

Transport Infrastructure Ireland

National Road & Greenway Network Indicators **2024**

June 2025



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Introduction

Transport Infrastructure Ireland's purpose is to provide sustainable transport infrastructure and services, delivering a better quality of life, supporting economic growth and respecting the environment.

Transport Infrastructure Ireland (TII) has overall responsibility for the planning, supervision, safety, maintenance and operations of the National Roads Network and related facilities such as greenways.

Efficient use of the National Roads Network provides a variety of benefits to all road users (drivers, passengers, road freight) in the form of shorter journey times, reduced traffic congestion and lower vehicle operating costs. Use of active travel modes along greenways contributes to the shift to sustainable transport.

When the National Roads Network and greenways perform to their highest standard, users enjoy safe and more sustainable journeys with predictable travel times.

This report analyses the performance and usage of the network and highlights key trends to the public.



A: Key Trends Summary

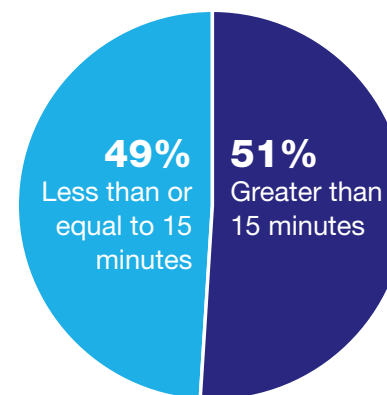
1. Road Network - Travel Hotspots

Trip Duration on National and Regional Roads - AM Peak

M50 Dublin area:
100,000 or more vehicles
per day hotspot:

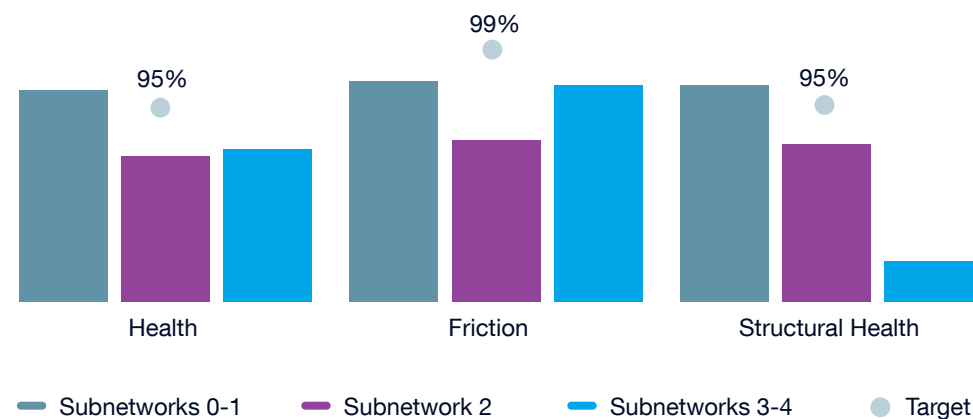
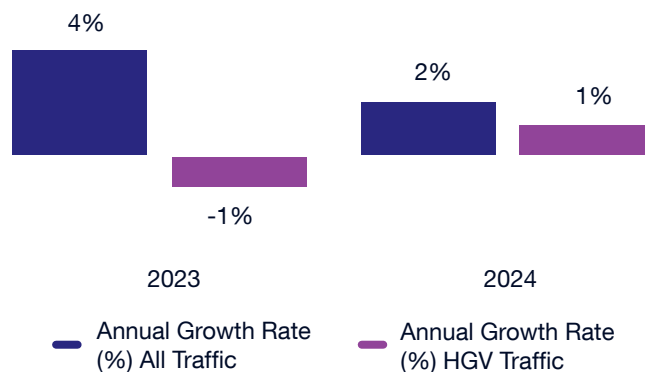


N40 Cork area:
50,000 or more vehicles per
day hotspot:



2. Economic - Traffic Growth 2023-2024

3. Road Condition - Pavement Surface



A: Key Trends Summary (Cont.)

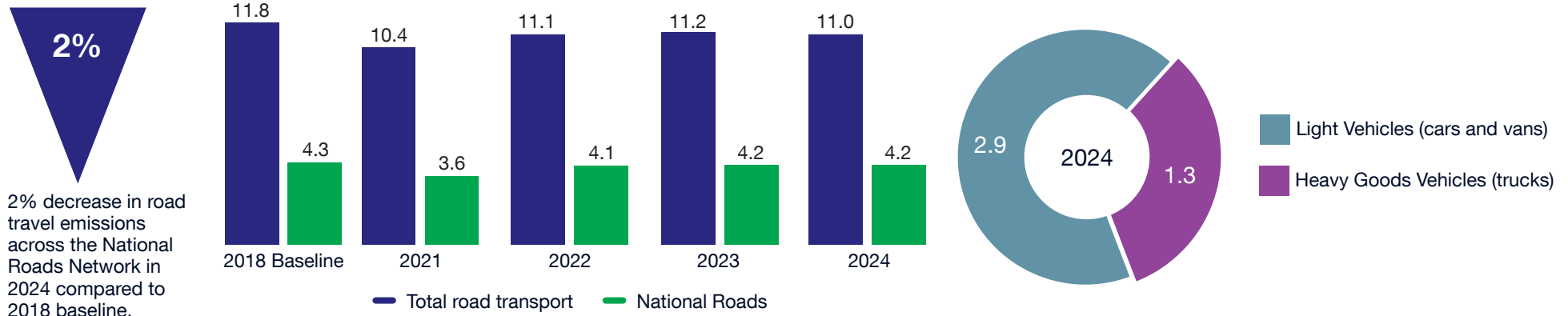
4. Safety - Fatal and Serious Injury Collisions

Total Fatalities and Seriously Injured

In 2024, 311 Fatal and Serious Injury Collisions resulted in 70 fatalities and 324 serious injuries on the National Roads Network. This represents a -3% decrease from 2023.



5. Emissions – Annual Road Travel Emissions on National Roads per Vehicle Class (mega tonnes CO₂e)



B: News & Information

How TII Shares News With Road Users

TII's traffic count database includes interactive features.

The site offers enhanced reporting facilities and allows users to create their own dashboard where they can personalise reports.

There are also two global reports available for download: a site-wide monthly summary report and Annual Average Daily Traffic (AADT) and a Heavy Goods Vehicle (HVG) percentage report.

The data is available at trafficdata.tii.ie

Mobility and Outdoor Value Estimates

In 2024, TII in partnership with Fáilte Ireland launched a new pilot research project called Mobility and Outdoor Values Estimates (MOVE). This initiative aims to gather valuable data and insights on Ireland's outdoor active travel infrastructure, with a specific focus on greenways.

A series of seasonal intercept surveys and counts have commenced and will continue throughout 2025. These surveys are helping to paint a clearer picture of greenway users and their preferences. The on-going research can be explored at uk.planengage.com/tii/page/Power-BI

Updates to the Road Emissions Model

In 2024, TII updated the Road Emissions Model (REM). The aim of the update was to improve the model's accuracy, through utilising up-to-date inputs and ensuring consistency with recognised international emissions modelling tools.

