Chapter 14: Agriculture

The submission acknowledges that the Modified GCCR is more impactful on agriculture than the proposed N6 GCRR but the result is that the Modified GCRR then avoids higher density residential and commercial zoned areas.

Whilst the impact of the Modified GCRR is greater than the proposed N6 GCRR, the impact is not a significant differentiator between the two options.

3.4.16 Chapter 15: Material Assets Non-Agriculture

The submission claims that the Modified GCCR reduces impacts on residential, recreational, educational and utility infrastructure, with fewer residential properties acquired overall than the proposed N6 GCRR. It again states that the Modified GCCR is more socially acceptable and will face significantly reduced public resistance and legal issues.

While in this regard the impact of the proposed N6 GCRR could be considered greater than the Modified GCRR due to the acquisition of 54 homes for the N6GCRR versus over 38 homes for the Modified GCRR. Note Section 4.7.2.4 of Chapter 4 of the Updated EIAR quotes 38 homes acquired for the Cyan Route Option which is the minimum number of homes that the Modified GCRR will acquire. However, but there is no quantification in the submission of the additional impact on homes arising from the realignment of the N59 from Bushypark to west of Glenlo Abbey and the proposed Amendment 4b route from Glenlo Abbey southeast to Letteragh Road as shown on Plate 3.9.

Even if the Modified GCRR with Amendment 4a or 4b acquires less homes, it is not a feasible alternative as it is not possible to progress either Amendment 4a or 4b as it is likely to impact on the integrity of the Lough Corrib SAC, plus the connection from both Amendment 4a and 4b on the eastern side of the River Corrib has an even more damaging impact on the integrity of the Lough Corrib SAC. Furthermore, the Modified GCRR would not deliver the optimum intermodal transport solution as it does not deliver relief to congestion to the same level as the proposed N6 GCRR due to the lower level of transfer of traffic from the existing urban centre to the Modified GCRR.

3.4.17 Chapter 16: Air Quality

The submission claims that the Modified GCRR improves compliance with air quality protection objectives. The basis for this claim is that the route of the Modified GCRR is removed further from residential clusters and vulnerable groups such as schools and playgrounds.

Whilst the Modified GCRR will impact on less human receptors from an air quality perspective due to its more rural route, it will impact on more ecological receptors, with the most significant being the potential impact on the designated habitat over a length of up to 2km through the Lough Corrib SAC on the eastern side of the River Corrib. The operational phase emissions assessment must quantify the concentrations of NOx, ammonia and nitrogen deposition to establish if they are significant or not. Given the fact that the route of the Modified GCRR passes directly adjacent to these designated habits as shown on Plate 3.13 above, it is highly likely that the air quality impacts will be significant, and significantly more impactful than the proposed N6 GCRR which crosses the Lough Corrib SAC at the shortest location via a tunnel section from Lackagh Quarry.

The Modified GCRR is also almost 4km longer than the proposed N6 GCRR. Therefore, the vehicle kilometres travelled to bypass the city using the Modified GCRR will be greater than that on the proposed N6 GCRR. This is likely to show an increased level of emissions as the tool which calculates the emissions uses output directly from the traffic model, so every link in the traffic model is replicated in the air quality model enabling capture and accurate reporting of emissions.

By contrast, the modelling of the air quality for the proposed N6 GCRR in Chapter 16 of the Updated EIAR shows that no significant adverse effects are predicted to occur during the construction or the operation phase. The worst-case effect of 'moderate adverse' is predicted at one home and similarly at Lough Corrib SAC which is a lower scale of impact than a significant impact.

3.4.18 Chapter 17: Climate

The submission claims that the Modified GCRR improves compliance with Ireland's climate action objectives by reducing construction related emissions, supporting modal shift, avoidance of climate sensitive areas including low-lying floodplains, and less complex geometry and junction design.

The project description and construction activities set out above clearly contradict this statement, as the construction of a cut and cover tunnel in the widest part of the River Corrib floodplain as proposed as part of the Modified GCRR results in significant construction related emissions and places critical infrastructure permanently in a floodplain.

The Modified GCRR is almost 4km longer than the proposed N6 GCRR which means that a trip to bypass the city will be 4km longer using the Modified GCRR. Whilst it is noted that the transfer of traffic to the Modified GCRR will be less than the transfer to the proposed N6 GCRR due to the lesser connectivity of it, it is still likely that the overall kilometres travelled for the lesser volume of traffic will be greater on the Modified GCRR due to the longer distance per trip on it. It is crucial to strive to reduce kilometres travelled with the most direct routes in order to achieve our climate goals.

Therefore, the circuitous additional kilometre added by inclusion of Amendment 4a or Amendment 4b of the Modified GCRR onto the journey from the Coolagh Junction at the eastern end of the Modified GCRR to the R336 at its western end, combined with the fact that the route is also about 4km longer, is less favourable from a climate perspective than the N6 GCRR.

3.4.19 Chapter 18: Noise and Vibration

The submission claims that there will be less noise impacts arising from the Modified GCRR as it passes at a further distance from urban areas and there are less elevated sections on it than on the proposed N6 GCRR. It is accepted that there will fewer human receptors in proximity to the Modified GCRR due to its more rural route.

While the noise and vibration impacts of the Modified GCRR are less than the proposed N6 GCRR, the impact is not a significant differentiator between the two options.

3.4.20 Chapter 19: Population and Human Health

The submission claims that the Modified GCRR reduces displacement, avoids severance of communities and direct intrusion into communities, protects school zones and aligns better with public health strategies. It states again that there will be significant severance of the Ardaun LAP which is factually incorrect as set out above in the discussion on Chapter 2.

The Modified GCRR passes at a further distance from urban areas with fewer human receptors in direct proximity to the Modified GCRR. However, from a socio-economic and human beings' perspective, there are several major severance effects on communities associated with the Modified GCRR at Bushypark in the central section for both Amendments 4a and 4b and at Ballindooley in the eastern section, with the potential for social severance at Ballindooley, and so the assertion in the submission that the Modified GCRR avoids severance of communities is incorrect. In terms of amenity, there will be impacts on the Glenlo Abbey Golf Course and impacts to amenity in the vicinity of Menlough graveyard on the Modified GCRR, both of which are not impacted by the proposed N6 GCRR.

The assertion that the Modified GCRR aligns better with public health strategies is unfounded. As set out in Section 19.9.3.3 of Chapter 19 of the Updated EIAR, the proposed N6 GCRR will have no significant adverse effect on human health and the N6 GCRR with the full implementation of the GTS, which includes measures designed to improve human health (i.e. walking and cycling facilities, reduced traffic in higher population city centre areas, increases provision and access to public transport), will have positive impacts on human health.

Both the Modified GCRR and the proposed N6 GCRR are impactful on population, but the impact is not a significant differentiator between the two options.

3.4.21 Chapter 20: Resource and Waste Management

The submission claims that the Modified GCRR reduces construction waste, avoidance of concrete intensive structures such as viaducts, and reduces spoil excavation. This is factually incorrect given the extent of the cut and cover tunnel proposed on the Modified GCRR.

Due to the nature of the ground conditions along alignment of the Modified GCRR, there will be a significant volume of slurry/tunnel arisings which cannot be utilised in the construction of the Modified GCRR and will need to be removed from site, thus generating significant volumes of waste to be removed from site.

By contrast the proposed N6 GCRR passes through Lackagh Quarry and passes beneath the Lough Corrib SAC in a short tunnel with the arisings from this tunnel processed in the disused quarry for reuse in road construction.

There are also significant issues to consider with a tunnel of this length as proposed in the Modified GCRR under the headings of sustainability and economy both in the construction and operational phase. In particular, in connection with longer tunnels, fire safety and ventilation requirements increase operational cost and resource consumption significantly.

In summary, the resource and waste management is considered in great detail for the proposed N6 GCRR with volumes of all materials quantified and set out in Chapter 20 of the Updated EIAR and with mutual gains arising from the placement of material for engineering use in Lackagh Quarry to support the existing quarry walls which are susceptible to weathering outlined in detail in Appendix A.9.3 of the Updated EIAR. By contrast no detail is provided in this submission of the waste management plans, volumes of material, volumes for reuse for the Modified GCRR.

3.5 Consideration of the "Modified Galway City Ring Road"

After due consideration of the "Compliance with EIAR" presented in this submission for the Modified GCRR, it is clear to Galway County Council that the "Modified Galway City Ring Road" does not meet the project objectives for the proposed N6 Galway City Ring Road and would not address the significant transport issues currently experienced in Galway City and its environs.

The western section of the Modified GCRR is the same route as the proposed N6 GCRR. The central portion of the Modified GCRR, referenced as Amendment 4a in this submission, is the exact same as what Mr. Rabbitt put forward at the 2020 Oral Hearing, and the central portion referenced as Amendment 4b in this submission is a modification of 4a which seeks to eliminate some issues of Amendment 4a that were raised by the design team during the oral hearing. The eastern portion of the Modified GCRR follows the route of the 2006 GCOB but adds a junction on the N83 Tuam Road, which makes it the exact same as the Cyan Route Option already considered as an alternative by GCC for the N6 GCRR. This Modified GCRR put forward by Mr. Rabbitt is not a reasonable alternative studied by GCC for the reasons set out above, a summary of which is included in brief below:

- Amendment 4a and Amendment 4b restore primacy to the N59/N6 traffic movement (giving priority to traffic on the N6 travelling westbound to Moycullen/Clifden and traffic from Clifden is free flow eastbound) which does not reflect the demand
- An at-grade crossing as proposed in the Modified GCRR will not provide for the N59 to/from city traffic demand and therefore, does not address the traffic issue trying to be resolved by the proposed N6 GCRR as connectivity back to the city is key

- The dispersion of conflicting traffic movements in the western suburbs is non-existent due to the elimination of a number of critical links in the Modified GCRR, which are necessary to solve the transport problem. The proposal removes the proposed link road from the N59 to the Letteragh Road and onwards to the Rahoon Road which is a critical missing link in the existing road infrastructure
- The dispersion of traffic in the eastern section of the Modified GCRR is not effective as the junction on the N83 on the Modified GCRR only serves to relocate the traffic to the N83 and does not connect directly into the key employment centres of Parkmore and Ballybrit Business Parks and the 10,000 employees working there
- The impacts of the cut and cover tunnel proposed in the central section of the Modified GCRR on the west of the River Corrib are very significant, as there will be an impact on Annex I habitat within the Lough Corrib SAC
- The submission includes no evidence to demonstrate that a tunnel beneath the Lough Corrib SAC will not impact on groundwater flow feeding water dependent QI habitat within the Lough Corrib SAC
- There will be a significant impact on Annex I habitat, Limestone pavement [* 8240] within the Lough Corrib SAC on the east of the River Corrib and as such an adverse effect on the site integrity of the Lough Corrib SAC
- There is no justification for the use of IROPI as there is a very clear alternative that does not affect the site integrity of Lough Corrib SAC, i.e. the proposed N6 GCRR
- The Modified GCRR impacts significantly on heritage constraints due to the construction of a free flow interchange and the realignment of the existing N59 leading to the free flow interchange, namely Bushypark House (Recorded Protected Structure (RPS)1504), Bushypark House (National Inventory of Architectural Heritage No. 30408203), Bushypark Demesne Designated Landscape, Glenlo Abbey Demesne Designated Landscape, Menlo Castle (RPS 5702 and Recorded Monument GA082-064/001), Menlo Castle Gate Lodge (RPS 5703 and Recorded Monument GA082-070) and Menlo Castle Demesne Designated Landscape
- The impact at Menlo Castle demesne is considered to be very significant negative as the route option runs in close proximity to the castle itself and severely truncates the principal structure from the attendant features

In Section 4.7.6 of the Updated EIAR, for completeness, GCC dealt with the central section of the Modified GCRR (Amendment 4a) but did not deem it a reasonable alternative studied by GCC and instead dealt with it as an alternative put forward by Mr. Rabbitt and explained why it was not feasible and did not meet the Project objectives as detailed above. For completeness, Amendment 4b is considered not feasible for the same reasons as Amendment 4a, and nothing in the submission changes that view as we have looked at this again and remain firmly of the view that neither Amendment 4a or Amendment 4b are feasible alternatives for the same reasons set out in the bullet points above. Similarly, GCC dealt with the eastern section of the Modified GCRR as the Cyan Route Option in Appendix A.4.2[30] and accompanying figures[31] of the Updated EIAR and did not progress it as it would result in adverse impacts on the integrity of the Lough Corrib SAC (Limestone Pavement) given that there is an alternative which better serves the project objectives and does not impact on the integrity of the Lough Corrib SAC (i.e. the N6 GCRR). In conclusion, the full extents of the Modified GCRR is not deemed a reasonable alternative as the eastern and central sections proposed are not viable.

[30] https://www.n6galwaycityringroad.ie/sites/default/files/media/Appendix%20A.4.2%20Cyan%20Route%20Option.pdf

[31] https://www.n6galwaycityringroad.ie/eiar-appendix-a42-figures

The route of the proposed N6 GCRR is the optimum corridor within the Galway Transport Strategy (GTS) Transport Solution. This is explained in Section 4.12 of Chapter 4 of the Updated EIAR and the proposed N6 GCRR delivers on the key objectives of providing a strategic route, forming part of the TEN-T comprehensive network, across the River Corrib without the need to go through the city, and provides the necessary connectivity to the national roads, the Western Region and the EU network. In doing so, it alleviates congestion within Galway City and enables the reallocation of existing road space within the city to public transport and active travel measures as envisaged in the GTS. This facilitates a more efficient public transport system and facilitates the optimal provision of a multi-modal choice of travel with resultant improved safety levels for all road users.

4. Response to ABP-318220-23: 04 DAU

4.1 Submission – Whole Scheme

The submission sets out observations / recommendations relating to:

1. Nature Conservation
2. Technicalities

4.2 Response to submission

4.2.1 Nature Conservation

The Department made the following observations and noted that they are not exhaustive and should be read together with all relevant previous Departmental observations.

There are 3 Recommendations set out in the submission, which are as follows:

1. *"Section 9 of the Construction Environmental Management Plan (CEMP) states that advance treatment of Invasive species may be required, such as Japanese Knotweed, and will be decided on a site-by-site basis. For example, in summary Table 9.2, areas of confirmed Japanese Knotweed within the development footprint states that "Isolating the species may not be possible, likely that treatment may be required". The Department recommends all third Schedule non-native species subject to restrictions under Regulations 49 and 50 Part 1: Plants listed in S.I. No. 477/2011 European Communities (Birds and Natural Habitats) Regulations 2011 identified in the development zone should be treated prior to the commencement of construction works.*
2. *In relation to Water Quality Monitoring. the Natura Impact Statement (NIS) section 10.5 states "regular monitoring of downstream receptor water quality ...will be carried out" and section 8.5 In CEMP states the "Local Authority will make recommendations on the water quality parameters to be assessed, sampling intervals and locations". Monitoring is essential to assess the effectiveness of any mitigation measures outlined in the NIS and Environmental Impact Assessment Report (EIAR). The Department recommends the details should be agreed before any consent is granted.*
3. *Regarding stockpiling of surplus materials, the Department notes the commitment for no stockpiling on lands within a European site (NIS 2.4.8 and CEMP 8.4.3), and stockpiling of materials will be 50m away from Annex I habitat within a designated site. Annex I habitats outside designated sites have not been explicitly considered here, and the Department recommends no stockpiling on Annex I habitats outside designated sites."*

Response

The following provides a response to the recommendations made by the DAU with the same numbering used for each item:

1. Treatment of Invasive Species

Galway County Council have no objection to the inclusion in the CEMP of the first recommendation that has been proposed by the DAU above. When finalising the CEMP, the contractor shall update the first sentence in the first paragraph of Section 9.3.4 (Advance Treatment) on page 40 of the CEMP included in Appendix A.7.5 of the Updated EIAR[32]:

[32] https://www.n6galwaycityringroad.ie/sites/default/files/media/Appendix%20A.7.5%20Construction%20Environmental%20Management%20Plan_I4.pdf

Current text:

> "*As mentioned previously, it may be necessary to implement an advance works contract to commence treatment of some non-native invasive species such as knotweed species before construction starts*."

Updated text:

> It will be necessary to implement an advance works contract to treat all third Schedule non-native species subject to restrictions under Regulations 49 and 50 Part 1: Plants listed in S.I. No. 477/2011 European Communities (Birds and Natural Habitats) Regulations 2011 before construction starts. For other non-third Schedule non-native invasive species it may also be necessary to implement an advance works contract to treat those species before construction commences.

2. Water Quality Monitoring Parameters

   The following chemical water quality parameters shall be used for the water quality monitoring for the Project:

   - Turbidity
   - Total suspended solids (TSS)
   - Dissolved oxygen (DO)
   - Temperature
   - pH
   - Biological oxygen demand (BOD)
   - Total phosphorous, nitrates, ammonia, heavy metals (Zn or Cu)
   - Total hydrocarbons
   - Conductivity

Samples will be taken upstream and downstream of sensitive waterbodies, crossing points, namely Bearna Stream, River Corrib, Coolagh Lakes and Ballindooley Lake, monthly during construction and quarterly post-construction for 12 months.

The above water quality sampling parameters are standard and are used across many road construction projects, and is not something that is required to be agreed in advance of any consent These parameters will be included in the finalised CEMP in Section 8.5 (Proposed Water Quality Monitoring) and so will be adhered to.

Please note that in terms of the EPA Waterbody Status Assessment, the EPA on 12 October 2025 published the updated waterbody status based on the assessment period 2019 to 2024. The previous assessment period was 2016 to 2021 which was reported on in Chapter 10 Hydrogeology[33] and Chapter 11 Hydrology[34] of the Updated EIAR. There are no changes to river, coastal, lake or groundwater status in respect to the waterbodies within the zone of influence of the Project as can be seen from Table 4.1, Table 4.2, Table 4.3 and Table 4.5 below. There are some improved status changes to a number of the Transitional waterbodies, as set out in Table 4.4 below. GCC and the project team have considered these changes to the waterbody status, and they do not impact the findings of the Updated EIAR or Updated NIS relating to potential water quality impacts because the only changes in the status are improvements in some of the estuarine/transitional waters of Inner Galway Bay and the assessment has shown that the Project will have negligible (imperceptible) hydrological impact on these marine waters and therefore the change in WFD status (improvement in the status) has no effect on the impact assessment. All other waterbodies retain the same status.

[33] https://www.n6galwaycityringroad.ie/sites/default/files/media/Updated%20EIAR%20Chapter%2010.pdf

[34] https://www.n6galwaycityringroad.ie/sites/default/files/media/Updated%20EIAR%20Chapter%2011.pdf

Table 4.1 River Waterbody Status

Name	Assessment Period (2016 to 2021)	Assessment Period (2019 to 2024)
Terryland_010	Moderate	Moderate
Corrib_020	Good	Good
Knocknacarragh_010	Poor	Poor
Barna (Stream)_010	Moderate	Moderate
Trusky Stream_010	Moderate	Moderate

Table 4.2 Lake Waterbody Status

Name	Assessment Period (2016 to 2021)	Assessment Period (2019 to 2024)
Ballyquirke Lough	Moderate	Moderate
Lough Corrib Lower	Good	Good
Coolagh Loughs	Good	Good
Ballindooly Lough	Not included	Not included

Table 4.3 Coastal Waterbody Status

Name	Assessment Period (2016 to 2021)	Assessment Period (2019 to 2024)
Outer Galway Bay	High	High
Inner Galway Bay North	Good	Good
Inner Galway Bay South	High	High
Aughinish Bay	Good	Good
Aran Islands, Galway Bay, Connemara (HAs 29;31)	High	High

Table 4.4 Transitional Waterbody Status Inner Galway Bay

Name	Assessment Period (2016 to 2021)	Assessment Period (2019 to 2024)
Corrib Estuary	Moderate	Good
Renmore Lough	Unassigned	Unassigned
Oranmore Bay	Unassigned	Moderate
Turreen Lough	Unassigned	Unassigned
Ardfry Oyster Pool	Moderate	High
Loughaunascailia	Unassigned	Moderate

Name	Assessment Period (2016 to 2021)	Assessment Period (2019 to 2024)
Mweeloon Pool North	Moderate	High
Mweeloon Pool South	Moderate	High
Dunbulcaun Bay	Good	High
Kinvarra Bay	Moderate	Moderate
Rossalia Lagoon	Moderate	High
Aughinish Lagoon	Unassigned	Unassigned
Murree Lough	Unassigned	Unassigned
Bridge Lough Knockakilleen	Moderate	High

Table 4.5 Groundwater Status

Name	Assessment Period (2016 to 2021)	Assessment Period (2019 to 2024)
Clarinbridge GWB includes Galway City East	Good	Good
Clare-Corrib GWB	Good	Good
GWDTE-Lough Corrib Fen 1 (Menlough) (SAC000297)	Good	Good
Ross Lake GWB	Good	Good
Maam-Clonbur	Good	Good
Spiddal GWB	Good	Good

3. Stockpiling within any Annex I habitat areas

Galway County Council have no objection to the inclusion in the CEMP of the third recommendation that has been proposed by the DAU above. When finalising the CEMP, the contractor shall include the following to the list of bullet points in Section 8.4.3 (Stock Piles) on page 28 of the CEMP included in Appendix A.7.5 of the Updated EIAR[32]:

New Bullet Point:

- No stockpiles will be located within any Annex I habitat areas.

All of the recommendations proposed by the DAU are acceptable to Galway County Council and do not alter the findings of the assessment presented in the Updated EIAR and Updated NIS.

4.2.2 Technicalities

The submission raises the following under the heading of technicalities: -

A. *"Lough Corrib SAC - The Statutory Instrument for this site was published in 2022. 'EUROPEAN UNION HABITATS (LOUGH CORRIB SPECIAL AREA OF CONSERVATION 000297) REGULATIONS 2022' -S.I. no 384 of 2022. Therefore, Lough Corrib is no longer a candidate SAC {cSAC). Lough Corrib Is referred to as a cSAC in some updated reports, for example the 'River Corrib Bridge Constructability Report - updated March 2025'.*

B. The Department notes the aquatic vegetation in the River Corrib has been reclassified on a precautionary basis, as corresponding to the Annex 1 habitat 'Vegetation of Flowing Waters 3280'. The NIS states 'At the site of the proposed River Corrib bridge where the elevated structure passes over habitats within the SAC, including Annex I habitat, Vegetation of Flowing Waters 3260'. However, some maps have not been updated to reflect this change. For example, plate 2 at the start of the NIS technical summary, and plate 8.1 in EIAR. The Department recommends An Coimisiún Pleanála take this into account.

C. The requirement for an Ecological Clerk of Works (ECoW) is stated in the NIS and EIAR. However, the CEMP makes reference to an Environmental Manager (EM) and there is no ECoW role outlined. The Department recommends An Coimisiún Pleanála takes this into account."

Response

The following provides a response to the above points raised by the DAU with the same lettering used for each item.

A. All references to Lough Corrib cSAC should be read as SAC in the planning documentation for the purposes of any assessments undertaken. The project team were aware of the publication of S.I. No. 384 of 2022 and the status of Lough Corrib SAC (and S.I. No. 384 of 2022 and the status of Lough Corrib SAC are referenced in, for example, both section 8.3.4 (Designated Area for Nature Conservation) of Chapter 8 of the Updated EIAR and in Section 5.8 (European Sites) of the Updated NIS). Therefore, any reference to "cSAC" rather than "SAC" in relation to Lough Corrib SAC is simply a typographical error.

B. Plate 8.1 of the EIAR and Plate 2 of the Updated NIS have been corrected and included below to reflect the classification of the River Corrib as QI Annex I 3260 habitat. This was a typographical error in the production of these plates only. The assessment of the River Corrib habitat, at the site of the proposed crossing for the N6 GCRR, utilised to inform the Updated EIAR and Updated NIS used the classification of QI Annex I 3260 habitat.

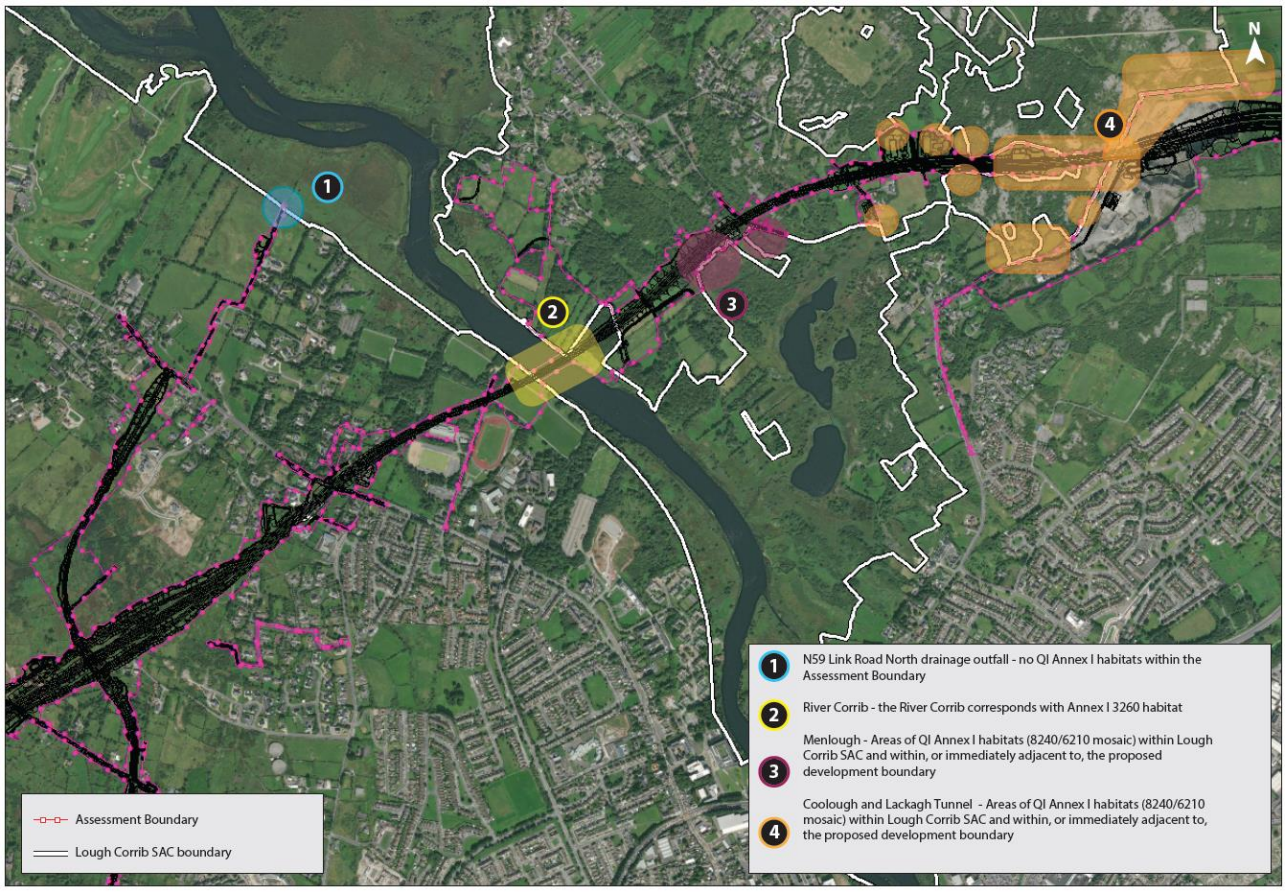

Plate 2.2 of the Updated NIS and 8.1 of Updated EIAR

A. The Environmental Manager referenced in the Updated EIAR, Updated NIS and the accompanying Construction Environmental Management Plan (CEMP) is employed by the Contractor and as detailed Section 5 of the CEMP in Appendix A.7.5 of the Updated EIAR[32], "w*ill liaise during the finalisation of the CEMP to assign individual duties and responsibilities bearing in mind the overall organisational structure, the nature of the Environmental Commitments and Requirements and the Project specific characteristics"*. They will be "*responsible for co-ordinating the day-to-day management of environmental impacts during the construction phase and for assisting and advising the Contractor's Project Team when programming construction activities and devising methodologies, taking cognisance of EIA/AA requirements"*.

The Ecological Clerk of Works is the suitably qualified ecologist employed by the contractor to oversee the implementation of the biodiversity related mitigation and compensation measures and reports to the environmental manager.

Both an Environmental Manager and an Ecological Clerk of Works will be appointed in accordance with the commitments given in the Updated EIAR and Updated NIS. As the appointment of the Ecological Clerk of Works is committed to in the Updated EIAR and Updated NIS it was not necessary to expressly include reference to an Ecological Clerk of Works in the CEMP. However, Galway County Council would have no objection to the appointment of an Ecological Clerk of Works being conditioned into the CEMP.

The technicalities noted by the DAU do not alter the findings of the assessment presented in the Updated EIAR and Updated NIS.

5. Response to ABP-318220-23: 05 Enda McGovern

5.1 Submission – Whole Scheme

The submission is made under the following three areas:

1. The concept of 'induced demand' with reference to published reports on the topic
2. Adopting a precautionary approach to climate change in planning applications
3. The construction site and resulting motorway will be devastating for nature

Mr. McGovern provides details of his work and studies on climate change over the past 30 years in the opening sections of the submission. He cites the measurement of the concentration of carbon dioxide in the atmosphere is described as parts per million (ppm) and he notes that this level is increasing as opposed to decreasing due to a lack of change in human behaviour such as purchasing electric vehicles.

5.2 Response to submission

5.2.1 The concept of 'induced demand'

The submission outlines a definition of 'induced demand' and applies the characteristics of this to the proposed scheme. The submission cites a 'Goodwin (2016)' study which reviewed various UK transport schemes and found that a typical road expansion induces traffic of up to 10% in the short term and 20% in the longer term. Specific additional reference is made to the 2022 OECD Report *'Redesigning Ireland's Transport for Net Zero: Towards Systems that Work for People and the Planet'*. The submission proceeds to outline that the Irish transport system has '*always promoted car ownership and use'*.

The submission also states that *'Building roads is not a long-term solution to congestion unless it's paired with demand management (like congestion pricing), better public transit options, or land-use planning'*. The submission goes on to cite the examples of poor investment in public transport in Galway and notes the limitations on the capacity of the single-track rail line between Galway and Athlone.

Response – The concept of induced demand

The concept of induced demand is discussed in the Updated EIAR in Chapter 6, Section 6.8.1. Tables 6.28 and 6.29 specifically show the mode share comparison in the Do-Minimum (without N6 GCRR) and Do-Something (with N6 GCRR) scenarios. The tables show that the Do-Something mode share increases by approx. 2% when the N6 GCRR is added in isolation. This increase is caused by induced traffic/demand and the Do-Something emissions results that are detailed in Table 17.8 of the updated 2025 EIAR include this increase in traffic. In addition, the rest of Section 6.8 details the various types of induced traffic, the reasons behind them, how they were assessed in the updated 2025 EIAR and the outcomes of each.

As set out in the *Response to Queries raised in Module 2 of the N6 Galway City Ring Road in respect of Traffic and Climate*[35] the West Regional Model (WRM) is a strategic multi-modal transport model for the counties Galway, Mayo, Roscommon, Sligo, Leitrim and Donegal, with a focus on the city of Galway. It is capable of modelling walking, cycling and public transport in addition to private vehicle trips. The model is capable of forecasting how a transport scheme may influence a population's choice of travel mode. The mode of transport which is chosen for an individual trip, is related to the following key factors:

- Car availability for the trip
- Availability & cost of parking at the destination
- The travel time for the trip by each mode (car, public transport, walking & cycling)
- The wait time (related to assumed frequency) for relevant public transport service

[35] https://www.n6galwaycityringroad.ie/sites/default/files/media/GCRR_4-03.34.13.003_Module%202%20Response_I1_.pdf

- Trip distance
- Cost of journey - public transport fares and vehicle running costs
- Behavioural parameters relating to travel and mode choice

The WRM has been calibrated and validated using observed travel and mode share data to ensure that the impact of each of the above factors is accurately represented when calculating modal choice.

Therefore, it is acknowledged in the Updated EIAR that induced demand exists, a full explanation of induced demand is provided therein, and an analysis of the mechanism to address induced demand in the form of demand management is presented in the Updated EIAR (Part VI) and the Section 15 Report (Part IV) submitted as part of the 2025 RFI Response.

Section 6.8.3.5 of Chapter 6 of the Updated EIAR shows the analysis/results of this, with the Parkmore area being the focus of the analysis, given it is a significant destination within the city, due to the number of people working in that area.

The analysis showed that in the Do-Minimum, without the N6 GCRR in 2046, there were more trips to the Parkmore area, from the eastern side of the city and county. This was due to congestion increasing to such a degree, in part due to significant population growth as per the NPF, that it discouraged some people from travelling across the river, via the existing bridges (in the 2046 Do-Minimum scenario, the Salmon Weir bridge has restrictions to general traffic during some time periods, with the BusConnects Cross-City Link scheme in place), from the western side of the city. However, when the N6 GCRR is implemented, congestion eases, allowing people from the western side of the city, to again choose the Parkmore area as a destination, thus illustrating the that the transport assessment in the Updated EIAR includes an assessment of changes in demand with the proposed N6 GCRR in place i.e. induced traffic. Further to that, ENEVAL is a tool built by the NTA which can take the outputs from a model by reading the level of traffic on every single road and the speed of each vehicle in the traffic model and assesses the associated emissions. Therefore, the outputs from the ENEVAL model cover the full extent of the transport model and provide a better representation of emission projections, again illustrating that the assessment of emissions in the Updated EIAR does account for induced traffic.

While Chapter 6 and Chapter 17 of the Updated EIAR both consider and assess the impacts of the proposed N6 GCRR in isolation, including any induced traffic impacts, on traffic and climate respectively for the purposes of the EIA to be carried out by the Commission, the Section 15 Report considers the implications of any induced traffic in the context of compliance with the Commission's obligations under section 15 of the 2015 Act.

In that context, Plate 5.5 of the Section 15 Report (reproduced below), shows a comparison of the mode shares for different Climate Action Plan related scenarios, both with and without the N6 GCRR. The figure shows a comparison of a CAP DS scenario, both with and without the N6 GCRR. Within this scenario, is the infrastructure included in the GTS, including the N6 GCRR, and a series of demand management measures required to meet the targets set out in the Climate Action Plans. The comparison showed that there was minimal resultant change in the car mode share when the N6 GCRR was implemented alongside demand management measures, thus demonstrating that the scheme is not inducing additional traffic when applied as part of a holistic strategy.

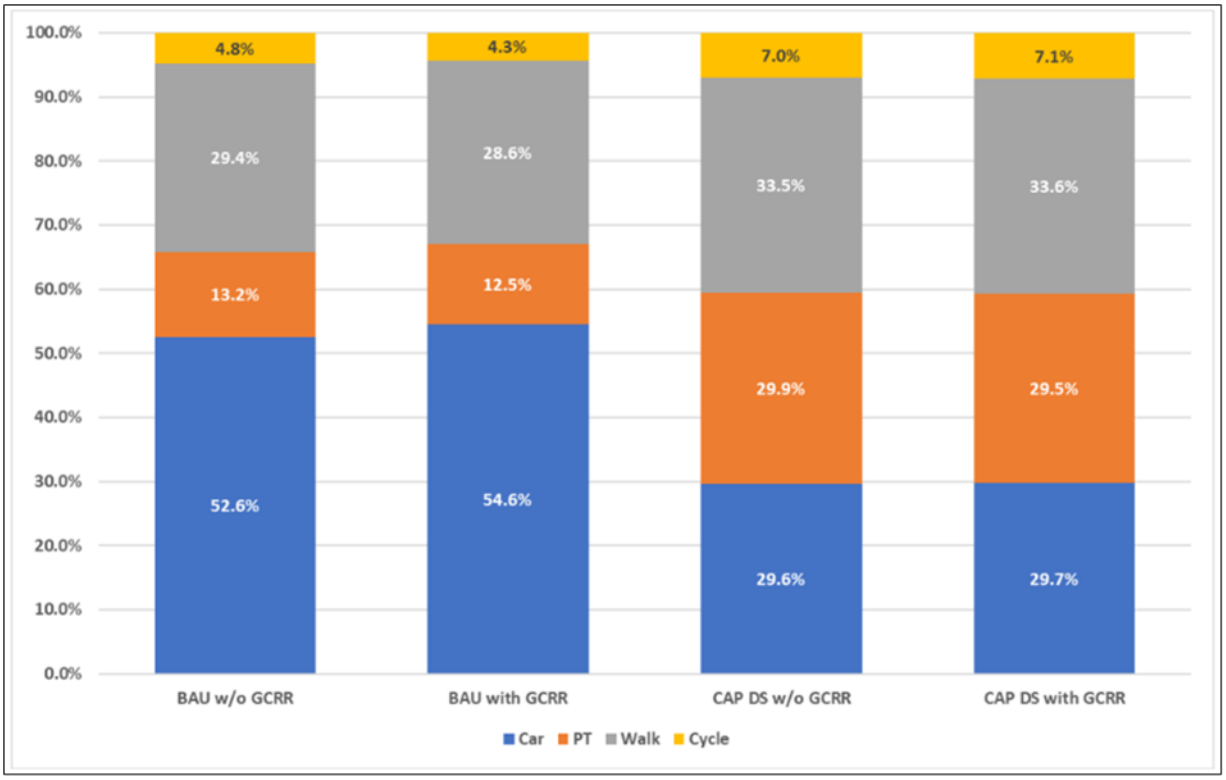

Plate 5.1 Mode Share Results, BAU vs CAP (with and without N6 GCRR) (extract from Part IV of 2025 RFI Response)

Sections 5.2.4 to 5.2.6 of the Section 15 Report further details the benefits of introducing the N6 GCRR alongside the demand management measures assessed and how the N6 GCRR enables these measures to be included.

Section 5.2.4 examines the daily traffic demand crossing the River Corrib under the 'BAU' (Business-As-Usual) and 'CAP Do-Something' scenarios. By 2030, the CAP Do-Something scenario is forecast to show approximately 78,000 vehicles crossing the river each day. This scenario includes three of the current four bridges being restricted to general traffic, i.e. Wolfe Tone and O'Briens Bridges restricted due to envisaged demand management measures for the city centre and the Salmon Weir Bridge converted to a sustainable transport corridor (as part of the Cross-City Link scheme), and only the Quincentenary Bridge remaining fully open. Currently, there is a demand for approximately 80,000 vehicles crossing the river each day across all four bridges.

However, the Quincentenary Bridge currently suffers from severe congestion issues, especially during peak hours and has approx. 40,000 vehicles using it on an average workday. Therefore, if another river crossing was not provided in the CAP DS scenario, the Quincentenary Bridge would have to cater for double the volume which it caters for today and would grind to a halt due to congestion, with all the attendant air quality impacts. Therefore, the additional bridge crossing provided by the proposed N6 GCRR is the key enabler for the implementation of the closure of the Salmon Weir Bridge and the further restrictions on Wolfe Tone and O'Briens Bridges as part of the CAP demand management measures.

The modelled 78,000 figure in the CAP Do-Something scenario is 2,000 lower than the present-day figure, whilst also catering for an approximate 30% increase in population across the Metropolitan Area by 2030 as set out under the National Planning Framework. This demonstrates that the N6 GCRR forms an integral part of the Galway Transport Strategy and is consistent with helping to achieve the objectives of the Climate Action Plan by accommodating the necessary residual movements of strategic traffic across the Galway Metropolitan Area, whilst facilitating the closure of Salmon Weir Bridge and additional envisaged restrictions on Wolfe Tone and O'Briens Bridges to general traffic, thereby creating a safer and more attractive city centre.

It is clear, therefore, from what is set out in the Updated EIAR and in the Section 15 Report, that the effects of induced traffic arising from the proposed N6 GCRR have been fully and properly considered and assessed and the emissions results take account of induced traffic, in the Environmental Impact Assessment to be carried out by the Commission as part of its consideration of the applications of approval of the N6 GCRR. That assessment concluded, in the EIA context, that when the proposed N6 GCRR is implemented in isolation, there would an increase in the car mode share by approx. 2%, as shown in Tables 6.28 and 6.29 of the updated 2025 EIAR. This increase in traffic in the Do-Something scenario (With the N6 GCRR) resulted in an increase of 4,584 tonnes of CO_{2eq} or an approx. 1% increase, relative to the Do Minimum scenario (without N6 GCRR).

Separately, to inform the Commission's consideration of its obligations under section 15 of the 2015 Act, the effects of the proposed N6 GCRR on induced traffic were also considered in the Section 15 Report, which demonstrates that the delivery of the proposed N6 GCRR alongside a series of demand management measures, which are designed to help meet the emissions reductions target set out within CAP25 , contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25), and does not lead to induced traffic.

