Galway Harbour Company

Galway Harbour Extension

Response to An Bord Pleanála Sept. 2024

EIS Addendum Chapter 13.4

Road Traffic & Infrastructure

An Bord Pleanála (Ref: 61.PA 0033)

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13.4. Road Traffic and Infrastructure

13.4.1. Introduction

The submitted Chapter 13.4 of the Environmental Impact Statement ("EIS") summarises the potential impacts on the surrounding road network area of Galway Harbour due to the proposed development.

The chapter states that the proposed development will have minimal impact on the surrounding road network, including the N6 corridor.

A review of current legislation, traffic and transportation guidance have been carried out for the purpose of this report to determine if any information in the original EIS had become outdated or to include any new information that could supplement the data already submitted.

This Chapter was drafted by Maria Rooney. Maria Rooney (TOBIN Senior Engineer: Roads and Traffic) is a Chartered Engineer and has a Bachelor of Engineering in Civil Engineering and Master of Engineering in Roads and Transport Engineering. She has over ten year's work experience in roads and transport engineering. Maria has undertaken many Traffic and Transportation Assessments ("TTA") and EIAR Traffic Chapters for various developments including environmental projects, waste management facilities and energy projects.

13.4.2. Report Format

This update to the original EIS includes a review of any changes to the original EIS chapter, a summary of conclusions of original chapter in EIS, an overview of additional policy of relevance, an Assessment of the validity of earlier conclusions or any necessary amendments to same, cumulative impact assessment and methodology, followed by a conclusion.

13.4.3. Review of any material changes to relevant chapter in original EIS

Chapter 13.4 of the EIS submitted in 2014 outlines the potential impacts of the proposed development on the surrounding road network in the vicinity of the Galway Port.

The aim of the traffic modelling process was to establish existing traffic patterns and traffic flows on Galway City's road network and to derive traffic flows for the proposed Galway Harbour Extension.

The traffic forecasts were used for the assessment of junctions around the city and to inform what impact the harbour related traffic would have on the junctions and what junction improvements may be necessary.

In order to determine the magnitude of the existing traffic flows, the Galway City 2011 SATURN Model, prepared by MVA Consultancy on behalf of Galway City Council, was used to ensure that the full effects of both the inclusion of the proposed harbour extension, committed development and the proposed adjacent developments of the Ceannt Station Quarter and the redevelopment of the Inner Harbour Lands (reported in the EIS as Galway Harbour Village) and any necessary junction or network improvements external to the site would be determined throughout the road network.

The performance of the junctions was analysed for the critical AM peak hour (08:00 – 09:00) and PM peak hour (17:00 – 18:00). This analysis was carried out for the anticipated year

of opening of the development at the time of completion of the SATURN modelling, 2016, five years beyond this year of opening, 2021, and the design year of the development 2031, 15 years beyond the year of opening of the development in accordance with the National Road Authority ("NRA") "Traffic and Transport Assessment Guidelines" and as agreed with Galway City Council. A 'high' future year growth factors was applied to the traffic model.

The conclusion of the original Chapter is summarised in Section 13.4.4. below. There are no changes in the proposal except the lowering of the road under Lough Atalia Bridge which was completed in 2015 by Galway City Council under a Part XI / Part 8 planning process.

13.4.4. Summary of previous conclusion of chapter in original EIS

The conclusion of the original Chapter 13.4 stated the existing site access junction is expected to operate above the desired capacity. However, with the proposed upgrade to the junction to a traffic signal-controlled junction, it will operate within capacity. The traffic assessment also showed the proposed development will have minimal impact on the surrounding road network. With the combination of minor network upgrade works and the implementation of an effective mobility management strategy, the proposed harbour will not significantly impact on the surrounding road network, particularly during network peak periods.

The conclusion also 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. It is noted this has since been completed.

13.4.5. Any additional surveys, data or policy developments of relevance

This report contains updated traffic counts for Galway City that were completed in 2022. The baseline traffic count data submitted as part of an original EIS has been factored utilising the high growth rate to 2022. These results are then directly compared to the 2022 traffic counts received from Galway City Council.

In order to determine the magnitude of the existing traffic flows recent traffic count data was obtained from Galway City Council. This traffic survey was carried out by IDASO consisting of a 12-hour count on Wednesday 9th November 2022 (Refer to Appendix 13.4.1). Count information was obtained at the following junctions:

- Junction 8: N6, N56 and Lower Newcastle
- Junction 9: Browne Roundabout
- Junction 10: Kirwan Junction
- Junction 11: N6 / N17 / R336 traffic signals junction (formerly Ffont Roundabout)
- Junction 12: Morris
- Junction 13: Lynch
- Junction 15: Martin Roundabout

Annual growth indices were applied to the 2022 traffic flows to determine background traffic flows for the assessment years.

The NRA Unit 5.5 Link-Based Traffic Growth Forecasting (January 2011) presents annual growth rates for each county. This document has since been updated however these were the growth rates that were utilised in the original submission. Table 13.4-1 shows the associated high sensitivity growth rates split into Light Good Vehicles ("LGVs") and Heavy Good Vehicles ("HGVs").

Table 13.4-1 High Growth Rates

County	2006-2025		2026-2040	
Galway	LGV	HGV	LGV	HGV
	1.022	1.017	1.017	1.006

13.4.6. Assessment of validity of earlier conclusions or any necessary amendments to same

In order to determine the validity of the 2011 model traffic growth projections, an examination of the traffic flows was carried out on the following Junctions:

- Junction 8: N6, N56 and Lower Newcastle
- Junction 9: Browne Roundabout
- Junction 10: Kirwan Roundabout
- Junction 11: N6 / N17 / R336 traffic signals junction (formerly Ffont Roundabout)
- Junction 12: Morris
- Junction 13: Lynch
- Junction 15: Martin Roundabout

The Galway City Council 2010 count data (Refer to Appendix 13.4.2) that was used for the 2011 SATURN model is shown in Table 13.4-2. The 2010 count data was factored up using the NRA high growth rate to 2022. A percentage difference was then calculated in order to determine if the growth rates were as predicted.