The updated REM improves TII's ability to assess various road emissions scenarios more accurately. The model also enables TII to make evidence-based decisions on interventions and policies to minimise road transport emissions and mitigate related air quality and climate impacts.

Traffic Monitoring and Assistance

TII has over 350 traffic monitoring units around the country that are used to monitor traffic volume and plan future interventions.

A **Motorway Service Helpline** is available to assist road users in difficulty on a Motorway. All calls are directed through the Motorway Traffic Control Centre.



T: 0818-715-100 or
E: info@mtcc.ie

Further information and live traffic updates are available at www.tiitraffic.ie

News & Information

Safety Cameras on the National Roads Network

To achieve national and EU road safety targets Ireland must innovate and transform its approach to manage speeds on our networks. Implementation of speed cameras and average speed camera sections represents a step change in our approach to road safety and is a move towards a Safe Systems Approach. TII and local authorities have supported An Garda Síochána in the installation of average speed cameras at 3 locations on the National Roads Network, N2 (Co. Meath), N3 (Co. Cavan) and N5 (Co. Mayo). In addition, 7 fixed speed cameras were installed on the N13 (Co. Donegal), N17 (Co. Mayo), N22 (Co. Cork), N25 (Co. Kilkenny), N59 (Co. Galway), N69 (Co. Limerick) and N80 (Co. Carlow).

Freight on the National Roads Network

The National Roads Network connects all major ports, airports and industrial areas, facilitating the efficient transport of goods across the country. In 2023, goods vehicles accounted for approximately 19%* of all vehicle kilometres travelled by road in Ireland, with 80-90%** of all goods vehicle kilometres carried on the National Road Network.

TII continues to invest in the planning, design and delivery of improved road connections to major ports such as Ringaskiddy Port (M28 Cork to Ringaskiddy Port Project), Shannon-Foynes Port (Foynes to Limerick Road Project) and Rosslare Europort (N25 Rosslare Europort Access Road and N11 / N25 Oilgate to Rosslare Harbour Scheme). In addition, TII are progressing the N19 Shannon Airport Access Road Improvement Scheme, which will enhance access to Shannon Airport, including for buses and active travel.

*CSO Road Traffic Volumes

**TII National Transport Model

1.

Road Network

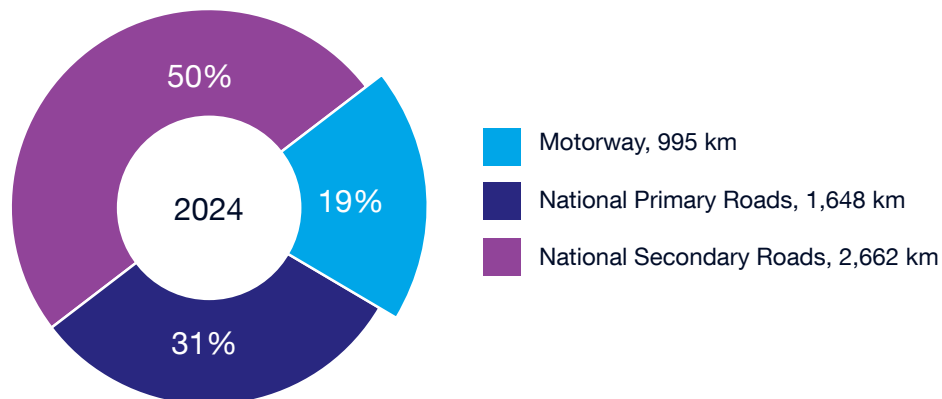


A1: Extent of National Roads Network by Classification

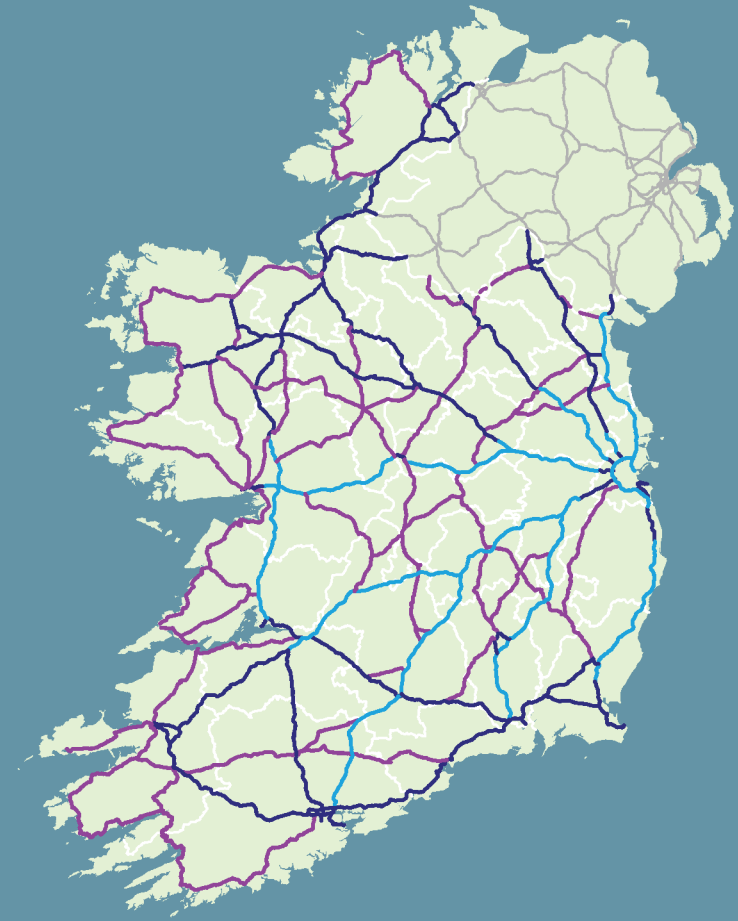
There are approximately 5,300 km of National Roads in Ireland. The length of the network fluctuates every year due to road reclassification, realignments to existing roads and the completion of new roads.

The network encompasses all National Primary Roads, including Motorways, and National Secondary Roads.

Extent of National Roads Network by Classification (2024)



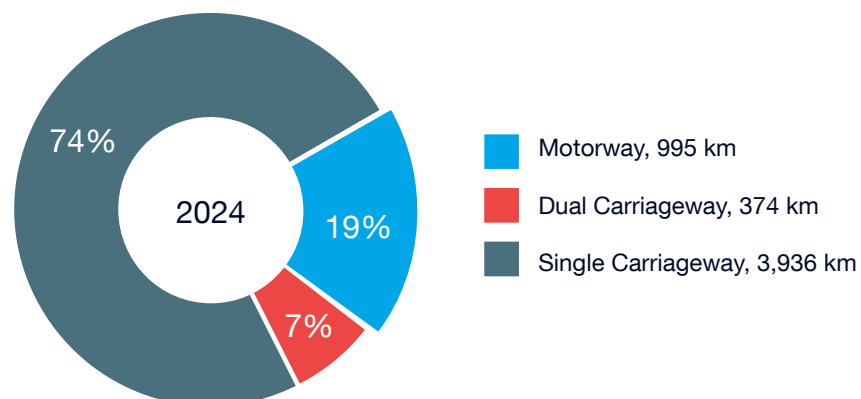
Overview of National Roads Network by Classification (2024)



A2: Extent of National Roads Network by Carriageway Type

The National Roads Network is also classified by Carriageway Type: Motorways, Dual, and Single Carriageways.