The submission cites a 'Goodwin (2016)' review of UK transport schemes. However, this appears to be a reference to an article by P Goodwin of Bristol University in June of 2023[36] about induced traffic. The article references a 1994 report entitled 'Trunk Roads and the Generation of Traffic' by The Standing Advisory Committed on Trunk Road Assessment (SACTRA) which noted that a road improvement will see a 10% increase in traffic in the short term and 20% in the longer term. This article by P Goodwin *concluded that induced traffic was, and remains, a significant issue in the appraisal of road capacity increases*. As set out above, it is acknowledged in the Updated EIAR that induced demand exists, a full explanation of induced demand is provided therein, and an analysis of the mechanism to address induced demand in the form of demand management is presented in the Updated EIAR (Part VI) and the Section 15 Report (Part IV) submitted as part of the 2025 RFI Response.

The submission also refers to a report from the editor of the Irish Times in 2004 on the EIS for the M50 junction upgrades as providing evidence of induced demand. The EIS acknowledges that specific demand management measures are required in conjunction with the provision of additional road infrastructure. This is in line with the assessments undertaken in the Updated EIAR and the Section 15 Report.

Response – Building roads and pairing with demand management

The Updated EIAR acknowledges the need for a holistic transport solution with all parts of the solution working in tandem, including pairing demand management with introduction of new road infrastructure. Section 6.8.3.5 of the Updated EIAR shows the analysis/results of this, with the Parkmore area being the focus of the analysis, given it is a significant destination within the city, due to the number of people working in that area.

The analysis showed that in the Do-Minimum, without the N6 GCRR in 2046, there were more trips to the Parkmore area, from the eastern side of the city and county than the western. This was due to congestion increasing to such a degree, in part due to significant population growth as per the NPF, that it discouraged some people from travelling across the river, via the existing bridges (in the 2046 Do-Minimum scenario, the Salmon Weir bridge has restrictions to general traffic during some time periods with the BusConnects Cross-City Link scheme in place), from the western side of the city. However, when the N6 GCRR is implemented, congestion eases, allowing people from the western side of the city, to again choose the Parkmore area as a destination thus illustrating that the transport assessment in the Updated EIAR includes an assessment of changes in demand with the proposed N6 GCRR in place i.e. induced traffic. This analysis presented in the Updated EIAR is in line with the consequences predicted in the submission on Page 3.

Further to that, the ENEVAL model is a tool developed by the NTA, which is run in conjunction with the outputs of the transport model and therefore reads the traffic on every single link in the traffic model and assesses the associated emissions. Therefore, the outputs from the ENEVAL model cover the full extent of

[36] Induced traffic: yet again a worryingly overlooked dimension in crucial road planning and appraisal policy

the transport model and provide a better representation of emission projections, again illustrating that the assessment of emissions in the Updated EIAR do account for induced traffic.

While Chapter 6 and Chapter 17 of the Updated EIAR both consider and assess the impacts of the proposed N6 GCRR, including any induced traffic impacts, on traffic and climate respectively for the purposes of the EIA to be carried out by the Commission, the Section 15 Report considers the implications of any induced traffic in the context of compliance with the Commission's obligations under section 15 of the 2015 Act which is a separate and distinct test and should not be conflated with the Environmental Impact Assessment process.

In that context, Plate 5.5 of the Section 15 Report, showed a comparison of the mode shares for different Climate Action Plan related scenarios, both with and without the N6 GCRR. The figure showed a comparison of a CAP DS scenario, both with and without the N6 GCRR. Within this scenario, is the infrastructure included in the GTS, including the N6 GCRR, and a series of demand management measures required to meet the targets set out in the Climate Action Plans. The comparison showed that there was no resultant change in the car mode share when the N6 GCRR was implemented alongside demand management measures, thus demonstrating that the scheme is not inducing additional traffic when applied as part of a holistic strategy.

Sections 5.2.4 to 5.2.6 of the Section 15 Report details the benefits of introducing the N6 GCRR alongside the demand management measures assessed and how the N6 GCRR enables these measures to be included. For example, Section 5.2.4 examines the daily traffic demand crossing the River Corrib under the 'BAU' (Business-As-Usual) and 'CAP Do-Something' scenarios. By 2030, the CAP Do-Something scenario is forecast to show approximately 78,000 vehicles crossing the river each day. This scenario includes three of the current four bridges being restricted to general traffic, i.e. Wolfe Tone and O'Briens Bridges restricted due to envisaged CAP demand management measures for the city centre and the Salmon Weir Bridge converted to a sustainable transport corridor (as part of the Cross-City Link scheme), and only the Quincentenary Bridge remaining fully open. Currently, there is a demand for approximately 80,000 vehicles crossing the river each day across all four bridges. The modelled 78,000 figure is 2,000 lower than the present-day figure, whilst also catering for an approximate 30% increase in population across the Metropolitan Area by 2030 as set out under the National Planning Framework. This demonstrates that the N6 GCRR forms an integral part of the Galway Transport Strategy and is consistent with helping to achieve the objectives of the Climate Action Plan by accommodating the necessary movements of strategic traffic across the Galway Metropolitan Area, whilst facilitating the closure of Salmon Weir Bridge and additional envisaged restrictions on Wolfe Tone and O'Briens Bridges to general traffic, thereby creating a safer and more attractive city centre. It is also very clear that the full implementation of the CAP demand management measures without the introduction of the proposed N6 GCRR would lead to significant grid-lock in the city as the Quincentenary Bridge, and road network leading to it, cannot accommodate 78,000 vehicles per day.

It is clear, therefore, from what is set out in the Updated EIAR and in the Section 15 Report, that the effects of induced traffic arising from the proposed N6 GCRR have been fully and properly considered and assessed in the Updated EIAR, to inform the Environmental Impact Assessment to be carried out by the Commission as part of its consideration of the applications of approval of the N6 GCRR.

The analysis presented in Section 6.11 of the Updated EIAR for the proposed N6 GCRR as part of the 'Do-Something + CAP' scenario clearly indicates that the demand management and behavioural change measures identified as necessary as part of the Climate Action Plan, when delivered along with the proposed N6 GCRR show negligible change in vehicle mode share, essentially validating the submission statement regarding the importance of pairing demand management and behavioural change measures with infrastructure improvements.

Response – The OECD report

The OECD report is an in-depth systematic analysis of the Irish transport sector and outlines what are considered to be three 'unsustainable dynamics' - namely, 'Induced Car Demand' (the manner in which investment in increased road capacity intended to reduce congestion is seen to have the opposite effect), 'Urban Sprawl' (when population increases occur away from inner areas of cities or towns) and the 'Sustainable Modes Low-Attractiveness Trap' (as investment results in increased road capacity for cars, the availability of safe and dedicated space for active modes, micro-mobility and public transport is reduced, reducing their adequacy and making driving more attractive as a result).

The OECD report acknowledges that the three dynamics referenced above lead to increased car use, emissions and other negative outcomes. However, the OECD report proceeds to investigate how planned and implemented policies can work collectively to reverse these dynamics and lead to systematic change.

The key recommendations of the OECD report are:

- Redefine the goal of the transport system as sustainable accessibility
- Prioritise the upscale of policies with high potential to transform the car dependent system
- Redefine the electrification strategy to support the transition towards a sustainable transport system
- Embrace a systemic approach to policy decision-making across government departments

In relation to the second point above, the report proceeds to outline what are considered to be 'transformative' policies that can help to accelerate the move towards sustainable transport systems. Transformative policies are considered to be those with a greater potential to effect change within a redesigned transport system but which can also increase the efficacy of other measures considered to be less transformative in isolation (for example carbon pricing, road user charging).

One such transformative policy is that of road space reallocation, which is considered to be a priority action in the OECD report. The proposed N6 GCRR, within the context of the Galway Transport Strategy supports this transformative measure within the Galway Metropolitan Area and the envisaged road space reallocation proposed in schemes such as the Cross-City Link and the Dublin Road corridor scheme under the BusConnects Galway program of improvements and as envisaged in the Galway Transport Strategy.

As detailed in Section 5.5 of the Section 15 Report, the delivery of the proposed N6 GCRR as an integral part of the Galway Transport Strategy will:

- *Enable potential demand management measures within the city like car free areas and congestion charges, and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP24, supporting potential road space reallocation for sustainable modes and encourage a shift from private car trips in line with CAP24 and public realm improvements.*
- *Facilitate demand management measures to help achieve CAP24 targets whilst ensuring a level of mobility for residents on both sides of the city.*
- *Enable a better performing network for all modes by reducing delays across the network by 50% compared with 2023 levels, whilst not increasing the level of car trips within the metropolitan area.*
- *Facilitate the BusConnects programme for the city, by reducing traffic flow along planned bus service routes, and by providing another river crossing to offset restrictions on Salmon Weir bridge and enable potential restrictions on other city centre bridges via car free urban areas and congestion charges which encourages the shift from private car trips to public transport in line with CAP24.*
- *Accommodate the significant planned growth within city and environs in line with NPF targets (50% increase in population by 2040, compared to 2016 levels).*
- *Reduce the need for HGVs to travel within the city, achieving a 25% reduction in the level of HGV kilometres within the NWR338 cordon of the city which accounts for approx. 60% of the city's current population. This will benefit pedestrians, cyclists and public transport users and will result in improved air quality and supporting a safer environment for active travel trips.*

In addition, the upcoming 'Moving Together' Strategy (published in 2024 as a draft for consultation and due for final publication in 2025/early 2026) will form Ireland's National Demand Management Strategy and will set out the policy framework for future additional measures for demand management and behavioural change that are intended to address the gap to target in emissions and to be considered for implementation across all relevant areas of the transport network. In Part IV of the 2025 RFI Response document, a series of demand management measures were also assessed alongside the GTS (which includes the GCRR) and as stated previously these reflect the types of demand management measures that will be required to meet the targets set out in the Climate Action Plans.

Response – Building roads and paired with public transport investment

As noted above, building roads paired with demand management helps resolves congestion which in turn is critical to enable optimal operation of public transport which essentially is what the overall strategy in the GTS sets out. As set out in the Updated EIAR, Galway City and County Councils fully support investment in public transport and active travel and the GTS sets out the plan to do that, with significant progress made on a number of GTS projects since the oral hearing in 2020, the most significant projects being the completion of the construction of the Salmon Weir Pedestrian and Cycle Bridge in 2023 and the grant of planning for two major Galway BusConnects projects namely the Cross-City Link and the Dublin Road schemes. As set out in Section 6.6.1.2 of Chapter 6 of the Updated EIAR, in the Do-Minimum scenario, significant levels of traffic congestion create a barrier to travel, constraining the economic growth of the city and the overall delay on the road network in the Do-Minimum scenario is between 30% - 45% higher than the Do-Something scenario with the Project in place. This highlights the positive impact of the project, in terms of reducing the level of congestion in the city, which would increase in the future as the city's population grows. Section 6.7.1.1 of the Updated EIAR shows '*significant AADT reductions on both sides of the city when the Project is in place and illustrate the benefits which the Project can have in reducing traffic volumes along bus routes which would need to travel alongside general traffic. These reductions would help provide more reliable journey times for bus users across the city where there is no current or planned bus priority infrastructure'*. Therefore, the proposed N6 GCRR is required to fully realise the benefits of that investment in public transport by freeing up space in the city centre for public transport and active travel modes and is a key part of the overall transport solution.

Other projects referenced, which are unrelated to the Project (specifically in relation to the suggested twin tracking of the Galway to Athlone rail line) are being examined by the NTA at present as part of a study to increase rail capacity between Galway and Dublin, which will consider a range of interventions including double tracking of sections of the rail line.

Therefore, contrary to the claim in the submission, significant investment has been made in public transport in the recent years in Galway with further investment planned.

5.2.2 Adopting a precautionary approach to climate change in planning applications

The Galway City Development Plan 2023-2029 Strategic Flood Risk Assessment notes that the *Guidelines for Planning Authorities* of 2009 recommend that a precautionary approach to climate change is adopted due to the level of uncertainty involved in the potential effects. The Guidelines include the following examples of the precautionary approach:

a) *"Recognising that significant changes in the flood extent may result from an increase in rainfall or tide events and accordingly adopting a cautious approach to zoning land in these potential transitional areas;*

b) *Ensuring that the levels of structures designed to protect against flooding, such as flood defences, land-raising or raised floor levels are sufficient to cope with the effects of climate change over the lifetime of the development they are designed to protect; and*

c) *Ensuring that structures to protect against flooding and the development protected are capable of adaptation to the effects of climate change when there is more certainty about the effects and still time for such adaptation to be effective*."[37]

One of the main requirements of the Strategic Flood Risk Assessment (SFRA) is to update the Flood Zone mapping which is then used to guide land use planning and ensure flood risk is reduced. The Western CFRAM study flood extents, the OPW's National Indicative Fluvial Map (NIFM), local knowledge and historical records, are used to develop the Flood Zone mapping in the SFRA for the Galway CDP.

The submission goes on to outline one of the key environmental impacts associated with the N6 GCRR is that it is impossible to construct such a project and guarantee no localised flooding will occur. The argument made is that new seepage patterns are likely to be introduced that never existed before due to the massive change to the topography, and possibly primarily through continued changing weather patterns bringing in

[37] https://www.opr.ie/wp-content/uploads/2019/08/2009-Planning-System-Flood-Risk-Mgmt-1.pdf

more rain on an annual basis. Given the warmer atmosphere which can hold more moisture in the clouds which leads to increased annual rainfall, how is the project designed to allow such an increased volume of rainfall to seep away given the areas of green fields which are to be hard surfaced with road construction.

Response

As part of the Hydrology and Drainage assessment for the N6 Galway City Ring Road development a site-specific, project-based, Flood Risk Assessment was carried out to meet the requirements of *The Planning System and Flood Risk Management Guidelines (2009).* A precautionary approach in respect to climate change was adopted in the design with sea level rise allowance of 0.5m and a 20% rainfall and river flood flow allowance (mid-range future scenario) included in the flood risk assessment and drainage design. All proposed culverts and the new River Corrib bridge obtained OPW Section 50 consent which requires the design to satisfy the 100-year flood event plus mid-range future change allowances and in addition allowances for hydrological uncertainty and debris passage. The drainage design pipe sizing included climate change allowance and the attenuation storage for the surface road drainage outfalls was designed for an additional volume of 20% for climate change increases.

The proposed N6 Galway City Ring Road development meets in full the requirements of *The Planning System and Flood Risk Management Guidelines (2009)* in respect to a precautionary approach to climate change. The approach adopted ensures in respect to flooding and flood risk that the proposed road development is sustainable and of low flood risk both current day and medium range future cases.

5.2.3 The construction site and resulting motorway will be devastating for nature

5.2.3.1 Key environmental impacts of the construction of the N6 Galway City Ring Road

The submission outlines key environmental impacts which will impact negatively on nature arising from the construction phase as follows:

a) Habitat Destruction

   Large-scale construction will lead to the destruction of habitats for flora and fauna, especially in more sensitive ecological areas like boglands, forests, or river valleys

b) Fragmentation of Ecosystems

   Motorways can split ecosystems, disrupting Insect movement routes and separating populations, which can reduce biodiversity over time.

c) Water Pollution

   Runoff from construction sites can carry sediments, oils, end pollutants into nearby water bodies, possibly affecting fish life

d) Noise and Air Pollution

   Heavy machinery and increased traffic during end after construction introduce noise and air pollution, affecting both humans and animals

e) Carbon Footprint

   The construction and long-term use of motorways contribute significantly to greenhouse gas emissions. This is evident from all studies and yet seems to be glossed over for the Ring Road with a completely insufficient analysis presented in the submitted documentation

f) Localized Flooding

   This is addressed above in Section 5.2.2.

Response – Habitat Destruction

In the context of Chapter 8 of the Updated EIAR, it is acknowledged throughout that the Project will result in habitat loss along its length during construction (see Table 8.35 in Section 8.5.5 of the Updated EIAR).

All efforts have been made in designing the Project and developing its mitigation strategy for habitats to minimise the scale of habitat loss through, firstly, avoiding sensitive habitat areas (i.e. those habitat areas of a high conservation value, particularly those habitats which are irreplaceable) and, secondly, retaining habitat areas within the Project boundary and protecting those habitat areas adjacent to it (Sections 8.6.3.1 and 8.6.3.2 of the Updated EIAR).

Where habitat areas could not be avoided or retained, habitat areas will be created and integrated into the landscaping design for the Project to minimise the effects in so far as possible. In the case of Annex I habitats, detailed compensatory habitat management plans (Appendix A.8.27) have been developed to direct the long-term management of those habitat areas and ensure they achieve an equivalent habitat types and quality to that being lost, where possible.

Despite best efforts through development of the mitigation and compensation measures for habitats set out in Sections 8.6.2 and 8.9.1, respectively, there will be likely significant residual effects with respect to habitat loss for the following habitat types, at geographic scales ranging from local to international, as set out in Section 8.10 of the Updated EIAR: priority Annex I Blanket bog (active) [*7130], Annex I Wet heath [4010], Annex I Dry heath [4030], priority Annex I Limestone pavement [*8240], Annex I Calcareous grassland [6210], priority Annex I Petrifying spring [*7220] features, calcareous springs (FP1), Dry-humid acid grassland (GS3) and Poor fen and flush habitat (PF2).

Two of the Annex I habitat areas being lost are considered irreplaceable and where habitat creation or compensation is not feasibly possible: Limestone pavement [*8240] and Wet heath [4010]. Nevertheless, although the significant residual effects associated with the losses of Limestone pavement and Wet heath habitat cannot be directly compensated for, areas of related habitats will be created to provide an overall biodiversity gain for both peatland habitats containing dry heath and limestone associated habitats locally (Section 8.10 of the Updated EIAR).

Habitat losses have also been considered in detail through the biodiversity chapter with respect to the flora and fauna species that affected habitats support (Section 8.5.6 for flora species impacts, Sections 8.5.7 to 8.5.12 for fauna impacts, Section 8.7.4 for residual impacts on flora species, and Sections 8.7.5 to 8.7.10 and Sections 8.9.2 and 8.9.3 for residual impacts on bats and peregrine falcon post mitigation and compensation, respectively) and the Local Biodiversity Areas within which those habitat areas are located (Section 8.5.13 for impacts and Sections 8.7.11 and 8.10 for residual impacts).

Habitat loss will also give rise to likely significant residual effects on flora species of a national significance (*Sphagnum affine*), of a county significance (*Plagiomnium cuspidatum*, *Plasteurhynchium striatulum* and *Sphagnum capillifolium*), and of a local significance (*Euphrasia arctica*), see Section 8.10 of the Updated EIAR.

However, the likely significant residual effects on habitats and supported flora and fauna species that are associated with the Project will be weighed against the benefits of the Project by ACP in considering the application for approval of the Project.

In the context of the NIS, habitat loss has also been fully and comprehensively considered with respect to direct loss of habitat in Lough Corrib SAC (Section 9.1.4.1) and the loss of potential ex-situ habitat for wintering birds that may form part of or support the SCI populations of the nearby Lough Corrib SPA (Section 9.3.4.4) and Inner Galway Bay SPA (Section 9.4.4.4). There are no other European sites at risk from habitat loss effects. The Updated NIS concluded that despite the habitat losses associated with the Project within Lough Corrib SAC, and the losses of habitat area used by wintering birds that may form part of or support the SCI populations of the nearby Lough Corrib SPA and Inner Galway Bay SPA, the Project would not adversely affect the integrity of any European sites.

Response – Fragmentation of Ecosystems

In the context of Chapter 8 of the Updated EIAR, it is acknowledged that the Project will fragment habitat areas (Sections 8.5.5.1 and 8.5.5.3) and local biodiversity areas (Sections 8.5.13 and 8.7.11), and that habitat fragmentation/severance can also affect fauna species where it can result in a barrier to species movement (Sections 8.5.7 to 8.5.12 for fauna impacts).

However, elements of the Project design (e.g. clear span bridge and viaduct structures) along with the mitigation measures that will be implemented during both construction and operation, such as mammal

passage facilities (Sections 8.7.5 to 8.7.10), will ensure that habitat/ecosystem fragmentation will not result in any likely significant residual effects from habitat/ecosystem fragmentation.

In the context of the NIS, habitat/ecosystem fragmentation has also been fully and comprehensively considered with respect to habitat areas in Lough Corrib SAC (Sections 6.14, 7.13, 9.1.4.1 and 9.8) and at potential ex-situ habitat for wintering birds that may form part of or support the SCI populations of the nearby Lough Corrib SPA (Section 9.3.4.4) and Inner Galway Bay SPA (Section 9.4.4.4). There are no other European sites at risk from fragmentation effects. The Updated NIS concluded that despite any habitat fragmentation effects associated with the Project within Lough Corrib SAC, or at habitat area used by wintering birds that may form part of or support the SCI populations of the nearby Lough Corrib SPA and Inner Galway Bay SPA, the Project would not adversely affect the integrity of any European sites.

Response – Water pollution

Section 11.5.3 of Chapter 11 of the Updated EIAR acknowledges that construction activities pose a significant risk to watercourses arising from contaminated surface water runoff from construction activities entering nearby watercourses. Each activity which could potentially pose such a risk is examined in subsequent sub-sections of Section 11.5.3 of the Updated EIAR.

Potential contaminants in construction runoff could include the following:

- Elevated silt/sediment loading which could arise due to the disturbance of bed and channel banks
- In-stream works which can lead to increased turbidity through re-suspension of bed sediments and release of new sediments from earthworks
- Spillage of cement-based products
- Accidental spillage of construction plant and equipment
- Discharge from site toilets and washing facilities

During the construction phase, in order to avoid any potential scour risk associated with the construction of bridge structures, abutments for bridges are sufficiently set back from the channel bank edge with foundations located at depth. This will protect the river channel from changes in morphology. Such design measures also ensure that the potential operational impact on hydrology and channel morphology is minimised as there will be no need to go into the rivers to undertake maintenance. Stream diversions and realignments will be carried out in the dry and when the channel has established, the watercourse will be diverted into them to minimise any sediment reaching the watercourse.

All watercourses are treated as fishery sensitive watercourses. In addition to the above design measures and control of the construction site, a full suite of mitigation measures is set out in Section 11.6.2 of Chapter 11 of the Updated EIAR, which includes reference to the Construction Environmental Management Plan (CEMP) included in Appendix A.7.5 of the Updated EIAR. The CEMP has specific measures to protect hydrology from construction pollution.

Furthermore, all construction works are to be carried out in accordance with OPW, EPA and IFI guidelines at appropriate times of the year and are to implement all necessary measures to limit the potential impact of the works on all stream/river ecology.

Response – Noise pollution

It is acknowledged that heavy machinery will be required to construct the proposed Project and construction traffic will be generated across the construction site and on the adjoining road network. An assessment of construction phase noise impacts is provided in Section 18.5.3 of the Updated EIAR. The assessment concludes that the direct noise impacts during the construction phase has the potential to be negative, moderate to very significant, and temporary to short-term in proximity to the works, in the absence of mitigation measures. Construction phase mitigation measures are provided in Section 18.6.2 of the Updated EIAR. Following the implementation of these measures, a negative, very significant and temporary impact to moderate to significant and short-term noise effect is expected in proximity to the works during the construction phase. Section 8.5 and 8.6 of the Chapter 8 of the Updated EIAR considers the potential

construction phase noise impacts on sensitive ecological receptors and the relevant mitigation measures required to control potential effects respectively.

An assessment of operational noise impacts is provided in Section 18.5.4 of the Updated EIAR which considers the potential impacts at human noise sensitive receptors. Whilst noise levels of varying increases and impact magnitudes are calculated at the assessment locations, the incorporation of a low noise road surface as part of the design and the use of extensive noise barriers as part of the mitigation along the proposed roadside boundary will reduce noise levels to within the design goal of 60dB L_{den} or to the pre-existing Do-Minimum noise levels at the majority of noise sensitive locations. The overall balance of residual effects are determined to be moderate or less across the Project with a small number of localised residual moderate to significant effects in the short and long-term assessment periods.

Section 8.5 of Chapter 8 of the Updated EIAR considers the potential operational noise impact on sensitive ecological receptors.

Response – Air pollution

It is acknowledged that heavy machinery will be required to construct the proposed Project and construction traffic will be generated across the construction site and on the adjoining road network. An assessment of construction phase air quality impacts is provided in Section 16.5.3 of the Updated EIAR. The assessment concludes that the direct impact on air quality during the construction phase has the potential to be negative, significant, and short-term in proximity to the works, in the absence of mitigation measures. Construction phase mitigation measures are provided in Section 16.6.1 of the Updated EIAR. Following the implementation of these measures, a negative, slight and short-term effect on air quality is expected in proximity to the works during the construction phase.

An assessment of operational air quality impacts is provided in Section 16.5.4 of the Updated EIAR. The assessment considers potential air quality impacts relating to human and ecological receptors. All predicted pollutant concentrations for the protection of human health comply with the air quality standards in 2031 and 2046. A worst-case effect of moderate adverse is predicted at one modelled receptor with the vast majority of receptors predicted to experience a neutral effect. In terms of effects on biodiversity, no likely significant effects on biodiversity are likely due to emissions to air during the construction and operational phases following the implementation of mitigation measures, apart from a limited number of receptors, refer to Section 8.7 of Chapter 8 of the Updated EIAR for residual impacts on biodiversity.

Response – Carbon Footprint

It is not correct to state that the carbon footprint of the construction and long-term use of the Project is glossed over in the documentation submitted with the application. Section 17.5 of the Updated EIAR includes a detailed quantification of likely greenhouse gas emissions during the construction phase of the Project. This section also includes an estimation of the emissions during the operational phase, with consideration of the Opening Year (2029) and Design Year (2034). Therefore the carbon footprint of the Project is fully provided within the documentation submitted with the application.

Response – Localised flooding

This is already addressed above.

5.3 Conclusion

The assertions in the conclusion to this submission point to a failure to consider national climate targets which is wholly incorrect as this is assessed in full in Chapter 17 of the Updated EIAR using data presented throughout the Updated EIAR. For the purposes of section 15 of 2015 Act, the Climate Action Plan was considered in Part IV of the 2025 RFI Response (entitled *"Obligations under Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended) and submissions in relation to the Climate Action Plan 2024"*) (the "Section 15 Report"). The provisions of CAP25 have been carefully considered and do not require any amendment to the analysis contained in Chapter 17 of the Updated EIAR that was submitted as Part VI of the 2025 RFI Response (the "Updated EIAR") or the analysis contained in the Section 15 Report.

The conclusion refers once more to the topic of induced demand and this is addressed above in Section 5.2.1 above, and reinforces the point made in the submission of the need for an overall strategy which pairs infrastructure provision with demand management, essentially the GTS of which the proposed N6 GCRR is a key component. As demonstrated above, the delivery of the proposed N6 GCRR as an integral part of the GTS will enable the adoption of the demand management measures that will be required to address the issue of induced traffic and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP25 (and previously CAP24).

It is clear, therefore, that contrary to what is set out in the conclusion section, the proposed N6 GCRR will contribute significantly to the achievement of the objectives set out in CAP25 (and previously CAP24), and will assist in relieving congestion in Galway and the State meeting its greenhouse gas emissions targets.

Finally the assertion that the construction is devastating to nature is addressed in Section 5.2.3 above, and again contradicts the statements made in the submission in this respect.

Therefore, for all of the reasons set out above, the issues raised in the submission have been full addressed in this response, and there is nothing in the submission that would warrant a decision to refuse to grant to approvals sought for the proposed N6 GCRR as suggested in the submission.

Indeed, the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions, insofar as practicable, in a manner consistent with CAP25, as well as the other plans and objectives specified in section 15 of the 2015 Act including the National Climate Objective.

6. Response to ABP-318220-23: 06 Friends of the Irish Environment

6.1 Submission – Whole Scheme

The submission is made under the following main areas, with a further split into more detailed points as set out in the subsequent section:

1. Compliance with Climate Legislation and the Climate Action Plan 2025
2. Transport Policy Context
3. Climate impact analysis in the revised EIAR
4. Assessment of the environmental effects of alternatives in the EIAR
5. Galway Transport Strategy 2016 and Climate Action Plan 2024-2029
6. Congestion generation
7. Legal precedents and the Climate Act

6.2 Response to submission

6.2.1 Compliance with climate legislation and Climate Action Plan 2025

The submission points to the legal obligations placed on public authorities by section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended) (the **"2015 Act"**), highlights the approval of the Climate Act Plan 2025 on 15 April 2025, and alleges that the Galway Transport Strategy is incompatible with the Climate Action Plan 2025.

Response – Climate Action Plan 2025

As the Commission is aware, pursuant to section 15(1)(a) of the 2015 Act, the Commission is required to perform its functions, in so far as practicable, in a manner consistent with *"the most recent approved Climate Action Plan"*.

The response to the request for further information was submitted to An Bord Pleanála (as it then was) on 14 April 2025 (the "**2025 RFI Response**"), prior to the publication of the Climate Action Plan 2025 (**"CAP25"**). Therefore, at the time of the submission of the 2025 RFI Response, the Climate Action Plan 2024 (**"CAP24"**) was the most recent approved Climate Action Plan for the purposes of Section 15 of 2015 Act, and was considered in Part IV of the 2025 RFI Response (entitled *"Obligations under Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended) and submissions in relation to the Climate Action Plan 2024"*) (the **"Section 15 Report"**). Subsequent to the submission of the 2025 RFI Response, CAP25 was published and became the most recent approved climate action plan for the purposes of section 15 of the 2015 Act.

It is accepted that it is CAP25 by reference to which compliance with the obligation imposed by section 15 falls to be assessed, subject to the caveat that the provisions of CAP24 remain relevant for reasons explained below.

The provisions of CAP25 have been carefully considered and do not require any amendment to the analysis contained in Chapter 17 (Climate) of the Updated EIAR that was submitted as Part VI of the 2025 RFI Response (the "**Updated EIAR**") or the analysis contained in the Section 15 Report that was submitted as Part IV of the 2025 RFI Response (the **"Section 15 Report"**).

This is because there is no change in CAP25 to the key performance indicators, relative to the transport sector, that are set out in CAP24. In particular, there is no change to the level of change required to meet the 50% reduction in overall emissions from transport by 2030 (relative to 2018 levels). These key targets (which remain unchanged in CAP25) include a 20% reduction in total vehicle kilometres travelled relative to the 2030 business-as-usual scenario, a 50% reduction in fuel usage, and significant increases to sustainable transport trips and modal share.

Therefore, the analysis as presented in the Section 15 Report, which clearly demonstrates how the delivery of the proposed N6 GCRR, as part of an overall transport solution for Galway, is consistent with CAP and with the achievement of the targets set out in CAP24 at a national level, applies with equal force in relation to CAP25, as no new measures or targets have been introduced in CAP25 that would in any way alter that position.

CAP25 states that it is to be read in conjunction with CAP24 '*to facilitate a focus on the delivery of outstanding actions from CAP24 and high-impact legacy actions from CAP23'*.

As mentioned above, the Commission's obligation under section 15 of the 2015 Act is to perform its functions, insofar as practicable, in a manner consistent with, amongst other matters, the most recent approved climate action plan, which is now CAP25. However, given that CAP25 is to be read in conjunction with CAP24, the Commission should not read CAP25 in isolation but in conjunction with CAP24 to facilitate the delivery of outstanding actions from CAP24 and high-impact legacy actions from CAP23.

In those circumstances, and for the reasons as are set out in the Section 15 Report, the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions in a manner consistent with the most recent approved Climate Action Plan, CAP25 (read in conjunction with CAP24), as well as the other plans and objectives specified in section 15 of the 2015 Act.

Response – Galway Transport Strategy

While the Galway Transport Strategy ("**GTS**") was prepared before the preparation of the Climate Action Plans, there is no basis for the contention made in the submission that the GTS is *"incompatible with the Climate Action Plan 2025"*.

In fact, the analysis set out in the Section 15 Report clearly demonstrates that the GTS is closely aligned with the objectives of the climate action plans and that the delivery of the proposed N6 GCRR alongside the measures set out in CAP25 (and previously CAP24) and other national level measures, contributes significantly towards the achievement of these national level targets. Contrary to what has been suggested, the GTS is consistent with CAP25 (and previously CAP24) and that the proposed N6 GCRR, as an integral part of the GTS, is likely consistent with those climate action plans.

As the modelling that informed this analysis included both the proposed N6 GCRR and the other measures set out in the GTS, it demonstrates that the GTS, while it pre-dates the preparation of the climate action plans, is fully aligned with and supports the delivery of the measures set out therein. Indeed, the delivery of the overall package of measures set out in the GTS will contribute significantly to the achievement of the national targets set out in CAP24 and CAP25.

Response – Transport Provisions of the Climate Action Plan 2025

The submission notes certain provisions of the Climate Action Plan 2023 ("**CAP23**"), CAP24, and CAP25 in relation to transport and transport infrastructure, and emphasises the statement in CAP24 that *"compliance with our sectoral emissions ceilings also requires transport planning and appraisal to prioritise interventions in line with the Sustainable Mobility Policy."*

However, the claim made in the submission that a decision to grant approval for the proposed N6 GCRR would be *"inconsistent with the prioritisation"* is entirely incorrect. For all of the reasons set out in detail in the documents before the Commission, and particularly in Chapter 17 of the Updated EIAR and in the Section 15 Report, the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions in a manner consistent with the most recent approved Climate Action Plan, CAP25 (read in conjunction with CAP24), as well as the other plans and objectives specified in Section 15 of the 2015 Act, which includes the specific elements of CAP24 mentioned on page 4 of the submission. In particular, CAP24 requires transport planning and appraisal to prioritise interventions in

line with the Sustainable Mobility Policy and the proposed N6 GCRR aligns with these policies, with the detail of where that is outlined set out as follows:

- *Avoid stimulating or facilitating increased GHG emissions from transport, especially over the next 20 years* – Refer to Section 6.2.6 below and Section 6.11.3 of the Updated EIAR. A comparison of the outputs from modelling of a Business-as-Usual scenario versus a CAP Do-Something scenario with the Project in place shows an approx. 43% reduction in vehicle emissions for the geographical area of influence of the proposed N6 GCRR and a 16% reduction in vehicle kilometres. This show that a significant emissions reduction can be achieved whilst also catering for an approx. 30% increase in the population level across the metropolitan area by 2030, versus 2016 levels.

- *Support a shift to active travel and public transport, including by the reallocation of road space* – Refer to Section 6.2.11 below for the modelling results of the inclusion of the proposed N6 GCRR scenario, it is possible to restrict traffic on three of the four existing river crossings in the city centre, thus enabling the reallocation of these streets for active travel and public transport.

- *Maintain our existing transport infrastructure* – The existing network is operating at maximum capacity currently with very little resilience given the physical constraint imposed by the River Corrib dividing the city in two. The implementation of the proposed N6 GCRR enables the retention and repurposing of the existing three city centre bridges and street network to serve modes other than the private car.

- Support the adaptation and resilience of existing, redesigned and new transport infrastructure to the impacts of climate change – Refer to Section 6.2.2, *The National Sustainable Mobility Policy (2022)* and the proposed N6 GCRR, along with the other components of the Galway Transport Strategy, aligns with and facilitates the implementation of the specific actions of national policy to support climate action thus shifting the momentum of transport policy to support sustainable mobility, decarbonisation, compact growth and balanced regional development.

Part IV of the 2025 RFI Response is entitled 'Obligations under Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended) and submissions in relation to the Climate Action Plan 2024'.

A Climate Action Plan assessment is summarised in Section 17.10 of the EIAR. The assessment of emission reductions in Section 17.10.1 concludes that when *comparing the CAP DS scenario to the base 2018 scenario, an approximate 43% reduction in vehicle emissions in the study area is predicted to occur. While this figure falls short of meeting the 50% target set out in CAP24, it does show that a significant emissions reduction can be achieved with the Project in place, whilst also catering for an approximate 30% increase in the population level across the metropolitan area by 2030, versus 2016 levels.*

The assessment of vehicle kilometres changes in Section 17.10.1 concludes that when comparing the CAP DS to the BAU scenario, the reduction in car kilometres is predicted to be 18%, while the total vehicle kilometre reduction predicted is 16%. Again, whilst these figures fall just short of the 20% national target set out in CAP24, they do show a significant reduction.

6.2.2 National Transport Policy

The submission claims that the Updated EIAR fails to engage with national transport policy; that the National Sustainable Mobility Policy, the Five Cities Demand Management Study and the OECD report Redesigning Ireland's Transport for Net Zero are not considered, and that the findings of the recently published 'The Economic Cost of Congestion in the Regional Cities' paper, by the Department of Transport (DoT) on 23 May of 2025 (the **"DoT Paper"**) have not been addressed.

Response – National Policy Document – The National Sustainable Mobility Policy (2022)

The allegation made in the submission that the EIAR makes *"no direct reference to the National Sustainable Mobility Policy"* is entirely incorrect. As is clear from what is set out below, and evident from any review of the relevant chapters of the Updated EIAR, both the National Sustainable Mobility Policy 2022 and indeed the National Sustainable Mobility Policy Action Plan 2022 to 2025 (which action plan is not mentioned in the submission) are considered in detail in the Updated EIAR, which clearly demonstrates how the Galway Transport Strategy and the proposed N6 GCRR align with the principles set out in the National Sustainable Mobility Policy. This is set out in detail in section 2.3.10 of the Updated EIAR, which is entitled *"National*

Sustainable Mobility Policy 2022 and National Sustainable Mobility Policy Action Plan (2022-2025)", and there can be no basis whatsoever to suggest that these policy documents have not been fully and comprehensively considered in the Updated EIAR.

The National Sustainable Mobility Policy was published in 2022 to work alongside the Climate Action Plan 2021 ("**CAP21**") and to support the CAP commitment to a 51% reduction in carbon emissions by 2030 (and onwards to net zero by 2050). It contains stated targets including a daily increase of at least 500,000 active travel and public transport journeys and a 10% reduction in kilometres driven by fossil fuelled cars by 2030 'in line with metrics for transport set out in the Climate Action Plan 2021'.

It is noted that the Policy clarifies that the above targets are derived from CAP21, and further states that the metrics 'may be subject to revision in further iterations of the plan once sectoral emissions ceilings have been settled'. In essence, the subsequent updates to the Climate Action Plan and sectoral emissions ceilings take precedence over the metrics set out in the National Sustainable Mobility Policy, which dates to 2022, with numerous revisions to the Climate Action Plan occurring thereafter.

The aim of the National Sustainable Mobility Policy is to develop a policy framework, which better supports climate action and sustainable mobility and adopts a more people centric approach in all aspects of Active Travel and Public Transport Policy. This policy context is intended to ensure better integrated land use and transport planning at all levels. The policy hierarchy for the Sustainable Mobility Policy sits alongside the Climate Action Plan, thus shifting the momentum of transport policy to support sustainable mobility, decarbonisation, compact growth and balanced regional development. The National Sustainable Mobility Policy contains 10 overarching goals across three key principles (Safe and Green Mobility, People Focused Mobility and Better Integrated Mobility):

1. Improve mobility safety
2. Decarbonise public transport
3. Expand availability of sustainable mobility in metropolitan areas
4. Expand availability of sustainable mobility in regional and rural areas
5. Encourage people to choose sustainable mobility over the private car
6. Take a whole of journey approach to mobility, promoting inclusive access for all
7. Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model
8. Promote sustainable mobility through research and citizen engagement
9. Better integrate land-use and transport planning at all levels
10. Promote smart and integrated mobility through innovative technologies and development of appropriate regulation.

Although not all of the 10 goals listed above are directly relevant to the proposed N6 GCRR, Section 2.3.10 of Chapter 2 of the Updated EIAR identifies how the proposed N6 GCRR, along with the other components of the Galway Transport Strategy, aligns with and facilitates the implantation of the specific actions identified in the Goals in the Sustainable Mobility Policy Action Plan, specifically Goal 1, Goal 3, Goal 5 and Goal 9.

"It is necessary to resolve traffic congestion issues in Galway in order to achieve the sustainable mobility goals. The proposed N6 GCRR will significantly assist with the removal of congestion in Galway City and environs. Journey times will reduce and journey time certainty will increase for both public transport and private vehicle users.

The reduction in congestion enabled by the proposed N6 GCRR will also help to optimally realise other key elements of the Galway Transport Strategy including the reallocation of road space for pedestrians, cyclists and public transport.

Improvements to the Galway bus network and bus services are identified in the GTS as necessary to cater for existing and future travel patterns in Galway City. The reallocation of road space for an expanded bus network and service will assist with the delivery of improved public transport in the city. This will reduce the number of short commuter trips by car facilitating more journeys by bicycle or other active modes which are faster, cheaper, more sustainable and provide health benefits. In addition, a rebalancing of traffic light signalling at junctions to better facilitate walking, cycling and public transport is required."