Table 13.4-2: Comparison of Count Data from original EIS and 2022 Data

	2010 Survey Count Data Results	2022 Forecasted From 2010 Data	2022 Survey Count Data Results	Difference between 2010 counts and 2022 counts
	AADT	AADT	AADT	%
Junction 8: N6, N56 and Lower Newcastle	42123	54571	42937	-27%
Junction 9: Browne Roundabout	36621	47438	39581	-20%
Junction 10: Kirwan Roundabout	46963	60818	37124	-64%
Junction 11: Ffont	51680	66913	41668	-61%
Junction 12: Morris	46864	66672	40537	-64%
Junction 13: Lynch	46685	60459	46635	-30%
Junction 15: Martin Roundabout	25549	33076	22292	-48%

The 2022 factored count data compared with the actual observed flows from the November 2022 traffic count difference varies between -20% and -64%. The 2010 factored up with the high growth rate shows a higher Annual Average Daily Traffic (AADT) than the observed 2022 flows. The high growth rates utilised shows 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.

The analysis contained within this EIS is considered conservative and robust as a number of differences have come about since the preparation of the original EIS. The differences include:

- Junction 10 previously Kirwan Roundabout has since been upgraded to a signalised junction.
- Junction 13 previously Lynch Roundabout has since been upgraded to a signalised junction.

13.4.7. Cumulative Impact Assessment

Chapter 13.4 of the EIS submitted in 2014 took into account THE cumulative impacts of other major developments in Galway City in the Traffic Assessment. There were four projects where the generated traffic proposed as part of these developments had been incorporated in the SATURN model utilised in the chapter:

- Galway Shopping Centre (Planning Ref: 05/33, granted permission by An Bord Pleanála in 2009);
- Crown Site Development (Planning Ref: 06/223, E.O.D. on Planning Permission Ref: 12/277);
- Galway Ceannt Station redevelopment (increase in platforms in the station from two to five)
- Galway Harbour Village Development as it was named at the time of the original Chapter. This project is now known as the Inner Harbour Regeneration Project as described further below.

Since the original submission, three of the four projects listed above have progressed:

- Galway Shopping Centre planning permission has expired and the applicant did not submit a new planning application.
- Crown Site Development is currently under construction.
- Galway Ceannt Station is currently under construction and is expected to be substantially complete by Q2 2026.
- The Galway Harbour Village Development is now known as the Inner Harbour Regeneration Project. It relates to the potential development of 17 acres of land situated at the Inner Harbour Lands surrounding the existing gated Galway Docks and to the East towards Lough Atalia Bridge and Lough Atalia Channel. A vision document has been prepared in relation to this project and was released to the public in May 2021. The vision is underpinned by a Planning Framework. The Inner Harbour Regeneration Site is referenced in Section 10.6 of the Galway City Development Plan 2023 - 2029 and a Masterplan is pending for the entire site. The Land Development Agency ("LDA") and Galway Harbour Company are also working on a more detailed Masterplan for an initial phase of the overall site. Therefore, the submission of the planning application(s) still awaits.

N6 Galway City Outer Bypass ("GCOB") (since renamed as Galway City Ring Road) was also reviewed in the original submission which, at the time, was expected to be submitted for a revised application to An Bord Pleanála. In order to ensure robustness of the report, the analysis contained within the chapter had not accounted for the construction of the GCOB.

Since the original submission, An Bord Pleanála approved the N6 Galway City Ring Road (December 2021). However, the decision of An Bord Pleanála granting approval for the N6 Galway City Ring Road has been overturned by the High Court.

The traffic methodology used in the original submission remains valid as it did not take the Galway City Ring Road into account.

A comprehensive review was undertaken as part of this update in order to determine if any cumulative impact of other major developments should be taken into account. Two additional projects were reviewed which are planned for Galway City.

- BusConnects Galway Cross City Link. This project was submitted with An Bord Pleanála however has not been granted permission. The scheme aims to promote and encourage sustainable transport and a mode shift to public transport. Therefore it is expected the scheme will have a positive impact on the traffic volumes in Galway City.
- Dexcom Stadium (previously Sportsgroud ground), College Road is currently under construction and is expected to be substantially complete by 2026

In summary, three of the four projects which were incorporated into the original submission have progressed and will not result in a cumulative impact. The Inner Harbour Regeneration is pending a Masterplan and was accounted for in the original submission. The updated cumulative list highlighted two other potential major projects (BusConnects and Dexcom stadium) which may result in changes. However, as discussed above, it is expected neither project will have a significant impact. Therefore, it is considered that the original EIS traffic model is robust and incorporates a conservative assessment.

13.4.8. Conclusion

The EIS Addendum has comprehensively reviewed the original EIS and concurs with its findings that the proposed development will have minimal impact on the surrounding road network.

The original 2010 count data was forecasted to 2022 using the NRA Unit 5.5 Link-Based Traffic Growth Forecasting (January 2011) in order to compare to new survey date from 2022.

The results show the actual observed flows from the November 2022 traffic count difference varies between -20% and -64% below the figures modelled as of the time of the submission of the EIS in 2014. The 2010 counts factored up with the high growth rate shows a higher AADT than the observed 2022 flows.

Therefore it is considered that the original EIS traffic model is robust in projecting a higher baseline of traffic than observed.

In conclusion, following review of the original EIS and updated traffic counts it has been have determined that a robust assessment was carried out.