Extent of National Roads Network by Carriageway Type (2024)



Overview of National Roads Network by Carriageway Type (2024)

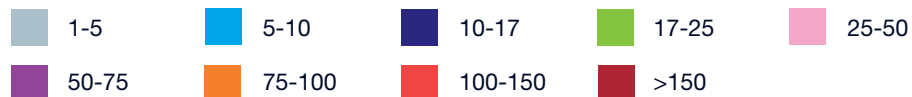


B1: Level of Usage of the National Roads Network

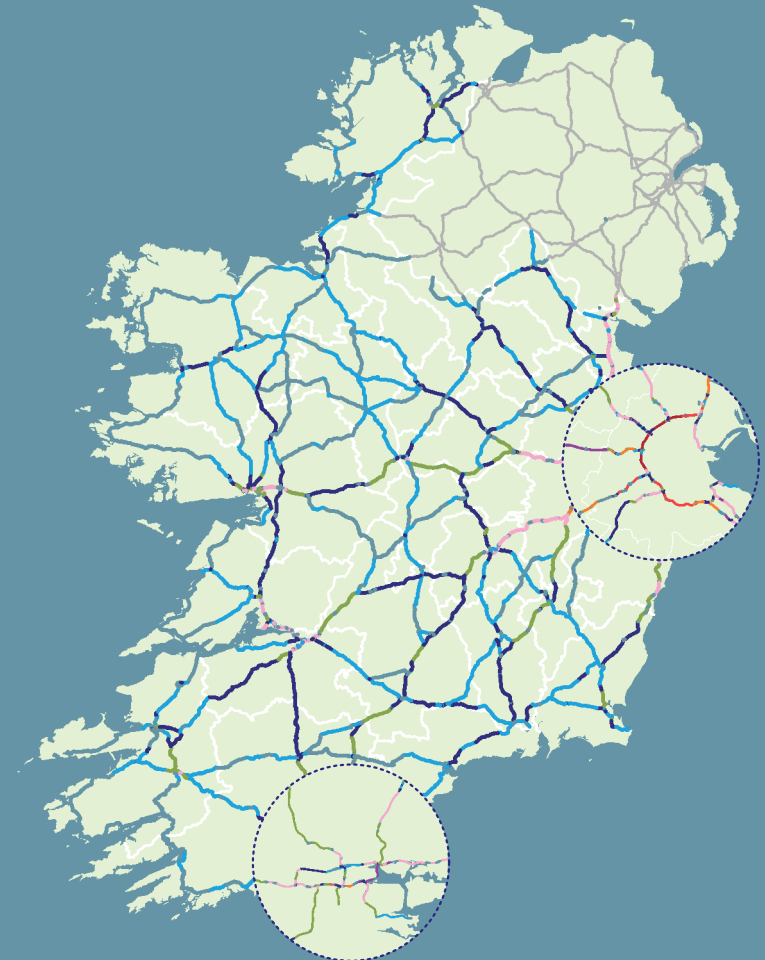
Traffic levels in 2024 increased from 2023, with AADT levels reaching over 150,000 per day.

- In 2024, the M50 experienced the highest levels of traffic across the country.
- In 2024, traffic levels on the N40 increased from 2023 levels.

AADT (thousands per day)



Level of Usage of the National Roads Network
Measured by Annual Average Daily Traffic (AADT) (2024)

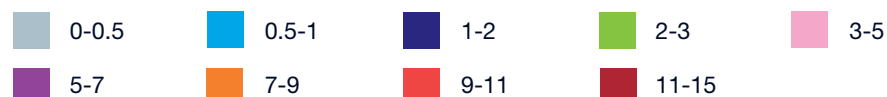


B2: Freight Movements on the National Roads Network

The National Roads Network is used by large numbers of freight vehicles (i.e. vehicles that carry and deliver goods). Ireland's economy is dependent on the efficient movement of goods, both domestically and internationally.

- The M50, the N7, the M7, and Dublin radial routes carried the highest levels of HGV traffic in 2024.

AADT (thousands per day)



Level of Usage of the National Roads Network by HGV
Measured by Annual Average Daily Traffic (AADT) (2024)