As outlined, the metrics presented in the National Sustainable Mobility Policy at the time of publication in 2022 are stated to be aligned with CAP21 and subject to ongoing review and update in line with updates to the Climate Action Plan itself. Section 6.11 of Chapter 6 of the Updated EIAR presents the results of analysis of a 'Climate Action Plan' scenario, which itself is a summary of the information submitted in Part IV of the 2025 RFI Response Report. The Key Performance Indicators (KPIs) in CAP24 relating to the transport sector are the objectives of a 50% reduction in transport-related emissions compared to 2018 levels, by 2030, and a 20% reduction in total vehicle kilometres compared to a 2030 Business as Usual ("**BAU**") scenario.

It is important to note that these are national level targets that cannot be applied to any individual project in isolation. Updated transport modelling was undertaken (based on the same transport modelling approach and assumptions as those used in the modelling undertaken to inform CAP23 and CAP24 (and now also CAP25)), to assess the overall benefits of delivering the N6 GCRR, as an integral part of the GTS, against these key performance indicators set out in CAP24, and to consider whether the delivery of the N6 GCRR would be consistent with CAP24.

Sections 6.11.3.1 and 6.11.3.2 of Chapter 6 of the Updated EIAR provide analysis of the Emissions and Vehicle Kilometre Reductions in the 'CAP Do-Something' ("**CAP DS**") scenario. The analysis demonstrates that the proposed scheme, in tandem with the demand management measures indicated in CAP24 show a 43% reduction in vehicle emissions compared to 2018, and a 16% reduction in vehicle kilometres. Whilst these results fall just short of the Climate Action Plan targets, it is noted that these are nationwide targets and are not specific to individual projects.

Consequently, the assessment of the Project in tandem with CAP24, as presented in Section 6.11 of Chapter 6 of the Updated EIAR, demonstrates that the scheme can achieve significant reductions as part of nationally set Climate Action Plan targets, whilst catering for a population increase of approximately 30% across the metropolitan area. This further demonstrates that the target metrics outlined in the National Sustainable Mobility Policy (which are aligned themselves with the Climate Action Plan) have been considered.

It also demonstrates that the assessment is not detached from the National Sustainability Mobility Plan's emission reduction objectives. In fact, detailed analysis and modelling has been undertaken to ensure that the principles of sustainable mobility are considered contrary to the allegations made by Friend of the Irish Environment.

Response – National Policy Document – Five Cities Demand Management Study

A submission on the Climate Action Plan is provided in Part IV of 2025 RFI Response. The modelling exercise, which is detailed in the document modelled a scenario with the N6 GCRR, the other measures contained within the GTS and a series of demand management measures in place. The demand management measures were adopted from a modelling exercise which was undertaken to inform the Government's 2023 version of the Climate Action Plan. These measures were taken from the recommended Transport Demand Management measures which were proposed in the Five Cities Demand Management Study. The selection of measures contained within the 2025 RFI Response are well-informed based on The Five Cities Demand Management Study and the Climate Action Plan.

Therefore, the Five Cities Demand Management Study has been considered in the 2025 RFI Response.

The submission further claims that there is no scenario modelling of a demand management alternative and a response to this is provided in Section 6.2.11 below.

Response – Redesigning Ireland's Transport for Net Zero (OECD 2022)

The OECD report is an in-depth systematic analysis of the Irish transport sector and outlines what are considered to be three 'unsustainable dynamics' - namely, 'Induced Car Demand' (the manner in which investment in increased road capacity intended to reduce congestion is seen to have the opposite effect), 'Urban Sprawl' (when population increases occur away from inner areas of cities or towns) and the 'Sustainable Modes Low-Attractiveness Trap' (as investment results in increased road capacity for cars, the availability of safe and dedicated space for active modes, micro-mobility and public transport is reduced, reducing their adequacy and making driving more attractive as a result).

The OECD report acknowledges that the three dynamics referenced above lead to increased car use, emissions and other negative outcomes. However, the OECD report proceeds to investigate how planned and implemented policies can work collectively to reverse these dynamics and lead to systematic change.

The key recommendations of the OECD report are:

- Redefine the goal of the transport system as sustainable accessibility
- Prioritise the upscale of policies with high potential to transform the car dependent system
- Redefine the electrification strategy to support the transition towards a sustainable transport system
- Embrace a systemic approach to policy decision-making across government departments

In relation to the second point above, the report proceeds to outlines what are considered to be 'transformative' policies that can help to accelerate the move towards sustainable transport systems. Transformative policies are considered to be those with a greater potential to effect change within a redesigned transport system, but which can also increase the efficacy of other measures considered to be less transformative in isolation (for example carbon pricing, road user charging).

One such transformative policy is that of road space reallocation, which is considered to be a priority action in the OECD report. The N6 GCRR, within the context of the Galway Transport Strategy supports this transformative measure within the Galway Metropolitan Area and the envisaged road space reallocation proposed in schemes such as the Cross-City Link and the Dublin Road corridor scheme under the BusConnects Galway program of improvements and as envisaged in the Galway Transport Strategy. As detailed in the Section 15 Report, the delivery of the proposed N6 GCRR as an integral part of the Galway Transport Strategy will enable potential additional demand management measures within the city and further reduce city centre traffic and associated congestion and carbon emissions in line with CAP25, supporting potential road space reallocation for sustainable modes and encourage a shift from private car trips in line with CAP25.

In addition, the upcoming 'Moving Together' Strategy (published in 2024 as a draft for consultation and due for final publication in 2025/early 2026) will form Ireland's National Demand Management Strategy and will set out the policy framework for future additional measures for demand management and behavioural change that are intended to address the gap to target in emissions and to be considered for implementation across all relevant areas of the transport network. In Part IV of 2025 RFI Response document, a series of demand management measures were also assessed alongside the GTS (which includes the GCRR) and as stated previously these reflect the types of demand management measures that will be required to meet the targets set out in the Climate Action Plans.

Response – The Economic Cost of Congestion in the Regional Cities 2022-2040 (DoT May 2025)

The submission notes that the Economic Cost of Congestion in the Regional Cities 2022-2040 study by the Department of Transport's Strategic Research and Analysis Division is not considered in the Updated EIAR. This DoT report was published on 23 May 2025 after the submission of the Updated EIAR on 14 April 2025 and therefore could not have referenced or provided context on this report. Therefore, there is no basis for the contention made in the submission that the lack of consideration of this study is a 'critical omission'.

It is noted that the modelling undertaken to inform the DoT Paper above does not account for the demand management measures contained within CAP25 (and previously CAP24) in the regional cities. The introduction to this study clearly states that the paper was prepared, not to assess the likely future scenario with demand management measures in place, but to inform the preparation of demand management strategies and to help identify the scale of demand management measures likely to be required. Therefore, whilst the paper was published post submission of the 2025 RFI Response, the conclusions of it were already well established in the various climate action plans in so far as establishing the fact that complementary demand management and behavioural change interventions are needed across the country in order to complement planned infrastructure investment and support the achievement of our stated climate action plan targets.

A review of this report is provided in Section 6.2.9 for the benefit of the Commission.

6.2.3 Climate Assessment Gaps

The submission contends that the Updated EIAR fails to consider the impact of induced demand over the project's lifespan.

Response - Induced demand

Section 6.8 of the Updated EIAR details what induced traffic is and outlines the various types of induced traffic and the benefits/outcome of each type. Tables 6.28 and 6.29 specifically show the mode share comparison in the Do-Minimum (without N6 GCRR) and Do-Something (with N6 GCRR) scenarios. The tables show that the Do-Something mode share increases by approx. 2% when the N6 GCRR is added in isolation. This increase is caused by induced traffic/demand and the Do-Something emissions results that are detailed in Table 17.8 of the updated 2025 EIAR include this increase in traffic. In addition, the rest of Section 6.8 details the various types of induced traffic, the reasons behind them, how they were assessed in the updated 2025 EIAR and the outcomes.

As set out in the *Response to Queries raised in Module 2 of the N6 Galway City Ring Road in respect of Traffic and Climate*[38] the West Regional Model (WRM) is a strategic multi-modal transport model for the counties Galway, Mayo, Roscommon, Sligo, Leitrim and Donegal, with a focus on the city of Galway. It is capable of modelling walking, cycling and public transport in addition to private vehicle trips. The model is capable of forecasting how a transport scheme may influence a population's choice of travel mode. The mode of transport which is chosen for an individual trip, is related to the following key factors:

- Car availability for the trip
- Availability & cost of parking at the destination

[38] https://www.n6galwaycityringroad.ie/sites/default/files/media/GCRR_4-03.34.13.003_Module%202%20Response_I1_.pdf

- The travel time for the trip by each mode (car, public transport, walking & cycling)
- The wait time (related to assumed frequency) for relevant public transport service
- Trip distance
- Cost of journey - public transport fares and vehicle running costs
- Behavioural parameters relating to travel and mode choice

The WRM has been calibrated and validated using observed travel and mode share data to ensure that the impact of each of the above factors is accurately represented when calculating modal choice. Therefore, the WRM is capable of modelling the manner in which trip destinations might change in response to the increased capacity and reduced travel times facilitated by a piece of transport infrastructure.

Section 6.8.3.5 of the Updated EIAR shows the analysis/results of this, with the Parkmore area being the focus of the analysis, given it is a significant destination within the city, due to the number of people working in that area.

The analysis showed that in the Do-Minimum, without the N6 GCRR in 2046, there were more trips to the Parkmore area, from the eastern side of the city and county than the western. This was due to congestion increasing to such a degree, in part due to significant population growth as per the NPF, that it discouraged some people from travelling across the river, via the existing bridges (in the 2046 Do-Minimum scenario, the Salmon Weir bridge has restrictions to general traffic during some time periods with the BusConnects Cross-City Link scheme in place), from the western side of the city. However, when the N6 GCRR is implemented, congestion eases, allowing people from the western side of the city, to again choose the Parkmore area as a destination thus illustrating that the transport assessment in the Updated EIAR includes an assessment of changes in demand with the proposed N6 GCRR in place i.e. induced traffic. Further to that, ENEVAL is a tool built by the NTA which can take the outputs from a model by reading the level of traffic on every single road and the speed of each vehicle in the traffic model and assesses the associated emissions. Therefore, the outputs from the ENEVAL model cover the full extent of the transport model and provide a better representation of emission projections, again illustrating that the assessment of emissions in the Updated EIAR do account for induced traffic.

While Chapter 6 and Chapter 17 of the Updated EIAR both consider and assess the impacts of the proposed N6 GCRR in isolation, including any induced traffic impacts, on traffic and climate respectively for the purposes of the EIA to be carried out by the Commission, the Section 15 Report considers the implications of any induced traffic in the context of compliance with the Commission's obligations under section 15 of the 2015 Act which, for the reasons discussed in more detail in section 6.2.11 below, is a separate and distinct test and should not be conflated with the Environmental Impact Assessment process.

In that context, Plate 5.5 of the Section 15 Report (reproduced below), shows a comparison of the mode shares for different Climate Action Plan related scenarios, both with and without the N6 GCRR. The figure shows a comparison of a CAP DS scenario, both with and without the N6 GCRR. Within this scenario, is the infrastructure included in the GTS, including the N6 GCRR, and a series of demand management measures required to meet the targets set out in the Climate Action Plans. The comparison showed that there was minimal resultant change in the car mode share when the N6 GCRR was implemented alongside demand management measures, thus demonstrating that the scheme is not inducing additional traffic when applied as part of a holistic strategy.

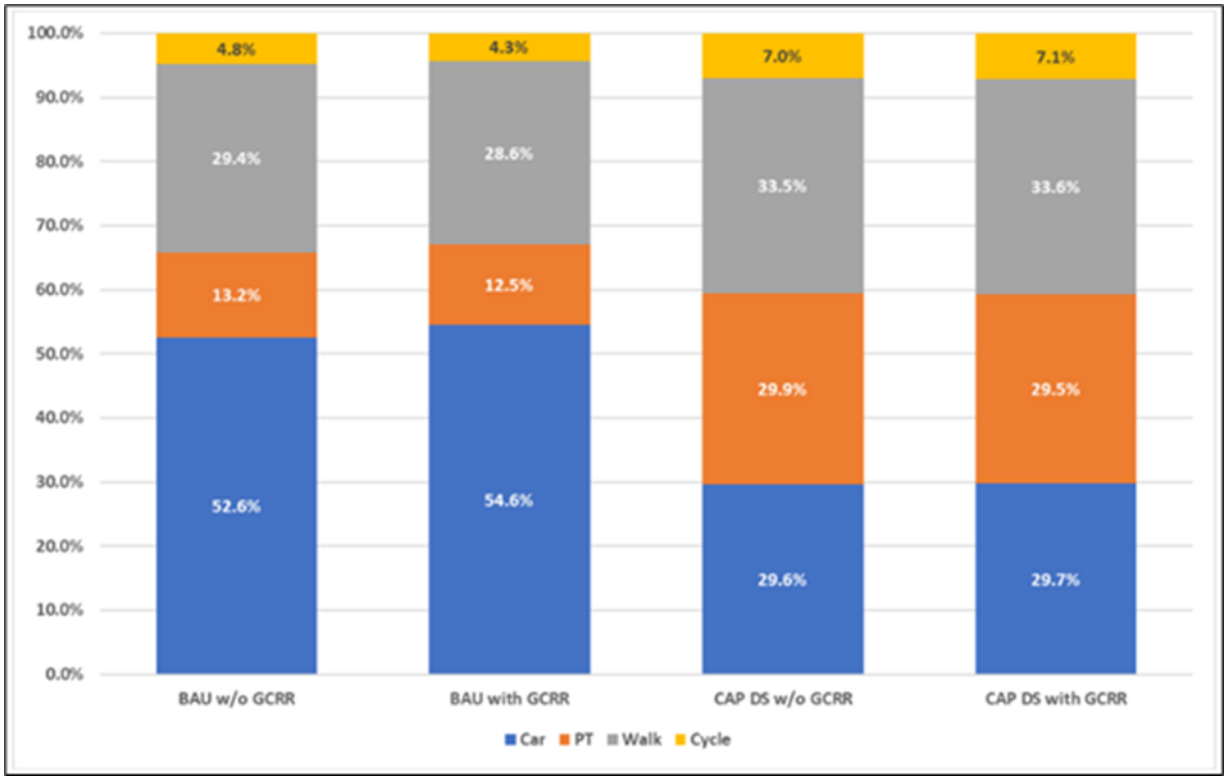

Plate 6.1 Mode Share Results, BAU vs CAP (with and without N6 GCRR) (extract from the Section 15 Report)

Sections 5.2.4 to 5.2.6 of the Section 15 Report further details the benefits of introducing the N6 GCRR alongside the demand management measures assessed and how the N6 GCRR enables these measures to be included. For example, Section 5.2.4 examines the daily traffic demand crossing the River Corrib under the 'BAU' (Business-As-Usual) and 'CAP Do-Something' scenarios. By 2030, the CAP Do-Something scenario is forecast to show approximately 78,000 vehicles crossing the river each day. This scenario includes three of the current four bridges being restricted to general traffic, i.e. Wolfe Tone and O'Briens Bridges restricted due to envisaged demand management measures for the city centre and the Salmon Weir Bridge converted to a sustainable transport corridor (as part of the Cross-City Link scheme), and only the Quincentenary Bridge remaining fully open. Currently, there is a demand for approximately 80,000 vehicles crossing the river each day across all four bridges.

However, the Quincentenary Bridge currently suffers from severe congestion issues, especially during peak hours and has approx. 40,000 vehicles using it on an average workday. Therefore, if another river crossing was not provided in the CAP DS scenario, the Quincentenary Bridge would have to cater for double the volume which it caters for today and would grind to a halt due to congestion, with all the attendant air quality impacts. Therefore, the additional bridge crossing provided by the proposed N6 GCRR is the key enabler for the implementation of the closure of the Salmon Weir Bridge and the further restrictions on Wolfe Tone and O'Brien Bridges as part of the CAP demand management measures.

The modelled 78,000 figure in the CAP Do-Something scenario is 2,000 lower than the present-day figure, whilst also catering for an approximate 30% increase in population across the Metropolitan Area by 2030 as set out under the National Planning Framework. This demonstrates that the N6 GCRR forms an integral part of the Galway Transport Strategy and is consistent with helping to achieve the objectives of the Climate Action Plan by accommodating the necessary residual movements of strategic traffic across the Galway Metropolitan Area, whilst facilitating the closure of Salmon Weir Bridge and additional envisaged restrictions on Wolfe Tone and O'Brien Bridges to general traffic, thereby creating a safer and more attractive city centre.

It is clear, therefore, from what is set out in the Updated EIAR and in the Section 15 Report, that the effects of induced traffic arising from the proposed N6 GCRR have been fully and properly considered and assessed in the Updated EIAR, to inform the Environmental Impact Assessment to be carried out by the Commission as part of its consideration of the applications of approval of the N6 GCRR. That assessment concluded, in the EIA context, that when the GCRR is implemented in isolation, there would an increase in the car mode share by approx. 2%, as shown in Tables 6.28 and 6.29 of the updated 2025 EIAR. This increase in traffic in the Do Something scenario (With the GCRR) resulted in an increase of 4,584 tonnes of CO_{2eq} or an approx. 1% increase, relative to the Do Minimum scenario (without GCRR).

Separately, to inform the Commission's consideration of its obligations under section 15 of the 2015 Act, the effects of the proposed N6 GCRR on induced traffic were also considered in the Section 15 Report, which demonstrates that the delivery of the proposed N6 GCRR alongside a series of demand management measures, which are designed to help meet the emissions reductions target set out within CAP25, contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25), and does not lead to induced traffic.

6.2.4 Structural Dependence on Private Car Use

The submission states that the EIAR does not explore the implications of integrated land use and transport planning, such as the National Sustainable Mobility Plan's call for 'transport-oriented housing development' and assumes a future of steady traffic growth and continued car dependency. The submission also states that the Updated EIAR does not adequately respond to the reality of induced demand.

Response – Structural Dependence on Private Car Use

The National Planning Framework (NPF) includes amongst other things, significant growth targets for each of the five cities, in terms of population and compact growth. These targets are higher than those against which the GTS would have been assessed previously, but they have been assessed as part of this Updated EIAR and also as part of the response to the 2019 Request for Further Information and the results presented during the 2020 Oral Hearing. As outlined in Table 6.1 of the Updated EIAR, the population figure assessed is approx. 135,000 which is itself an increase of approx. 14,000 on the 2019 RFI and an increase of approx. 50,000 on the 2018 EIAR. For context, the population of the city within the Galway City Council boundary, according to the 2022 Census was approx. 84,000. This would therefore represent an increase of 51,000, or a 61% increase on the 2022 level. These population forecasts are aligned to the National Transport Authority's NPF Reference Case scenario for the city.

Therefore, it is clear that the future development patterns in Galway, including projected population growth projections which were developed by the NTA and are aligned to the NPF were fully taken into account in both the traffic and transport assessment and the climate impact assessment presented in the EIAR, to inform the Environmental Impact Assessment to be carried out by the Commission.

This was also considered in the Section 15 Report in addressing compliance with the Commission's obligations under section 15 of the 2015 Act. In that regard, section 14.2.3 of CAP25 states the following:

> *The revision of the National Planning Framework presents an opportunity to re-emphasise the cross-linkages between land-use and spatial planning and the transport system. The policy pathway for cutting transport emissions centres around the 'Avoid-Shift-Improve' approach and specifically, Compact Growth Transport Orientated Development improved 'Active Travel' infrastructure, better public realm and planning consents for alternative fuel, and EV charging infrastructure.*

The Section 15 Report also assesses the GTS, which includes the N6 GCRR, alongside a series of demand management measures intended to help achieve the targets set out within CAP24 (now CAP25). These measures include additional restrictions on existing city centre bridges (Wolfe Tone Bridge and O'Briens Bridge) beyond those outlined in the GTS. These demand management measures help to reduce the car mode share to 30%, down from over 50% as per Plate 5.5 of the Section 15 Report, with a subsequent increase in the mode share for public transport, walking and cycling. Plate 5.5 also showed that, when the proposed N6 GCRR is added, the mode shares remain unchanged, highlighting how the remaining level of car traffic is not conducive to switching to walking, cycling or public transport. This traffic would be deemed strategic traffic and is more difficult to serve by public transport, given that most high-frequency public transport services would be intended to serve people who have a start point and destination within the Galway City

area. Also, as outlined previously, these demand management measures are the same as those used in a modelling exercise which was undertaken to inform the preparation of CAP23. The analysis demonstrates that the proposed N6 GCRR facilitates an acceleration towards further transformative measures envisaged for Galway City beyond those in the Galway Transport Strategy.

The issue of induced demand, both in the context of the assessment presented in the EIAR and in terms of its relevance to the Commission's obligations under section 15 of the 2015 Act, has already been addressed in 6.2.3, which clearly demonstrate that induced demand has been fully and comprehensively considered and there is no basis for the suggestion on page 7 of this submission that the EIAR *"does not adequately respond to the reality of induced demand"*.

Therefore given that the 2025 submission by the applicant includes land-use forecasts from the NPF prepared by the NTA, and has assessed the N6 GCRR and the rest of the components of the GTS (which remains the current adopted transport strategy for the city) alongside demand management measures required to achieve the targets set out within the Climate Action Plan, it has to the greatest extent possible assessed the implications of integrated land-use and transport planning and has not assumed a future of steady traffic growth and continued car dependency. Indeed, the Section 15 Report clearly demonstrates that the implementation of the N6 GCRR supports a significant population increase across the Galway Metropolitan Area without leading to an increase in car mode share and facilitating the implementation of additional city centre demand management measures over and above those envisaged as part of the Galway Transport Strategy. The N6 GCRR therefore forms part of a fundamental shift away from car dependency arising from significant population and economic growth within the Galway Metropolitan Area.

6.2.5 Climate Impact Analysis in Updated EIAR

The submission claims that there are supply constraints and competing demand that can limit the availability of Ground Granulated Blast Furnace Slag material in Ireland. It states that the carbon modelling is speculative and overly optimistic. It notes that the carbon emissions analysis relies on the NTA's ENEVAL model, which it alleges is based on highly optimistic assumptions about electric vehicle uptake, full delivery of the Climate Action Plan and limited induced traffic.

Response – Construction phase carbon assessment

As noted in the submission, one of the mitigation measures identified for the construction phase of the proposed N6 GCRR, to reduce the embodied carbon emissions associated with construction, is the use of 50% of cement to be Ground Granulated Blast Furnace Slag (GGBS) cement. This mitigation measures results in a reduction c.1,034 tonnes of CO_{2eq} and is directly aligned with Climate Action Plan policies in relation to green public procurement and reducing embodied carbon in construction materials, as set out in further detail below.

In 2022, the Department of Enterprise, Trade and Employment (DETE) published the document 'Reducing Embodied Carbon in Cement and Concrete Through Public Procurement'. This document was prepared in response to the Climate Action Plan 2023 target to *"Decrease embodied carbon in construction materials produced and used in Ireland by at least 30%"* and develops a '*fresh approach to green public procurement for cement and concrete*'. It sets out recommendations for how public bodies can reduce embodied carbon emissions from cement and concrete, by including appropriate procurement approaches for projects and programmes. CAP25 mandates the public sector to reach climate targets by specifying *low carbon construction methods and low carbon cement material as far as practicable as per guidance issued by Department of Enterprise, Trade and Employment for directly procured or supported construction projects from 2024.* Further information on relevant measures contained in this document is outlined in Section 17.6.2 of the Updated EIAR.

In relation to GGBS, the 2022 DETE report states *that "in Ireland, industry consultations suggested that there are some 500,000 tonnes of GGBS available which are not being used in the domestic market. While some operators use up to 70% GGBS in their concrete mix on certain projects, the majority do not use GGBS as much as they could. The GGBS supply chain is well established."*

Further, this demonstrates that the use of GGBS is an appropriate mitigation measure and that there is sufficient GGBS available to accommodate the construction of the proposed N6 GCRR, and supports the use of steel manufacturing furnace slag in the construction phase as a substitute for cement in the carbon modelling for the construction phase.

Section 12.2.1 of CAP25 references the 2024 DETE report in highlighting the purchasing power of the State to drive the demand-side of low carbon cement and concrete. It states that this demand for low carbon products will incentivise material producers, developers and builders to reduce embodied carbon in construction.

Response – Operational phase carbon assessment

The submission also challenges the greenhouse gas emissions calculations set out in the Updated EIAR in relation to the operational phase of the proposed N6 GCRR and suggests that the modelling of carbon emission is "not properly justified" and is "highly optimistic".

The modelling methodology employed in the operational phase assessment is clearly outlined in Section 17.2.5.2 of Chapter 17 of the Updated EIAR. This methodology is robust and utilises current advanced transport modelling techniques and tools. In this assessment, the NTA ENEVAL tool is used, which calculates emissions directly from the traffic model based on the level of traffic on every single link in the model, their speed, as well as the make-up of the traffic on those links.

Plate 6.2 N6 GCRR Area of Influence - used for Emission Reductions

As the emissions figures are calculated using outputs directly from the traffic modelling, these include the carbon emissions arising from any induced traffic, as clearly set out above in Section 6.2.3 above, in the area of influence of the proposed N6 GCRR as shown on Plate 6.2. The total tonnes of CO_{2eq} emitted from transport across the entire area shown is used for the calculation of emissions, noting that the area equates to approx. 3,110km^2. As outlined in Table 17.8 of the Updated EIAR, the total transport emissions in this extensive area in the 2031 Do-Minimum scenario is 493,796 CO_{2eq} while the total emissions in the 2046 Do-Minimum scenario is 125,392 CO_{2eq}. This predicted reduction in emissions between 2031 and 2046 can be attributed to the assumptions made regarding the change in fleet/transition to electric vehicles, which is

expected to have occurred by 2046. By 2046, the ENEVAL traffic model assumes that the car fleet is 91% electric, given the target to achieve net zero emissions by 2050 at the latest.

Table 17.8 of the 2025 Updated EIAR, sets out the operational emissions of the scheme e.g. the difference between the Do-Something (DS) and Do-Minimum (DM) emissions. The 'Change DM to DS' value set out in Table 17.8 of 4,584 tonnes of CO_{2eq} for 2031 is the difference between the Do-Minimum Scenario and the Do-Something Scenario which equates to 0.0764% of Ireland's transport budget in 2030. In 2046, the change in emissions between the DM and DS is calculated at 662 tonnes of CO_{2eq}. This is the quantum of emissions that can be attributed to the operational performance of the N6 GCRR, as it represents the change in emissions as a result of the scheme becoming operational i.e. introduced into the Do-Something and not being present in the Do-Minimum.

As is clear from the detail set out below, the ENEVAL model is a robust and conservative estimate of likely operational carbon emissions and is the correct modelling tool to use in the assessment of the climate impacts of the Proposed N6 GCRR (in the EIA context). As outlined in Section 17.2.5.2 of the Updated EIAR, ENEVAL incorporates the official EU vehicle standard emission factor database, termed COPERT, and the emission data from the UK National Atmospheric Emissions Inventory (NAEI). Therefore, there can be no suggestion that these modelling tools are not robust or that they "risk understating" the climate impacts of the proposed N6 GCRR as alleged on page 8 of the submission. Further, the allegation that these modelling tools *"do not reflect the well-documented risk that new road capacity generates additional demand and long-terms emissions"* is not correct. As explained above, the outputs of the ENEVAL tool are based directly on the traffic modelling undertaken to inform the assessment, and that traffic modelling fully accounts for any induced traffic that might result from the proposed N6 GCRR. The effects of induced traffic are therefore built into these assessment tools and fully accounted for in the project carbon emissions set out in Chapter 17 of the Updated EIAR. It is not clear on what basis the submission claims that ENEVAL accounts for only "limited induced traffic", but that is evidently not the case.

The table below presents the vehicle splits which are assumed to be in place by each forecast year, in ENEVAL. By 2031, it is assumed that 24% of the car fleet will be electric, noting that this is less than the target within the Climate Action Plan of 30% by 2030. This 24% figure is calculated based upon the current trajectory of electric vehicles in the country and therefore the allegation that the ENEVAL tool is based on "highly optimistic assumptions about electric vehicle uptake" and "full delivery of the Climate Action Plan 2024" is simply not correct.

By 2046, this figure is required to increase to 91%, given the goal to achieve net zero by 2050, at the latest. The assumed 24% ENEVAL figure by 2030 is not, therefore, considered to be 'highly optimistic' about EV uptake and full delivery of CAP25. Indeed, it is noted that the Department of Transport issued a press release[39] on 2 October 2025 to state that Ireland had already met its target for the end of 2025 in the Climate Action Plan to reach 195,000 electric vehicles on the roads. The 2025 Key Performance Indicator in the Climate Action Plan was stated to be 175,000 passenger electric vehicles and 20,000 commercial Light Goods Vehicles (195,000 total) and the DoT press release confirmed that the country had surpassed this total figure by 1,000 at the beginning of October, with three months of the year to spare.

The stated targets of 30% EV share of the national car fleet by 2030 and onwards to net zero by 2050 remain embedded in the Climate Action Plan 2025.

[39] https://www.gov.ie/en/department-of-transport/press-releases/ireland-reaches-major-milestone-in-the-transition-to-electric-with-196000-evs-now-on-irish-roads/

Table 6.1 Assumed split of vehicles in each year, in ENEVAL emissions calculations

Vehicle Type		2031	2046
Car	EV	24%	91%
	Petrol	32%	2%
	Diesel	44%	7%
Light Goods Vehicles	EV	24%	98%
	Petrol	0%	0%
	Diesel	76%	2%

Further, as explained in detail in Section 6.2.11 below, the criticism in this section of the submission that the EIAR fails *"to assess how the proposal can meet national carbon budget limits*" is misplaced.

Firstly, the EIAR itself does, as set out in Section 6.2.12, *Coolglass High Court Judgement*, address the contextualisation of the emissions from the proposed N6 GCRR against Ireland's carbon budgets. More fundamentally, however, compliance with carbon budgets is not a matter that falls to be assessed in the EIAR or in the context of an Environmental Impact Assessment for the reasons discussed in 6.2.12, *Coolglass High Court Judgement*. The carbon budgets and sectoral emissions ceilings are set by government, and the Climate Action Plan then sets out the roadmap of actions, identified by the Minister and approved by the Government, that are required in order for each sector to meet its sectoral emissions ceilings, and for Ireland at a national level to comply with the carbon budgets. It follows, therefore, that once a given project aligns with and supports the relevant actions set out in the relevant Climate Action Plan, as the proposed N6 GCRR does, an approval for that project would not just be consistent with the relevant Climate Action Plan, but also with the relevant carbon budgets and sectoral emissions ceilings.

6.2.6 Accommodation of continued growth in vehicle numbers

The submission also claims that the business case for the scale of the project provides for accommodation of continued growth in vehicle numbers contract to the objectives of the Climate Action Plan.

Response

This is wholly incorrect as set out in Section 6.11.3 of the Updated EIAR. This provides a comparison of the outputs from modelling of a Business-as-Usual scenario, (i.e. which is a forecast 2030 scenario which assumes a certain level of transport infrastructure based upon schemes which are likely to be built by 2030 in line with the National Development Plan), versus a CAP Do-Something scenario (i.e. which contains a suite of demand management measurements of a scale which would change travel behaviours and travel mode choice and ultimately achieve the 20% reduction in total vehicle kilometres target. The area of influence for this modelling is as shown on Plate 6.2. The conclusion of this comparison is that when comparing the CAP Do-Something scenario to the 2018 scenario, there is an approx. 43% reduction in vehicle emissions for the above geographical area. This show that a significant emissions reduction can be achieved with the Project in place, whilst also catering for an approx. 30% increase in the population level across the metropolitan area by 2030, versus 2016 levels.

Therefore, contrary to the statement in the submission, a 30% population increase can be accommodated across the metropolitan area without an equivalent 30% increase in emissions when the proposed N6 GCRR is introduced with demand management measures as per the objectives of the Climate Action Plan.

6.2.7 Assessment of environmental effects of alternatives in the EIAR

The submission claims that the Updated EIAR does not meet the legal requirements as it does not set out the environmental impacts of the alternatives considered. It claims that Chapter 4 of the EIAR gives details on traffic modelling of various alternatives but does not translate these outputs into an environmental assessment.

Response

The approach to the consideration of alternatives in the EIA context which is advocated for in the submission does not reflect the provisions of the EIA Directive or of the relevant case law. Therefore, before considering the specific allegations made in this submission in relation to alternatives, it is necessary to briefly set out the relevant provisions of the EIA Directive and the case law in relation to alternatives.

As the Commission will be aware, the EIA Directive requires at Article 5(1)(d) that the EIAR contains *"a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment"*

Further, Annex IV of the EIA Directive requires that an EIAR *include "a description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."*

Therefore, the obligation under the EIA Directive is to include in the EIAR a "description of the reasonable alternatives studied by the developer", and to set out the "main reasons for selecting the chosen option" and "a comparison of the environmental effects" of those reasonable alternatives. The analysis of alternatives set out in Chapter 4 of the Updated EIAR fully satisfies these requirements, as is clear from what is set out below. There is no obligation under the EIA Directive to include a consideration of alternatives that are not "reasonable alternatives studied by the developer" and, as has been expressly confirmed by the Court of Justice of the European Union, it is not necessary to subject any alternative, reasonable or otherwise, to the type of detailed consideration required in an EIAR in respect of a proposed development.

Turning to the relevant case law in relation to alternatives, the submission refers, at page 9, to the decision of the Court of Justice of the European Union (CJEU) in Case C-461/17 *Holohan v An Bord Pleanála*.

The first point to note is that the submission does not correctly describe the findings of the CJEU in *Holohan*. Neither *Holohan* nor the EIA Directive requires an EIAR to set out "the environmental effects of the alternatives considered" as suggested on page 9 of the submission. Rather, what is required is that the EIAR set out the **reasonable** alternatives studied by the developer, and the main reasons for selecting the chosen option, including a comparison of environmental effects.

In *Holohan*, a road authority had identified a particular alternative that had been favoured by objectors, namely a bridge to "span" the road above the flood plain, but that possible alternative was rejected at an early stage of the process essentially on cost grounds, without any information being provided as to its environmental impact. The complaint in the case was that the consideration given to that alternative was inadequate and the approval granted by the Board (as it then was) was challenged with that being one of the main grounds of challenge.

The CJEU held that Article 5(3)(d) of what was then the unamended EIA Directive must be interpreted as meaning that the developer must supply information in relation to the environmental impact of both the chosen option and of all the main alternatives (as was the test then, this is now "reasonable alternatives") studied by the developer, together with the reasons for his/ her choice, taking into account *at least* the environmental effects, even if such an alternative was rejected at an early stage.

Therefore, there is an obligation to consider the environmental impact of all reasonable alternatives, and an alternative cannot be ruled out simply on the basis that it would be more expensive than the proposed project, for example, without also considering the environmental effects of that alternative.

However, the CJEU judgment in Holohan expressly found that the EIA Directive "does not require the [main] alternatives studied to be subject to an impact assessment equivalent to that of an approved project"[40], which applies equally to the requirement to assess "reasonable alternatives" now applicable. It is therefore not necessary to conduct an Environmental Impact Assessment in respect of any reasonable alternatives considered, and there can be no suggestion that any reasonable alternative is required to be subject to same type of consideration and assessment as is applied to a proposed development, which appears to be the

[40] Case C-414/17, paragraph 66

position advanced in the submission. There is simply no basis for the suggestion on page 9 of the submission that the assessment of alternatives set out in the Updated EIAR does not comply with the requirements of the CJEU decision in Holohan.

All alternatives which are considered reasonable as they meet the Project objectives, are environmentally assessed in the Updated EIAR.

The submission goes on to say that in Chapter 4 (Alternatives Considered) of the Updated EIAR, *"four scenarios are descried as having been modelled with the use of the NTA's Western Regional Model"*. The submission cites these four alternatives only, but Chapter 4 contains the assessment of many more alternatives including a range from doing nothing, to maximising active travel and public transport alternatives, and only when the transport issues remain unresolved, moving on to considering road based alternatives. The full assessment of the progression through the hierarchy of alternatives is presented in Chapter 4 of the Updated EIAR.

The submission states, by reference to Section 4.6.3 of the Updated EIAR, that *'Table 2 (referring to Table 4.2 in the Updated EIAR) shows percentage reductions in AADT figures on some bus routes for Scenario 1 (Light Rail Only) and Scenario 2 (Light Rail and N6 GCRR), but it is not clear what baseline is being used for the comparison."* The comparison is between Scenarios 1 & 2, with the results showing the impact of the N6 GCRR, when implemented alongside a Light Rail.

The text in Section 4.6.3.3 highlights that the light rail alignment would improve the public transport provision along it's alignment but it does not improve the remainder of the public transport network and the comparison is Table 4.2 of the Updated EIAR, shows the impact of the N6 GCRR in terms of helping to reduce traffic on proposed BusConnects routes which have no current or planned bus lanes and thus would be subject to any increase in congestion (delays/unreliable journey times) that would happen as the city grows in line with population targets set out in the NPF. Section 4.6.3.5 of Chapter 4 of the Updated EIAR concludes that *Light Rail alone will not resolve the significant transport issues currently experienced in Galway City and its environs and detail in Chapter 3 of this updated EIAR and does not meet the Project Objectives and as such is discounted as an alternative to the proposed N6 GCRR*. On that basis, Light Rail was not considered for the more detailed environmental assessment contained in Table 4.7 of the Updated EIAR.

The EPA Guidelines on the 'Information to be Contained in Environmental Impact Assessment Reports' states that *alternatives should be described with 'an indication of the main reasons for selecting the chosen option'. It is generally sufficient to provide a broad description of each main alternative and the key issues associated with each, showing how environmental considerations were taken into account in deciding on the selected option. A detailed assessment (or 'mini-EIA') of each alternative is not required.* Climate was a consideration in the assessment of alternatives, as described in Chapter 4 of the Updated EIAR. Particular reference should be given to Table 4.7 of the Updated EIAR which includes an assessment of environmental considerations under each environmental discipline, including air and climate. This scale of assessment is deemed appropriate and accords with the requirement of the EIA Directive and EPA Guidelines. An emissions modelling assessment of each alternative is considered a detailed assessment (or 'mini-EIA) and is not an appropriate level of assessment for the consideration of alternatives.

The submission states that, in the Section 15 Report, which the submission acknowledges is not part of the EIAR, there was no assessment of alternatives. This complaint incorrectly conflates the purpose and contents of an EIAR (and the need to consider alternatives in the EIA context) with the test that applies under section 15 of the 2015 Act and the consideration of the Commission's obligations under that section.

The Section 15 Report was prepared to inform the Commission's consideration of its obligations under section 15 of the 2015 Act, and therefore examines the N6 GCRR in the context of the Climate Action Plan 2024, with a particular focus on the transport sector targets set out within it. These include the 50% emissions reduction target by 2030, against a 2018 baseline and 20% reduction in vehicle kilometres against a 2030 Business as Usual scenario. The document detailed an exercise which modelled the N6 GCRR alongside the other measures contained within the GTS and a series of demand management measures for the city. This analysis demonstrates that the delivery of the proposed N6 GCRR alongside the measures set out in CAP24 (which are now re-stated in CAP25) and other national level measures, contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25), and that the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved climate action plan, as well as the other plans and objectives specified in Section 15 of the 2015 Act including the National Climate Objective.

It is not necessary, in this context, to include any consideration of alternatives, as that is not a relevant consideration for the Commission in considering its obligations under section 15 of the 2015 Act. In considering its obligations under section 15 of the 2015 Act, the Commission must establish that, in granting approval for a proposed development, it is performing its functions, insofar as practicable, in a manner consistent with the matter set out in section 15(1) of the 2015 Act. Therefore, it is the proposed development before the Commission that must be considered in that context, and it is simply not relevant to include any consideration of alternatives.

6.2.8 Compatibility of the Galway City and County Councils' Local Authority Climate Action Plans and the Galway Transport Strategy 2016 with the Climate Action Plan 2025

Both Galway City and County Councils have a Local Authority Climate Action Plan, and both of these documents state the goal of achieving a 51% reduction in greenhouse gas emissions relative to a 2018 baseline by 2030, which is in line with the target set out in CAP25 (and previously CAP24). Both plans support the implementation of the GTS. The submission provides statements on the GTS failing to align with CAP25. It also comments on the Galway City Council Climate Action Plan 2024 – 2029 and the Galway County Climate Action Plan 2024 – 2029.

Response

It should be noted that the 51% figure is not broken down by sector within these Local Authority Plans, unlike CAP25 which is sector-specific, and so it is not possible to identify from these plans what level of reduction in emissions is required to be achieved in the Transport Sector.

However, as mentioned above, the overall target in each plan of achieving a 51% reduction in greenhouse gas emissions relative to a 2018 baseline by 2030 is aligned with CAP25 (and previously CAP24). The analysis set out in the Section 15 Report clearly demonstrates how the delivery of the proposed N6 GCRR, as part of an overall transport solution for Galway, is consistent with the achievement of the targets set out in CAP25 (and previously CAP24) at a national level. As the target in these Local Authority Climate Action Plans is the same as the overall national target set out in CAP25 (and previously CAP24), it follows that the delivery of the proposed N6 GCRR is also consistent with the Local Authority Climate Action Plans.

In that regard, as clearly set out in the Section 15 Report, the development of the proposed N6 GCRR aligns with the principles of sustainable road development and supports the reallocation of existing road infrastructure for active travel modes and public transport routes, all of which aligns with NIFTI and CAP25 (and previously CAP24). In particular, the updated transport modelling undertaken for the purposes of the Section 15 Report and the Updated EIAR has shown that the proposed N6 GCRR is still required as an integral part of the GTS, and that when the proposed N6 GCRR is delivered alongside a series of demand management measures identified in CAP25 (and previously CAP24), there will be a 43% reduction in carbon emissions from transport by 2030 within the area of influence of the proposed N6 GCRR when compared to 2018 levels.

This is clearly fully aligned with the targeted 51% reduction set out in the Local Authority Climate Action Plans, and there is no basis for suggesting that, where a project is aligned with and contributes to achieving the targets set out in the Local Authority Climate Action Plans, but falls short of fully achieving those targets, that project cannot be approved or is not consistent with the Local Authority Climate Action Plans.

Indeed, included in the Galway City Council Climate Action Plan is a stated target to deliver a Decarbonisation Zone (DZ) within the local authority area to act as a test bed for a range of climate action measures, which will assist in the delivery of the National Climate Objectives. There is also an action within the plan to conduct a demand management study for the zone, to identify opportunities to reduce car travel. The timeframe for this study is 2-3 years and the plan covers the period 2024 - 2029.

This upcoming study is likely to build upon the measures which were assessed alongside the N6 GCRR and detailed in the Section 15 Report. Those measures were adopted from the modelling exercise undertaken to inform CAP23, and further measures that may be identified under this study would assist in meeting the gap to target in terms of emissions reductions. Any such further measures would be enhanced and supported by the delivery of the proposed N6 GCRR which will free up road space in the city centre to encourage and facilitate modal shift to active travel and public transport, and the effective implementation of demand management measures in the city centre.

The allegation in the *submission that the GTS fails to align with the Climate Action Plan 2025* is fundamentally misconceived. While clearly the GTS was prepared before the preparation of the various climate action plans, that does not mean that it is not aligned with CAP25. Indeed, as noted above, the analysis set out in the Section 15 Report clearly demonstrates that the delivery of the proposed N6 GCRR alongside the demand management measures set out in Part IV of the RFI Response document and other national level measures, contributes significantly towards the achievement of these national level targets, and that the proposed N6 GCRR as an integral part of the GTS is consistent with CAP25 (and previously CAP24).

As the modelling that informed this analysis included both the proposed N6 GCRR and the other measures set out in the GTS, it demonstrates that the GTS, while it pre-dates the preparation of the Climate Action Plans, is fully aligned with and supports the delivery of the measures set out in CAP25 (and previously CAP24) and contribute significantly to the achievement of the national targets set out therein.

The submission notes that there is a lack of reference to 2018 baseline data. The reference to 2018 relates to the national emission reduction target of 51% by the end of 2030 relative to the greenhouse gas emissions reported for the end of 2018. Local authorities are obliged to develop an inventory of baseline emissions for 2018 for comparison with 2030 predicted values which is to be considered as part of the preparation of Climate Action Plans at a county level[41]. Consideration of 2018 baseline emissions is not applicable to the assessment for compliance with EIA. The EIA Directive requires *a description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.*

Table 17.6 of the Updated EIAR provides data on the future baseline using published data from the EPA on projected emissions for the transport sector as well as combined sectors.

6.2.9 Congestion Generation

The submission refers to the recently published 'The Economic Cost of Congestion in the Regional Cities' paper, by the Department of Transport (DoT) in May of 2025. The submission proceeds to discuss the findings of this paper in detail, with specific references made to 'induced demand' which is deemed to 'undermine the strategic rationale for the GCRR' and further states that the Updated EIAR 'does not appear to respond to this emerging national evidence meaningfully'.

[41] Local Authority Climate Action Plan Guidelines, Government of Ireland 2023

Response – The Economic Cost of Congestion in the Regional Cities 2022 – 2040 (DoT)

The issue of induced demand has been addressed above in Section 6.2.3.

In order to respond to this particular section of the submission, it is necessary to provide some context regarding the DoT Paper. This research represents a continuation of analysis undertaken in the Greater Dublin Area (GDA) in 2017 (and later updated in 2023), with a similar methodology being applied to the regional cities (Galway, Limerick, Cork, and Waterford). While the paper does conclude that congestion will increase in the regional cities modelled in the report, namely Galway, Cork and Waterford, in the coming three decades, driven by population and economic growth, and states that ' *increased congestion is an unavoidable consequence of continued economic and population growth',* in order to understand that conclusion, it is necessary to first understand the purpose of the DoT Paper, and the nature of the analysis undertaken to inform it.

First and foremost, the modelling undertaken to inform the DoT Paper above does not account for the demand management measures contained within CAP25 (and previously CAP24) in the regional cities. That is because the paper was prepared, not to assess the likely future scenario with demand management measures in place, but to inform the preparation of demand management strategies and to help identify the scale of demand management measures likely to be required. In that regard, the paper clearly states in the *Introduction* section that: '*The results of this study will help inform the scale of interventions required to address issues associated with congestion and provide an evidence base for policy development'*. Again, in Section 2.2 (relating to Climate Policy) the paper states that: '*This analysis will help set out the extent of congestion being experienced across the regional cities and help inform the degree of intervention required to address it'*.

The DoT Paper does not, and is not intended to, reflect the impacts of the N6 GCRR when delivered as part of an overall transport solution for Galway.

The NPF 2018 growth projections used in the paper formed the basis of a 2040 'Core' scenario and a 2040 'Alternative Future' scenario. This 'Alternative Future' scenario is based on research undertaken by the NTA and published in November of 2020 relating to potential future trends in remote working seen to emerge prior to Covid-19 and which were expected to continue. This alternative scenario is based on assumed reductions to trip generation across various user classes (i.e. journey to work, journey to education, etc.). The NTA research outlining this 'Alternative Future' scenario is available at https://www.nationaltransport.ie/wp-content/uploads/2021/03/Alternative-Scenario-Development-Note-v-6.1_Final.pdf. It is noted that this research was published prior to CAP24 and CAP25.

In the DoT Paper, the 'Alternative Future' scenario assessed is the only additional demand management/behavioural change measure that has been investigated as a potential mitigation or response to the expected increase in congestion in the regional cities. The analysis is based on the prevailing transport strategies in place in each of the cities (with the Galway Transport Strategy (GTS) in place for Galway City).

Therefore, both the 2040 Core Scenario and the 2040 Alternative Future Scenario considered in the DoT Paper include the delivery of infrastructure including the N6 GCRR, but neither scenario accounts for the delivery of the extensive additional demand management measures necessitated by the Climate Action Plans 2024 and 2025. The traffic modelling for Cork City in the DoT Paper was undertaken by Systra, who also are responsible for the transport assessment for the proposed N6 GCRR, and as the methodology was the same for the modelling for all three cities in the DoT Paper, Systra are confident that the 2040 Core Scenario and the 2040 Alternative Future Scenario considered in the DoT Paper do not account for the demand management measures contained within CAP25 (and previously CAP24).

The analysis concludes that planned infrastructure developments in Galway in the period between 2030 and 2040 are seen to relieve congestion, but the population and economic growth planned sees the overall cost of congestion increase. The GCRR is included in the analysis as an infrastructural element of the GTS. The analysis states that *'the bypass will provide alleviation from congestion in the short-term….however, increased transport demand will eventually result in the bypass becoming congested without further intervention'*. This is unsurprising in circumstances where the demand management measures required to deliver CAP targets alongside this significant population growth are not included in the analysis.

As indicated in the DoT Paper, the purpose of the research is to help to determine the level of further intervention required to mitigate the increase in congestion and associated economic costs of same, and to provide an evidence base for policy development in support of same. The significant impact of the 'Alternative Future' scenario, which contains one specific demand management measure (greater uptake of remote working) shows that demand management measures are a critical item to consider in tandem with infrastructure investment in order to address congestion, and underscores the significant role that demand management measures can play in relieving congestion when delivered in tandem with the necessary infrastructure development required to free up road space for public transport and active modes.

In that regard, in April 2024, the Government published 'Moving Together – A Strategic Approach to the Improved Efficiency of the Transport System in Ireland' in draft form for consultation. The Minister's Foreword states that '*Moving Together goes hand-in-hand with the extensive range of Government investment and supports already in place or planned for public transport, walking, cycling, and electric vehicles. It will support an incremental change in travel behaviour for people who already have alternatives to the car or for those who will have more choice when investments in infrastructure are fully realised over the next few years'*.

It further states that *'that the benefits of current and future Government investment and supports in public transport, walking, cycling and electric vehicles cannot be fully realised while current levels of congestion remain.'* The introduction of the report also states that *'The Strategy is intended to provide an overarching framework for the delivery of a range of potential demand management measures that can be deployed to bridge this gap in a fair and equitable manner'* (the 'gap' referred to is the gap in emissions required to be bridged in order to meet the Climate Action Plan targets). Moving Together therefore represents the development of a National Demand Management Strategy.

The draft report makes specific reference to the 2023 GDA Cost of Congestion Study, stating that the 'Alternative Future' scenario '*demonstrates that behavioural change interventions can have significant impacts in reducing the cost of congestion over the long-term'*. Indeed, the report also discussed modelling undertaken to inform the 2023 Climate Action Plan by the National Transport Authority, stating that the measures included in this analysis *'are not an exhaustive list of possible measures – they are those measures that are amenable for modelling……other measures are in the scope of this Strategy but will require further policy design. There are also a range of potential measures which are considered as part of this strategy which do not feature in the modelling assumptions but have strong potential to impact in reducing vehicle kms.'*

'Moving Together' was published for consultation in April 2024 in draft form. A final version of the Strategy is yet to be published. It is however clear that the strategy will, when published, set out a clear framework for implementation of a significant range of demand management measures and behavioural change measures intended to complement planned infrastructure investment and to ensure that the benefits of infrastructural investment can be fully unlocked. The DoT Paper on the Cost of Congestion in the Regional Cities therefore reaffirms the requirement for policy-led demand management measures to be delivered in tandem with planned infrastructure investment and to ensure that capacity that is unlocked is utilised in the most appropriate manner.

The DoT Paper therefore reaffirms the need for the pending National Demand Management Strategy (Moving Together) to establish the complementary demand management and behavioural change interventions that will be needed across the country in order to complement planned infrastructure investment and support the achievement of our stated climate action plan targets, which will include measures such as those considered and modelled alongside the proposed N6 GCRR in the Section 15 Report. The analysis contained in the Section 15 Report clearly indicates that the demand management measures assessed in the 'CAP Do-Something' scenario result in a significant reduction in car mode share – reduced to approximately 30% both with and without the N6 GCRR included. Importantly, this highlights that when, the N6 GCRR is implemented alongside demand management measures, the car mode share remains effectively unchanged. This demonstrates that the delivery of the N6 GCRR, when aligned with demand management measures, is a complementary approach, with no resultant increase in vehicle mode share.

In particular, as set out in the Section 15 Report, the delivery of the proposed N6 GCRR as an integral part of the GTS will:-

- Enable potential demand management measures within the city like car free areas and congestion charges, and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP24, supporting potential road space reallocation for sustainable modes and encourage a shift from private car trips in line with CAP24 and public realm improvements
- Facilitate demand management measures to help achieve CAP24 targets whilst ensuring a level of mobility for residents on both sides of the city
- Enable a better performing network for all modes by reducing delays across the network by 50% compared with 2023 levels, whilst not increasing the level of car trips within the metropolitan area
- Facilitate the BusConnects programme for the city, by providing another river crossing to offset restrictions on Salmon Weir bridge and enable potential restrictions on other city centre bridges via car free urban areas and congestion charges which encourages the shift from private car trips to public transport in line with CAP24
- Accommodate the significant planned growth within city and environs in line with NPF targets (50% increase in population by 2040, compared to 2016 levels)
- Reduce the need for HGVs to travel within the city, achieving a 25% reduction in the level of HGV kilometres within the NWR338 cordon of the city which accounts for approx. 60% of the city's current population. This will benefit pedestrians, cyclists and public transport users and will result in improved air quality and supporting a safer environment for active travel trips.

Further, as set out above, the key targets for the transport sector remain unchanged in CAP25 and so the analysis by reference to CAP24 above applies with equal force in relation to CAP25, as no new measures or targets have been introduced in CAP25 that would in any way alter that position. Therefore, while it is acknowledged that the N6 GCRR is not, in and of itself and without the delivery of demand management measures, a standalone solution to the problem of congestion in Galway (and was never intended to be so), and so the predictions in the DoT Paper in that regard are unsurprising, the delivery of the N6 GCRR is an integral element of any overall transport solution to address the issues identified in the DoT Paper.

Further, because the N6 GCRR was included as planned infrastructure in both the Core Scenario and the Alternative Future scenario, the DoT Paper does not give any indication of the likely cost of congestion in Galway in the future if the N6 GCRR is not delivered. In that regard, the impacts of the proposed N6 GCRR on congestion are considered and assessed in Chapter 6 (Traffic and Transportation) of the Updated EIAR, which clearly demonstrates that the provision of the N6 GCRR is hugely beneficial for reducing traffic congestion in Galway City in both the AM and PM Peak and for reducing journey times on key routes. While not modelled in the DoT Paper, there is little doubt that, in the absence of the N6 GCRR, the cost of congestion in Galway would increase significantly more than is predicted in the DoT Paper.

Indeed, as shown in Figure 14 of the DoT Paper (reproduced below) and as stated – *'The cost of congestion decreases slightly between 2030 and 2040. This result indicates that planned infrastructural developments between 2030 and 2040 could relieve some congestion in the GMA'*. The infrastructural elements of the Galway Transport Strategy, including the N6 GCRR are seen to support planned population and economic growth in the period from 2030-2040 whilst simultaneously reducing the cost of congestion slightly in the same period.

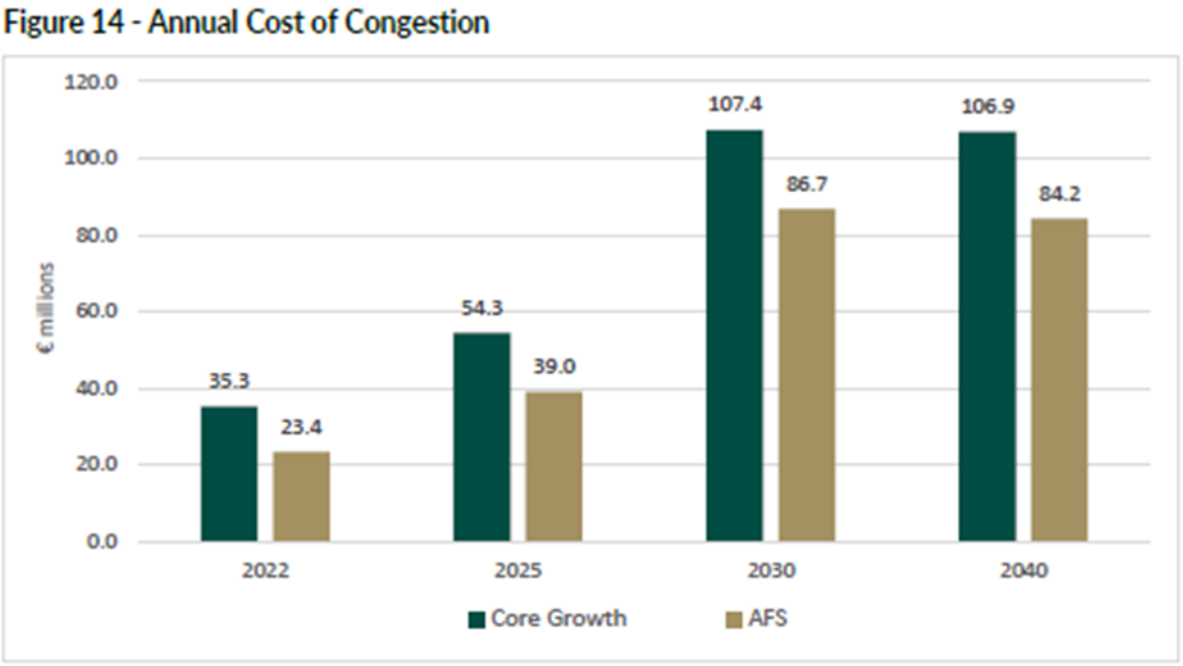

Plate 6.3 DoT Cost of Congestion in Galway (Extract Figure 14)

Therefore, in light of what is set out above, the reference to the DoT Paper and the interpretation of same is based on a misunderstanding of the purpose and findings of that paper. It has been clearly demonstrated in this response, and in the totality of the documents before the Commission including the Updated EIAR and the Section 15 Report, that the delivery of the proposed N6 GCRR as an integral part of the GTS is a key enabler of the demand management measures that will be required to address the issues identified in the DoT Paper and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP25 (and previously CAP24).

6.2.10 Long-term emissions profile

The submission states that the EIAR fails to evaluate whether the project's long-term emissions profile undermines the effectiveness of accompanying public transport or demand management measures.

Response

Firstly, it should be noted that while the GTS was published in 2016, it is still the adopted transport strategy for the city. The GTS includes the N6 GCRR which is a key enabler for the optimal efficiency of the BusConnects programme for the city. The BusConnects Cross-City Link scheme, which was approved by An Bord Pleanála (now An Coimisiún Pleanála) in October 2024, will restrict access to general traffic on the Salmon Weir Bridge between the hours of 7a.m. and 7p.m. on weekdays. This restriction will help to create a sustainable transport corridor through the Eyre Square area and help facilitate the large increase in cross-city bus services planned as part of the BusConnects programme for the city (a 50% increase in services).

As stated in Section 6.3.2 of the Updated EIAR, during the hours of 7a.m. and 7p.m. on weekdays, the Salmon Weir bridge carries traffic volumes of approximately 12,000 which accounts for ~20% of the traffic volumes across all four bridges during those hours. A significant portion of these 12,000 vehicles would be likely to use the Quincentenary Bridge instead in the future to cross the city, notwithstanding that the Quincentenary Bridge itself suffers from severe congestion issues today, especially during peak hours.

Consequently, by closing the Salmon Weir Bridge to general traffic without providing another any additional river crossing, the current significant traffic issues which are experienced in the city, are likely to get worse. When this is combined with the expected growth in population in the city (50 % population growth from 2016 levels, from the Government's National Planning Framework), congestion levels rise relative to current levels. A Local Area Model (LAM) was built based on data from 2023, to inform the Updated EIAR and further details of this can be found in Chapter 6 of the Updated EIAR but in 2023, the average speed on the road network across the entire Galway Metropolitan Area, was 28 km/h.

In the 2031 Do-Minimum (without N6 GCRR) scenario, this average speed drops to 19 km/h. In the 2031 Do-Something (with N6 GCRR) scenario, this average speed increases to 27km/h. The deterioration in the performance of the road network, without the N6 GCRR, not only impacts the performance of general traffic but it also impacts the performance of the BusConnects programme in the city as there are numerous roads in the city which are earmarked for new bus routes but don't have any current or planned bus lanes. Therefore, these bus services will be forced to travel with general traffic and will be affected by the deterioration of the road network and negatively impact bus users through long and unreliable journey times. Table 6.25 of the Updated EIAR, shows the AADT reductions along BusConnects routes without existing or planned bus lanes.

The slower average speed of the road network also impacts the level of emissions produced as higher emissions are produced per kilometre, at low speeds. The below figure illustrates the amount of emissions produced per km at differing speeds, for different Euro standard petrol cars. The figure shows that the highest emissions are produced at lower speeds <20km/h, and both the 2031 Do-Minimum and Do-Something speeds are represented on the figure by dotted lines. For example, at the aforementioned speeds, there is an 31% increase in emissions produced per kilometre at the Do-Minimum speed, relative to the higher Do-Something (with GCRR) speed, for Euro 6 standard petrol cars.

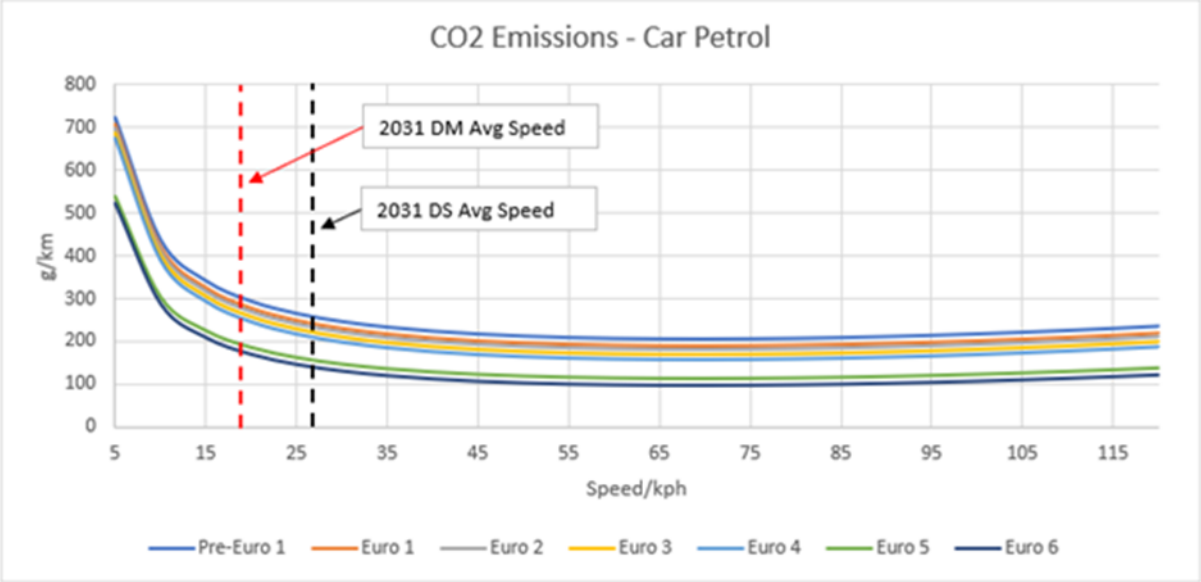

Plate 6.4 CO2 Emissions rate at different speeds for 2031 Do-Minimum and Do-Something

The table below shows a direct comparison of the CO_2 emissions produced in both the (2031) Do-Minimum and (2031) Do-Something scenarios, for different euro standard petrol cars. The figures show that at the more congested speed in the morning peak hour, more emissions are produced per kilometre and this therefore contributes to a smaller difference in the overall emissions between the Do-Minimum (without N6 GCRR) and Do-Something (with N6 GCRR) scenarios, relative to previous figures submitted by the applicant.

Table 6.2 CO_2 emissions in the (2031) Do-Minimum and (2031) Do-Something scenarios for different Euro standard petrol cars

Type	CO2 Emissions per km from DM Average Speed (grams)	CO2 Emissions per km from DS Average Speed (grams)	Reduction in Emissions with N6 GCRR	Difference (%)
Pre-Euro 1	311	257	53	21%
Euro 1	296	243	53	22%
Euro 2	288	234	53	23%
Euro 3	274	221	53	24%
Euro 4	262	209	53	26%
Euro 5	199	155	44	28%
Euro 6	185	141	44	31%

While it is acknowledged that the emissions in Table 17.8 of the Updated EIAR, still show an increase when the N6 GCRR is implemented on its own, the Section 15 Report assessed the GTS (which includes the N6 GCRR) alongside a series of demand management measures.

The 2015 Report details the results of this assessment and Plate 5.5 showed the mode share results for the Galway Metropolitan Area when the demand management measures were introduced on their own and also when introduced alongside the N6 GCRR. The results showed that, when the demand management measures were introduced, the car mode share reduced to approx. 30%, down from just over 50%. When the N6 GCRR was added, the car mode remained unchanged at 30%. This demonstrates that, when the N6 GCRR is introduced as part of an overall transport strategy for the city, which includes demand management measures, the N6 GCRR does not induce traffic and the additional capacity in the network created by the N6 GCRR, is used by strategic traffic movements and traffic movements which are not conducive to walking, cycling or public transport. The N6 GCRR acts to free up road space elsewhere for public transport to operate optimally and active modes to travel more safely thereby facilitating traffic with lower emissions.

The Section 15 Report also details the benefits of introducing the N6 GCRR alongside the demand management measures assessed and how the N6 GCRR enables these measures to be included. For example, Section 5.2.4 examines the daily traffic demand crossing the River Corrib in the 'CAP Do-Something' scenarios. By 2030, the CAP Do-Something scenario (which includes demand management measures) is forecast to show approximately 78,000 vehicles crossing the river each day. This scenario includes three of the current four bridges being restricted to general traffic, i.e. Wolfe Tone and O'Briens Bridges restricted due to demand management measures for the city centre and the Salmon Weir Bridge converted to a sustainable transport corridor, and only the Quincentenary Bridge remaining fully open. However, the Quincentenary Bridge currently suffers from severe congestion issues, especially during peak hours and has approx. 40,000 vehicles using it on an average workday.

Currently, there is a demand for approximately 80,000 vehicles crossing the river each day across all four bridges. The modelled 78,000 figure is 2,000 lower than the present-day figure, whilst also catering for an approximate 30% increase in population across the Metropolitan Area by 2030 as set out under the National Planning Framework. Therefore, if another river crossing was not provided in the CAP DS scenario, the Quincentenary Bridge would have to cater for double the volume which it caters for today and would grind to a halt due to congestion, with all the attendant air quality impacts. Therefore, the additional bridge crossing provided by the proposed N6 GCRR is the key enabler for the implementation of the closure of the Salmon Weir Bridge and the further restrictions on Wolfe Tone and O'Briens Bridges as part of the CAP demand management measures, as the city would grind to a halt if these were introduced without the proposed N6 GCRR.

This demonstrates that the GCRR forms an integral part of the Galway Transport Strategy and is consistent with helping to achieve the objectives of the Climate Action Plan by accommodating the necessary movements of strategic traffic across the Galway Metropolitan Area, whilst facilitating the closure of Salmon Weir Bridge and imposing restrictions on the Wolfe Tone and O'Briens Bridges to general traffic, thereby creating a safer and more attractive city centre.

6.2.11 Modelling alignment with National Policy

The submission claims that there is a failure to model policy aligned, demand-managed alternatives such as light rail, BusConnects and congestion pricing which should be considered under the Environmental Impact Assessment Directive. The submission also states that Chapter 4 of the Updated EIAR dismisses non road alternatives like light rail, BusConnects and demand management on the grounds that they do not reduce congestion to the same extent as the GCRR.

Response

The role of the N6 GCRR within the context of the overarching Galway Transport Strategy is clear – the GTS is a multi-modal transport strategy for the Galway Metropolitan Area and includes a comprehensive range of proposed measures for implementation, which collectively function in a complementary manner as part of the full strategy deployment.

The Updated EIAR for the proposed N6 GCRR is required to assess the Project in isolation compared to a 'Future Year Do-Minimum' scenario. The Future Year Do-Minimum scenario includes planned and committed transport schemes for Galway City and its environs and those likely to be completed for the various years assessed. This Do-Minimum scenario incudes the 2023 base network plus all of the schemes expected to be complete by 2031 and 2046, respectively. These are outlined in Section 6.4.5.1 of Chapter 6 of the Updated EIAR and include the Cross-City Link bus priority corridor scheme, the Dublin Road bus corridor scheme, the revised new bus network for Galway (developed as part of BusConnects Galway), and other sections of bus lanes across the study area. Therefore, the Public Transport Bus Alternative detailed in Section 4.6.2 of the Updated EIAR is the BusConnects alternative. This scenario is also the same as the Do-Minimum scenario which is used for comparative purposes in the traffic impact assessment, which is included in Chapter 6 of the Updated EIAR and therefore demonstrates that a BusConnects alternative was assessed. As noted above in Section 6.2.10, the average speed on the road network across the entire Galway Metropolitan Area was 28 km/h in 2023 which will decrease to 16 km/h by 2046 in the Do-Minimum scenario. This negatively impacts on the entire BusConnects programme are numerous roads in the city which are earmarked for new bus routes but do not have any current or planned bus lanes. It also shows that more emissions are produced at the lower speeds in the Do-Minimum scenario (BusConnects only), compared to the Do-Something (BusConnects & N6 GCRR).

This Do-Minimum scenario presents the modelling results of BusConnects, which the submission claims are missing. Every table included in Section 6.6 of Chapter 6 of the Updated EIAR provides an output for the Do-Minimum scenario, and therefore presents the modelling results of BusConnects.

The further claim made in this submission on Page 8 that the alternative of a modal shift strategy of public transport priority investment, cycling promotion and other active travel measures is not adequately modelled is wholly inaccurate as the Do-Minimum scenario incudes these measures.

Furthermore, as the BusConnects Galway Dublin Road project had not been approved at the time of submission of the 2025 RFI Response, a scenario was tested without the Dublin Road Scheme in place, and this is documented in Sections 6.6.3.2, 6.6.3.3 and 6.6.3.4 of the Updated EIAR.

Section 4.6.4 of the Updated EIAR details the results of the demand management measures scenario, which also includes the full roll-out of the BusConnects programme. These results are the same as in the Section 15 Report. The demand management measures listed in the submission include specific measures such as a congestion charge, a car-free urban area, removal of free workplace parking, increases in parking charges, increase in fuel costs, etc.

Plate 4.6 of the Updated EIAR shows that the demand management measures (without the N6 GCRR) will reduce delay/congestion relative to the current level. But the N6 GCRR enables/facilitates these demand management measures, which would help achieve our Climate Action Plan goals. This is shown in Section 4.6.4.1 of the Updated EIAR. Table 4.3 shows that with the demand management measures in place, and given that the population increases by 30%, there is still a demand for vehicles crossing the River Corrib, of approx. 78,000. For comparison purposes, the current level today, is approx. 80,000 but that figure is spread over four bridges. In the demand management measures scenario, three of the four current bridges in Galway have restrictions placed upon them, with the Quincentenary Bridge being the only bridge full open. However, the Quincentenary Bridge, which currently suffers from severe congestion issues, especially during peak hours and has approx. 40,000 vehicles using it, on an average workday.

In Plate 5.5 of the Section 15 Report, the mode share results show that with the same demand management measures, the car mode share reduces to approx. 30%, down from over 50%. When the N6 GCRR is added, the mode remains unchanged at 30%. This suggests that the demand management measures have supressed traffic levels to the lowest levels and the remaining levels, are not conducive to walking, cycling or public transport. Therefore, the level of traffic would be the same, with or without the N6 GCRR and as shown in Table 4.3 of the Updated EIAR, there is still a demand for 78,000 vehicles to cross the river. Without the N6 GCRR, the only remaining bridge without restrictions is the Quincentenary bridge which is effectively at capacity today and has an AADT of approx. 40,000 and thus would have to cater for double the volume which it caters for today if the GCRR was not implemented, given the level of remaining traffic which does not have an alternative mode of transport to use. Therefore, the demand management measures scenario is fully assessed, modelled and documented in both the Updated EIAR and the Section 15 report.

In Section 4.6.3 of Chapter 4 of the Updated EIAR, the N6 GCRR was assessed in the context of the NTA's Light Rail Transit Feasibility Study report. A number of scenarios were modelled and assessed in this section, with Scenario 4 being the indicative Light Rail line included in the NTA's study alongside the N6 GCRR and a series of demand management measures. The results in this Updated EIAR showed that there is a still a need for the N6 GCRR, as demonstrated by the approx. 40,000 AADT crossing the river. As mentioned above in the demand management measures scenario (which includes BusConnects), the demand management measures supress traffic levels to their lowest levels possible and the remaining level of traffic, is not conducive to walking, cycling or public transport (including Light Rail). The remaining traffic would be deemed strategic traffic and is more difficult to serve by public transport, given that most high frequency public transport services would be trying to serve people who have a start point and destination within Galway City. In this scenario, two thirds of the traffic using the N6 GCRR to cross the River Corrib, in the morning peak hour, have a destination outside of the city boundary. All of this highlights the strong demand for the N6 GCRR, alongside a potential Light Rail alignment and demand management measures, to help serve the high level of strategic traffic who wish to travel across the study area, i.e. the N6 GCRR and the light rail, when delivered in tandem with demand management measures, serve complimentary functions. Light Rail services the travel requirements for residents and workers across the city, whereas the N6 GCRR services the travel requirements for longer distance strategic passenger and freight of the wider city and region. The Galway Light Rail Transit Feasibility Study has been considered in the 2025 RFI Response.

Congestion pricing is a demand management measure included in the CAP24 and CAP25. The modelling exercise, which is detailed in the Section 15 Report, modelled a scenario with the N6 GCRR, the other measures contained within the GTS and a series of demand management measures. The demand management measures were adopted from a modelling exercise which was done to inform the Government's 2023 version of the Climate Action Plan. This is separate to the modelling required for the Project under the EIA Directive.

Therefore, the 2025 RFI Response has modelled and considered all alternatives as per EIA Directive and additional sensitivity modelling was also undertaken.

The claim made in the submission that the Updated EIAR dismisses these other alternatives on grounds of congestion is entirely incorrect as the Future Year Do-Minimum scenario includes the 2023 base network plus the Cross-City Link bus priority corridor scheme, the Dublin Road bus corridor scheme, the revised new bus network for Galway (developed as part of BusConnects Galway), and other sections of bus lanes across the study area. As set out above, the Updated EIAR does not dismiss Light Rail, but rather demonstrates that the Light Rail serves different travel demand to that served by the proposed N6 GCRR and that together with CAP demand measures, they serve complimentary functions.

Section 17.9 of the Updated EIAR includes a consideration of the EU Commission published 'Technical guidance on the climate proofing of infrastructure in the period 2021-2027'. The purpose of the publication is to give technical guidance on the climate proofing of investments in infrastructure covering the programming period 2021-2027. The guidance acknowledges that '*most projects will have an impact on GHG emissions, compared to the Baseline, through their construction, operation, and eventual decommissioning and through indirect activities that occur because of the project. This should be seen in the context of the project not as an isolated event but as a set of different and complementary interventions – in particular stemming from a plan. This might mean that a certain specific project does not have an individual net GHG reduction effect but is integral part of an overall plan that reduces emissions.*

In response to the technical guidance an assessment of the measures provided in the GTS and CAP24 are also considered alongside the Project and compared to a Do-Nothing scenario – without the GTS and CAP24 for 2030. When comparing the scenarios with and without the Project, GTS and CAP24, an 8% decrease in CO_{2eq} emissions due to the predicted traffic changes on the road network in 2030 is expected to arise. The predicted change in emissions corresponds to a decrease of 0.59% relative to Ireland's transport carbon budget in 2030.

6.2.12 Legal precedents and the Climate Act

The submission references a number of recent legal decisions which it says have implications for the Project.

Response – Coolglass High Court Judgement

As the Commission is no doubt aware, the decision of Mr Justice Humphreys in *Coolglass Wind Farm* Limited -v- An Bord Pleanála [2025] IEHC 1, which is referenced on a number of occasions in this submission, is currently under appeal to the Supreme Court. That appeal was heard by a full panel of seven judges of the Supreme Court over 3 days from 22 to 24 July 2025, and it is hoped that a decision in relation to that appeal will be issued by the Supreme Court in the course of the current legal term (which runs from 6 October 2025 to 19 December 2025), and hopefully during the earlier part of this legal term.

The decision of the Supreme Court in relation to this appeal will, we understand, clarify the nature and extent of the obligation that apply to relevant bodies, such the Commission, in the performance of their functions pursuant to section 15 of the 2015 Act and should provide very valuable guidance to the Commission as to how to discharge that obligation. [It may be prudent for the Commission to await any such guidance from the Supreme Court before making any determination in relation to the applications for approval of the proposed N6 GCRR, but that is of course a matter for the Commission.]

Not only is the High Court judgment in *Coolglass* under appeal, a number of assertions made in the submission about that judgment are incorrect and fail to appreciate the particular context within which that decision was made.

The development the subject of the *Coolglass* decision was a renewable energy development that, if constructed, would directly contribute to the achievement of certain specific renewable energy targets set out in the relevant Climate Action Plan. It was, in that very particular factual context, that the High Court held that the Commission (or An Bord Pleanála as it then was), in refusing planning permission for that development (because in the Commission's view it would materially contravene the Laois County Development Plan), had failed to perform its functions insofar as practicable in a manner consistent with the matters specified in section 15(1) of the 2015 Act.

However, Mr. Justice Humphreys was conscious of the risk of his judgment being overread and expressly cautioned that *"the obligation to use discretionary powers favourably to renewable energy infrastructure does not automatically translate into an obligation to refuse permission for developments that cause emissions"*. He went on to say that *"it doesn't automatically follow from a pro-renewables interpretation that there must be, say, an anti-cheese factory interpretation,*[42] *an anti-data centre interpretation or an anti-LNG storage*[43] *interpretation."*

Therefore, while the High Court determined that the Commission was obliged under section 15 of the 2015 Act to exercise its discretionary powers in a manner favourable to renewable energy infrastructure, it was clear that it does not follow that the Commission must refuse permission for projects that are predicted to cause carbon emissions.

In considering whether or not the Commission can grant approval for a given project in a manner consistent with the matters specified in section 15(1) of the 2015 Act, the primary consideration is not the quantum of predicted emissions compared against the relevant carbon budget/sectoral emissions ceiling (as appears to be the position advanced in this submission). Rather, the starting point for this consideration is and must be whether or not a decision to grant approval for a given project would be consistent with the relevant Climate Action Plan, here CAP25.

The statement on page 13 of the submission that the High Court in Coolglass held *that "authorities must demonstrate that their decisions materially and measurably contribute to climate mitigation outcomes*" is not correct. The High Court made no such finding. In fact, the High Court held that the provisions of section 15 mean that a relevant *body "is required to act in conformity with the climate plans and objectives set out in the subsection [i.e. section 15(1)] unless it is impracticable to do so",* and that this means *"exercising discretionary and evaluative powers in whatever way is most likely to be consistent with the relevant plans and objectives."* The Commission is not required to demonstrate that its decisions "materially and measurably contribute to climate mitigation outcomes" as alleged in the submission and there is no basis in the 2015 Act or in the decision in Coolglass for that assertion.

Further, there is a suggestion throughout the submission that the EIAR prepared in respect of the proposed N6 Galway City Ring Road is required to comply with the provisions of section 15 of the 2015 Act, and has not done so. For example, it is stated on page 12 of the submission that *"the Updated EIAR for GCRR fails to meet the legal obligations imposed by Section 15 of the Climate Act*".

This approach is quite incorrect and proceeds from a misunderstanding as to the nature of the obligation imposed by section 15 of the 2015 Act. First, the obligation imposed by section 15 is one imposed on a relevant body, not on a developer. Second, the section does not impose any obligation in relation to the contents of an EIAR. Once more, the submission seeks to impermissibly conflate the different obligations imposed by section 15 and the EIAR Directive.

Impacts on climate is one of the categories of environmental impacts required to be considered in the context of an Environmental Impact Assessment. The purpose of the consideration of climate issues in the EIA context is to ascertain the likely significant effects of a proposed development on climate in accordance with the EIA Directive. The EIA is not, however, determinative of outcome. From an EIA perspective, once those impacts have been properly considered and assessed, even a project which would have a major adverse impact on climate could, in principle, be approved by the competent authority.

[42] This is a reference to a proposed cheese factory in Kilkenny which was approved by An Bord Pleanála (as it then was) in 2020, and which approval was challenged by way of Judicial Review proceedings brought by An Taisce. Ultimately, the Supreme Court in 2022 dismissed the proceedings, on the basis that it was not necessary to assess the possible future greenhouse gas emissions generated from an expansion in dairy production to meet the demand for milk generated by the factory. See *An Taisce - The National Trust for Ireland -v- An Bord Pleanála & Ors* [2022] EISC 8.

[43] This is a reference to a proposed Liquified Natural Gas storage facility off the coast of Kerry. Approval for the LNG Facility was originally refused by An Bord Pleanála (as it then was) in 2023 and that refusal was subsequently quashed by the High Court in 2024 and remitted to An Bord Pleanála. While the legal challenge to the refusal was pending, a separate standalone application for permission for the gas-fired power plant was submitted; the Commission granted approval for the power plant in 2025. That subsequent approval is now the subject of a further judicial review challenge brought by Friends of the Irish Environment CLG.

Section 15 of the 2015 Act imposes an entirely separate obligation on the Commission which is to perform its functions, in so far as is practicable, in a manner consistent with the specified plans and policies including the climate action plan (now CAP25). The information necessary to demonstrate that the Commission would be discharging this obligation by granting approval for the proposed N6 GCRR is to be found in the Section 15 Report.