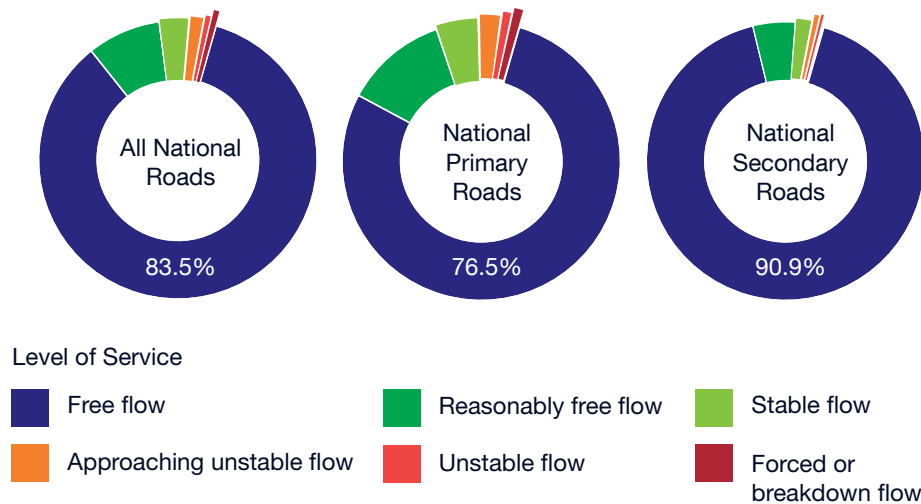


C1: Level of Service: Morning Rush-Hour

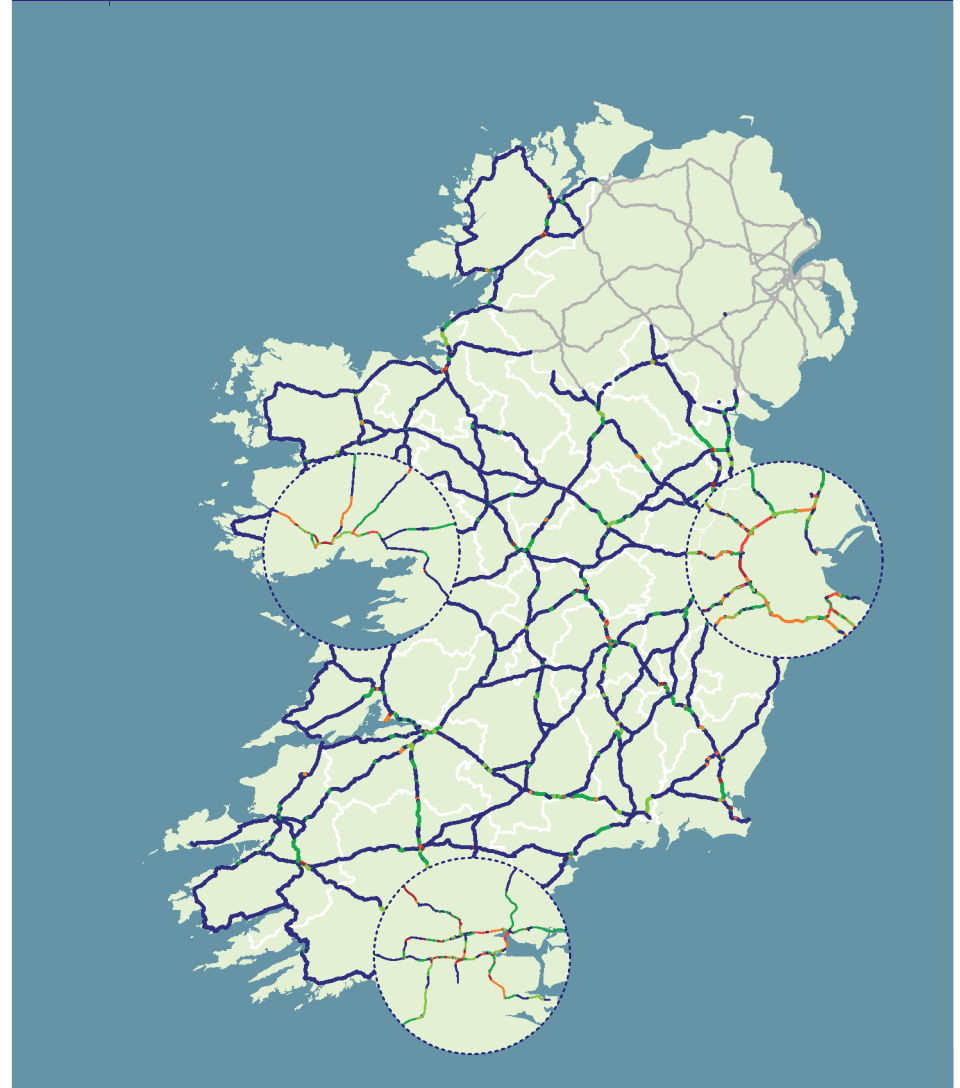
Level of service (LOS) is a measurement used to evaluate road performance in terms of traffic flow and speed. It considers factors such as vehicle speed, mobility and safety.

For further information see: Transport Research and Information Note: A Study of Lane Capacity, online at www.tii.ie/tii-library/strategic-planning

Levels of Service by Road Type (2024)



Level of Service Provided by the National Roads Network During Morning Rush-Hour (2024)



D1: M50 Performance Summary

2024 Key Network Statistics

The M50 is the most heavily used road in the country with over 150,000 vehicles travelling several sections on an average day.

**14,267**

Highest Hourly Flow recorded on the N3 - N2 section between 1pm and 2pm on 8th March

**193,774**

Highest Daily Flow recorded on M50 between the N3 - N2

**Thursday**

Busiest Typical Day

**1.70 billion**

Vehicle km travelled which represents a 2% increase on 2023

**17:00 - 18:00**

Peak Incident Time

**2,079**

Total No. of Incidents of which **676** were Traffic Collisions

**14 minutes**

Average Response Time to Incidents

**32 minutes**

Median Duration of Incidents

M50 Annual Average Daily Traffic and Percent Heavy Goods Vehicles (2024)

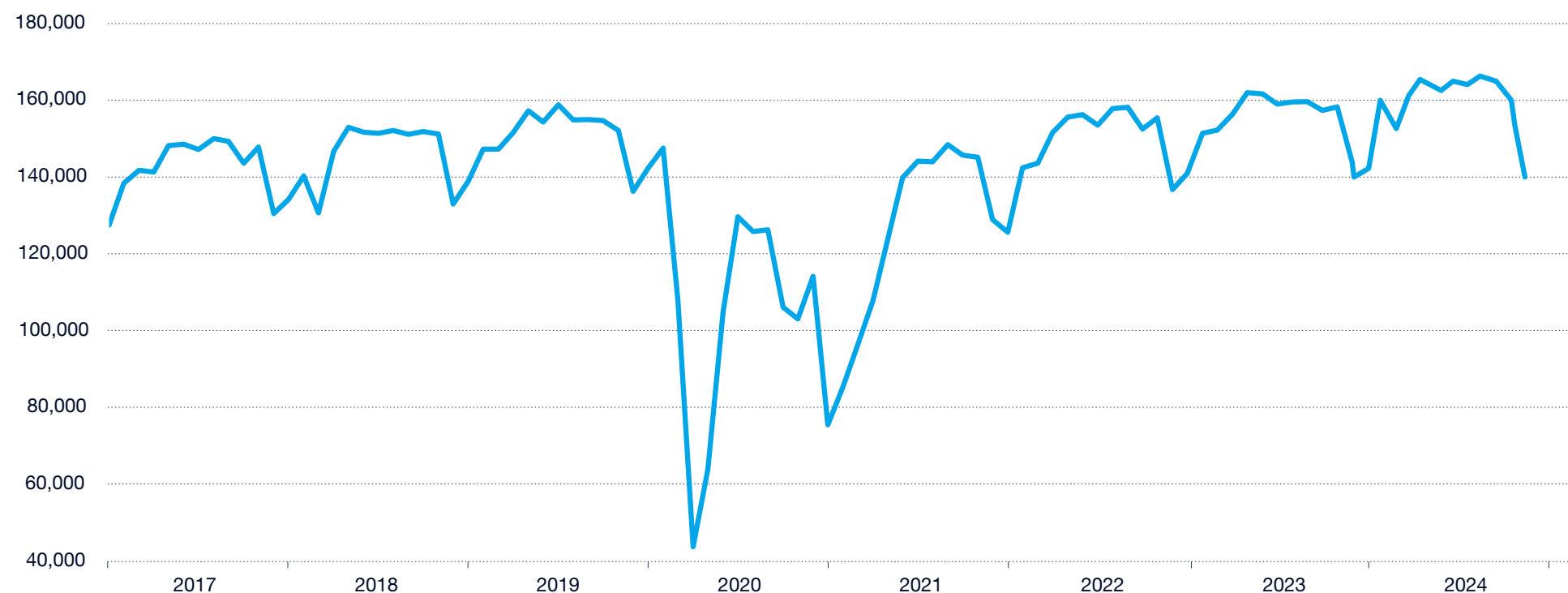


* This figure represents non-tollable traffic volumes at the Dublin Tunnel which includes HGVs (26.1%) and buses (8.6%). Buses that are exempt from tolls have more than 25 seats.

** This figure was estimated due to missing data at this location.

D2: M50 Performance Summary

Monthly Average Daily Traffic (MADT) on the M50 (2017-2024)



Monthly average daily traffic measures the average daily traffic over the period of a month. This is shown above at the location of the M50 eflow toll bridge (between J6 & J7), for each month between 2017 and 2024.