The Updated EIAR presents the assessment of effects on climate during the construction and operation phase of the Project by comparing the emissions in a scenario with the proposed Project to a scenario without the proposed Project. As the EIA assessment only considers the effects of the Project, it cannot account for emission reductions associated with additional commitments which will arise from the delivery of the Galway Transport Strategy (GTS) or the most recent approved climate action plan, which is now CAP25 (which must be read in conjunction with CAP24).

The reductions in carbon emissions likely to arise from the GTS, CAP24, and CAP25 in conjunction with the Project were considered in detail in the Section 15 Report, which concluded that the delivery of the proposed N6 GCRR alongside the measures set out in CAP24 (which are now re-stated in CAP25) and other national level measures, contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25), and that the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved climate action plan, as well as the other plans and objectives specified in Section 15 of the 2015 Act including the National Climate Objective.

The submission alleges on page 13 that Chapter 17 of the Updated EIAR (which as mentioned above sets out the assessment of impacts of the proposed N6 GCRR on climate from an EIA perspective), *"adopts a procedural tone rather than a legally compliant, outcome-based approach"* and *"fails to evaluate whether the emissions arising from the GCRR are compatible with the national carbon budgets for 2021-2025 and 2026-2030, with the prioritisation required for transport planning and appraisal as quoted above, or with the 50% reduction required from the transport sector by 2030".*

Firstly, it is not correct to say that Chapter 17 of the Updated EIAR does not address compatibility with carbon budgets or the targeted reductions in emissions set out in the Climate Action Plans. Those matters are considered and addressed in Chapter 17 as appropriate in the context of an Environmental Impact Assessment. Carbon budgets in particular are addressed in section.

An assessment of the change in emissions between the DM and DS scenarios are set out in table 17.8 of the Updated EIAR. This change in emissions is considered in terms of Ireland's 2030 Transport Budget: i.e. the difference between the Do-Minimum Scenario and the Do-Something Scenario equates to 0.0764% of Ireland's transport budget in 2030.

The climate impact rating is determined using the TII Standard significance criteria, as shown in Table 17.4 of the Updated EIAR. The level of impact is considered based on a number of factors, including the contribution of the project to achieving Ireland's trajectory to net zero. This clearly demonstrates that the climate assessment considers carbon budgets and targeted reductions as part of the impact assessment.

However, more fundamentally, the submission does not recognise the distinct nature and purpose of the assessment set out in Chapter 17 of the Updated EIAR. Chapter 17 of the Updated EIAR presents a comprehensive and robust assessment of the likely significant effects of the proposed N6 GCRR on the environment, in accordance with the provisions of the EIA Directive the TII Climate Standard and EPA EIAR guidelines. That is the purpose of a climate impact assessment in the context of an EIA.

The matters highlighted on page 13 of the submission, such as the Climate Action Plan targets, are addressed separately in the Section 15 Report, which concludes that the delivery of the proposed N6 GCRR alongside the measures set out in CAP24 (which are now re-stated in CAP25) and other national level measures, contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25), and that the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved climate action plan, as well as the other plans and objectives specified in Section 15 of the 2015 Act including the National Climate Objective.

The submission goes on to say that Chapter 4 (Alternatives) of the EIAR *"similarly falls short of the threshold"* on the basis that certain potential alternatives have been ruled out, and claims that "*this contradicts the Coolglass interpretation of "insofar as practicable", which demands a robust demonstration that climate-compatible alternatives are genuinely unfeasible"*. However, this is yet another example of the conflation of the quite distinct obligation placed on a relevant body by section 15 of the 2015 Act with the consideration of reasonable alternatives required under the EIA Directive.

The submission goes on to argue on page 14 that the decision in Coolglass *"explicitly rejects economic growth or "carbon leakage" concerns as legitimate grounds for overriding climate obligations."* Firstly, for the reasons set out above, there is no basis on which to suggest that a decision to grant approval for the N6 GCRR would in any sense involve "overriding climate obligations". In fact, the documents before the Commission clearly demonstrate that the delivery of the proposed N6 GCRR alongside the measures set out in CAP25 (and previously CAP24) and other national level measures, contributes significantly towards the achievement of the national level targets set out in CAP25 (and previously CAP24). Furthermore, this statement on page 14 of the submission does not accurately represent what the High Court in fact determined in Coolglass. Far from rejecting economic considerations, Mr. Justice Humphreys at paragraph 132 of his decision held that *"pending complete adaptation of the economy,* ***there will be other imperatives of economic necessity that require projects that, in and of themselves, wouldn't support climate goals in isolation****"* (emphasis added).

The statement on page 14 of the submission that *"the legal priority is emissions reduction, not balancing climate with economic convenience"* is also incorrect. It is clear on any reading of the 2015 Act that there are a wide range of factors, including economic factors, that must be balanced with climate action. For example, the 2015 Act expressly provides in section 4(8) that Ministers and the Government, in performing their functions under that section including the preparation of Climate Action Plans must balance a wide range of factors, including, at paragraph (g) the need to maximise employment, the attractiveness of the State for investment and the long term competitiveness of the economy, and at paragraph (m) the National Planning Framework (which provides for the delivery of the N6 GCRR). The balancing of these public interest factors and the policy choices that this entails is expressed in the Climate Action Plans, and it is for that reason that the obligation placed on a relevant body such as the Commission is to perform its functions, insofar as practicable, in a manner consistent with the Climate Action Plan.

An assessment of cumulative impacts is included in Chapter 21 of the Updated EIAR. An assessment of cumulative climate impacts is addressed in Section 21.6.10 and Section 17.8. In accordance with the TII Climate Standard, the impact of the Project should be considered based on its whole lifecycle. As outlined in Section 17.2.4, the study area for the climate assessment encompasses the Republic of Ireland as the Project is assessed relative to climate commitments and carbon budgets.

The European Commission produced its Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report in 2017. The guidance states that *'cumulative effects can occur at different temporal and spatial scales. The spatial scale can be local, regional or global*…' The assessment contained in Section 17.8 accords with this guidance.

Response – A5 decision

In June 2025, Northern Ireland's high court quashed a decision by the Department of Infrastructure (DFI) (NI) to proceed with the first phase of the A5 dual carriageway project through Tyrone and Derry.

The court determined that section 52 of the *Climate Change (Northern Ireland) Act 2022* clearly rules out the construction and operation of a major project like the A5 scheme in the absence of robust planning, synchronisation and coordination between the Northern Ireland governmental departments to ensure that the project fits into all plans, strategies and policies which map out a realistic pathway to achieve the goals of the 2022 Act.

The court considered that in order to comply with its Section 52 duty, the DFI needed to provide cogent evidence that its decision had been made following such planning and coordination. The DFI's decision did not reference any such evidence being provided by the Department of Agriculture, Environment and Rural Affairs (DAERA). As such, the court identified an evidential lacuna rendering the DFI's decision non-compliant with its duties under s.52.

The court considered a further ground of challenge alleging that a DFI decision not to assess greenhouse gas emissions from transboundary vehicle journeys which would be induced by the scheme between Northern Ireland and the Republic of Ireland on the assumption that they would be "marginal" meant that the DFI did not have "full information" at the time the decision was made and therefore, did not comply with the Environmental Impact Assessment Directive 2011/92/EU. This is not the case in the 2025 RFI Response given the fact that the WRM was used for modelling and it includes and takes account of induced demand, and noting the geographic location of the zone of influence of the proposed N6 GCRR shown on Plate 6.2 vis a vis Northern Ireland, the number of these journeys which will appear in the model are likely to be limited. However, even if minimal, they will be accounted for in the modelling undertaken due to the use of the regional NTA model.

It should be noted that there is no similar provision in the 2015 Act that requires consultation with other government departments so this element of the decision is not directly relevant to the proposed N6 GCRR.

In relation to the assessment of induced traffic, the Section Report highlights that when the N6 GCRR is implemented alongside demand management measures, the car mode share remains effectively unchanged. Therefore it can be concluded that the introduction of the N6 GCRR does not lead to induced traffic; refer to Section 6.2.3 above.

The suggestion on page 18 of the submission that there is any weakness in the treatment of non-road alternatives set out in Chapter 4 of the Updated EIAR is not supported by any reading of Chapter 4 of the Updated EIAR, or of the obligations arising under the EIA Directive, for the reasons set out in detail in Section 6.2.7 above. Further, the statement in the submission that the decision of the High Court in Coolglass found that the "as far as practicable" language in section 15 of the 2015 Act "demands proof that climate-compatible alternatives are unfeasible, not merely less convenient" is not correct and is a misreading and overstatement of what is set out in the High Court decision.

Response – ICJ Opinion

The submission refers to the Advisory Opinion of the International Court of Justice in relation to the Obligations of States in respect of Climate Change, published on 23 July 2025.

The Advisory Opinion relates to the obligations of States under international law, and in particular under a number of international treaties in relation to climate change including the United Nations Framework Convention on Climate Change (1994), the Kyoto Protocol (2005), and most recently the Paris Agreement (2016). While this is an Advisory Opinion only and is not binding, and relates to obligations placed on States by international treaties and does not deal with the obligations that arise for a body such as the Commission in the performance of its functions, Galway County Council fully accepts that the tenor of the Advisory Opinion underscores the importance of addressing the challenges posed by climate change, and the legal significance of the duties placed on States by international treaties and agreements in relation to climate.

It is important to note, as emphasised by the Supreme Court in its decision in *Conway v Ireland* ([2017] IESC 13), that Article 29.6 of the Constitution provides that *"No international agreement shall be part of the domestic law of the State save as may be determined by the Oireachtas".* Therefore, Ireland's international obligations under, for example, the Paris Agreement, only form part of domestic law to the extent determined by the Oireachtas. In that regard Ireland has, as the Commission will be aware, addressed its obligations under international law, including for example under the Paris Agreement, through the enactment of the 2015 Act and the amendments made to the 2015 Act in 2021. In particular, the 2015 Act states in Section 5 that the Minister and the Government shall carry out their respective functions under sections 4, 5, 6, 6A, 6B, 6C and 6D in a manner -

a) that is consistent with the ultimate objective specified in Article 2 of the United Nations Framework Convention on Climate Change done at New York on 9 May 1992, and:

(i) any mitigation or adaptation commitments entered into by the European Union in response or otherwise in relation to that objective;

(ii) the steps specified in Articles 2 and 4(1) of the Agreement done at Paris on 12 December 2015 to achieve that objective,

Ireland has, under the framework set out in the 2015 Act, clearly set out how it will comply with its international obligations in relation to the climate change through the adoption of binding carbon budgets and sectoral emissions ceilings. It has also identified, in, most recently, the Climate Action Plan 2024 and Climate Action Plan 2025, a roadmap of actions which will ultimately lead to the State meeting the national climate objective of pursuing and achieving, by not later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

Therefore, the obligations that apply to Ireland under International Law, which were the subject of the Advisory Opinion, are complied with through the implementation of the 2015 Act. Section 15 of the 2015 Act then goes on to very clearly set out the domestic law obligations that apply to relevant bodies such as the Commission in the performance of their functions, including the obligation to perform their functions, insofar as practicable, in accordance with the matters specified in section 15(1) of the 2015 Act including, in particular, the most recent approved Climate Action Plan.

In that regard, the Section 15 Report demonstrates that the delivery of the proposed N6 GCRR alongside the measures set out in CAP24 (which are now re-stated in CAP25) and other national level measures, contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25), and that the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved climate action plan, as well as the other plans and objectives specified in Section 15 of the 2015 Act including the National Climate Objective.

In those circumstances, there is no basis on which to suggest that a decision to grant approval for the proposed N6 GCRR would be in any way inconsistent with the Commission's obligations under the 2015 Act, with Ireland's obligations under international law in relation to climate change, or with the Advisory Opinion of the ICJ.

Response - Cycle Toronto v AGO decision

This decision relates to the decision in Ontario to remove active travel lanes along Eglinton Avenue, which was stated to be deemed to be '*irrational, inadequately justified and inconsistent with binding environmental and policy commitments'*. The submission states that '*just as Ontario failed to assess the climate impact of removing bike lanes, the GCRR (Chapter 17) does not demonstrate how the project aligns with Ireland's legally-binding carbon budgets, nor does it model the long-term impact of Induced Traffic emissions – a known outcome of expanding road capacity*'.

The submission further states that *'When considering the transition to electric vehicles, or other alternatives to fossil fuel engines, the analysis does not address the additional burdens of developing sustainable electric power sources at scale to keep pace with an expanding fleet, due in part to induced car trips'*.

Firstly, it is important to note that the Cycle Toronto decision is a decision of the Superior Court of Ontario, which is a State court in Canada is of not legal precedential value in this jurisdiction. In any event, the parallels drawn in the submission between the issues arising in the Cycle Toronto decision and the proposed N6 GCRR are misconceived.

Firstly, in an attempt to draw a parallel to the failure in the Cycle Toronto case to assess the climate impacts of removing bike lanes, the submission claims that the proposed N6 GCRR "does not demonstrate how the project aligns with Ireland's legally binding carbon budgets". In that regard, as discussed above, the measures required to ensure that Ireland complies with its national climate budgets are set out in the Climate Action Plan. It is noted that Climate Action Plan targets (a 20% national reduction in total vehicle kilometres in 2030 compared to the 'Business as Usual' scenario, and 50% reduction in carbon emissions nationally) are national targets, to be achieved across the entire country, and it is not incumbent on any individual project to achieve these targets in isolation.

However, while these are national level targets that cannot be applied to any individual project in isolation, updated transport modelling was undertaken to inform the Section 15 Report included in the 2025 RFI Response (based on the same transport modelling approach and assumptions as those used in the modelling undertaken by the Department of Transport to inform CAP23 and CAP24 (and now also CAP25)), to assess the overall benefits of delivering the N6 GCRR, as an integral part of the GTS, against these key performance indicators set out in CAP24, and to consider whether the delivery of the N6 GCRR would be consistent with CAP24.

The results of this updated transport modelling (which considered the N6 Galway City Ring Road (GCRR) together with the various other measures included in the Galway Transport Strategy and a series of demand management measures for the city) are documented in section 5.2 of Part IV of the 2025 RFI Response and demonstrate that the delivery of the proposed N6 GCRR alongside the measures identified in CAP24 (and now CAP25) results in:

- A 16% reduction in total kilometres travelled in 2030 within the area of influence of the N6 GCRR, when compared to the 2030 BAU scenario
- A 43% reduction in carbon emissions from transport within the area of influence of the proposed N6 GCRR in 2030, when compared to 2018 levels

The outcomes of the modelling presented in the Section 15 Report are therefore very clearly aligned with the targets and key performance indicators set out in CAP25 (and previously CAP24), and while no individual project can be expected to meet these overall national level targets, the gap to target between (i) what can be achieved in Galway by the delivery of the proposed N6 GCRR alongside the measures identified in CAP25 (and previously CAP24) and (ii) the overall national level targets, is clearly described in the Updated EIAR. There is no basis for contending that, where a project is aligned with and contributes to achieving the targets set out in CAP but falls short of fully achieving those national targets, the project cannot be approved or is not consistent with the CAP. Such an approach would be counterproductive and actually undermine progress towards achieving Ireland's national decarbonisation targets.

Further, the Section 15 Report demonstrates that the delivery of the proposed N6 GCRR alongside the measures set out in CAP24 (which are now re-stated in CAP25) and other national level measures, contributes significantly towards the achievement of the national level targets set out in CAP24 (and now CAP25).

The submission also claims on page 19 that the long term impacts of induced traffic emissions have not been modelled. That is demonstrably not the case for the reasons set out above.

Future Power Supply for EV Fleet Targets

The submission suggests that an analysis is needed of the impact of *'developing sustainable electric power sources at scale to keep pace with an expanding fleet, due in part to induced demand'*. This is outside the scope of the assessment of the N6 GCRR and measures to be implemented in relation to the supply of sustainable power to support the planned trajectory of EV mode share within the national fleet will be subject to their own individual planning applications. Further, similar to issue ultimately determined by the Supreme Court in its decision in *An Taisce - The National trust for Ireland v An Bord Pleanala & ors* [2022] IESC 8 (the *"Kilkenny Cheese"* case), there can be no suggestion that the impacts of developing sustainable electric power sources to fuel an expanding electric vehicle fleet is in any way something that is required to be considered in the context of the Environmental Impact Assessment of the proposed N6 GCRR. In that case, the Supreme Court held that the upstream consequences of a proposed cheese factory (i.e. any potential impact on the demand for milk, and the environmental impacts of an increase in milk production) were not indirect significant effects liable to be assessed under EIA Directive or the Habitats Directive. Hogan J concluded that, as important as the EIA Directive undoubtedly is, *"it was ultimately designed to assist in identifying and assessing the direct and indirect significant environmental effects of a specific project, including (post-2014) the climate change effects of such a project. Yet the proper scope of the EIA Directive should not be artificially expanded beyond this remit and, in particular, it should not, so to speak, be conscripted into the general fight against climate change by being made to do the work of other legislative measures such as the [Climate Action and Low Carbon (Development)(Amendment) Act 2021]."* The same can be said of the allegation made in this submission. While, as is clearly set out above, the carbon emissions of any induced traffic arising from the Proposed N6 GCRR have been fully considered and assessed in the

Updated EIAR, then can be no suggestion that the impacts of developing sustainable power sources to fuel any such induced traffic can or should be considered in the EIA carried out in respect of the Proposed N6 GCRR .for completeness, however, it is noted that the National EV Charging Infrastructure Strategy, published in 2023 by ZEVI (Zero Emission Vehicles Ireland) sets out the pathway for the delivery of a national EV charging network, which sets out how Government will work alongside private industry to deliver the required level of EV charging capability on the National Road network. A supporting 'Regional and Local EV Charging Network Plan' was published in draft form in May 2024, with the deployment of the required infrastructure to be led by local authorities across the country.

The Sustainable Energy Authority of Ireland 'Electric Vehicle Roadmap' (https://www.seai.ie/sites/default/files/publications/Electric-Vehicle-Roadmap.pdf) presents key results for the 'Mean EV Deployment Scenario', with 60% EV and 18% H_2 Fuel Cell car sales by 2050. The analysis presented in this scenario indicates that by 2050, with EV's comprising 60% of the total car stock, fossil fuel imports will be reduced by 45%, overall vehicle CO_2 emissions will be reduced by 73% and 45% of all Ireland's passenger car energy will be supplied from locally generated wind power.

In light of what is set out above, therefore, notwithstanding that the Cycle Toronto decision is not of legal precedential value in this jurisdiction, it is clear that none of the issues identified in the submission relative to that decision in fact give rise to any concern in relation to the proposed N6 GCRR. The decision in that case to remove bicycle lanes on a particular avenue in Toronto, Canada, was found to be irrational and inconsistent with the binding environmental policy commitments that apply in that jurisdiction (and it is not made clear in the submission what in fact those commitments are or how they compare to the law in this jurisdiction). However, as is clear from what is set out in this response and indeed from the totality of the documents before the Commission, the proposed N6 GCRR has been subject to a robust and detailed assessment, both of its impacts on climate from an EIA perspective as set out in the Updated EIAR, and of how a decision to grant approval for the N6 GCRR would be consistent with the most recent approved climate action plan and with the other matters identified in Section 15(1) of the 2015 Act.

This assessment fully complies with the relevant legislation and policy in this jurisdiction, and demonstrates that in granting the approvals sought for the proposed N6 GCRR, the Commission will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved climate action plan, as well as the other plans and objectives specified in Section 15 of the 2015 Act including the National Climate Objective.

6.2.13 Conclusion

The submission concludes as follows:

1. *This application does not have the information and mitigation measures required to allow the Commission to meet its obligations under Section 15 of the Climate Action Act & Low Carbon Development Act (as amended) 2015.*
2. *The EIAR does not contain the necessary assessment of alternatives required to comply with the Environmental Impact Assessment Directive.*
3. *The project is inconsistent with the national Climate Action Plans 2024 and 2025, the Carbon Budgets, the Galway County Council and Galway City Council Climate Action Plans, and the EU and international law commitments to which these give effect.*
4. *The project does not address and provide for the reduction of traffic congestion in and around Galway City.*

Response

Our response:

1. The Updated EIAR and all other documentation in the 2025 RFI Response contains sufficient information to allow the Commission to meet its obligations under Section 15 of the Climate Act (as amended). Refer to Part IV of the 2025 RFI Response which considers obligations under Section 15 of the Climate Act (as amended) and submissions in relation to the Climate Action Plan 2024. The report considers how the proposed N6 GCRR aligns with CAP24 (and now CAP25) and Section 15 of the Act.
2. The Updated EIAR outlines all alternatives considered and provides the justification for excluding these alternatives as feasible alternatives to meet the Project objectives.
3. The Project is not inconsistent with the national Climate Action Plans, carbon budgets, the Galway County Council and Galway City Council Climate Action Plans and EU and international law commitments. Refer to the sections above which provide detailed analysis in support of this statement.
4. The detail of how the Project addresses congestion in and around Galway City is covered in full above.

7. Response to ABP-318220-23: 07 IDA Ireland

7.1 Submission – Whole Scheme

The IDA made the following submission:

"IDA Ireland is the State Agency that is responsible for winning Foreign Direct Investment (FDI) for Ireland. These Investments cover a full spectrum of activities including manufacturing, research development & Innovation and business services, and they result in significant capital Investment and employment creation in Ireland.

To support the continued growth of employment in FDI companies in Galway city, the implementation of the Galway Transport Strategy is required in order to enable the efficient movement of employees and freight In Galway city and county.

The Galway City Ring Road is a fundamental aspect of the Galway Transport Strategy and is required to support the future growth of the city, county and wider region.

In this context, IDA Ireland is very supportive of the development of the Galway City Ring Road."

7.2 Response to submission

It is welcomed that the IDA, who are responsible for winning Foreign Direct Investment (FDI) for Ireland is "*very supportive*" of the proposed N6 Galway City Ring Road as a "*fundamental aspect*" of the Galway Transport Strategy. The recognition by the IDA of the necessity of the proposed N6 Galway City Ring Road and that it is required to support the continued and future economic growth of Galway City and County and the wider region is fully aligned with what is set out in the Updated EIAR.

8. Response to ABP-318220-23: 08 James O'Connell

8.1 Submission – Whole Scheme

The submission makes the following points:

1. It is contended that the policy and legal context has changed since the Galway Transport Strategy (GTS) was developed in 2016 and that the evidence to inform strategic transport planning in Galway has also evolved. It is stated that transport strategies have been developed for other metropolitan areas in Ireland but that the Galway Metropolitan Area Transport Strategy (GMATS) is yet to be finalised. It is contended that this creates a circular dependency: the GCRR application is justified on the basis of the GTS, yet the GTS is being replaced, and the finalisation of its replacement (GMATS) is being postponed pending a decision on the GCRR.
2. It is contended that approval of the N6 GCRR would be premature pending finalisation of the GMATS.

8.2 Response to submission

8.2.1 Policy changes and evolving transport planning since 2016

8.2.1.1 Context

The submission notes that the policy and legal context in which the GTS was developed has changed significantly since 2016 and that strategic transport planning has evolved since that time. The developments identified in this submission include the following:

- The National Planning Framework
- The National Sustainable Mobility Policy
- Successive Climate Action Plans, national carbon budgets
- The Climate Action and Low Carbon Development (Amendment) Act 2021
- Planning Act 2024 which is meant to create a more defined hierarchical plan and strategy-led approach to planning
- The Economic Cost of Congestion in the Regional Cities 2022 – 2040
- The Five Cities Demand Management Study
- The Galway Light Rail Transit Feasibility Study
- National research on societal climate concerns and support for climate action
- While the submission is correct in highlighting the above developments are post the GTS, the application has dealt with all of the above items as outlined below
- Large infrastructure projects take time to progress, and it is not possible for all other elements of policy to stagnate, especially in the ever-changing global environment in which we live. Climate change, congestion, carbon assessments are global issues; new policy is expected and welcomed as ongoing research and advancing technologies assist in dealing with these issues. The response to the request for further information submitted to An Bord Pleanála (as it then was) on 14 April 2025 (2025 RFI Response) takes cognisance of these changing policies to ensure that the Project is aligned with up-to-date proper planning and sustainable development principles.

8.2.1.2 National Planning Framework

The National Planning Framework[44] (NPF) is a statutory plan which constitutes the overarching national planning policy document and establishes a high-level framework for the co-ordination of a range of national, regional and local authority policies and activities, planning and investment, both public and private. Section 2.3.3 of Chapter 2 of the Updated EIAR outlines how the development of the N6 GCRR aligns with the NPF. The NPF identifies the proposed N6 GCRR in itself as being a "key future growth enabler", and, '*to a greater or lesser degree, the proposed N6 GCRR is required in order to deliver a number of other "key future growth enablers" in Galway by transferring traffic out of the urban areas, thus allowing reallocation of existing road space to enable other infrastructure improvements in public transport, cycling and walking to be optimally delivered.'*

"*Enhanced Regional Accessibility"* is one of the ten National Strategic Outcomes (NSOs) in the NPF. This NSO seeks enhanced connectivity between centres of population and improved accessibility to the Northern and Western Region, ensuring the region has a high degree of accessibility to Dublin and other regions and seeks to advance orbital traffic management solutions including the proposed N6 GCRR to achieve these objectives. Accordingly, the proposed N6 GCRR is identified within this national planning framework as a key growth enabler for Galway City and the Northern and Western Region.

The National Planning Framework (NPF) includes amongst other things, significant growth targets for each of the five cities, in terms of population and compact growth. These targets are higher than those on the basis of which the GTS was assessed but they have been assessed as part of this 2025 RFI Response and also as part of the 2019 Request for Further Information and the results presented during the oral hearing were based on those results. As outlined in Table 6.1 of Chapter 6 of the Updated EIAR, the population figures assessed in the Updated EIAR, are approx. 135,000, which is an increase of approx. 14,000 on the figure used in the 2019 RFI Response and an increase of approx. 50,000 on the figure used in the 2018 EIAR. For context, the population of the city within the Galway City Council boundary, according to the 2022 Census was approx. 84,000. A figure of 135,000 would represent an increase of 51,000 or a 61% increase on the 2022 level. These population forecasts are aligned to the National Transport Authority's NPF Reference Case scenario for the city.

The NPF is, thus, considered fully in the 2025 RFI Response and the development of the N6 GCRR aligns with the NPF.

8.2.1.3 The National Sustainable Mobility Policy (2022)

The National Sustainable Mobility Policy was published in 2022 alongside the Climate Action Plan 2021 and supports the commitment in that CAP to a 51% reduction in carbon emissions by 2030 (and onwards to net zero by 2050). It contains stated targets including a daily increase of at least 500,000 active travel and public transport journeys and a 10% reduction in kilometres driven by fossil fuelled cars by 2030 *'in line with metrics for transport set out in the Climate Action Plan 2021'.*

It is noted that the Policy clarifies that the above targets are derived from the Climate Action Plan 2021, and further states that the metrics 'may be subject to revision in further iterations of the plan once sectoral emissions ceilings have been settled'. In essence, the subsequent updates to the Climate Action Plan and sectoral emissions ceilings take precedence over the metrics set out in the National Sustainable Mobility Policy, which dates to 2022, with numerous revisions to the Climate Action Plan occurring thereafter.

The aim of the National Sustainable Mobility Policy is to develop a policy framework, which better supports climate action and sustainable mobility and adopts a more people centric approach in all aspects of Active Travel and Public Transport Policy. This policy context is intended to ensure better integrated land use and transport planning at all levels. The policy hierarchy for the Sustainable Mobility Policy sits alongside the Climate Action Plan, thus shifting the momentum of transport policy to support sustainable mobility, decarbonisation, compact growth and balanced regional development. The National Sustainable Mobility Policy contains 10 overarching goals across three key principles (Safe and Green Mobility, People Focused Mobility and Better Integrated Mobility):

[44] Project-Ireland-2040-NPF.pdf

1. Improve mobility safety
2. Decarbonise public transport
3. Expand availability of sustainable mobility in metropolitan areas
4. Expand availability of sustainable mobility in regional and rural areas
5. Encourage people to choose sustainable mobility over the private car
6. Take a whole of journey approach to mobility, promoting inclusive access for all
7. Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model
8. Promote sustainable mobility through research and citizen engagement
9. Better integrate land-use and transport planning at all levels
10. Promote smart and integrated mobility through innovative technologies and development of appropriate regulation.

Although not all of the 10 goals listed above are directly relevant to the proposed N6GCRR, Section 2.3.10 of Chapter 2 of the Updated EIAR identifies how the proposed N6 GCRR, along with the other components of the Galway Transport Strategy, aligns with and facilitates the implantation of the specific actions identified in the Goals in the Sustainable Mobility Policy Action Plan, specifically Goal 1, Goal 3, Goal 5 and Goal 9.

> *"It is necessary to resolve traffic congestion issues in Galway in order to achieve the sustainable mobility goals. The proposed N6 GCRR will significantly assist with the removal of congestion in Galway City and environs. Journey times will reduce and journey time certainty will increase for both public transport and private vehicle users.*
>
> *The reduction in congestion enabled by the proposed N6 GCRR will also help to optimally realise other key elements of the Galway Transport Strategy including the reallocation of road space for pedestrians, cyclists and public transport.*
>
> *Improvements to the Galway bus network and bus services are identified in the GTS as necessary to cater for existing and future travel patterns in Galway City. The reallocation of road space for an expanded bus network and service will assist with the delivery of improved public transport in the city. This will reduce the number of short commuter trips by car facilitating more journeys by bicycle or other active modes which are faster, cheaper, more sustainable and provide health benefits. In addition, a rebalancing of traffic light signalling at junctions to better facilitate walking, cycling and public transport is required."*

As outlined, the metrics presented in the National Sustainable Mobility Policy at the time of publication in 2022 are stated to be aligned with the Climate Action Plan 2021 and subject to ongoing review and update in line with updates to the Climate Action Plan itself. Section 6.11 of Chapter 6 of the Updated EIAR presents the results of analysis of a 'Climate Action Plan' scenario, which itself is a summary of the information submitted in Part IV of the 2025 RFI Response Report. The Key Performance Indicators (KPIs) in the Climate Action Plan 2024 (CAP24) (and repeated in the Climate Action Plan 2025 (CAP25)) relating to the transport sector are the objectives of a 50% reduction in transport-related emissions compared to 2018 levels, by 2030, and a 20% reduction in total vehicle kilometres compared to a 2030 Business as Usual (BAU) scenario.

It is important to note that these are national level targets that cannot be applied to any individual project in isolation. Updated transport modelling was undertaken (based on the same transport modelling approach and assumptions as those used in the modelling undertaken to inform CAP23 and CAP24 (and now also CAP25)), to assess the overall benefits of delivering the N6 GCRR, as an integral part of the GTS, against these key performance indicators set out in CAP24, and to consider whether the delivery of the N6 GCRR would be consistent with CAP24.

Sections 6.11.3.1 and 6.11.3.2 of Chapter 6 of the Updated EIAR provide analysis of the Emissions and Vehicle Kilometre Reductions in the 'CAP Do-Something' scenario. The analysis demonstrates that the proposed N6 GCRR scheme, in tandem with the demand management measures indicated in the Climate Action Plan show a 43% reduction in vehicle emissions compared to 2018, and a 16% reduction in vehicle kilometres. Consequently, the assessment of the Project in accordance with CAP24 as presented in Section 6.11 of Chapter 6 of the Updated EIAR (the outcome of which is the same for CAP25 given that there are no changes in this regard in CAP25) demonstrates that the scheme can achieve significant reductions in vehicle emissions as part of nationally set Climate Action Plan targets, whilst catering for a population increase of approximately 30% across the metropolitan area. This further demonstrates that the target metrics outlined in the National Sustainable Mobility Policy (which are aligned themselves with the relevant Climate Action Plan) have been considered.

8.2.1.4 Successive Climate Action Plans

Pursuant to section 15(1)(a) of the Climate Action and Low Carbon Development Act 2015 (as amended) (the **"2015 Act"**), the Commission is required to perform its functions, in so far as practicable, in a manner consistent with *"the most recent approved Climate Action Plan"*.

The response to the request for further information was submitted to An Bord Pleanála (as it then was) on 14 April 2025 (the "**2025 RFI Response**"), prior to the publication of the Climate Action Plan 2025 (**"CAP25"**). Therefore, at the time of the submission of the RFI Response, the Climate Action Plan 2024 (**"CAP24"**) was the most recent approved Climate Action Plan for the purposes of section 15 of 2015 Act, and was considered in Part IV of the 2025 RFI Response (entitled *"Obligations under Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended) and submissions in relation to the Climate Action Plan 2024"*) (the **"Section 15 Report"**). Subsequent to the submission of the 2025 RFI Response, CAP25 was published and became the most recent approved climate action plan for the purposes of section 15 of the 2015 Act.

It is accepted that it is CAP25 by reference to which compliance with the obligation imposed by section 15 falls to be assessed, subject to the caveat that the provisions of CAP24 remain relevant for reasons explained below.

The provisions of CAP25 have been carefully considered and do not require any amendment to the analysis contained in Chapter 17 (Climate) of the Updated EIAR that was submitted as Part VI of the 2025 RFI Response (the "**Updated EIAR**") or the analysis contained in the Section 15 Report.

This is because there is no change in CAP25 to the key performance indicators, relative to the transport sector, that are set out in CAP24. In particular, there is no change to the level of change required to meet the 50% reduction in overall emissions from transport by 2030 (relative to 2018 levels). These key targets (which remain unchanged in CAP25) include a 20% reduction in total vehicle kilometres travelled relative to the 2030 business-as-usual scenario, a 50% reduction in fuel usage, and significant increases to sustainable transport trips and modal share.

Therefore, the analysis as presented in the Section 15 Report, which clearly demonstrates how the delivery of the proposed N6 GCRR, as part of an overall transport solution for Galway, is consistent with CAP and with the achievement of the targets set out in CAP24 at a national level, applies with equal force in relation to CAP25, as no new measures or targets have been introduced in CAP25 that would in any way alter that position.

CAP25 states that it is to be read in conjunction with CAP24 'to facilitate a focus on the delivery of outstanding actions from CAP24 and high-impact legacy actions from CAP23'.

As mentioned above, the Commission's obligation under section 15 of the 2015 Act is to perform its functions, insofar as practicable, in a manner consistent with, amongst other matters, the most recent approved climate action plan, which is now CAP25. However, given that CAP25 is to be read in conjunction with CAP24, the Commission should not read CAP25 in isolation but in conjunction with CAP24 to facilitate the delivery of outstanding actions from CAP24 and high-impact legacy actions from CAP23.

In those circumstances, and for the reasons as are set out in the Section 15 Report, the Commission can be satisfied that, in granting the approvals sought for the proposed N6 GCRR, it will be performing its functions in a manner consistent with the most recent approved Climate Action Plan, CAP25 (read in conjunction with CAP24), as well as the other plans and objectives specified in section 15 of the 2015 Act.

8.2.1.5 The Climate Action and Low Carbon Development (Amendment) Act 2021

An assessment of plans, strategies and objectives specified in section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended by section 17 of the Climate Action and Low Carbon Development (Amendment) Act 2021) is provided in Section 17.11 of Chapter 17 of the Updated EIAR. The assessment was carried out under the following headings, in accordance with Section 15 of the Climate Act:

a) the most recent approved climate action plan

b) the most recent approved national long term climate action strategy

c) the most recent approved national adaptation framework and approved sectoral adaptation plans

d) the furtherance of the national climate objective

e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State

The assessment concludes that:

> *"The assessment of the proposed Project when combined with the Galway Transport Strategy and CAP24 demonstrates consistency with each matter specified in Section 15 during the operational phase of the Project. Refer to the 'Obligations under Section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended) and submissions in relation to the Climate Action Plan 2024' Report for further details."*
>
> *Mitigation measures are proposed during the construction phase to mitigate greenhouse gas emissions in accordance with the matters specified in Section 15, these include the use of low carbon cement and recycled steel.*
>
> *The Project is consistent with adapting to the effects of climate change which is consistent with the matters specified in Section 15.*

The inclusion of the CAP24 (and CAP25 given that there is no change in CAP25 relative to this assessment) measures alongside the GTS is therefore considered to be dealt with in the Updated EIAR.

8.2.1.6 Planning Act 2024 which is meant to create a more defined hierarchical plan and strategy-led approach to planning

The Planning and Development Act 2024 (the "**2024 Act**") was enacted in October 2024. However, a lot of its provisions require a commencement order under section 1(3) of the 2024 Act and have not yet been commenced. Part 3 of the 2024 Act relates to *"Plans, Policies and Related Matters",* and only certain of the provisions of Part 3 have been commenced to date including those in relation to the National Planning Framework, National Planning Statements and Regional Spatial and Economic Strategies. The 2024 Act confirms (i) in section 21(6) that the National Planning Framework currently in force, namely the National Planning Framework First Revision April 2025 continues in force notwithstanding the repeal of the provisions of the Planning and Development Act 2000 (as amended) (the "**2000 Act**") in relation to the National Planning Framework, and (ii) in section 41 that any regional spatial and economic strategy made under section 21 of the 2000 Act, continues in force notwithstanding the repeal of that section. Therefore, while the submission suggests that the policy and legal context in which the GTS was developed has changed significantly since 2016 and cites the *"Planning Act 2024"* as supporting such contention, it is not clear what changes the submission is referring to in this regard given that (i) a lot of the provisions of the 2024 Act have not been commenced, and (ii) in terms of the relevant provisions that have been commenced, the 2024 Act supports the maintenance of the "*status quo*" in terms of the existing National Planning Framework and existing regional, spatial and economic strategies.

Chapter 2 of the Updated EIAR sets out the relevant strategic and statutory land use planning policy context and the strategic transport policy context for the proposed N6 GCRR. Where there have been developments in planning policy since the 2018 EIAR due to new policies, evolving policies and policy updates, these have been set out in this updated Chapter 2, and further this Chapter 2 also clearly demonstrates how the proposed N6 GCRR is entirely consistent with these new, evolving and updated policies.

8.2.1.7 The Economic Cost of Congestion in the Regional Cities 2022 – 2040

The submission refers to the recently published 'The Economic Cost of Congestion in the Regional Cities' paper, by the Department of Transport (DoT) in May of 2025 (the **"DoT Paper"**).

In order to respond to this particular section of the submission, it is necessary to provide some context regarding the DoT Paper. This research represents a continuation of analysis undertaken in the Greater Dublin Area (GDA) in 2017 (and later updated in 2023), with a similar methodology being applied to the regional cities (Galway, Limerick, Cork, and Waterford). While the paper does conclude that congestion will increase in the regional cities modelled in the report, namely Galway, Cork and Waterford, in the coming three decades, driven by population and economic growth, and states that ' *increased congestion is an unavoidable consequence of continued economic and population growth',* in order to understand that conclusion, it is necessary to first understand the purpose of the DoT Paper, and the nature of the analysis undertaken to inform it.

First and foremost, the modelling undertaken to inform the DoT Paper above does not account for the demand management measures contained within CAP25 (and previously CAP24) in the regional cities. That is because the paper was prepared, not to assess the likely future scenario with demand management measures in place, but to inform the preparation of demand management strategies and to help identify the scale of demand management measures likely to be required. In that regard, the paper clearly states in the *Introduction* section that: '*The results of this study will help inform the scale of interventions required to address issues associated with congestion and provide an evidence base for policy development'*. Again, in Section 2.2 (relating to Climate Policy) the paper states that: '*This analysis will help set out the extent of congestion being experienced across the regional cities and help inform the degree of intervention required to address it'*.

The submission seeks to use certain statements in the DoT Paper to argue that the N6 GCRR *"will not be an effective solution to congestion"* in Galway, but that is not the correct approach to this paper. The DoT Paper does not, and is not intended to, reflect the impacts of the N6 GCRR when delivered as part of an overall transport solution for Galway. Accordingly, contrary to what is suggested, it does not support the position advanced in the submission.

The NPF 2018 growth projections formed the basis of a 2040 'Core' scenario and a 2040 'Alternative Future' scenario. This 'Alternative Future' scenario is based on research undertaken by the NTA and published in November of 2020 relating to potential future trends in remote working seen to emerge prior to Covid-19 and which were expected to continue. This alternative scenario is based on assumed reductions to trip generation across various user classes (i.e. journey to work, journey to education, etc.). The NTA research outlining this 'Alternative Future' scenario is available at https://www.nationaltransport.ie/wp-content/uploads/2021/03/Alternative-Scenario-Development-Note-v-6.1_Final.pdf. It is noted that this research was published prior to CAP24 and CAP25.

In the DoT Paper, the 'Alternative Future' scenario assessed is the only additional demand management/behavioural change measure that has been investigated as a potential mitigation or response to the expected increase in congestion in the regional cities. The analysis is based on the prevailing transport strategies in place in each of the cities (with the Galway Transport Strategy (GTS) in place for Galway City).

Therefore, both the 2040 Core Scenario and the 2040 Alternative Future Scenario considered in the DoT Paper include the delivery of infrastructure including the N6 GCRR, but neither scenario accounts for the delivery of the extensive additional demand management measures necessitated by the Climate Action Plans 2024 and 2025. The traffic modelling for Cork City in the DoT Paper was undertaken by Systra, who also are responsible for the transport assessment for the proposed N6 GCRR, and as the methodology was the same for the modelling for all three cities in the DoT Paper, Systra are confident that the 2040 Core Scenario and the 2040 Alternative Future Scenario considered in the DoT Paper do not account for the demand management measures contained within CAP25 (and previously CAP24).

The analysis concludes that planned infrastructure developments in Galway in the period between 2030 and 2040 are seen to relieve congestion, but the population and economic growth planned sees the overall cost of congestion increase. The GCRR is included in the analysis as an infrastructural element of the GTS. The analysis states that *'the bypass will provide alleviation from congestion in the short-term…….however, increased transport demand will eventually result in the bypass becoming congested without further intervention'*. This is unsurprising in circumstances where the demand management measures required to deliver CAP targets alongside this significant population growth are not included in the analysis.

As indicated in the DoT Paper, the purpose of the research is to help to determine the level of further intervention required to mitigate the increase in congestion and associated economic costs of same, and to provide an evidence base for policy development in support of same. The significant impact of the 'Alternative Future' scenario, which contains one specific demand management measure (greater uptake of remote working) shows that demand management measures are a critical item to consider in tandem with infrastructure investment in order to address congestion, and underscores the significant role that demand management measures can play in relieving congestion when delivered in tandem with the necessary infrastructure development required to free up road space for public transport and active modes.

In that regard, in April 2024, the Government published 'Moving Together – A Strategic Approach to the Improved Efficiency of the Transport System in Ireland' in draft form for consultation. The Minister's Foreword states that '*Moving Together goes hand-in-hand with the extensive range of Government investment and supports already in place or planned for public transport, walking, cycling, and electric vehicles. It will support an incremental change in travel behaviour for people who already have alternatives to the car or for those who will have more choice when investments in infrastructure are fully realised over the next few years'*.

It further states that '*that the benefits of current and future Government investment and supports in public transport, walking, cycling and electric vehicles cannot be fully realised while current levels of congestion remain.*' The introduction of the report also states that *'The Strategy is intended to provide an overarching framework for the delivery of a range of potential demand management measures that can be deployed to bridge this gap in a fair and equitable manner'* (the 'gap' referred to is the gap in emissions required to be bridged in order to meet the Climate Action Plan targets).

The draft report makes specific reference to the 2023 GDA Cost of Congestion Study, stating that the 'Alternative Future' scenario '*demonstrates that behavioural change interventions can have significant impacts in reducing the cost of congestion over the long-term'*. Indeed, the report also discussed modelling undertaken to inform the 2023 Climate Action Plan by the National Transport Authority, stating that the measures included in this analysis *'are not an exhaustive list of possible measures – they are those measures that are amenable for modelling……other measures are in the scope of this Strategy but will require further policy design. There are also a range of potential measures which are considered as part of this strategy which do not feature in the modelling assumptions but have strong potential to impact in reducing vehicle kms.'*

'Moving Together' was published for consultation in April 2024 in draft form. A final version of the Strategy is yet to be published. It is however clear that the strategy will, when published, set out a clear framework for implementation of a significant range of demand management measures and behavioural change measures intended to complement planned infrastructure investment and to ensure that the benefits of infrastructural investment can be fully unlocked. The DoT Paper on the Cost of Congestion in the Regional Cities therefore reaffirms the requirement for policy-led demand management measures to be delivered in tandem with planned infrastructure investment and to ensure that capacity that is unlocked is utilised in the most appropriate manner.

The findings of the DoT analysis are therefore entirely consistent with the findings of the 2016 Galway Transport Strategy development and of the updated analysis provided in the Updated EIAR and the Section 15 Report. The N6 GCRR is an effective and vital component of the overall transport strategy for Galway as part of a multi-modal overarching transport strategy for the overall Galway Metropolitan Area.

In that regard, the DoT Paper reaffirms the need for the pending National Demand Management Strategy (Moving Together) to establish the complementary demand management and behavioural change interventions that will be needed across the country in order to complement planned infrastructure investment and support the achievement of our stated climate action plan targets, which will include

measures such as those considered and modelled alongside the proposed N6 GCRR in the Section 15 Report. The analysis contained in the Section 15 Report clearly indicates that the demand management measures assessed in the 'CAP Do-Something' scenario result in a significant reduction in car mode share – reduced to approximately 30% both with and without the N6 GCRR included. Importantly, this highlights that when, the N6 GCRR is implemented alongside demand management measures, the car mode share remains effectively unchanged. This demonstrates that the delivery of the N6 GCRR, when aligned with demand management measures, is a complementary approach, with no resultant increase in vehicle mode share.

In particular, as set out in the Section 15 Report, the delivery of the proposed N6 GCRR as an integral part of the GTS will:-

- Enable potential demand management measures within the city like car free areas and congestion charges, and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP24, supporting potential road space reallocation for sustainable modes and encourage a shift from private car trips in line with CAP24 (and now CAP25) and public realm improvements
- Facilitate demand management measures to help achieve CAP24 (and now CAP25) targets whilst ensuring a level of mobility for residents on both sides of the city
- Enable a better performing network for all modes by reducing delays across the network by 50% compared with 2023 levels, whilst not increasing the level of car trips within the metropolitan area
- Facilitate the BusConnects programme for the city, by providing another river crossing to offset restrictions on Salmon Weir bridge and enable potential restrictions on other city centre bridges via car free urban areas and congestion charges which encourages the shift from private car trips to public transport in line with CAP24 (and now CAP25)
- Accommodate the significant planned growth within city and environs in line with NPF targets (50% increase in population by 2040, compared to 2016 levels)
- Reduce the need for HGVs to travel within the city, achieving a 25% reduction in the level of HGV kilometres within the NWR338 cordon of the city which accounts for approx. 60% of the city's current population. This will benefit pedestrians, cyclists and public transport users and will result in improved air quality and supporting a safer environment for active travel trips

Further, as set out above, the key targets for the transport sector remain unchanged in CAP25 and so the analysis by reference to CAP24 above applies with equal force in relation to CAP25, as no new measures or targets have been introduced in CAP25 that would in any way alter that position. Therefore, while it is acknowledged that the N6 GCRR is not, in and of itself and without the delivery of demand management measures, a standalone solution to the problem of congestion in Galway (and was never intended to be so), and so the predictions in the DoT Paper in that regard are unsurprising, the delivery of the N6 GCRR is an integral element of any overall transport solution to address the issues identified in the DoT Paper.

Further, because the N6 GCRR was included as planned infrastructure in both the Core Scenario and the Alternative Future scenario, the DoT Paper does not give any indication of the likely cost of congestion in Galway in the future if the N6 GCRR is not delivered. In that regard, the impacts of the proposed N6 GCRR on congestion are considered and assessed in Chapter 6 of the Updated EIAR, which clearly demonstrates that the provision of the N6 GCRR is hugely beneficial for reducing traffic congestion in Galway City in both the AM and PM Peak and for reducing journey times on key routes. While not modelled in the DoT Paper, there is little doubt that, in the absence of the N6 GCRR, the cost of congestion in Galway would increase significantly more than is predicted in the DoT Paper.

Indeed, as shown in Figure 14 of the DoT Paper (reproduced below) and as stated – '*The cost of congestion decreases slightly between 2030 and 2040. This result indicates that planned infrastructural developments between 2030 and 2040 could relieve some congestion in the GMA*'. The infrastructural elements of the Galway Transport Strategy, including the N6 GCRR are seen to support planned population and economic growth in the period from 2030-2040 whilst simultaneously reducing the cost of congestion slightly in the same period.

Figure 14 - Annual Cost of Congestion

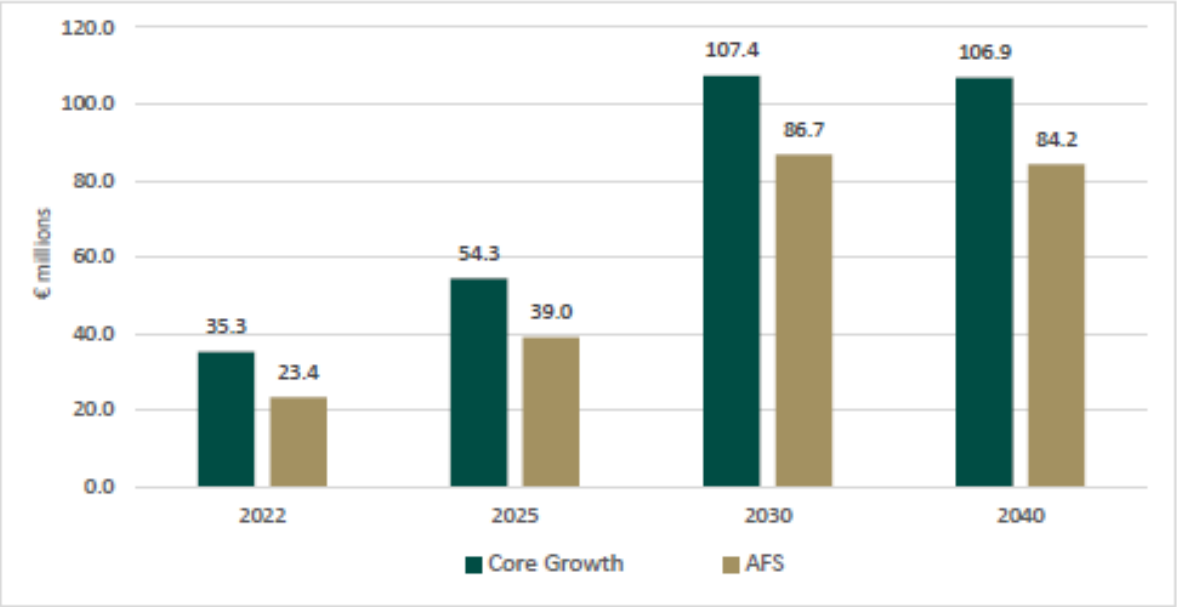

Plate 8.1 DoT Cost of Congestionin Galway (Extract Figure 14)

Therefore, in light of what is set out above, the contention advanced in the submission that the N6 GCRR is not an effective solution for congestion in Galway is not correct, and the reliance in that regard on the DoT Paper is based on a misunderstanding of the purpose and findings of that paper. It has been clearly demonstrated in this response, and in the totality of the documents before the Commission including the Updated EIAR and the Section 15 Report, that the delivery of the proposed N6 GCRR as an integral part of the GTS is a key enabler of the demand management measures that will be required to address the issues identified in the DoT Paper and help to reduce city centre traffic and associated congestion and carbon emissions in line with CAP25 (and previously CAP24).

8.2.1.8 The Five Cities Demand Management Study

A submission on the Climate Action Plan is provided in Part IV of 2025 RFI Response. The modelling exercise which is detailed in the document, modelled a scenario with the N6 GCRR, the other measures contained within the GTS and a series of demand management measures. The demand management measures were adopted from a modelling exercise which was done to inform the Government's 2023 version of the Climate Action Plan. These measures were taken from the recommended Transport Demand Management measures which were proposed in the Five Cities Demand Management Study. The selection of measures contained within the 2025 RFI Response are well-informed based on The Five Cities Demand Management Study and the Climate Action Plan.

Therefore, the Five Cities Demand Management Study has been considered in the 2025 RFI Response.

8.2.1.9 The Galway Light Rail Transit Feasibility Study

In Section 4.6.3 of Chapter 4 of the Updated EIAR, the N6 GCRR was assessed in the context of the NTA's Light Rail Transit Feasibility Study report. A number of scenarios were assessed in this section, with one being the indicative Light Rail line included in the NTA's feasibility study alongside the N6 GCRR and a series of demand management measures. The results of this assessment concluded that, when the Light Rail line and the N6 GCRR were delivered in tandem with demand management measures, they both serve complimentary functions. The Light Rail services the travel requirements for residents and workers across the city, whereas the N6 GCRR services the travel requirements for longer distance strategic passenger and freight of the wider city and region.

The Galway Light Rail Transit Feasibility Study has been considered in the 2025 RFI Response.

8.2.1.10 National research on societal climate concerns and support for climate action

It is acknowledged that a number of research programmes have been carried out since the publication of the GTS in 2016 on societal climate concerns and support for climate action.

The Climate Conversation's programme is a cornerstone of Ireland's strategy to engage citizens in shaping the nation's climate policies. By participating, citizens contribute directly to the development of the Climate Action Plan, ensuring that policies reflect diverse viewpoints and address the concerns of all demographics.

As part of the 2025 RFI Response, a submission on the then most recently approved Climate Action Plan, CAP24, was included in Part IV of 2025 RFI Response document. This document contains a modelling exercise which details how the N6 GCRR was assessed with the other measures contained within the GTS and a series of demand management measures. The results of this were measured against the national targets set out within CAP24 (which are the same in CAP25). On this basis, the fact that the GTS was published in 2016 has no bearing on the outcome of the Updated EIAR assessment relative to national research on societal climate concerns and support for climate action.

8.2.1.11 Benefits and Impacts of the GCRR

As set out in Chapter 2 (Planning and Policy Context) of the Updated EIAR, the Galway Transport Strategy (GTS) is the current adopted transport strategy for Galway and its recommendations are incorporated into the Galway City Development Plan 2023-2029. Accordingly, the assessment of the proposed N6 GCRR has been undertaken with regard to the infrastructure contained in the GTS. The approach in the GTS is to deliver significant improvements in active travel and develop a high-quality public transport network to support the city's planned growth by encouraging the use of other sustainable transport modes and to facilitate the efficient movement of private vehicles and freight. The GTS consists of a number of proposed measures combined under an overall vision "to create a connected city region driven by smarter mobility". It is recognised within the National Planning Framework as key to achieving the 50% population growth targeted for the Galway Metropolitan Area by 2040 in the form of compact urban growth supported by sustainable transport.

The delivery of the GTS is underway, and the local authorities remain committed to the implementation of the GTS. Substantial progress has been made in advancing major elements of the strategy with an emphasis upon the delivery of sustainable measures such as cycling, walking and public transport funded by the National Transport Authority and the Urban Regeneration and Development Fund under the NDP, and Galway City Council has undertaken a wide range of important projects under the GTS since the adoption of the strategy in 2016, as detailed in Table 2.1 of Chapter 2 of the Updated EIAR. Examples of progress on the GTS projects include (but are not limited to):

- BusConnects Galway – Cross City Link (€80m) confirmed by An Bord Pleanála and subject to a judicial review
- BusConnects Galway – Dublin Road Multi Modal Corridor Scheme, lodged in January 2024 and approved in September 2025
- New Galway Bus Network to be implemented from 2025/2026, based on NTA's redesign
- Salmon Weir Pedestrian & Cycle Bridge (opened May 2023)
- Miller's Lane pedestrian/cycle link (opened June 2023)
- Kirwan (completed in 2021) and Martin Junction Upgrades (completed in 2024), incorporating pedestrian, cycle, and public transport connectivity
- Eglinton Canal Active Travel Scheme, Doughiska Cycle Scheme, Wolfe Tone Bridge II (pedestrian cantilever, completed August 2024)
- Parkmore Road Bus Priority Scheme (completion Q2 2025)
- Cycle parking provision and bus stop upgrades, implemented citywide
- School Street at Scoil Iognáid and other Safe Routes to School measures

- Park & Ride development, with sites under negotiation and integration into wider public transport network

In those circumstances, the Galway Transport Strategy is the appropriate transport strategy against which to consider and assess the applications for approval of the proposed N6 GCRR.

Further, a series of demand management measures were assessed along with the GTS (which includes the N6 GCRR) in the Section 15 Report, meaning that the consideration of how the N6 GCRR, as part of an overall package of measures, aligns with CAP24 (and now CAP25) considered not only the provisions of the GTS itself, but also future demand management measures necessitated by the Climate Action Plans.

Therefore, the 2025 RFI Response takes account of all current policies, including the GTS. Whist the GTS was published in 2016, it is a 20-year framework that runs to 2036. Each subsequent plan and policy since 2016 gives consideration to the same principles under which the GTS was developed, and the GTS is embedded in statutory plans at all levels of the hierarchy of planning policy. Factually, the development of any future policy documents will of course be required to align with the current planning policy at each of these planning tiers at the point at which it is developed, and therefore the Commission is already fully apprised of the relevant policy hierarchy.

This well established policy hierarchy, together with the clear support for the proposed N6 GCRR set out in the GTS, which remains the current adopted transport strategy for Galway, and the findings of the Section 15 Report that clearly demonstrate how all of the measures set out in the GTS, including the proposed N6 GCRR, align with and support the delivery of CAP24 and CAP25, provides a comprehensive and robust basis for the Commission to make its determination in relation to the proposed N6 GCRR.

There is simply no basis to the suggestion made in this submission that it is premature for the Commission to determine the application for approval of the N6GCRR pending some future policy or plan and it is quite clear that all of the policies referenced above that have issued since the adoption of the GTS have been taken into account in the application documentation before the Commission.

8.2.2 Dependencies on the Galway Transport Strategy (GTS) 2016

The submission claims that the full realisation of the benefits of the proposed N6 Galway City Ring Road (GCRR), as well as mitigation measures for its negative impacts, are dependent upon the implementation of the full GTS. The submission goes on to infer that this creates dependencies, which are set out in the submission as follows:

- *Reduced city centre congestion - dependent on delivery of GTS measures such as public transport priority corridors, pedestrianisation, cycling infrastructure, and traffic management.*
- *Increased bus reliability and frequency - requires reallocation of road space to buses, achievable only if through-traffic is diverted via the Ring Road, a GTS measure. The Cross-City Link bus corridor is under judicial review, and a decision on the Dublin Road scheme is still pending, meaning certainty as to this effect of the GTS is lacking.*
- *Improved conditions for walking and cycling - assumes road space will be freed, which again depends on GTS implementation.*
- *Travel time savings for commuters - based on integrated traffic modelling that presumes full GTS implementation.*
- *Mitigation of emissions associated with the GCRR - is highly dependent on GTS measures.'*

Response

The role of the N6 GCRR within the context of the overarching Galway Transport Strategy is clear – the GTS is a multi-modal transport strategy for the Galway Metropolitan Area and includes a comprehensive range of proposed measures for implementation, which collectively function in a complementary manner as part of the full strategy deployment, and many of those measures have been implemented and or approved pending implementation.

In any event, the Updated EIAR for the proposed N6 GCRR is required to assess the Project in isolation compared to a 'Future Year Do-Minimum' scenario. The Future Year Do-Minimum scenario includes the 2023 base network plus all of the schemes expected to be complete by 2031 and 2046, respectively. These are outlined in Section 6.4.5.1 of Chapter 6 of the Updated EIAR and include the Cross-City Link bus priority corridor scheme, the Dublin Road bus corridor scheme (now approved), the revised new bus network for Galway (to be developed as part of BusConnects Galway), and other sections of bus lanes across the study area. The inclusion of these projects contained within the Galway Transport Strategy in the Future Year Do-Minimum scenario as outlined above demonstrates that these projects can be considered to be implemented independently of the N6 GCRR.

As outlined in Section 6.10 of Chapter 6 of the Updated EIAR, the assessment of the proposed N6 GCRR scheme in this manner results in a number of residual real beneficial impacts. The relevant residual impacts as they pertain to Mr. O'Connell's points above are outlined below.

Response - Reduced city centre congestion

The assessment of the impact of the N6 GCRR compared to the Future Year Do-Minimum scenario outlined above demonstrates that it is hugely beneficial for reducing traffic congestion in Galway City in the AM and PM Peak, and for reducing journey times. The Project reduces the network delay considerably by removing several bottlenecks and results in a 33% reduction in traffic on the Quincentenary Bridge and a 25% reduction in HGV kilometres within the N6/R338 cordon.

As a sensitivity test, Section 6.6.3 of Chapter 6 of the Updated EIAR contains an assessment of the N6 GCRR in the 2031 and 2046 assessment years, without the proposed Dublin Road Bus Corridor scheme in place. This was undertaken to evaluate the impact of the scheme in the event that the Dublin Road project was not approved or progressed. The analysis demonstrates that the N6 GCRR project remains hugely beneficial for reducing traffic congestion and journey times in both 2031 and 2046. It also demonstrates that the N6 GCRR can deliver real improvements that are not dependent on the implementation of other proposed projects in the Galway Transport Strategy.

Response – Increased bus reliability and frequency

Frequency of bus services is set by the National Transport Authority. The proposed N6 GCRR results in improved journey times across the entire network for all modes, including public transport. The proposed N6 GCRR also reduces network delay considerably (between 30% - 45%) in peak hours.

Not all of the proposed future bus services for the city will be provided with dedicated bus priority, and as such network-wide improvements to journey times (by virtue of the proposed N6 GCRR) will increase the reliability of these services, along with sections of the core bus corridor projects mentioned above where dedicated bus priority cannot be provided.

Response – Improved conditions for walking and cycling

The N6 GCRR enables and facilitates the reallocation of road space within the Galway Metropolitan Area, which can include infrastructural improvements intended to improve conditions for walking and cycling. Furthermore, the removal of HGV traffic from city centre will improve the environment for vulnerable road users within the city centre.

Response – Travel time savings for commuters

As stated above, the N6 GCRR is shown to result in improved journey times across the entire network for all modes, reducing network delay considerably (between 30% - 45%) in peak hours. This results in travel time savings for commuters.

Response – Mitigation of emissions associated with the N6 GCRR

No part of the mitigation measures included in the assessment of climate impacts rely on measures included in the GTS. A description of operational phase mitigation measures is provided in Section 17.6.3 of Chapter 17 of the Updated EIAR. There is no reference to the GTS in the description of mitigation measures in the Updated EIAR.

Part IV of the 2025 RFI Response includes an assessment of the likely carbon emissions from the GTS and CAP24 in conjunction with the proposed N6GCRR. This approach aligns with the EU Commission published 'Technical guidance on the climate proofing of infrastructure in the period 2021-2027'. The purpose of the publication is to give technical guidance on the climate proofing of investments in infrastructure covering the programming period 2021-2027. The guidance acknowledges that '*most projects will have an impact on GHG emissions, compared to the Baseline, through their construction, operation, and eventual decommissioning and through indirect activities that occur because of the project. This should be seen in the context of the project not as an isolated event but as a set of different and complementary interventions – in particular stemming from a plan. This might mean that a certain specific project does not have an individual net GHG reduction effect but is integral part of an overall plan that reduces emissions.*

In response to the technical guidance an assessment of the measures provided in the GTS and CAP24 are also considered alongside the Project and compared to a Do-Nothing scenario – without the GTS and CAP24 for 2030. The consideration of the proposed N6 GCRR alongside the GTS and CAP24 is not considered a mitigation measure but an approach that aligns with the EU Technical Guidance.

8.2.3 Prematurity pending finalisation of the Galway Metropolitan Area Transport Strategy (GMATS)

The submission suggests that it is not possible to make a determination on the Project until the finalisation of some future policy namely GMATS.

Response

For the reasons set out at Section 8.2.1 above which are not being repeated here but apply with equal force, there is simply no basis to the suggestion made in this submission that it is premature for the Commission to determine the application for approval of the proposed N6 GCRR pending some future policy or plan and it is quite clear that all of the policies referenced above that have issued since the adoption of the GTS have been taken into account in the application documentation before the Commission.

9. Response to ABP-318220-23: 09 Linda Rabbitte

9.1 Submission – Motorway Scheme Reference Number 584

The submission raises the following concerns, and whilst these have been grouped, a response to each point raised in the submission is provided in Section 9.2:

1. Concerns that the Project will have significant negative impacts on one of the "*only scenic area within walking distance of Galway City"*
2. Concerns relating European sites, terminology used and assessment presented in the Natura Impact Statement
3. Concerns about the future structural integrity of Menlo Castle as a result of the Project and that the Project will adversely impact the area around Menlo Castle "*which is rich in heritage and has an adjacent cemetery*"
4. Concerns that the "*Galway race meeting will be adversely affected"*
5. Planning Policy in the Galway City Development Plan for the "*protection of historical sites, culture and areas of high scenic amenity within Galway city"* and notes that Menlo Castle is specifically mentioned
6. Suggests that there are alternatives to the proposed N6 GCRR
7. Concerns relating to the construction Activities at Lackagh Quarry and the structural integrity of Lackagh Quarry due to blasting in the vicinity and that engineering surveys within the quarry need to be repeated

9.2 Response to submission

9.2.1 Concerns that the Project will have adverse impacts on the scenic areas of Galway City

The opening and closing statements in the submission raise general concerns around the perceived adverse impacts of the Project on scenic areas of Galway City that cannot be repaired and suggests there are alternatives available.

Response

A complete, detailed and robust assessment of the potential effects of the proposed N6 GCRR has been provided in the Updated EIAR. Where adverse effects have been identified, mitigation measures have been proposed and included in the Updated EIAR. As detailed in Chapter 4 of the Updated EIAR, alternatives have been extensively considered (see are further set out in Section 9.2.2 below).

In any objective consideration of the merits of this Project, it is firstly necessary to clearly demonstrate its need, which is documented in Chapter 3 of the Updated EIAR. In the first instance, the need for the proposed N6 GCRR arises directly from the necessity to address the very serious transport issues currently arising in Galway City and its environs. As set out in An Bord Pleanála's (now known as An Coimisiún Pleanala) Inspector's Report dated 22 June 2021, the Inspector stated:

> *"I am of the view that it has been demonstrated that there is a clear and pressing need for the PRD [Proposed Road Development] as a result of the issues faced by Galway City".*

The need for, and justification of, the proposed N6 GCRR is even more pronounced now than it was in 2018. As is the case with any major infrastructure development, the impacts of the Project must be viewed and balanced in the context of the overall benefit that the proposed N6 GCRR presents for the future of Galway and its environs and connectivity to the West Region. The proposed N6 GCRR is a critical element to the Galway Transport Strategy (GTS) and is key to the realisation of the full benefits of an integrated transport solution as it facilitates the reallocation of road space for active travel facilities and improved bus services.

The proposed N6 GCRR will have certain localised negative impacts on the receiving environment, and while every effort has been made to avoid such impacts – or mitigate where avoidance is not possible – certain residual negative effects remain. As summarised in Chapter 22 of the Updated EIAR, however, many of the predicted residual effects, following the implementation of mitigation measures, are assessed to be not significant, with many positive residual effects also predicted. Where negative residual effects are predicted, the overall context of the impacts must be considered against the many benefits which can be accrued from the proposed N6 GCRR, which provides much-needed benefits to the built-up environment of Galway City and its environs and the West Region as well as TEN-T transport network.

9.2.2 Alternatives available to the N6 GCRR

The submission states that there are *'numerous alternatives to this road'*. It also expresses total disagreement with the summary of the Updated NIS which states that, *'the alternatives are more damaging in terms of property demolition and other potential environmental impacts in comparison to the proposed N6 GCRR'*.

It is further stated in the conclusion to the submission that the alternatives must be revisited.

Response

As noted above, numerous alternatives have been considered as detailed in Chapter 4, Alternatives Considered, of the Updated EIAR. The alternatives considered for this Project are wide-ranging and multi-modal, and include:

- Do-Nothing Alternative – comprising an examination of the existing transport network to meet the future demands.
- Do-Minimum Alternative – comprising an examination of the existing transport network and likely and committed transport schemes (excluding the N6 GCRR) to meet future demands.
- Do-Something Non-Road Alternative – comprising:
  - Local safety improvements
  - Fiscal or traffic control measures to manage demand
  - Public transport priority capacity and/or public transport services
  - Improvements to pedestrian and/or cycling provision
  - Technology Solutions such as Intelligent Transport Systems (ITS) to improve reliability, safety and operation capacity
  - Galway Transport Strategy (the non road-based elements of this Strategy and does not include an orbital route)
  - Public Transport Only (buses)
  - Light Rail
  - Climate Action Plan/Demand Management Measures
  - ITS, bus, light rail and other non-road elements
- Do-Something Road Alternative – comprising road-based options which included alternative crossing points of the River Corrib and alternative alignments in the Menlo Area

The evaluation of these alternatives is detailed in Chapter 4 of the Updated EIAR. The conclusion of the consideration of the alternatives is that the Galway Transport Strategy with the proposed N6 GCRR as the key component represents the optimum transport solution for Galway City and its environs. The proposed N6 GCRR has avoided the greatest number of known and immovable constraints and is the option that overall has a lesser environmental impact taking all other potential environmental impacts into account.

Further, once chosen, the design of the emerging preferred route was refined in as much as possible to eliminate and reduce impacts on the human environment. As discussed in Chapter 4, Alternatives Considered, significant design measures such as steeper earthwork slopes, steepened green embankments and retaining walls are employed in the scheme design to minimise the impact on the human environment. Additional mitigation measures such as noise barriers, landscaping, planting and earth bunding are also utilised to minimise the overall impact on the receiving environment as discussed in Chapter 12, Landscape and Visual and Chapter 18, Noise and Vibration.

The proposed N6 GCRR is consistent with proper planning and sustainable development, and this view is supported/validated by the inclusion of policy support for both GTS and constituent measures, including the proposed N6 GCRR, in the relevant Galway Development Plans.

9.2.3 European Sites, terminology used, and assessment presented in the NIS

The submission makes several references to the Natura Impact Statement (NIS). It makes the following statements:

- *"It states that there are ONLY 4 European sites within the zone of influence of the project. These sites have NOT been given European protection status for no good reason. Also, the extremely detailed report specifically names every potential plant, mammal, soil and water quality, birds etc all of which WILL absolutely be affected during the construction phase and operational phase of this project. Printing out and highlighting the 'disclaimer' (see quoted text below) after every chapter is not going to change the reality on the ground.*

  'It has also been objectively concluded by Scott Cawley Ltd following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the project the effective implementation of the mitigation measures proposed, that the Project will not adversely affect (either directly or indirectly) the Integrity of any European site, either alone or in combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion. '

  It really is a case of the devil quoting scripture to suit himself here. If you smash an egg and then try to stick it back together with glue, will it be adversely affected? Have the same integrity? Still an egg. Of course not!"

- "*The word:* ***Imperceptible,*** *is used frequently throughout the report. The definition of which; so slight, gradual or subtle as not to be perceived. There is nothing subtle about major construction works! The damage caused throughout the construction phase will not be easily repairable. All areas and affected individuals living within the "zone of influence" of this project will be adversely affected. Health, Air quality, Ecosystem services soils and water, Landscape and visual, these are all mentioned in the report.*"

- "*One particular statement caught my eye. Quote from NIS Section 9." Landscape and Visual; the impact on health and in particular psychological health associated with landscape change is assessed as slightly negative and long term, as people tend to get accustomed to the new visual landscape, the impacts are not assessed as significant."*

- "So basically, we are being told that we better get used to it! That does not mean it is necessarily a good thing! *NIS Section* 9.5 *Air Quality: "No significant residual air quality impacts are envisaged for human receptors as it is predicted that compliance with air quality standards for protection of human health will be achieved"., "*

Response

A complete, detailed and robust assessment of the potential for the Project to adversely affect the integrity of the European sites within the Project's Zone of Influence (ZoI) is presented in the Updated NIS. The submission point raised that there are only four European sites within the ZoI of the Project is incorrect; the Updated NIS concludes in Section 8.2 that there is a total of 22 European sites within the potential ZoI of the Project.

Section 10 of the Updated NIS presents a complete and robust set of design and mitigation measures, including relevant additional mitigation measures proposed in Section 12.6.3 of An Bord Pleanála's (now known as An Coimisiún Pleanála (ACP)) Inspector's Report dated 22 June 2021. The effective implementation of these mitigation measures will ensure that the Project will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects, and there is no scientific doubt in relation to this conclusion.

The mitigation measures are industry best practice, are compliant with relevant best practice guidelines, will be effective and reliable in avoiding and reducing the negative effects of the Project, will be conditioned by ACP and, furthermore, must and will be implemented in full across the construction and operational phases of the Project by the contractor and the local authority. Section 11 of the Updated NIS explains that the ecological supervision of the Project embedded into the mitigation strategy will ensure that they will be delivered as designed and achieve their objectives to ensure the Project will not adversely affect (either directly or indirectly) the integrity of any European sites.

With respect to the use of the term "Imperceptible", Table 3.4 of the *Guidelines on the information to be contained in Environmental Impact Assessment Reports* published in May 2022 by the EPA provides a description of the terminology to be used when describing the significance of effects in an Environmental Impact Assessment Report (EIAR). 'Significance' is a concept that can have different meanings for different topics – in the absence of specific definitions for different topics the following definitions are noted by the EPA as being useful in categorising and explaining impact significance. The term 'Imperceptible' is used to describe "an effect capable of measurement but without significant consequences". Each expert in their assessment presented in the Updated EIAR classify the effects (impacts) of the Project on the receiving environment relating to their areas of expertise and the term 'Imperceptible' is used throughout the Updated EIAR chapter in that context.

The submission asserts that all areas and individuals living with the ZoI of the Project will be adversely impacted. This assertion is incorrect. The Updated EIAR has assessed any potential impacts in terms of human health, air quality, ecosystem services, soils and water, landscape and visual as a result of the Project and proposes measures to mitigate any impacts identified. As detailed in Chapter 22 of the Updated EIAR, the *mitigation measures proposed for the potential air quality, noise, water, soils and landscape and visual are specified above in the respective sections. The implementation of these mitigation measures, emissions including air and noise will be adequately controlled to ensure no adverse effect on human health*."

It is understood that the statement attributed in the submission to 'NIS Section 9' is actually an extract from the Non-Technical Summary of the Updated EIAR (refer to Section 9.2.2.1). The psychological health effects of the Project are assessed under the heading of Health Protection, following the approach set out in the EPA Guidelines, in the European Commission's SEA Implementation Guidance and recently published TII Population and Human Health Standard (2024). The assessment has included a review of all updated noise, air, soils, water, landscape and visual assessments as they relate to the health impact assessment. To undertake the health assessment, the potential impacts (including landscape and visual) which could affect human health were identified, the scale of these potential impacts and their duration were assessed and the significance of the potential impact on human health determined. As detailed in Chapter 19 of the Updated EIAR, there are varying degrees of psychological impact, and these can be both positive and negative. Changes in the landscape and visual environment could affect psychological health adversely and / or positively depending on the impacts. The significance of health affects are assessed on a group or community basis rather than on an individual basis. As detailed in the Updated EIAR, it will take time for the extensive landscape mitigation proposals to become established and effective and the initial stages of the operational phase of the Project will have adverse landscape and visual impacts. However, with the development of mitigation planting, the significance and severity of landscape and visual impacts will gradually abate and the impact on human health and in particular psychological health associated with landscape change is assessed as slight negative in the long term.

The statement attributed to 'NIS Section 9.5 Air Quality' is actually an extract from the Non-Technical Summary of the Updated EIAR (refer to Section 9.5). Health protection covers the health effects of the proposed N6 GCRR arising across a number of environmental pathways, including air quality. As detailed in Chapter 16, Air Quality, of the Updated EIAR, the Air Quality Regulations establish limit values for concentrations of certain pollutants, which apply to the air quality assessment of the Project. The air quality parameters considered relevant to traffic emissions are NO_2 and PM_{10} for human health. The methodology applied to the air quality assessment in the 2018 EIAR has been updated to reflect new guidance, legislation, policy, baseline data and modelling tools. During the operational phase, modelling of air quality impacts due to the redistribution of traffic has been carried out using the TII REM tool and the modelling demonstrates compliance with air quality standards at most affected human receptor locations. A worst-case effect of moderate adverse is predicted at one human sensitive receptor in the Opening and Design Years. "*No significant residual air quality impacts are envisaged for human receptors as it is predicted that compliance with all air quality standards for the protection of human health will be achieved."*

9.2.4 Menlo Castle

The submission raises concerns about the potential impacts to areas rich in heritage, specifically Menlo Castle and the adjacent cemetery, as well as the future structural integrity of Menlo Castle and the adequacy of proposed mitigation measures to address these issues.

Response

A detailed appraisal of the Project under the heading of Cultural Heritage is presented in Chapter 13 of the Updated EIAR. The assessment previously presented in the 2018 EIAR has been revised as necessary to account for updated TII Guidance (2024), changes or additions to sites and structures listed in the various inventories and to take account of points raised at the oral hearing in 2020 and from the An Bord Pleanála's (now known as An Coimisiún Pleanála) Inspector's Report dated 22 June 2021.

Menlo Castle is located 140m northwest of the Project, however, the receiving environment for the Cultural Heritage assessment is defined as an area measuring c.250m from the edge of the Assessment Boundary in accordance with TII Guidelines. Accordingly, both the site of Menlo Castle (BH 10) and its associated demesne landscape (DL 8) are located within the cultural heritage study area for the Updated EIAR as shown on Figure 13.1.07 of the Updated EIAR.

No alterations to the visual appearance of the site are proposed or predicted as part of the Project. Any direct or indirect impacts to both the site of the castle and its associated demesne landscape have been assessed and are documented in Chapter 13, Cultural Heritage, of the Updated EIAR. As the site of the castle is located outside the land acquisition boundary for the Project, no direct impacts are predicted during the construction phase. Predicted indirect operational effects are noted on both the archaeological and built heritage of Menlo Castle. Post mitigation, it has been assessed that the operation of the Project will have an indirect negative effect on the castle, of moderate significance of effect.

Prior to construction, the demesne landscape associated with Menlo Castle will be subject to a detailed photographic and written record, carried out by a suitably qualified person or team under Ministerial Directions in consultation with the DoHLGH and the Project Archaeologist.

In response to suggestions that the foundations of the Castle may be impacted / damaged, it is important to state that impacts during the construction phase of the Project have also been thoroughly assessed and documented in the Updated EIAR as relevant to each environmental topic. This includes, inter alia, assessments of construction activities (Chapter 7), vibration (Chapter 18), landscape (Chapter 12) and soils and geology (Chapter 9). No impacts to the foundations or structural integrity of Menlo Castle are predicted.

9.2.5 Galway Racecourse

The submission raises a concern that the Project will adversely affect the race meetings at Galway Racecourse, noting the racecourse is *"a major tourist attraction providing an economic boom to the city annually".* The submission suggests that *'even with all the mitigation measures which are beautifully outlined in the comprehensive report put in place, no doubt, the Galway race meeting will be adversely affected.'*

Response

It is recognised that the Galway Racecourse is of key importance to the economy of Galway City, local tourism and the cultural experience of Galway. Accordingly, the impacts of the Project on the operation of the facility have been considered in detail, both in respect of its economic viability and its amenity value.

As stated in Section 15.5.3 of Chapter 15, Material Assets Non-Agriculture, of the Updated EIAR, once the proposed N6 GCRR is operational "*Galway Racecourse will continue to operate and function to a level of service as is the current situation*." The reasons as to why this is the case are set out below.

As outlined in Chapter 19 of the Updated EIAR, the construction works will be carefully phased to minimise impacts on racing events, with a slight negative residual effect predicted post mitigation. As detailed in Chapters 5 and 7 of the Updated EIAR, the temporary and permanent stables for Galway Racecourse will be constructed during Phases 1, 3 and 4 of the Project as follows:

- During Phase 1 of the Project, the works required for the construction of temporary stables, a machinery shed, and new parade ring will remove lands currently used by Galway Racecourse for parking during race days.
- During Phase 3, the new permanent stables which are critical to ensure the continued operation of Galway Racecourse will be constructed at the Brooks builders' providers. The proposed temporary stables will be demolished to during a 3-month period once Phase 3 is complete and operational.

A construction works programme has been included in the Appendix A.7.4 to Chapter 7 of the Updated EIAR, as compiled in conjunction with Galway Racecourse for the proposed 230m cut and cover tunnel at the racecourse. The programme will involve the cessation of construction works during the summer/autumn racing schedule, to avoid disruption to participants and spectators during racing events. Given the temporary and permanent stables sequence of construction are not interlinked with the construction sequence of the Galway Racecourse tunnel, the interaction is less complicated than previously presented in the 2018 EIAR, and there is even less risk to the interruption to the racing schedule.

Therefore, whilst Section 15.5.2 of Chapter 15 of the Updated EIAR, the potential impact on the racecourse during construction of the proposed N6 GCRR is Very Significant, the above measures during construction ensure the racecourse will continue to operate during the construction of the Project.

As detailed in the Updated EIAR, it is assessed that there will be a positive residual impact on Galway Racecourse once the mitigation measures for the racecourse have been constructed and with the provision of enhanced access to the premises and a new stable yard.

9.2.6 Galway City Development Plan 2023-2029

The submission references policy in the Galway City Development Plan for the "*protection of historical sites, culture and areas of high scenic amenity within Galway city"* and notes that Menlo Castle is specifically mentioned. It also suggests that the impacts of the Project, together with other high-rise developments in the area, contravene policies outlined in the Galway City Development Plan.

Response

The policy within the Galway City Development Plan 2023-2029 for the protection of historical sites, culture and areas of scenic amenity within Galway City, (including Menlo Village and Menlo Castle) is acknowledged and has been taken into account in the assessment presented in Chapter 13 of the Updated EIAR.