M50 Level of Service

Typical Working Day in 2024



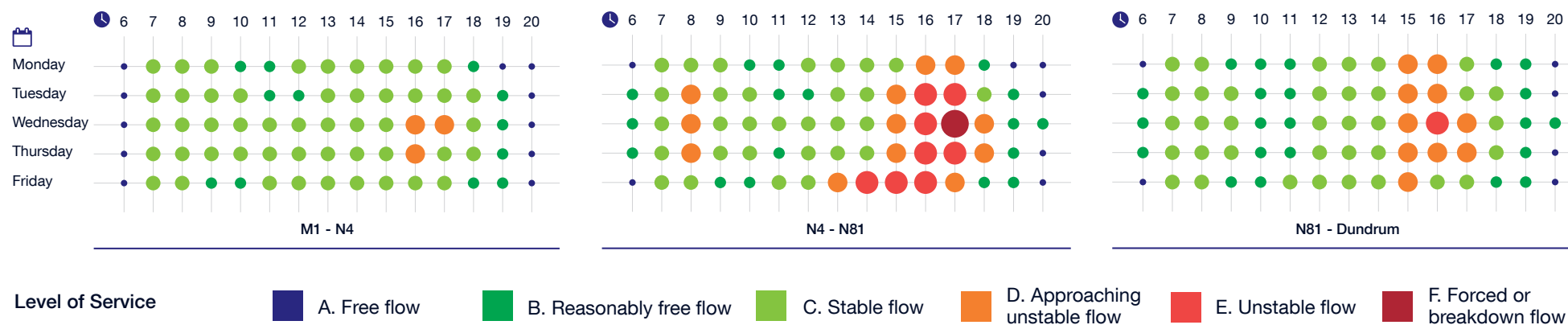
Average hourly levels of service for 2024 were analysed from TII Traffic Monitoring Units to give an indication of travel congestion and typical working days. A typical working day in 2024 refers to all weekdays, excluding school holidays and public holidays.

D3: Daily Variations in M50 Congestion

Traditionally, the performance of the M50 is examined for a typical working day, as presented on Page 18. Detailed data provides further insights into variations throughout the working week.

- **Northbound:** The heaviest congestion typically occurs on Wednesday evenings between the N4 (J7) and N81 (J11), with peak traffic observed from 3pm to 7pm. On Fridays, congestion on this section occurs between 1pm and 6pm.

Variations in M50 Congestion Across a Typical Week: Northbound

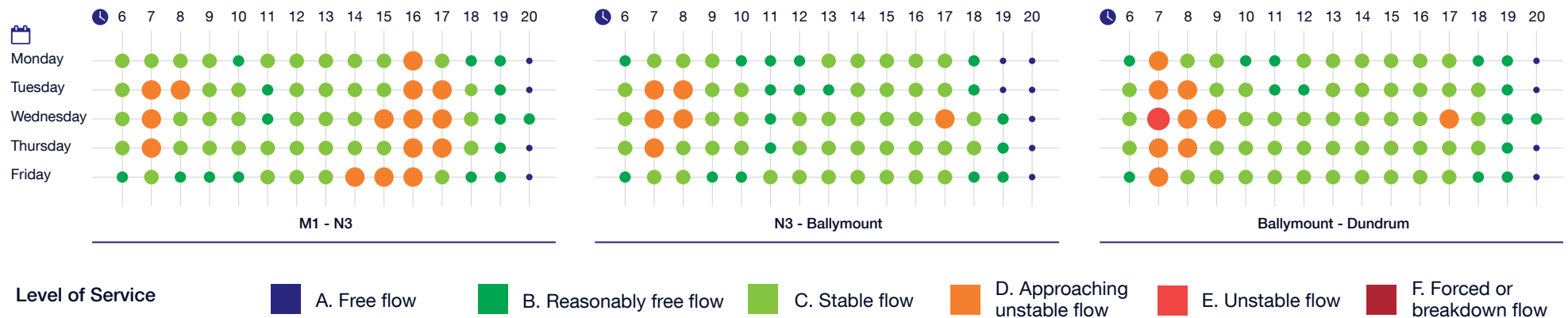


D3: Daily Variations in M50 Congestion

Traditionally, the performance of the M50 is examined for a typical working day, as presented on Page 18. Detailed data provides further insights into variations throughout the working week.

- **Southbound:** The most congested section of the M50 is between Ballymount (J10) and Dundrum (J13), with peak traffic observed on Wednesday mornings from 7am to 9am.