Part V of the 2025 RFI Response[45] presents the Implications of the Galway City Development Plan 2023-2029 relative to the proposed N6 GCRR.

[45] https://www.n6galwaycityringroad.ie/sites/default/files/media/Implications%20of%20new%20Galway%20City%20Development%20Plan%20Report%20-%20March%202025%20-%20Web.pdf

The NPF and RSES acknowledge that the growth and economic success of Galway city requires investment in a range of infrastructure, including roads, and identify the delivery of the proposed N6 GCRR as a key future growth enabler for the city region. The proposed N6 GCRR remains a key objective of the Galway City Development Plan 2023-2029 to implement the Core Strategy and to integrate land use and transport planning to cater for the projected growth in the Galway Metropolitan Area Strategic Plan.

Part V of the 2025 RFI Response demonstrates how the provision of the proposed N6 GCRR aligns with the policies and objectives in the Galway City Development Plan 2023-2029 and is consistent with those policies and objectives and is necessary for the implementation of the Galway City Development Plan 2023-2029.

Specifically, it is noted that:

- Policy 4.6 in the Galway City Development Plan 2023-2029 expressly supports the proposed N6 GCRR and the GTS in terms of the road and street network (refer to page 8 of Part V of the 2025 RFI Response).
- The Development Plan explicitly recognises the need for the proposed N6 GCRR to successfully deliver the integrated transport solution in the GTS (refer to page 6 of Part V of the 2025 RFI Response).
- Section 4.8 of the Development Plan lists specific development objectives pertaining to sustainable mobility whilst the road and street network & accessibility objectives no.'s 23 & 24 emphasise the strategic function of the proposed N6 GCRR and associated bridge crossing which are critical transport infrastructure works (refer to page 8 of Part V of the 2025 RFI Response).
- Section 11.2 of the Development Plan notes that priority will be given to the reservation of the N6 GCRR designated strategic road corridor (refer to page 10 of Part V of the 2025 RFI Response).

With respect to suggestion that the potential impacts of the Project, together with high-rise development referenced in the submission, contravene policies outlined in the Galway City Development Plan, Chapter 21 of the Updated EIAR presents the assessment carried out to examine whether the Project along with other planned and/or committed projects could result in likely significant cumulative environmental impacts, both positive and negative. As detailed in in Chapter 21 of the Updated EIAR, there are no projects either planned, approved or in construction that would in-combination with this Project or cumulatively with all other projects and this Project that give rise to any significant impacts in the Menlo area.

9.2.7 Lackagh Quarry

The submission raises concerns relating to potential impacts on air quality due to the construction activities in Lackagh Quarry and the associated construction traffic and the potential impact of this on human health in terms of air quality but also concerns to people's safety with respect to construction traffic for those living adjacent to the quarry.

The submission also questions the adequacy of the baseline data for the engineering assessment of tunnelling at the quarry face and states the following.

> *"Furthermore, I wish to point out that the structural integrity of the Lackagh quarry most likely has been compromised since the original engineering surveys related to the N6 GCRR were conducted. This is due to multiple blasts conducted in the vicinity of the quarry in recent years. Evidence of which may be found in the National seismic reports, readily available online. My own property which is adjacent to the Lackagh Quarry has suffered damage from these seismic tremors. Therefore it can be concluded with some certainty that the quarry itself may have been structurally altered. One would presume that such engineering surveys would have to be repeated in light of this."*

Response

Firstly, it should be noted that Lackagh Quarry has significant blast damage on the faces which means it is susceptible to natural weathering and degradation over time (without taking any manmade activities into account). This blast damage is detailed in both the Updated EIAR and the 2018 EIAR and in particular

Section 3.3.1 of the Lackagh Tunnel and Hydrogeological Appraisal Report in Appendix A.7.3 of the Updated EIAR[46].

As detailed in Section 9.4.2.1 of Chapter 9 (refer to page 883 (Key Design Feature – Lackagh Tunnel and the Western Approach)[47] and Appendix A.7.3 of the Updated EIAR, a conservative approach has been taken in the design of Lackagh Tunnel, taking cognisance of this blast damage and that the quarry face is susceptible to natural weathering and degradation over time. Equally the potential environmental impact in terms of the potential extents of the blast damage has been assessed in the Updated EIAR.

A site visit to Lackagh Quarry was undertaken in July 2024 by our geotechnical experts to inform the Updated EIAR. This included a review of whether the quarry face in the vicinity of the Project had changed. No changes of significance were identified.

A repeat site visit was undertaken on 04 October 2025 by our geotechnical experts and they confirmed that the quarry walls do not show any sign of major rockfalls due to natural weathering and degradation over time or any alleged ongoing manmade activities within the quarry. It should be noted that even if there has been additional blasting, which no evidence of such activities within the quarry were found, over time there will be some additional damage due to time and the design of the proposed N6 GCRR and proposed mitigation measures at Lackagh Quary will be unchanged.

Both site visits confirmed that there are no changes to the quarry face that will in any way impact on the construction or operation of the proposed N6 GCRR at this location.

With respect to the 'numerous blasts' referenced in the submission, data from the Irish National Seismic Network (INSN) has been obtained and reviewed. It is important to note that seismic events captured by the INSN include quarry blasts and other disturbances detected in or near Ireland, and that in some instances, locations may have uncertainties of several kilometres in latitude, longitude and depth. Data from the INSN records show that there have been 1602 seismic events recorded as quarry blasts in Ireland from 1 January 2025 to 7 October 2025. Of these, 75 were in County Galway and of these 75, 2 were recorded at 1.8km and 2km from Lackagh Quarry, with a third event 5.5km away.

The INSN does not provide a measurement or indication of any damage or subsidence as a result of an earthquake or seismic event and as such, there is no basis or evidence for the contention that the seismic events recorded as quarry blasts on the INSN have caused any alleged subsidence or instability that would compromise the design, construction or operation of the proposed N6 GCRR at this location.

In summary, the conservative design approach take for Lackagh Tunnel will ensure that the tunnel can be constructed safely without damaging the surface above the tunnel or causing subsidence in the ground. The most recent site inspections undertaken by our geotechnical experts at the quarry on 4 October 2025 confirm that that the baseline data used to inform the design approach as outlined in the Updated EIAR remains fully valid.

The concerns raised in the submission in relation to the construction activities at Lackagh quarry are acknowledged. With respect to concerns raised in relation to potential impacts on air quality due to the construction activities in Lackagh Quarry and the associated construction traffic and the potential impact of this on human health in terms of air quality as concluded in Chapter 22 of the Updated EIAR no significant residual air quality impacts are envisaged for human receptors as it is predicted that compliance with all air quality standards for the protection of human health will be achieved.

Section 11 of the Construction Environmental Management Plan (CEMP) in Appendix A.7.3 of the Updated EIAR includes a Construction Traffic Management Plan (CTMP) to safely manage construction traffic where it may interact with local residents and the public in the vicinity of the construction work.

---

[46] https://www.n6galwaycityringroad.ie/sites/default/files/media/Appendix%20A.7.3%20Lackagh%20Tunnel%20Geo%20and%20Hydro%20Appraisal_I4.pdf

[47] https://www.n6galwaycityringroad.ie/sites/default/files/media/Updated%20EIAR%20Chapter%209.pdf

10. Response to ABP-318220-23: 10 Marian Rabbitte

10.1 Submission – Motorway Scheme Reference Number 584

The submission raises the following concerns, and whilst these have been grouped, a response to each point raised in the submission is provided in Section 10.2:

1. Alleged on-going construction/clearing at the former Lackagh Quarry site and concerns that its structure may have been compromised.
2. Mitigation measures proposed will not guarantee the protection of European Sites or Menlo Castle.
3. Alternative, more eco-friendly solutions to Galway's traffic problems (including light rail, bus) are not being implemented.
4. The future of Galway City is paramount, and mass transit will be the transportation choice for most.

10.2 Response to submission

10.2.1 Alleged on-going construction/clearing at the former Lackagh Quarry

The submission suggests that the Updated EIAR and Updated AA Screening Report fail to mention what is described as, *'the continuous, currently ongoing, construction/clearing being carried out in the former Lackagh Quarry site in Coolough, Galway'.*

The submission also states *"Notwithstanding site excavation, numerous blasts have been conducted in the vicinity of the quarry in relatively recent times. Considering this quarry is earmarked to be tunnelled through as part of the N6 Galway Ring Road project, it would seem obvious that its structure may well have been compromised. Are Galway City Council even aware of the construction that is taking place in this quarry? I see no planning permission notices posted anywhere and can only surmise that this construction is most probably unauthorized. It seems to me that this location must be reevaluated prior to any further consideration being given to its future use."*

Response

Firstly, it should be noted that Lackagh Quarry has significant blast damage on the faces which means it is susceptible to natural weathering and degradation over time (without taking any manmade activities into account). This blast damage is detailed in both the Updated EIAR and the 2018 EIAR and in particular Section 3.3.1 of the Lackagh Tunnel and Hydrogeological Appraisal Report in Appendix A.7.3 of the Updated EIAR[48].

As detailed in Section 9.4.2.1 of Chapter 9 (refer to page 883 (Key Design Feature – Lackagh Tunnel and the Western Approach)[49] and Appendix A.7.3 of the Updated EIAR, a conservative approach has been taken in the design of Lackagh Tunnel, taking cognisance of this blast damage and that the quarry face is susceptible to natural weathering and degradation over time. Equally the potential environmental impact in terms of the potential extents of the blast damage has been assessed in the Updated EIAR.

A site visit to Lackagh Quarry was undertaken in July 2024 by our geotechnical experts to inform the Updated EIAR. This included a review of whether the quarry face in the vicinity of the Project had changed. No changes of significance were identified.

A repeat site visit was undertaken on 4 October 2025 by our geotechnical experts and they confirmed that the quarry walls do not show any sign of major rockfalls due to natural weathering and degradation over time or any alleged ongoing manmade activities within the quarry. It should be noted that even if there has been

[48] https://www.n6galwaycityringroad.ie/sites/default/files/media/Appendix%20A.7.3%20Lackagh%20Tunnel%20Geo%20and%20Hydro%20Appraisal_I4.pdf

[49] https://www.n6galwaycityringroad.ie/sites/default/files/media/Updated%20EIAR%20Chapter%209.pdf

additional blasting, which no evidence of such activities within the quarry were found, over time there will be some additional damage due to time and the design of the proposed N6 GCRR and proposed mitigation measures at Lackagh Quary will be unchanged.

Both site visits confirmed that there are no changes to the quarry face that will in any way impact on the construction or operation of the proposed N6 GCRR at this location.

With respect to the 'numerous blasts' referenced in the submission, data from the Irish National Seismic Network (INSN) has been obtained and reviewed. It is important to note that seismic events captured by the INSN include quarry blasts and other disturbances detected in or near Ireland, and that in some instances, locations may have uncertainties of several kilometres in latitude, longitude and depth. Data from the INSN records show that there have been 1602 seismic events recorded as quarry blasts in Ireland from 1 January 2025 to 7 October 2025. Of these, 75 were in County Galway and of these 75, 2 were recorded at 1.8km and 2km from Lackagh Quarry, with a third event 5.5km away.

The INSN does not provide a measurement or indication of any damage or subsidence as a result of an earthquake or seismic event and as such, there is no basis or evidence for the contention that the seismic events recorded as quarry blasts on the INSN have caused any alleged subsidence or instability that would compromise the design, construction or operation of the proposed N6 GCRR at this location.

In summary, the conservative design approach take for Lackagh Tunnel will ensure that the tunnel can be constructed safely without damaging the surface above the tunnel or causing subsidence in the ground. The most recent site inspections undertaken by our geotechnical experts at the quarry on 4 October 2025 confirm that that the design approach as outlined in the Updated EIAR remains fully valid.

10.2.2 Integrity of European Sites and impacts to Menlo Castle

The submission raises a concern that mitigation measures proposed so that the project *"will not adversely affect (either directly or indirectly) the integrity of a European Site*" do not guarantee a successful outcome.

The submission also states *"Menlo Castle, a noted local historical landmark, will never look the same again and may very well be damaged, should this project proceed. It is a shame that when so many European cities are striving to retain their historical integrity that Galway City Council are eager to sacrifice Galway's*."

Response

A complete, detailed and robust assessment of the potential for the Project to adversely affect the integrity of the European sites within the Project's Zone of Influence is presented in the Updated NIS.

Section 10 of the Updated NIS presents a complete and robust set of design and mitigation measures, including relevant additional mitigation measures proposed in Section 12.6.3 of An Bord Pleanála's (now known as An Coimisiún Pleanála (ACP)) Inspector's Report dated 22 June 2021. The effective implementation of these mitigation measures will ensure that the Project will not adversely affect (either directly or indirectly) the integrity of any European sites, either alone or in combination with other plans or projects, and there is no scientific doubt in relation to this conclusion.

The mitigation measures are industry best practice, are compliant with relevant best practice guidelines, will be effective and reliable in avoiding and reducing the negative effects of the Project, will be conditioned by ACP and must and will be implemented in full across the construction and operational phases of the Project by the contractor and the local authority. Furthermore, specific commitments are enshrined within Chapter 23 of the Updated EIAR, to ensure all biodiversity mitigation measures will be conducted under the supervision of the Project Ecologist and/or the Ecological Clerk of Works (refer Section 23.14 of Chapter 23 of the Updated EIAR). Section 11 of the Updated NIS also explains that the ecological supervision of the Project embedded into the mitigation strategy will ensure that they will be delivered as designed and achieve their objectives to ensure the Project will not adversely affect (either directly or indirectly) the integrity of any European sites.

Regarding Menlo Castle specifically, no alterations to the visual appearance of the site are proposed or predicted as part of the Project. Any direct or indirect impacts to both the site of the castle and its associated demesne landscape have been assessed and are documented in Chapter 13 of the Updated EIAR. As the site of the castle is located outside the land acquisition boundary for the Project, no direct impacts are predicted

during the construction phase. Predicted indirect operational effects are noted on both the archaeological and built heritage of Menlo Castle. Post mitigation, it has been assessed that the operation of the Project will have an indirect negative effect on the castle, of moderate significance of effect.

Prior to construction, the demesne landscape associated with Menlo Castle will be subject to a detailed photographic and written record, carried out by a suitably qualified person or team under Ministerial Directions in consultation with the DoHLGH and the Project Archaeologist.

In response to suggestions that the castle may be damaged as a result of the Project, it is important to state that the potential impacts during the construction of the Project have also been thoroughly assessed and documented in the Updated EIAR as relevant to each environmental topic. This includes, inter alia, assessments of construction activities (Chapter 7), vibration (Chapter 18), landscape (Chapter 12) and soils and geology (Chapter 9). No impacts to the foundations or structural integrity of Menlo Castle are predicted.

10.2.3 Alternative options to Galway's traffic problems

The submission notes that alternative, eco-friendly options aside from this new road have been proposed as an answer to Galway's traffic problems but have not been implemented. These options include light rail and bus, and it is suggested that more public buses could be implemented as a simple measure overnight to help ease the traffic congestion.

Response – Light Rail

Light Rail has been assessed as an alternative to the proposed N6 GCRR. This was considered in the 2018 EIAR, discussed during the oral hearing in 2020 and assessed again in the Updated EIAR to consider the 'Galway Light Rail Transit Feasibility Study Report[50]' published by the National Transport Authority (NTA) in October 2024. As explained in Section 4.6.3 of Chapter 4 of the Updated EIAR, the NTA's report *explored key issues and the potential feasibility of introducing a Light Rail line to the city of Galway along one corridor linked to development growth on the specific corridor(s).* An assessment of various light rail scenarios is detailed in Sections 4.6.3.2 to 4.6.3.4 of Chapter 4 of the Updated EIAR.

The conclusion of that assessment was that the Light Rail and the proposed N6 GCRR, when delivered in tandem with the climate action plan demand management measures, serve complementary functions. The light rail services the travel requirements for residents and workers across the city within the city boundary, whereas the proposed N6 GCRR services the travel requirements for longer distance strategic passenger and freight requirements of the wider city and region. In all of the light rail scenarios assessed, there remains strong demand for the proposed N6 GCRR.

As detailed in the Galway Light Rail Transit Feasibility Study Report[50], there could be a demand for a light rail system in the longer-term, however, the analysis presented in Chapter 4 of the Updated EIAR, demonstrates that the proposed N6 GCRR does not preclude the provision of light rail in the future when sufficient demand for it is there. Moreover, it is evident that light rail alone will not resolve the significant transport issues currently experienced in Galway City and its environs as detailed in Chapter 3 of this updated EIAR.

[50] https://www.nationaltransport.ie/wp-content/uploads/2024/10/GMATS-LRT-Feasibility-Study-report-v0.4_Final.pdf

In addition, the Inspector for An Bord Pleanála concluded in their report date 22 June 2021 that:

> *"A Light Rail option for Galway or the GLUAS was also raised in written submissions and at the oral hearing by many including Mr Kevin Gill, Mr Derrick Hambleton (An Taisce), Mr Brendan Mulligan and Mr John J Martin amongst others. This option was comprehensively addressed by the applicant at the hearing and in the EIAR. The applicant stated that analysis of potential light rail routes showed that there is not sufficient demand to warrant the implementation of a light rail system as the highest demand achievable for travel on an east-west light rail corridor would amount to approximately 25% of the capacity of a light rail system during peak periods. This can be catered for by a bus-based public transport network. Based on the data presented at the hearing, I am satisfied that there is insufficient demand to warrant a light rail option at this stage. Furthermore, while this could in the future become an option it is currently not an option for assessment before the Board and the road would not preclude the development of a Light Rail system in the future".*

It is noted that light rail is an element of the overall Galway Transport Strategy Galway (GTS) prepared by Galway City Council and Galway County Council in partnership with the National Transport Authority. The proposed N6 GCRR is also a key element of the GTS.

Response - Additional Buses

Galway City and County Councils fully support investment in public transport (including buses) and the GTS sets out the plan to do that, with significant progress made on a number of GTS projects since the oral hearing in 2020, the most significant projects being the grant of planning for two major Galway BusConnects projects namely the Cross-City Link and the Dublin Road schemes.

The BusConnects Cross-City Link scheme will restrict access to general traffic on the Salmon Weir Bridge between the hours of 7a.m. and 7p.m. on weekdays. This restriction will help to create a sustainable transport corridor through the Eyre Square area and help facilitate the large increase in cross-city bus services planned as part of the BusConnects programme for the city (a 50% increase in services) (the increase in bus services will be further enhanced by the reduction in traffic flows along key bus routes that will arise from the operation of the N6 GCRR.

As set out in Section 6.6.1.2 of Chapter 6 of the Updated EIAR, in the Do-Minimum scenario, significant levels of traffic congestion create a barrier to travel, constraining the economic growth of the city and the overall delay on the road network in the Do-Minimum scenario is between 30% - 45% higher than the Do-Something scenario with the Project in place. This highlights the positive impact of the Project, in terms of reducing the level of congestion in the city, which would increase in the future as the city's population grows. Section 6.7.1.1 of the Updated EIAR shows '*significant AADT reductions on both sides of the city when the Project is in place and illustrate the benefits which the Project can have in reducing traffic volumes along bus routes which would need to travel alongside general traffic. These reductions would help provide more reliable journey times for bus users across the city where there is no current or planned bus priority infrastructure'*.

Therefore, the proposed N6 GCRR is required to fully realise the benefits of that investment in public transport by freeing up space in the city centre for public transport and is a key part of the overall transport solution.

10.2.4 Future of Galway City

The submission is concerned that the Project is not adequately planning for the future, especially at a time when the population is growing a rapid pace. It is noted that cars and car insurance will become much more expensive and out of reach for many, and mass transit will be the transportation choice for most.

Response

The assessment of the Project has accounted for the effects of the forecast population growth on future transport demand. As detailed in Section 6.2.4.3 of Chapter 6 of the Updated EIAR, a detailed approach to forecasting travel demand has been developed to capture the planned growth in population and employment at a local level in Galway. It is important to note also that forecast scenarios used for the Updated EIAR have evolved since the 2018 EIAR, taking cognisance of more recent national and regional planning frameworks.

In the 2018 EIAR, three land use forecasts were assessed, as follows:

1. NTA Reference Case
2. TII Central Case
3. TII High Growth

After the Government published the National Planning Framework (NPF), the which contained higher levels of projected growth for the five cities (including Galway) across the country, An Bord Pleanála (now known as An Coimisiún Pleanála) requested further information and asked for the NPF forecasts to be assessed. In the RFI in 2019, two land use forecasts were assessed, as follows:

1. TII NPF Central Case
2. NTA/GCC NPF (developed by the NTA with some input from Galway City Council)

For the most recent assessment presented in Chapter 6 of the Updated EIAR, a revised NTA NPF Reference Case forecast (and associated demographic forecasts) has been used for the Project to generate the future year travel demand. These forecasts are based on the NTA High Growth scenario and follow the National Planning Framework (NPF)/Regional Spatial Economic Strategy (RSES) distribution. Given these forecasts are a high growth scenario, they represent a reasonable worst case and are appropriate for use for the EIA.

Table 6.1 of Chapter 6 of the Updated EIAR (reproduced below) shows a comparison of the various Design Year population forecasts for Galway City for each of the scenarios used throughout the Project to date. It should be noted that the first five scenarios used a Design Year of 2039, as that was the original Design Year assumed for the proposed N6 GCRR. As part of the Updated EIAR, the Design Year has been revised to 2046 to account for the passage of time. The figures in Table 6.1 of the Updated EIAR show that the new NTA Reference Case scenario has the highest population forecasts of approximately 135,000 (more than a 10% increase on the NTA/GCC NPF forecasts assessed in the 2019 RFI), relative to the previously assessed forecasts. These new NTA NPF Reference Case forecasts have been adopted for the traffic assessment as they are the NTA's current reference case and are therefore considered the most appropriate forecasts to use for the assessment.

Table 10.1 Population Forecast Comparison for Galway City (Table 6.1 of Chapter 6 of the Updated EIAR)

Scenario	Forecast Year	Population Forecasts (Galway City)
NTA Reference Case (2018 EIAR)	2039	83,339
TII Central (2018 EIAR)	2039	77,666
TII High (2018 EIAR)	2039	78,304
TII NPF Central Case (RFI 2019)	2039	90,000
NTA/GCC NPF (RFI 2019)	2039	121,741
NTS NPF Reference Case (Updated EIAR)	2046	135,339

It is considered therefore that forecast demand scenario upon which the traffic impact assessment for the Project is based, has taken appropriate consideration of future population growth.

Regarding future year car usage, it is important to note that the future year 'Do-Minimum' networks include the base year network plus all schemes (road and public transport) that are already built, are committed to be built or likely to be built by the proposed Opening and Design Year of the N6 GCRR (2031 and 2046). The list of schemes to be included in the 'Do-Minimum' networks was developed in coordination with Galway City Council, Galway County Council and TII. The list of schemes for inclusion are mostly derived from the existing Galway Transport Strategy (GTS), which is the most recently approved strategy for the region, which was published in 2016 and any updates arising from a review in 2024 by Galway City and County Councils. This list of schemes is presented in Appendix B to the Transport Modelling Report which is included in Appendix A.6.1 of the Updated EIAR. It is noted that these schemes include public transport, active travel and demand management measures, thereby ensuring that the projections on future year car usage in the Do-Minimum scenario are appropriate.

11. Response to ABP-318220-23: 11 Offaly County Council

11.1 Submission – Whole Scheme

As a neighbouring county to Galway, and as such a statutory consultee on the application for approval, Offaly County Council advised in their submission that they had no comments to make.

"*I refer to the above and wish to **advise** that Offaly County Council have no comments to make.*"

11.2 Response to submission

The fact that Offaly County Council has no comments to make on the application for approval is acknowledged.

12. Response to ABP-318220-23: 12 Shane Foran

12.1 Submission – Whole Scheme

The submission is made under the following main points:

1. There have been key changes in the operating environment since the earlier submission of the N6 GCRR scheme. The GTS stands in opposition to current state and EU policy on sustainable transport
2. The traffic problems in Galway are attributed to mismanagement of the existing city's roads infrastructure and to planning practices
3. Actions and project of Galway City Council over the past number of years are discussed

The responses below use the same headings as used by Mr. Foran in his submission. It is important to note at the outset that certain issues raised in this submission do not appear to be directed towards the N6 GCRR Project, but for completeness this response in any event engages with those issues below.

12.2 Response to submission

12.2.1 Changes in the operating environment

The submission states that since the original submission of the scheme key changes have occurred in the operating environment, namely (i) that Galway has been designated as an urban node for the purpose of the EU TEN-T Regulations, and (ii) that the Climate Change Act has created a requirement of consistency with the Climate Action Plans.

TEN-T Regulations

The submission says that Galway City was confirmed as an urban node for the purpose of the European Union TEN-T Regulations. The submission claims that the Ten-T Regulations requires that during infrastructure planning for designated urban nodes, Member States shall **give** due consideration to the promotion of active travel modes including the integration of active travel modes with other transport infrastructure and the requirement for a 'do no significant harm' assessment based on the latest available guidance and best practice. The submission also includes an appendix with what Mr. Foran calls relevant sections of the TEN-T Regulations. While Galway has been designated as an "Urban Node" under the TEN-T Regulations, its designation does not mean that all transport infrastructure in Galway City (including all of the measures set out in the Galway Transport Strategy) falls within the scope of the TEN-T Regulations.

Climate Action and Low Carbon development (Amendment) Act 2021 (as amended) and Climate Action Plan

In terms of the "Climate Change Act" which Mr. Foran refers to and which we assume is a reference to the Climate Action and Low Carbon Development Act 2021 (as amended), Mr. Foran is correct in that the obligation now is that the relevant body (which includes An Coimisiún Pleanála) must in so far as practicable, perform its functions in a manner consistent with, amongst other things, the most recent approved climate action plan.

The submission claims that the 2023 Climate Action Plan as adopted in December 2022 calls for high quality active travel infrastructure and states a necessity of significantly improving the attractiveness, capacity and frequency of public transport services - such as the Galway public bike scheme. The submission says that the 2023 Climate Action Plan names as a key supporting element the prioritisation and reallocation of existing road space towards public transport and active travel and that there are objectives included on school travel by sustainable means and promoting shared mobility such as public bikes. The submission further claims that the 2024 Climate Action Plan continues themes contained in its predecessors. The submission further claims the Climate Action Plan 2024 states that providing for school journeys by active travel is a priority and implies that all public infrastructure projects should have regard for this aim.

The submission then further claims that elements of the current Galway Transport Strategy and associated schemes sit in direct opposition to these purposes of the TEN-T regulations and these elements of the Climate Action Plans.

Response

It is acknowledged that Galway City is an urban node for the purpose of the European Union TEN-T Regulations and it is acknowledged that the Climate Action Plan 2024, and indeed the Climate Action Plan 2025 include the aims set out in this submission.

Contrary to the claim in the submission that the GTS is actively sitting in opposition to these policies, the GTS supports both the TEN-T Regulations and the Climate Action Plans. The GTS provides an integrated transport, providing multimodal walking, cycling and public transport initiatives as well as a route for strategic traffic wishing to bypass the city centre.

Since the adoption of the Galway Transport Strategy (GTS) in 2016, Galway City Council, in collaboration with Galway County Council, the National Transport Authority (NTA), and Transport Infrastructure Ireland (TII), has been actively delivering a comprehensive and integrated suite of sustainable mobility projects across the city. These include both infrastructure schemes and service-based improvements that prioritise walking, cycling and public transport, in line with national policy including the Climate Action Plan, the National Sustainable Mobility Policy, and the NDP. A significant number of GTS projects are now complete, under construction, or at advanced design and statutory approval stages as set out in more detail in Section 12.2.7.1. This is in line with the TEN-T Regulations which indicate that the local connectivity with urban areas is the responsibility of the local authority. It also aligns with the CAP measures of the prioritisation and reallocation of existing road space towards public transport and active travel, including providing for school journeys by active travel.

The functionality of the proposed N6 GCRR which is also a key component of the GTS is two-fold. It provides the strategic need of the TEN-T comprehensive road network and connectivity of Galway City and the West Region to the national road network as well as providing a solution to relieve the city centre roads of unnecessary traffic and providing the necessary road space for other modes of transport, namely walking, cycling and public transport. These two functions are complimentary and fully align with the TEN-T regulations and the Climate Action Plans as opposed to the erroneous claim in the submission.

12.2.2 Inadequate car parking provision on west side of river

The submission states that the applicants' documents cite the provision of an additional river crossing as a justification for the scheme. The submission suggests that before a new river crossing is added the question needs to be asked why existing traffic is crossing the river, and indicates that it is the lack of car parks for the city centre on the western bank of the river that is the reason for traffic crossing the river. The submission proposes an "obvious" intervention to reduce pressure in the existing river crossings being to provide drivers with parking opportunities on the west side of Galway city centre.

Response

As shown in Plate 6.7 of Chapter 6 of the Updated 2025 EIAR, the majority of jobs are located on the eastern side of the city. This creates a problem in terms of transport as the large number of people living on the western side of the city need to cross the River Corrib each day for work, which places an importance on the river crossings. The submission is focused on car parks near the city centre, but car parks in the city centre only cater for some trips crossing the river each day.

Also in Section 6.8 of Chapter 6 of the Updated 2025 EIAR, the NTA's Western Regional Model was used in the assessment of the scheme and it is capable of modelling the manner in which trip destinations might change in response to the increased capacity and reduced travel times facilitated by a piece of transport infrastructure. Section 6.8.3.5 of the Updated EIAR shows the analysis/results of this, with the Parkmore area being the focus of the analysis, given it is a significant destination within the city, due to the number of people working in that area.

The analysis showed that without the N6 GCRR in 2046, there were more trips to the Parkmore area from the eastern side of the city and county. This was due to congestion increasing with the associated increase in air pollution to such a degree, in part due to significant population growth as per the NPF, that it discouraged

some people from travelling across the river, via the existing bridges (the Salmon Weir Bridge has restrictions to general traffic during some time periods, with the BusConnects Cross City Link scheme), from the western side of the city. However when the N6 GCRR is implemented, congestion eases, allowing people from the western side of the city, to again choose the Parkmore area as a destination.

Plate 6.11 of the Updated EIAR, presents a daily profile of traffic crossing all four of the existing bridges over the river Corrib. The figure shows the total volume of traffic by each hour crossing the four bridges combined. Each hour also has a percentage label which relates that hour's traffic volume to the highest hourly volume across the day, this being the morning peak hour. The figure shows that between the twelve-hour window of 7am to 7pm, only three hours fall below 80% of the highest hourly volume. This data demonstrates that the traffic volumes crossing the River Corrib on an average workday remain high throughout the day, whilst a typical profile would show two spikes for the morning and evening peak hours, due to higher traffic volumes due to commuting/school traffic. However Plate 6.11 shows a relatively flat profile across the day, which highlights the importance of the river crossings to residents on both sides of the city each day, not just to travel to work or school which would take place during certain hours, but for all travel purposes.

When we examine the origin and destination of the trips that are crossing the river as shown on Figure NTS 03 in the Non-Technical Summary of the Updated EIAR, 17% are crossing the river from and to the city zone. This zone includes UHG, UoG, ATU (formerly GMIT), Merlin Park Hospital, Parkmore, where significant parking is provided for employees. Therefore, providing more city parking on the west side of the river will not reduce the volume of traffic crossing the river to get a car parking space in the city centre. In fact, it would have a worse impact in terms of increasing the attractiveness of driving to the city centre for those who currently use public transport due to a lack of parking. Reducing parking at destination is a key component of demand management and additional parking provision should be avoided.

12.2.3 Imbalance in location of secondary schools

The submission states that there is an unbalanced coverage of secondary schools in the city, with the majority of secondary schools located on the west side of the river, which creates a requirement for pupils to cross the river to get to school. The submission suggests that some of the traffic problems could be fixed by finding a better way to distribute secondary schools. The submission says that during the school term it is likely that a non-trivial proportion of vehicles crossing the river at peak hours are engaged in escort to education journeys and so the submission also asks how many of these journeys are genuinely divertible to the N6 GCRR.

Response

Plate 6.11 of the updated 2025 EIAR presents a daily profile of traffic crossing all four of the existing bridges over the river Corrib. As noted above, Plate 6.11 shows a relatively flat profile across the day, which highlights the importance of the river crossings to residents on both sides of the city each day, not just to travel to schools which would take place during certain hours but for all travel purposes.

Also as per the Government's National Planning Framework (NPF), the city is targeted to grow its population by 50% from 2016 levels. This significant growth would require additional schools in line with population growth and more schools will be provided on the east side of the city. For example, the Ardaun Local Area Plan aims to support the provision of community facilities such as schools, in order to cater for the new development area.

Section 6.7.1.1 of the Updated EIAR shows a series of bullet points which highlight the reduction in traffic near schools/universities in the city, with associated improvement in air quality, as a result of implementing the N6 GCRR:

- School Road (Castlegar National School) – 66% reduction
- Dr. Mannix Road (St. Enda's National School) – 29% reduction
- Threadneedle Road (St. Enda's Secondary School) – 9% reduction
- Taylor's Hill Road (Taylor's Hill Primary School) – 36% reduction
- Shantalla Road (Scoil Bhride) – 11% reduction
- Newcastle Road (Scoil Chroi Iosa) – 18% reduction
- Lower Newcastle Road (adjacent to UoG campus) – 13% reduction
- O'Briens Bridge (St. Patricks Primary School) – 26%

Lower traffic levels should make these areas safer and improve the air quality outside of schools.

12.2.4 Galway Harbour Extension

The submission states that in Part IV of 2025 RFI Response and Chapter 6 Traffic Assessment and Cross-Section of the updated 2025 RFI response, it makes reference to reducing the number of HGVs accessing parts of the city, and that this is being offered as a justification for the N6 GCRR based on the claim that this will provide a safer environment for walking and cycling. The submission claims that the applicant is seeking to remove HGVs from the city in the proposed N6 GCRR scheme, but the same applicant is supporting the Galway Harbour Redevelopment which it claims will generate significant HGV traffic through the city centre and peripheral approach roads. The submission also queries why the N6 proposals did not include a new road link serving the harbour which should also be addressed.

Response

Section 6.8.3.2 of the Updated EIAR states that the N6 GCRR will result in a 25% reduction in HGV kilometres within the existing N6/R338 cordon. This cordon accounts for approx. 60% of the city's current population and therefore reducing the number of HGVs within this area, would make it a safer and more attractive environment for the walking and cycling. This is one benefit of introducing the N6 GCRR.

Section 5.2.6 of the Part IV of 2025 RFI Response, presents the % reduction in HGVs for a number of junctions across the city. The comparison shows the results when the N6 GCRR is added to a Climate Action Plan (CAP) Do-Something scenario. This scenario includes a series of demand management measures which are designed to assist in meeting the country's transport sector emissions reduction targets as set out in CAP25. These demand management measures are outlined in Section 5.1 of the Part IV of 2025 RFI Response and are the same measures which were used in a modelling exercise to the inform the 2023 version of the Climate Action Plan. The comparison in Table 5.3, showed the morning peak hour reductions of HGVs which are achieved when the N6 GCRR is implemented alongside a series of demand management measures. These demand management measures will impact primarily on car trips as car trips can be taken by an alternative mode of transport e.g. walking, cycling or public transport but Table 5.3 shows significant HGV reductions also where the proposed N6 GCRR provides that alternative for goods vehicles trips. This is another benefit of introducing the N6 GCRR.

The EIS for the Galway Harbour Extension was submitted on 10 January 2014 to An Bord Pleanála. Chapter 13.4[51] of the 2014 EIS contains a detailed analysis of the existing road/street network with and without the harbour extension. It assesses the key junctions around the city zone as shown on *Figure 13.4.2 – Assessed Junction Locations* in the chapter and reports on their performance using indicators such as capacity which is standard practice. The conclusion of the traffic assessment is *"The proposed development will have minimal impact on the surrounding road network, including the N6 corridor"*.

[51] http://www.galwayharbourextension.com/download/ch-13-4-road-traffic-and-infrastructure-pdf/

An Updated EIAR was submitted in September 2024 with Chapter 13.4[52] including a re-examination of the traffic assessment. The existing traffic flows were updated using the Galway City Council yearly traffic survey in November 2022. The traffic data utilised in the 2014 assessment was factored up to 2022 and compared with the 2022 actual observed flows from the November 2022 traffic counts, and this showed a difference which varies between -20% and -64%. This means that the high growth rates utilised in the 2014 EIS presented a robust assessment where the actual growth in traffic has not reached the projected growth in the original Chapter. Therefore, it is considered that the original EIS traffic model is robust in projecting a higher baseline of traffic than observed and the conclusion remains that the traffic assessment showed the harbour extension development will have minimal impact on the surrounding road network.

The conclusion of the 2014 EIS outlined the '*lowering of the vertical profile of Lough Atalia Road under the railway bridge to provide headroom in excess of the minimum 5.03 metres plus sag compensation will facilitate 2-way Heavy Commercial Vehicle ("HCV") movement under the bridge, thus improving road safety in general at this location'*. This work was completed in 2015 and is operating well such that Lough Atalia is a primary artery serving the harbour area.

The proposed N6 GCRR did not include a new road link serving the harbour as the harbour is well served today and will be well served in the future by the existing road network with minimal impact on the existing road network. Also were the cumulative impacts of the proposed N6 GCRR with the Galway Harbour Development is assessed in Appendix A.21.1 of the Updated EIAR.

12.2.5 Galway as a Walking City

The submission states that walking has been made difficult and inconvenient in parts of Galway, and that Galway City Council should be required to implement a credible programme to improve walking distances and times and improve permeability for pedestrians by demolishing walls or adjacent properties at strategic locations along the boundaries of current cul-de-sacs before the N6GCRR can be justified. A further suggestion included in the submission is to improve the allocation of time to walking at traffic signals and locate crossing points at pedestrian desire lines.

Response

The Galway Transport Strategy contains a Section on Walking (Section 7.2 of the GTS). This strategy identifies similar issues to those contained within the submission and identifies a significant number and locations of improvements to the walking network. The GTS identifies these walking improvements as an element of the overall strategy for Galway City and not as an alternative to any other element of the strategy. As set out in Section 12.2.7.1, a significant number of GTS projects are now complete, under construction, or at advanced design and statutory approval stages. Specific examples which provide very significant improvements to the walking network include (but are not limited to):

- Salmon Weir Pedestrian & Cycle Bridge (opened May 2023) which replaces the need to cross the existing Salmon Weir Bridge on a footpath of less than 1m and 12,000 vehicles per day
- Miller's Lane pedestrian/cycle link (opened June 2023) is a great example of improved connectivity in Knocknacarra by paving and lighting the walkway, which is very well used as a direct route to the schools on Threadneedle Road
- Kirwan (completed in 2021) and Martin Junction Upgrades (completed in 2024), incorporating pedestrian, cycle, and public transport connectivity
- Eglinton Canal Active Travel Scheme, Doughiska Cycle Scheme, Wolfe Tone Bridge II (pedestrian cantilever, completed August 2024)

[52] http://www.galwayharbourextension.com/wp-content/uploads/2024/12/CH13.4-Road-Traffic-Infrastructure.pdf

12.2.6 Galway as a cycling city

The submission claims that the N6GCRR documents make reference to low level of cycling in Galway, but that there are no cultural or social class obstacles for cycling and in the view of the author of the submission, the explanation for low levels of cycling in some parts of the city is due to roads management. The author makes the claim that Galway cycling is being artificially suppressed by the manner of the conduct of Galway City Councils roads department, including various measures in the Galway Transport Strategy.

Response

The Galway Transport Strategy contains a Section on Cycling (Section 7.1 of the GTS). This Strategy identifies a proposed cycling network for the city together with a number of proposals to improve the cycling environment across the area. Galway City Council have been implementing this cycling network since the adoption of the GTS, which multiple schemes at various stages of development. There has been a number of objections and legal challenges to the progression of certain initiatives/schemes/measures that provide for cycling in recent times including by the author of this submission.

12.2.7 Conduct in apparent opposition to, or avoidance of, standard multi-modal transport measures by the Galway City Council executive

The submission states that the concept of multi-modal transport is well established in sustainable transport planning. The submission references the 2009 National Cycle Policy Framework and a Specific Objective 8.1 within relating to Safe Routes to Stations and Objective 8.9 relating to Bikes and Ferries / Ports. The submission claims that these objectives have been restated in the Irish Climate Action Plans, in the EU Declaration on Cycling and in the EU TEN-T regulations.

The submission highlights a section in the Climate Action Plan 2024, relating to public transport projects ensuring quality active travel access and cycle parking for passengers, and availing of opportunities that public transport infrastructure projects present for providing new or improved active travel infrastructure. The submission also includes a principle from the European Declaration on Cycling relating to cycling being a key enabler of sustainable tourism and contributing to connectivity within and between rural and urban areas especially in combination with trains, buses and other modes to create multimodal mobility services.