Variations in M50 Congestion Across a Typical Week: Southbound

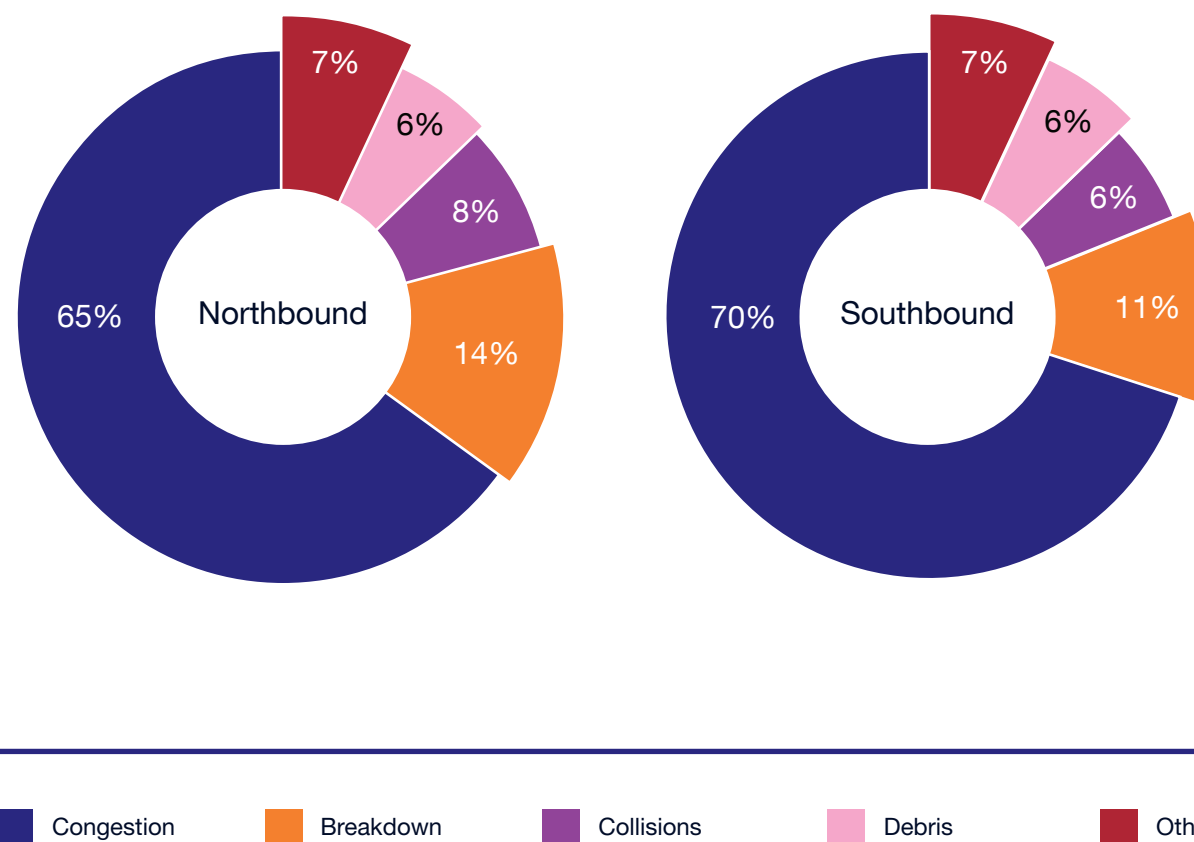


D3: Variable Speed Limits on the M50

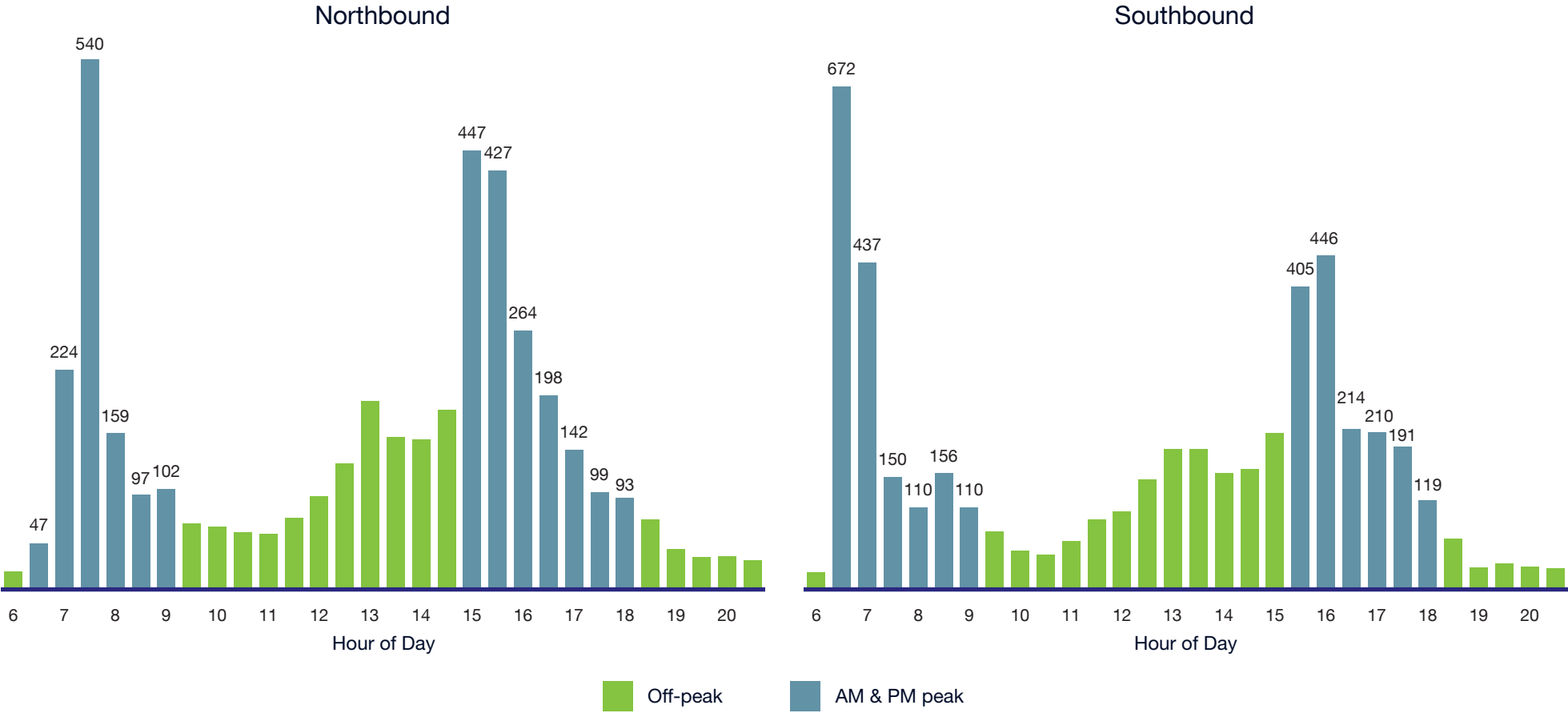
A Variable Speed Limit (VSL) system has been introduced on the M50. VSL and intelligent traffic management systems enhance safety and operational efficiency for users of the M50. This involves active management of traffic speeds during congested periods and in response to incidents.

The most common issue that resulted in speed limit reductions on the M50 in 2024 was traffic congestion. Speed limit reductions generally occurred most frequently during the busy morning and evening peak hours, varying slightly depending on direction of travel.

Reasons for Speed Limit Reduction on the M50 in 2024



Daily Profile of Speed Limit Reductions on the M50 in 2024*



*Graphs show the number of times throughout 2024 when speed limit reductions were set during specific times of the day.

D3: N40 Performance Summary

2024 Key Network Statistics

Several sections of the N40 Cork Southern Ring Road carry in excess of 80,000 vehicles on an average day.

**8,530**

Highest Hourly Flow recorded on the Togher - Sarsfield section between 4pm and 5pm on 3rd October

**09:00 - 10:00**

Peak Incident Time

**104,281**

Highest Daily Flow recorded on the Kinsale Rd - Douglas section

**304**

Total No. of Incidents of which **99** were Traffic Collisions

**Thursday**

Busiest Typical Day

**17 minutes**

Average Response Time

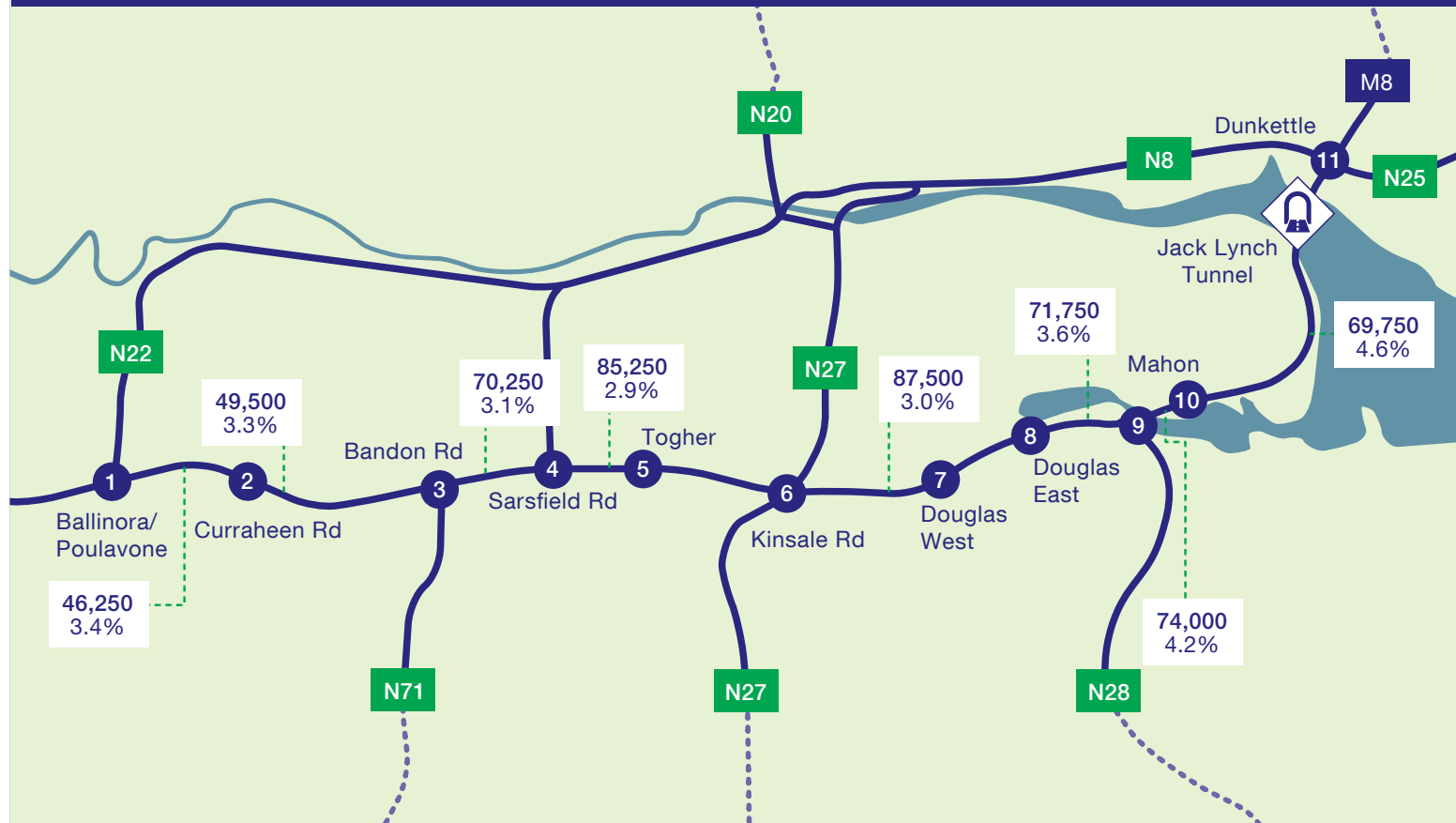
**0.37 billion**

Vehicle km travelled which represents a 5% increase on 2023

**46 minutes**

Median Duration of Incidents

N40 Annual Average Daily Traffic and Percent Heavy Goods Vehicles (2024)



D4: N40 Operational Performance

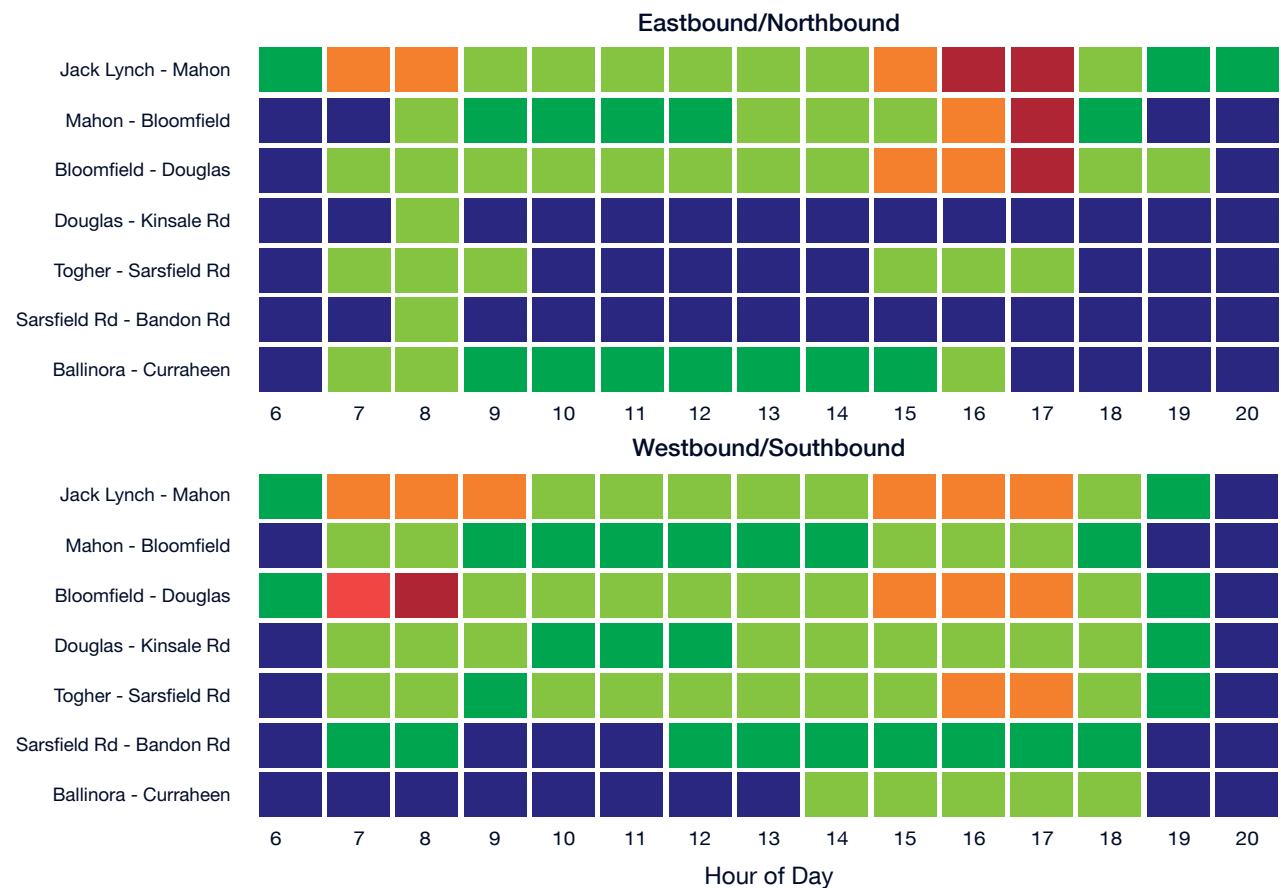
Monthly Average Daily Traffic (MADT) on the N40 (2017-2024)



Monthly average daily traffic measures the average daily traffic over the period of a month. This is shown above at the location of the Jack Lynch Tunnel (between J10 and J11), for each month between 2017 and 2024.

N40 Level of Service

Typical Working Day in 2024



Level of Service



Average hourly levels of service for 2024 were analysed from TII Traffic Monitoring Units to give an indication of travel congestion and typical working days. A typical working day in 2024 refers to all weekdays, excluding school holidays and public holidays.

D5: Dublin Radials Performance Summary

The Dublin Radials represent some of the busiest routes in Ireland converging onto the M50 and providing access to the Greater Dublin Area. They are made up of National Primary Routes including the M1, M2, N3, N4, N7, N81 and M11.