The submission states that the EU TEN-T Regulations support active travel and multimodal transport.

The submission makes a claim that it is the position on the Galway City Council executive and their consultants (Arup) that the location of the main transport interchanges (train station and private coach station) and some of the connecting roads, are not considered part of any nominated cycle network for the city. The submission claims to base this on the writings of Galway City Council in relation to the BusConnects Cross City Link Scheme, and that this is based on the content of the 2016 Galway Transport Strategy.

The submission references the Bus Connects Cross City Link proposal and the cycle network identified in the Galway Transport Strategy.

The submission states that this content of the Galway Transport Strategy and its interpretation is in direct opposition to the purpose of the Climate Action Plans and the TEN-T regulations and that there is a discrepancy between the city and county council claiming that a new ring road is needed to deal with traffic congestion and for them at the same time to be working in objective opposition to, or avoidance of, standard models of multi-modal transport provision.

12.2.7.1 Response – Galway City Council Executive's position

The claim made in the submission that Galway City Council is opposed to the provision of multimodal walking, cycling and public transport initiatives is firmly rejected.

Since the adoption of the Galway Transport Strategy (GTS) in 2016, Galway City Council, in collaboration with Galway County Council, the National Transport Authority (NTA), and Transport Infrastructure Ireland (TII), has been actively delivering a comprehensive and integrated suite of sustainable mobility projects across the city. These include both infrastructure schemes and service-based improvements that prioritise walking, cycling and public transport, in line with national policy (e.g. the Climate Action Plan, the National Sustainable Mobility Policy, and the NDP).

A significant number of GTS projects are now complete, under construction, or at advanced design and statutory approval stages. Examples include (but are not limited to):

- BusConnects Galway – Cross City Link (€80m) confirmed by An Bord Pleanála and subject to a judicial review
- BusConnects Galway – Dublin Road Multi Modal Corridor Scheme, lodged in January 2024 and approved in September 2025
- New Galway Bus Network to be implemented from 2025/2026, based on NTA's redesign
- Salmon Weir Pedestrian & Cycle Bridge (opened May 2023)
- Miller's Lane pedestrian/cycle link (opened June 2023)
- Kirwan (completed in 2021) and Martin Junction Upgrades (completed in 2024), incorporating pedestrian, cycle, and public transport connectivity
- Eglinton Canal Active Travel Scheme, Doughiska Cycle Scheme, Wolfe Tone Bridge II (pedestrian cantilever, completed August 2024)
- Parkmore Road Bus Priority Scheme (completion Q2 2025)
- Cycle parking provision and bus stop upgrades, implemented citywide
- School Street at Scoil Iognáid and other Safe Routes to School measures
- Park & Ride development, with sites under negotiation and integration into wider public transport network.

In addition, Galway City Council has secured URDF funding for citywide active travel corridors (including the Galway City Cycle Network and Clifden Railway Pedestrian Bridge), and continues to bring forward Part 8 and CPO processes to deliver key elements of the Galway Cycle Network.

Further, paragraph 63 of the preamble to the TEN-T Regulations indicates that *"local connectivity within urban nodes should be addressed by the competent local regional or national authorities, in particular through relevant measures of their sustainable urban mobility plans ("SUMP"s)"* However, very importantly, the GTS is not a SUMP within the meaning of the TEN-T Regulations. The GTS was adopted in 2016, and the 2013 version of the TEN-T Regulations, which or any equivalent was the version in force at the time of the adoption of the GTS, did not contain any requirement for SUMPs local plans. There is no obligation to put in place a SUMP for Galway before 31 December 2027.

12.2.7.2 Response – National policy

The National Cycle Policy Framework was replaced by the National Sustainable Mobility Policy, published in 2022.

With regards to the extract taken from the 2024 Climate Action Plan, it is suggested that the author of the submission is confusing public transport projects which comprise the public transport service provision and public transport infrastructure projects which is the physical infrastructure on which those services operate.

With regards to the submission's claim regarding Galway City Council's position in relation to the network connecting the train and coach stations, the written response from Galway City Council to a submission from Shane Foran to An Bord Pleanála in the context of the BusConnects Galway: Cross-City Link (University Road to Dublin Road) application, stated "*The GTS has been adopted by Galway City Council and it is noted as a Strategic Goal of Galway City Council in the Galway City Development Plan 2023-2029. The Proposed Scheme takes full cognisance of the objectives included in the GTS, including the cycle network which coincides with the route of the Proposed Scheme. Separate cycle network projects are being developed and advanced by Galway City Council along the identified cycle network. It should be noted that the GTS does not preclude other cycle scheme proposals being developed for the city, they do not however form part of the Proposed Scheme".* source: BusConnects Galway Cross City Link (University Road to Dublin Road) – Galway City Council Observations on the Proposed N6 GCRR Submissions and CPO Objections February 2023.

It is further noted that the Train Station and Coach Station are located along the route of the BusConnects Cross-City Link scheme. The cycle network for Galway City clearly connects these two nodes and extends from these nodes out from the city centre. The applicant is suggesting that if all roads are not part of the designated cycle network, then the main transport interchanges are not part of the cycle network. This is incorrect and a mis-representation of the cycle network and the Galway Transport Strategy.

12.2.8 Conduct inconsistent with a claimed intent to improve sustainable transport

The submission claims that there is a pattern of Galway City Council executive acting in objective opposition to state policy and established best practice on active travel and says that the Galway Transport Strategy is an example of this in written form. The submission lists scheme examples of the implied creation of additional access problems for bicycle users in Galway. The submission claims that there is a pattern of delivering cycle facilities on the periphery of the city and making cycling more difficult in the city centre.

Response

As mentioned at the outset, these issues related to the GTS do not appear to be directly related towards the N6 GCRR, however these issues have been engaged with below for completeness.

The first example that the submission makes is in relation to the alleged one-way street restrictions in 2021 *"that closed down Flood Street, Cross Street and Middle Street"* as an access route for cyclists coming from Wolfe Tone Bridge. The submission inaccurately claims that all cycle traffic coming from Wolfe Tone Bridge direction, must now use Merchants Road to access the city centre. A cyclist crossing from west to east over the Wolfe Tone Bridge who wishes to access the city can access the dedicated cycle/pedestrian path along the river along Bruach na Corribe (further detail of this route below), which is accessible on the east side of the river from Wolfe Tone Bridge. Galway City Council installed a signalised pedestrian crossing at this location in the 2024, which provides a safe crossing. The applicant also frames this statement as the creation of new one-way streets. These streets had previously been one-way streets, and the direction of flow in some streets were reversed, in order to remove vehicles from Cross Street and expand the pedestrianised area in the city centre core. Of particular relevance is the recent delivery of the Eglinton Canal Active Travel Scheme, which was completed and opened in 2024. This scheme provides an alternative cycle route which is a dedicated, high-quality pedestrian and cycling route extending from near the western landing point of Wolfe Tone Bridge along the Eglinton Canal and connecting directly to the newly constructed Salmon Weir Pedestrian and Cycle Bridge. This continuous, safe, and segregated corridor offers a strategic and attractive link for cyclists travelling from the west into the city centre, bypassing high-conflict vehicular areas on the Galway City Inner Access Network.

The closure of Cross Street to vehicular traffic, as part of a broader suite of city centre public realm and active travel enhancements, is fully aligned with the objectives of the Galway Transport Strategy, the National Sustainable Mobility Policy (2022), the Climate Action Plan and the Town Centres First framework. These policies all promote the reallocation of road space in urban centres to prioritise pedestrians, cyclists, and public transport users, while reducing through-traffic, noise and emissions.

While it is acknowledged that cyclists may need to dismount and walk over a short section of Cross Street (100m) should they wish to traverse it directly to access Bridge Street, this is a modest compromise in the context of the significant benefits achieved by restricting vehicular access. The resulting environment is safer, cleaner, and more inclusive, particularly for pedestrians, vulnerable road users, and families accessing the historic city core.

The second example provided in the submission, relates to Galway City Council erecting signage that the submission claims is a *"permanent ban on cycling through the medieval core of the city"* during the pandemic. The applicant is referring to the restriction on cycling on pedestrianised streets including Shop Street. This did not ban cycling through the core of the city as alleged by Mr. Foran, and alternative routes are available without using Shop Street which is a busy pedestrian thoroughfare. For context, the images below, taken from google streetview, are the streets the author of the submission is referring to.

Therefore, in line with the Galway Transport Strategy (GTS) and national policy objectives, Galway City Council has implemented a range of targeted interventions to improve the safety, attractiveness and functionality of the city centre for sustainable travel modes, including walking and cycling. This is delivering infrastructure and public realm enhancements that support increased levels of active travel, reduce car dependency, and improve the overall quality of life in the city centre.

In relation to the remaining initiatives/measures referenced in this part of the submission namely, Radharc na Mara National School, Ballyloughane Road and Renmore Active Travel Scheme, Clybaun Road Active Travel Scheme, Raleigh Row School Street, these initiatives/measures remain under the active consideration of Galway City Council. The active travel scheme along Ballybane and Castlepark Road is presently under construction as is the active travel scheme along Bóthar Stiofán.

12.2.9 BusConnects Cross City Link

The submission states that the BusConnects Galway Cross City Link (CCL) scheme is in apparent opposition to long standing sustainable transport policy and in a manner that implies strong negative implications for cycling access to the city, and is a comprehensive example of the negative implications of the GTS for sustainable travel in Galway.

The submission notes that through sections of the city centre, it is proposed to remove general vehicle traffic through the implementation of bus gates and for the roads to function as a shared bus and cycle roads. The submission notes that along sections of the CCL, it is proposed to widen existing footpaths and reduce carriageway widths currently used by cycling traffic. The submission references a submission made by Mr. Foran to the CCL planning process which included a desktop review that suggested areas along the scheme where the footpaths could be narrowed and the carriageways widened. The submission makes the statement that the use of 3m lanes implies that when oncoming lanes are occupied, buses will be restricted to cycling speed.

The submission further suggests that the scheme "apparently" proposed one-way restrictions that will ban cycling access to a city centre secondary school campus from the north and render a newly constructed cycling and walking bridge pointless, and cut off another public bike station from the north.

The submission claims that some roads will receive increased traffic arising from the CCL without any mitigation proposed for the cyclists already using the same roads, and further makes the claim the Fairgreen Road and Bóthar na mBan are roads serving the city train station and therefore are a key cycling routes under national policy, and that they are to experience peak hour traffic increases.

The submission claims that the BusConnects Galway Cross-City Link Scheme would have negative impacts for the bike share scheme in Galway.

Response

As mentioned at the outset, these issues related to the GTS do not appear to be directly related towards the proposed N6 GCRR, however these issues have been engaged with below for completeness. For context, the BusConnects Galway: Cross-City Link (University Road to Dublin Road) scheme was granted planning permission by An Coimisiún Pleanála (Order ABP-314597-22) in September 2024. The author of this submission has made a legal challenge to the scheme, by way of Judicial Review (2024/1448JR), which is currently going through the courts system. A contested leave hearing was held on 24 March 2025 solely in relation to the grounds of challenge that related to the GTS. Mr. Foran was refused leave to seek judicial review of the GTS, but leave was otherwise granted in relation to the other grounds raised. This judicial review in relation to the remaining grounds is set for hearing on 17 December 2025.

The submission fails to reference the design standards and the planning context of the Cross City Link scheme. The scheme has been designed in accordance with the Design Manual for Urban Roads and Streets (DMURS) which is the applicable design standard for that scheme. The author of the submission included a challenge to the validity of DMURS as part of this ongoing challenge of the Cross City Link Scheme.

An Environmental Impact Assessment Report was prepared for the Cross City Link Scheme and the scheme has been fully assessed by An Coimisiún Pleanála (ACP), and has been approved. The submission is an attempt to conflate the authors objections to the Cross City Link with his objections to the N6 GCRR.

Notwithstanding the above, a number of the submission's claims have been addressed, some on numerous occasions. A brief summary of previous responses are bulleted below:

- The lane widths proposed within the CCL scheme are in accordance with the prevailing design standards
- The location that the submission refers to, that would apparently ban cycling access to a school campus from the north is at Newtownsmith (entering Newtownsmith from St. Vincent's Avenue). A submission by the author of this submission, was submitted to ACP during the consultation phase of the CCL scheme. A response by Galway City Council, directly in relation to the submission stated:
  - *It is not the intention of the Proposed Scheme to restrict access for cyclists to or from the new Salmon Weir Pedestrian and Cycle Bridge. The submission suggests that the creation of a cul-de-sac at Newtownsmith (to permit vehicles exit from Newtownsmith onto St. Vincent's Avenue at times when HGV access is permitted for loading), will restrict cyclists from entering Newtownsmith from St. Vincent's Avenue (and restrict access to the new Salmon Weir Pedestrian and Cycle Bridge). The Proposed Scheme intends that Newtownsmith will be made a cul-de-sac utilising retractable bollards. The section of Newtownsmith between the bollards and St. Vincent's Avenue is proposed to act as a shared space for pedestrians and cyclists. Both pedestrians and cyclists will be permitted to traverse Newtownsmith in both directions when the bollards are up, permitting access and egress in both directions for cyclists. References in the design to a one-way relate to vehicles exiting Newtownsmith during the loading window when the bollards are retracted and are not intended to restrict cyclist permeability.*
- The applicant refers to Fairgreen Road and Bóthar na mBan as a key cycling route under national policy. This is untrue. The applicant is basing this on these roads providing a vehicular route to the coach station (and a drop off route for Ceannt Station presumably, as the route as described by the submission does not provide vehicular access to Ceannt Station). However the submission fails to acknowledge that the Cross City Link, which is part of the cycle network, travels directly in front of both stations. The submission is disingenuous in its description and interpretation of national policy.
- The submission fails to acknowledge that six no. of the bike share stations in Galway City are located upon the CCL and will hugely benefit from the introduction of the CCL. The bike share scheme is a beneficiary of the CCL.

12.2.10 The credibility of the 2016 Galway Transport Strategy

The submission claims that the GTS does not reflect some items that were state policy under the 2011 National Cycle Policy Framework.

The submission claims that the GTS contains no proposals for contra-flow cycling on any one-way streets in the city, and references a proposal contained within the GTS to make a clockwise one-way loop around Woodquay, Mary Street, Newtownsmith and St. Vincents Avenue, claiming that this turned state policy on cycling promotion upside down.

The submission claims that the GTS references objectives of integrating cycling and public transport, but the GTS does not include Fairgreen Road, Bóthar Ui Either, Bóthar na mBan or Prospect Hill as part of the cycle network. The submission claims that Fairgreen Road is effectively the only route available to access the train station by bicycle as the station only has an exit onto Eyre Square operated by barriers.

The submission claims that Appendix F: GTS Cycle Network & Infrastructure Development does not apparently mention the Galway public bike share scheme or make reference to a Technical Feasibility Study for the bike share scheme.

The submission claims that the GTS does not mention negative effects of pinch points or narrow traffic lanes for cycling or proposals for 30km/h zones in Galway.

The submission claims that there is no discussion within the GTS of the alleged poor treatment of cyclists by Galway City Council at traffic signals.

The submission claims that the NCPF specifically required that cyclists have space to keep moving and adequate separation from passing motor vehicles with or without cycle lanes, and compares this to schemes

in the GTS, which it is claimed remove space from people using bicycles. It is claimed that the GTS removes road capacity from cycle-traffic across the city.

The submission claims that the Galway cycle network in the GTS is likely to have a strong negative impact on cycling in Galway.

The submission claims that the Cappagh Road and Ballymoneen Road will have reduced capacity for cyclists on both roads and are to be repurposed by Galway City Council for feed arterial traffic to the N6 GCRR.

The submission claims that the cycling network in the GTS is not compliant with the NCPF and does not confirm with what the submission claims is the commonly understood concept of a cycle network.

Response

As mentioned at the outset, these issues related to the GTS do not appear to be directly related towards the proposed N6 GCRR, however these issues have been engaged with below for completeness. Further, the author of this submission has made a legal challenge to the BusConnects Galway: Cross-City Link (University Road to Dublin Road) scheme by way of Judicial Review (2024/1448JR), which is currently going through the courts system. A contested leave hearing was held on 24 March 2025 solely in relation to the grounds of challenge that related to the GTS in that Judicial Review, and Mr. Foran was refused leave to seek judicial review of the GTS, but leave was otherwise granted in relation to the other grounds raised. Therefore, the Galway Transport Strategy was, and remains, the relevant transport strategy of Galway. This authors dislike of this strategy does not remove the relevance of the GTS.

Notwithstanding the above, below is a summary of responses to errors in the submission:

- The GTS Appendix F, Section 4.7 City Centre, under concept designs for junction notes that movements at various junctions in the city centre will change under the proposed road reallocation and provision of an inner-city cordon for private motorised traffic. Some one-way streets will become two-way and vice versa. It is noted that the BusConnects Galway Cross-City Link project proposed Woodquay to become a one-way route, with a contra-flow cycle track and Newtownsmith to become a cul-de-sac for general traffic but permit two-way movement for cyclists.
- The GTS Technical Report references the Bike Share Scheme in Section 2.3.2, Section 2.5.4.5, Section 3.4.4.2, Section 7.1.1, Section 7.1.4.1, Section 7.4.4.1, Section 7.4.4.3, Section 7.4.4.6 and Section 8.1. It was clearly considered in the development of the GTS.
- The lack of reference to “Proposals for Introducing Public Bike Schemes in Regional Cities – Technical Feasibility Study” is not a failing of the GTS. That report is a 2011 report and is not required as supporting documentation for the GTS as the GTS acknowledges that the bike sharing scheme in the city was launched in 2014 and highlights its potential further expansion. In accordance with the GTS, the bike sharing scheme has been expanded since 2014.
- The GTS Section 4.4 Cross City Link states that the Cross-City Link Concept was based on a number of components, one of which was implementing a reduced speed limit within the Cross-City Link area.
- In relation to narrower lanes, the submission is misleading with regards to what is contained in the NCPF. Policy 2.5 within the NCPF specifically mentions audits of existing infrastructure and references narrow traffic lanes in the context of the development of the Quality Bus Network. It is noted that DMURS and the National Cycle Manual are the relevant design criteria for streets and cycle infrastructure in Galway City.
- The author of the submission’s opinion that the cycle network in the GTS is likely to have a strong negative impact on cycling in Galway is wholly rejected and it is reaffirmed that the GTS is the relevant policy document for the delivery of transport infrastructure in Galway.
- The Galway City Development Plan 2023–2029 contains an objective for the delivery of multi-modal transport corridors across the city to promote active travel, support public transport and enable smarter, safer and more efficient mobility. In line with this objective and the Galway Transport Strategy (GTS), Galway City Council engaged Tobin Consulting Engineers to prepare a Feasibility and Constraints Report (June 2025), as part of a wider programme of sustainable mobility projects. The study forms part

of a citywide assessment of nine priority corridors (that includes both the Cappagh Road and Ballymoneen Road) intended to provide for walking, cycling, public transport, and private car use within an integrated and accessible transport network. Cappagh Road and Ballymoneen Road are identified as primary cycling feeder routes within the Galway Transport Strategy and Galway City Council are actively pursuing a study to identify the requirements to achieve this, contrary to the submission's claim that it is doing the opposite.

12.2.11 Summary

The submission puts forward an opinion that the N6 GCRR should not be developed until Galway City Council implement a programme of works to support other forms of transport such as walking, cycling and public transport. The submission also puts forward the opinion that the GTS is not a credible document.

Response

The Galway Transport Strategy is the adopted transport strategy for Galway. It is the policy of Galway City and Galway County Councils. The opinion expressed by the author in this submission is his opinion only.

The GTS contains proposals for a programme of works for walking, cycling and public transport, some of which have been delivered and others are at various stages of development. The flagship element of the GTS in the city centre is the Cross-City Link, the development of which is currently being delayed as it is in a Judicial Review process, undertaken by the author of this submission. It is noted that the author of the submission is calling for walking, cycling and public transport works to be delivered while simultaneously bringing a number of objections and legal challenges to the progression of certain initiatives/schemes/measures that provide for these.

12.2.12 Appendix

The submission is attempting to relate ways that the Galway Transport Strategy doesn't comply with the 2024 TEN-T Regulations.

Response

The author of the submission has unsuccessfully attempted to challenge the GTS through Judicial Review proceedings. The GTS is the relevant policy document for transport in Galway.

Notwithstanding this, the authors interpretation of the TEN-T regulations and how they are applicable to Galway, as an urban node are flawed (and irrelevant).

13. Response to ABP-318220-23: 13 JFC Property Developments Ltd.

13.1 Submission – Lands at Mincloon, Clybaun Road, Galway

The submission makes the following points:

1. The subject lands relate to a residential landbank with *Residential R* land use zoning in a key residential suburb/district of the city. The landowner is seeking to submit a planning application on the subject lands in the near future and wants to ensure that the deliverability of a housing scheme on the subject lands will not be undermined by the proposed N6 GCRR.
2. Development of housing on the subject lands is an objective of the Galway City Council Development Plan. The landowner is seeking to ensure that the proposed N6 GCRR takes cognisance of future residential use in the adjoining lands.
3. The submission outlines various mitigation measures that are necessary to mitigate the impact of the proposed N6 GCRR on the subject lands, such as noise mitigation, surface water management and blasting mitigation.

13.2 Response to submission

13.2.1 Proposed mitigation measures

The submission notes that the proposed *"N6 Galway City Ring Road can be compatible with a housing development on the subject lands, but only if assurances and requirements are put in place to mitigate the potential impact of the road project, in particular in relation to noise, drainage and construction impacts/ disturbance, where it is appropriate to assume that the subject lands would be developed in advance of any road project."* Each of the proposed mitigation measures are discussed in the sub sections below.

The submission also states that with the inclusion of the proposed mitigation measures, *"the potential of the subject lands can be realised. In the absence of the amendments proposed herein, the development of the subject lands could be undermined."*

13.2.1.1 Noise

The submission seeks *"Noise mitigation through extended noise barriers along the full extent of the subject lands (and beyond as required to avoid any lateral noise pathways)"* as it states that *"it appears that the noise assessments contained within the RFI response do not treat zoned but currently undeveloped residential land as being noise sensitive"*, which the submission says they should. The submission states that the proposed N6 GCRR should not prejudice the realisation of the zoning objective.

Response

The approach for the application of noise mitigation across the proposed N6 GCRR relates to all existing noise sensitive areas. This is in line with the TII 2004 and 2014 Noise Guidance documents for national roads, namely Guidelines for the Treatment of Noise and Vibration in National Road Schemes (NRA, 2004) and Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes (NRA, 2014). These are the most commonly applied standards relating to noise from road schemes in Ireland, as described in Section 18.2.2.2 of Chapter 18 of the Updated EIAR. The TII Noise Guidance Documents set out a design goal for the assessment of potential noise impacts from national road schemes as stated in Section 18.2.2.2 of Chapter 8 of the Updated EIAR:

> *"It should be noted the design goal is applicable to new road schemes only. In addition, the design goal is applied to existing receptors in respect of both the year of opening and the design year".*

Therefore, the provision of noise mitigation across zoned but undeveloped lands does not form part of the proposed N6 GCRR.

During the oral hearing in 2020, the following was noted in response to submissions relating to noise mitigation in the Statement of Evidence by Jennifer Harmon on behalf of Galway County Council relating to noise[53]:

> *"… noise mitigation has been provided for all existing noise sensitive areas where the relevant noise criteria have been met as discussed in the paragraphs above. It is not possible to establish specific noise levels at speculative developments where planning permission has not yet been granted for residential or other potentially noise sensitive developments. It is noted, however that a low noise road surface is included along the full extent of the proposed road development as standard. It is not, however, proposed to extend noise barriers over the full extent of retained lands in the event that future development may occur.*
>
> *It is important to note that the presence of a new road does not preclude new development within adjacent lands. As part of the planning application of any new development, consideration will be given to the requirement of any localised boundary treatments within the development sites to reduce noise, where this is deemed necessary."*

In addition, the Inspector for An Bord Pleanála (now known as An Coimisiún Pleanála) concluded in agreement with GCC that the appropriate time for considering noise mitigation of new development is during the planning process for said development, and said the following with respect to this issue in their report dated 22 June 2021 in Section 11.12.104:

> *"A number of parties who consider that their lands may be suitable for future development have sought that noise barriers be provided. Any such development will require planning permission and it is uncertain when and if such development will take place and the requirement for noise barriers may depend on the form and layout of development proposed. I would, therefore, agree with the applicant that the appropriate time for considering noise mitigation of new development is during the planning process for said development. I do not consider that the presence of the PRD would preclude new development on adjacent suitably zoned lands".*

In Section 10.3 of the Galway City Council Noise Action Plan (2024 – 2028) (NAP), which relates to *Noise Impact from Future Developments* (and refers to the Galway City Development Plan 2023 – 2029 (Amended May 2025)), the following is stated in relation to the proposed N6 GCRR and applications for new residential developments:

> *"Galway County Council, on behalf of itself and on behalf of Galway City Council, is proposing to develop the N6 Galway City Ring Road (N6 GCRR) around Galway City*
>
> *…*
>
> *Applications for new residential developments are assessed by the Planning Authority in accordance with the policies and standards of the prevailing Galway City Development Plan including:*
>
> *Policy no. 9 Air Quality and Noise includes a policy to 'ensure that developments incorporate measures to minimise noise levels in their design and reduce the emission and intrusion of any noise or vibration which might adversely impact on amenities, in particular residential amenities where appropriate.'*
>
> *Policy no. 9.6 also states that the NAP shall be considered in the assessment and design of relevant development applications in the interests of protecting future amenity".*

Therefore, in line with Galway City Council planning policies, any residential development in proximity to the proposed N6 GCRR is required to have cognisance of the road within its design as it relates to noise. This is reflected in the typical planning conditions included as part of planning applications across Galway City for residential developments which form the boundary with the proposed N6 GCRR land acquisition boundary. Further Section 9.8 of the Galway City Development Plan 2023 – 2029 provides that:

> *"Wherever possible, the siting of new development should have regard to noise sensitive locations and implement acoustic design measures to minimise noise impact. These measures may include, but are not*

[53] https://www.n6galwaycityringroad.ie/sites/default/files/media/GCRR_4.03_34.3.15%20BoE%20Noise_I1.pdf

limited to, building placement and orientation, building materials, setback and separation between noise sources and receptors, landscaping, noise barriers and buffer zones".

On the basis of the above the proposed N6 GCRR does not prejudice the realisation of the zoning objective or preclude new development within adjacent lands. Further, in line with the Galway City Development Plan objectives any proposed development shall have regard to best practice acoustic design measures to ensure a suitable residential amenity is achieved across the development site. It is a matter for the developer of future development to ensure that its development includes any necessary noise mitigation in its development.

13.2.1.2 Surface water management

The submission requires that "*Surface water management such that surface water leaving the ring road lands are attenuated to greenfield rates, in line with good practice and the standards imposed on all modern urban development".*

Response

The proposed N6 GCRR will provide a SUDs solution to its road pavement storm runoff and will control surface water discharge rates to estimated greenfield flood runoff rates through provision of suitably sized attenuation in the form of large surface ponds whose storage is sized for the 100-year rainstorm events with 20% climate change allowance. In respect to the JFC Property Development Ltd.'s lands at Mincloon, in the Clybaun Road area the proposed road drainage will discharge via three outfalls, namely S11, S12 and S32, all of which will be controlled and limited to greenfield runoff rates. S11 and S32 will discharge to the existing public storm sewer of 300mm and 375mm diameters near Ch. 6+050 and Ch. 6+375 of the proposed N6 GCRR respectively. This storm sewer flows southwards away from their lands. Outfall S12 will be discharged at a greenfield runoff rate to a surface drain (Knocknacarra Stream) near Ch. 6+850 of the proposed N6 GCRR and flows southwards away from their lands. Interceptor drains and filter drains will be provided for the road embankment drainage to avoid any local ponding issues at the tow of the embankment for the proposed N6 GCRR. This integrated approach to storm water management will prevent drainage and flooding impacts on any third party lands along the proposed N6 GCRR. (refer to Chapters 5 and 11 of the Updated EIAR and Figure 11.5.105 of the Updated EIAR.)

13.2.1.3 Blasting mitigation

The submission requires "*Blasting mitigation, if relevant, in that the subject lands be treated as an extant housing site (similar to adjoining developments (e.g. Ard Na Gaoithe)).*"

Response

The proposed construction works for the proposed N6 GCRR adjacent to the subject lands is predominantly fill/embankment (EW08). Blasting is noted as a possible excavation option in this location for the attenuation pond and a section of the realignment of the Clybaun Road as shown on Figure 7.201 of the Updated EIAR.

As outlined in Section 9.4.2.1 of Chapter 9 of the Updated EIAR, on page 886 under the heading 'Construction Activity – Excavation of cuts'[54], *where blasting is deemed as the preferable option for excavation of rock, a site-specific blast assessment will be undertaken to confirm that blasting is viable. A site-specific blast assessment will include a desk-based assessment which will involve defining the area of proposed blasting, identifying the local receptors (e.g. properties, dwellings), defining the ground conditions and their engineering properties and defining the rock excavation sequence. Where the outputs from the blast assessment determine that blasting is feasible, the blast design assessment will be refined. As part of the blast design assessment monitored trial blasts in the same bedrock formation as the proposed blast locations at locations of proposed blasting will be conducted. These trial blasts will further calibrate the blast design to site-specific designs and will refine and validate the blast design properties. Trial blasts will not exceed the limitations of the local sensitive receptors*."

[54] https://www.n6galwaycityringroad.ie/sites/default/files/media/Updated%20EIAR%20Chapter%209.pdf

What this means is that if housing is built on these lands prior to the construction of the proposed N6 GCRR, they will be treated as sensitive receptors and the mitigation measures relating to blasting detailed in the Updated EIAR will apply. Full details are outlined in Chapter 9, 18 and 23 of the Updated EIAR on the measures which will be taken to protect all receptors within vicinity of the construction works (including blasting) and to provide certainty to affected landowners. These measures include, but are not limited to:

- Prior to construction, a site-specific blast assessment will be undertaken to confirm blasting is viable, which will take into consideration the local receptor and the location-specific ground conditions
- Allowable limits have been set out to ensure no cosmetic damage
- Pre and post condition structural surveys will be completed by a competent structural engineer for all affected receptors
- Vibration and air over pressure monitoring will be undertaken throughout the works
- A geotechnical expert will be appointed to monitor ground vibrations near sensitive receptors
- A site monitoring team will be in place to monitor weekly reports and ensure compliance with commitments and allowable vibration limits
- Commitment that blasting works will cease in the unlikely event vibration limits are exceeded
- In the highly unlikely event that damage from vibration is observed, the damage will be repaired

Where blasting is not viable within the boundary of the proposed N6GCRR, for example due to the existence of a sensitive receptor within the blasting exclusion zone, alternative methods will be employed. These alternative methods have been outlined in Section 4.1.3 of the Blast Feasibility and Exclusion Requirements file note in Appendix A.9.2 of the Updated EIAR and include methods such as hydraulic breaking, hydraulic splitting, chemical splitting and electrical disintegration.

As outlined in Section 18.2.2.1, Chapter 18 of the Updated EIAR, on page 1457 under the heading 'Construction Vibration'[55], allowable vibration limits are set out to ensure no cosmetic damage occurs to buildings in the vicinity of construction works.

To protect and monitor existing receptors within proximity of blasting, additional precautions will be put in place as per environmental commitment reference number C18.15 in Chapter 23 of the Updated EIAR, most notably:

- *"The design, execution and completion of any blasting within 150 metres of any existing structure shall require special considerations. This will include the use of pre and post condition structural surveys by a competent structural engineer."*
- *"Ground vibration and air over pressure (AOP) will be recorded simultaneously for each blast at the most sensitive locations, depending on the works area being blasted."*

As outlined in Section 9.6.2.1, Chapter 9 of the Updated EIAR on page 908 under the heading 'Effect on Surrounding Ground', "*a geotechnical expert will be appointed by the Contractor and will be present to monitor the surrounding ground vibrations near sensitive receptors (including domestic dwellings) during blasting works. The Employer's Site Monitoring Team will be monitoring the reports on a weekly basis to ensure compliance with the commitments in relation to vibration limits. In the unlikely event that the blast vibration limit at the surface is exceeded, blasting works will cease on site until it is understood the basis for the increased vibration. The blast design will then be recalibrated and blasting works will proceed with continued monitoring.*

As per the 2018 EIAR, a key contact person will be appointed during the construction phase to facilitate communications between affected property owners, informing them of proposed works in their area, including blasting. After vibration and movement related construction works have ceased, a post condition

[55] https://www.n6galwaycityringroad.ie/sites/default/files/media/Updated%20EIAR%20Chapter%2018_0.pdf

survey will be undertaken for all receptors within a zone of influence. In the highly unlikely event that damage from vibration is observed, the damage will be repaired."

Therefore, should the subject lands have housing on them prior to the construction of the proposed N6 GCRR, they will be treated in the same manner as other lands with buildings on them and the blasting mitigation measures outlined in the Updated EIAR will apply. Equally, if the subject lands remain without housing they will be treated in the same way as any other land without development as there are no buildings to protect.

13.2.2 Overall planning hierarchy

The submission states that the proposed N6 GCRR could affect a degree of sterilisation on the subject lands owning to the timeframes for completion of the proposed N6 GCRR and it argues that the An Coimisiún Pleanála should treat these lands as if they are already developed when reaching their determination.

Response

As regards the contention that "*the proposed N6 GCRR could affect a degree of sterilisation on the subject lands*," there is no sterilisation of lands outside of the land acquisition boundary and therefore no sterilisation of development on the subject lands. All planning applications are reviewed on a case-by-case basis by Galway County Council and the Project team, and observations are made to the planning department in Galway City Council or County Council depending on the jurisdiction for the application. There are many examples along the route of the proposed N6 Galway City Ring Road where planning permission has been granted for housing on lands adjacent to the proposed N6 GCRR where it was demonstrated that such development did not hinder the construction or operation of the proposed N6 GCRR and the proposed developments met the requirements of the city and county council planning departments.

We note the acknowledgement in the submission that the proposed N6 GCRR "*can be compatible with a housing development on the subject lands*" where there are appropriate mitigation measures in place. We refer the Coimisiún to the responses above and to the relevant sections of the Updated EIAR which set out the relevant mitigation measures for the proposed N6 GCRR. We note that mitigation measures are also a matter for the developer in relation to their proposed development where same is proximate to the proposed N6 GCRR.

In accordance with Section 2.9 of the Spatial Planning and National Roads document published by the Department of Environment, Community and Local Government in 2012, the planning authority shall adopt the following:

"A development or local area plan should identify any land required for future national road projects including objectives that:

- *retain required lands free from development; and*
- *ensure that measures are put in place so that any adjacent development of sensitive uses, such as housing, schools and nursing homes, are compatible with the construction and long-term operation of the road.*

In the case of the proposed N6 (or any other national road), this infers that all developments seeking planning approval after the date of submission of the road scheme to the Planning Authority, shall be sympathetic in their design and take cognisance of the road development. The onus does not lie with the local authority progressing the road development to take cognisance of the design of developments not in planning."

14. Response to ABP-318220-23: 14 TII

14.1 Submission – Whole Scheme

As a statutory consultee on the application for approval, TII's submission set out that under the Government's Infrastructure Guidelines, TII is the Approving Authority for National Road Projects and works in partnership with local authorities to deliver the investment priorities identified in the National Development Plan, which *"includes the Galway City Ring Road"*. TII confirmed that the scheme is included in TII's current capital programme and said that TII *"fully supports"* the development and publication of the proposed N6 Galway City Ring Road by Galway County Council. The submission concludes by stating that *"The Authority trusts that the foregoing comments prove of assistance to An Coimisiún in dealing with this matter."*

14.2 Response to submission

Galway County Council welcomes TII's submission that it "*fully supports*" the development and publication of the proposed N6 Galway City Ring Road. The recognition by TII that the proposed N6 Galway City Ring Road is included in TII's current capital programme and as such supports their role in the delivery of investment priorities identified in the National Development Plan is fully aligned with what is set out in the Updated EIAR.

15. Response to ABP-318220-23: 15 Údarás na Gaeltachta

15.1 Submission – Whole Scheme

Údarás na Gaeltachta made their submission as Gaeilge, and a certified English translation was obtained by Galway County Council, which is referred to herein.

Údarás na Gaeltachta expressed its "*strong support*" for the proposed N6 Galway City Ring Road which they considered to be a "*vital infrastructure for the sustainable economic, cultural and social development*" of South Conamara. Údarás na Gaeltachta provided some detail on the population and economy of the Galway Gaeltacht and highlighted how the current "*infrastructure deficiencies*" are a threat to the sustainable development of the Gaeltacht region, in particular outlining that:

- "*The Quincentenary Bridge, the only major road bridge across River Corrib, is well beyond its design capacity*
- *Traffic is subject to constant delays, hindering business operations*
- *Travel times between the east side of Galway and South Conamara are too long and*
- *The closure of Galway Airport in October 2011 contributed to the lack of access to the region*
- *Access to the port of Ros an Mhíl, a vital sea location, is severely restricted"*

These infrastructure deficiencies are a threat to the sustainable development of the Gaeltacht region at this stage."

Údarás na Gaeltachta set out the "*multiple strategic advantages*" that the proposed N6 Galway City Ring Road would deliver, as follows*:*

"1. Improved Business Efficiency

- *Improved access to national and international markets for export products*
- *More efficient supply chains for raw materials and finished goods*
- *Better connections to ports, airports, and the national motorway network*
- *An expanded labour market, particularly for specialist skills available in east Galway*
- *New opportunities for business collaboration across the region*

2. Technological Innovation and Advancement

- *Support for high-tech companies such as Mylan, Freudenberg Medical, Aran Biomedical, ÉireComposites, and Telegael*
- *Improved viability for our award-winning companies supported by the Transformative Technologies Innovation Fund*
- *Accelerated growth of our gTeic digital hub network, which foster innovation, creativity, and remote working capability*

3. Marine Economy Development

- *Vital infrastructure support for Páirc na Mara in Cill Chiaráin (70km west of Galway City)*
- *Improved connectivity for marine innovation services and businesses*
- *Improved access to the strategic port at Ros an Mhíl*
- *Support for sustainable growth in aquaculture, marine biotechnology, and marine energy*

4. Tourism Growth

- *Improved access for the 200,000+ annual visitors to Conamara and the Aran Islands*
- *Support for Cósta Gaelach Chonamara agus Árann initiatives*
- *Improved Visitor Spread Across West County Galway*
- *Reduction in traffic congestion that currently discourages tourists from visiting*

5. Environmental and sustainability benefits

- *Enabling expanded public transport services to South Conamara*
- *Reducing carbon emissions as a result of reduced congestion and more efficient travel patterns*
- *Supporting population retention in Gaeltacht communities*
- *Preserving social and cultural networks that support the Irish language"*

Údarás na Gaeltachta further set out the below:

> *"As an organisation with a mandate to strengthen and preserve the Irish language as the main means of communication in Gaeltacht communities, we recognise that economic vitality cannot be separated from cultural sustainability. Our research shows that 58% of those employed in Údarás na Gaeltachta client companies speak Irish, and the use of the language in the media sector is very strong.*
>
> *The N6 Ring Road is not just a transport infrastructure – it is a lifeline that will enable Gaeltacht communities to achieve economic success and retain their distinctive cultural identity in the 21st century.*
>
> *The N6 Ring Road is an essential infrastructure that would contribute substantially to the viability and attractiveness of the Gaeltacht region in terms of investment, employment, tourism, and quality of life. Having carefully analysed its impacts, we are of the strong and determined opinion that the development of this ring road will not just be directly beneficial but essential for the sustainable future of the Gaeltacht.*
>
> *We ask An Bord Pleanála to take into account the basis of this submission as you engage in the decision-making process on this development and consider the basis for this essential investment.."*

15.2 Response to submission

Galway County Council welcomes the support of Údarás na Gaeltachta for the proposed N6 Galway City Ring Road (GCRR), who have in their submission outlined the need for the proposed N6 GCRR as a "*lifeline*" which is "*vital infrastructure for the sustainable economic, cultural and social development of South Conamara*" that will enable Gaeltacht communities to "*achieve economic success*" and "*retain their distinctive cultural identity in the 21st century*", and which will be "*essential for the sustainable future of the Gaeltacht*". It is noted and welcomed that Údarás na Gaeltachta set out in detail how the proposed N6 GCRR will deliver (1) improved business efficiency, (2) technological innovation and advancement (3) marine economy development (4) tourism growth; and (5) environmental and sustainability benefits. The need for improved access to the Galway Gaeltacht area outlined by Údarás na Gaeltachta in their submission and the benefits that can be achieved with the provision of the proposed N6 GCRR is fully aligned with what is set out in the Updated EIAR.