**163,235**

Highest Daily Flow Recorded on the **M1** between the M50 and Dublin Airport

**55,526**

Highest Daily Flow Recorded on the **M2** between the M50 and Coldwinters

**94,198**

Highest Daily Flow Recorded on the **N3** between Blanchardstown and Clonsilla

**118,311**

Highest Daily Flow Recorded on the **N4** between the M50 and Liffey Valley

**131,657**

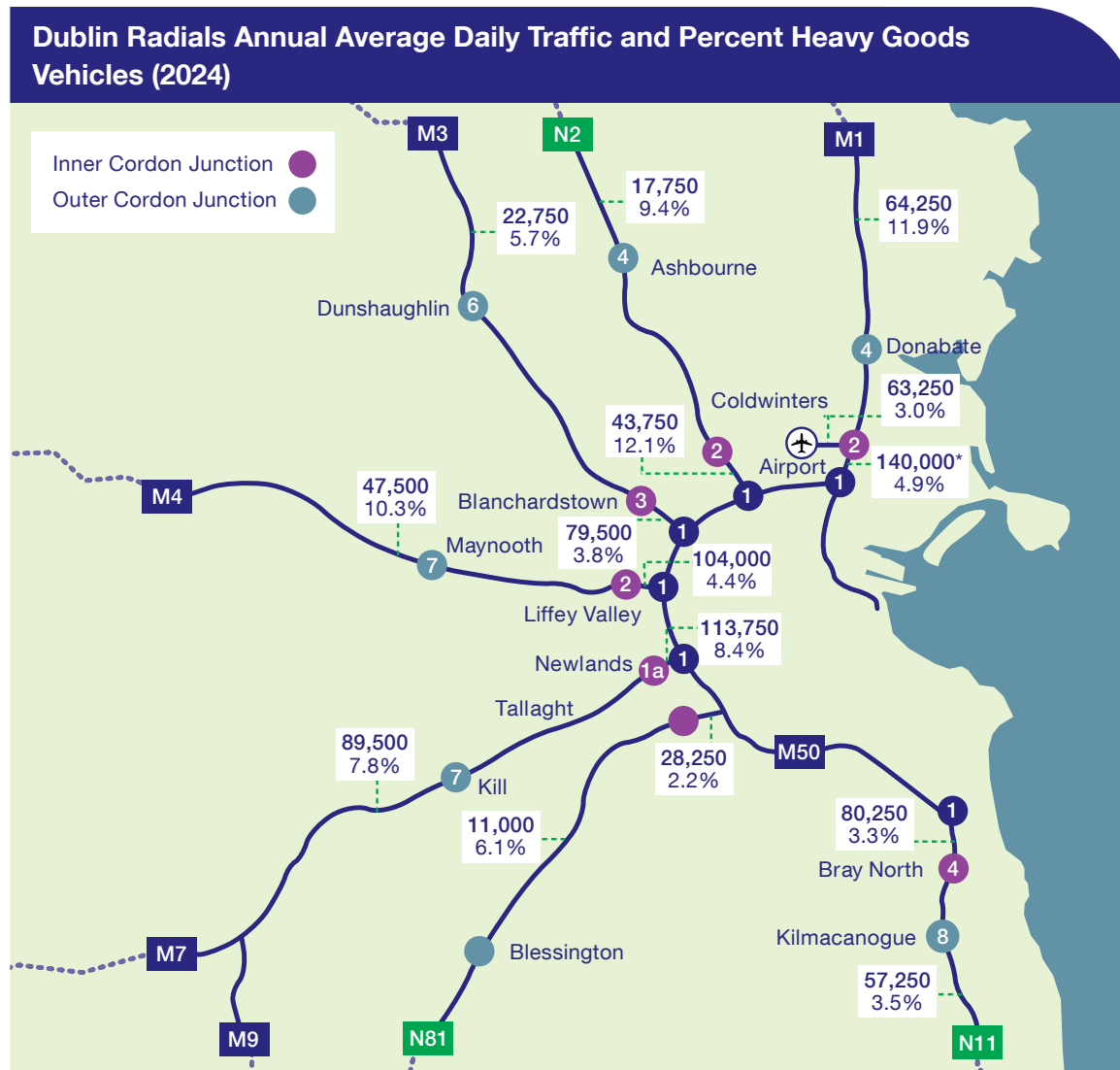
Highest Daily Flow Recorded on the **N7** between the M50 and Newlands Cross

**35,019**

Highest Daily Flow Recorded on the **N81** between the M50 and Tallaght Village

**94,050**

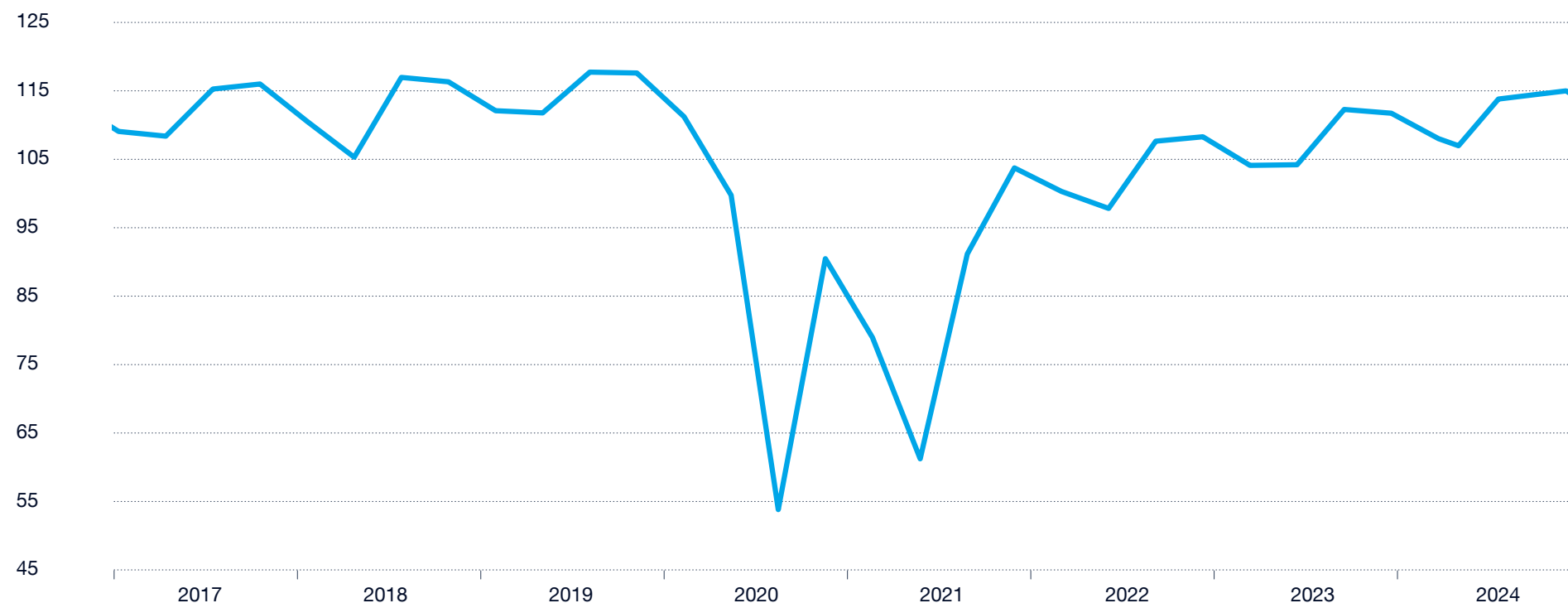
Highest Daily Flow Recorded on the **M11** between the M50 and Bray North



*This figure was estimated due to missing data at this location.

D6: Dublin Radials Performance Summary

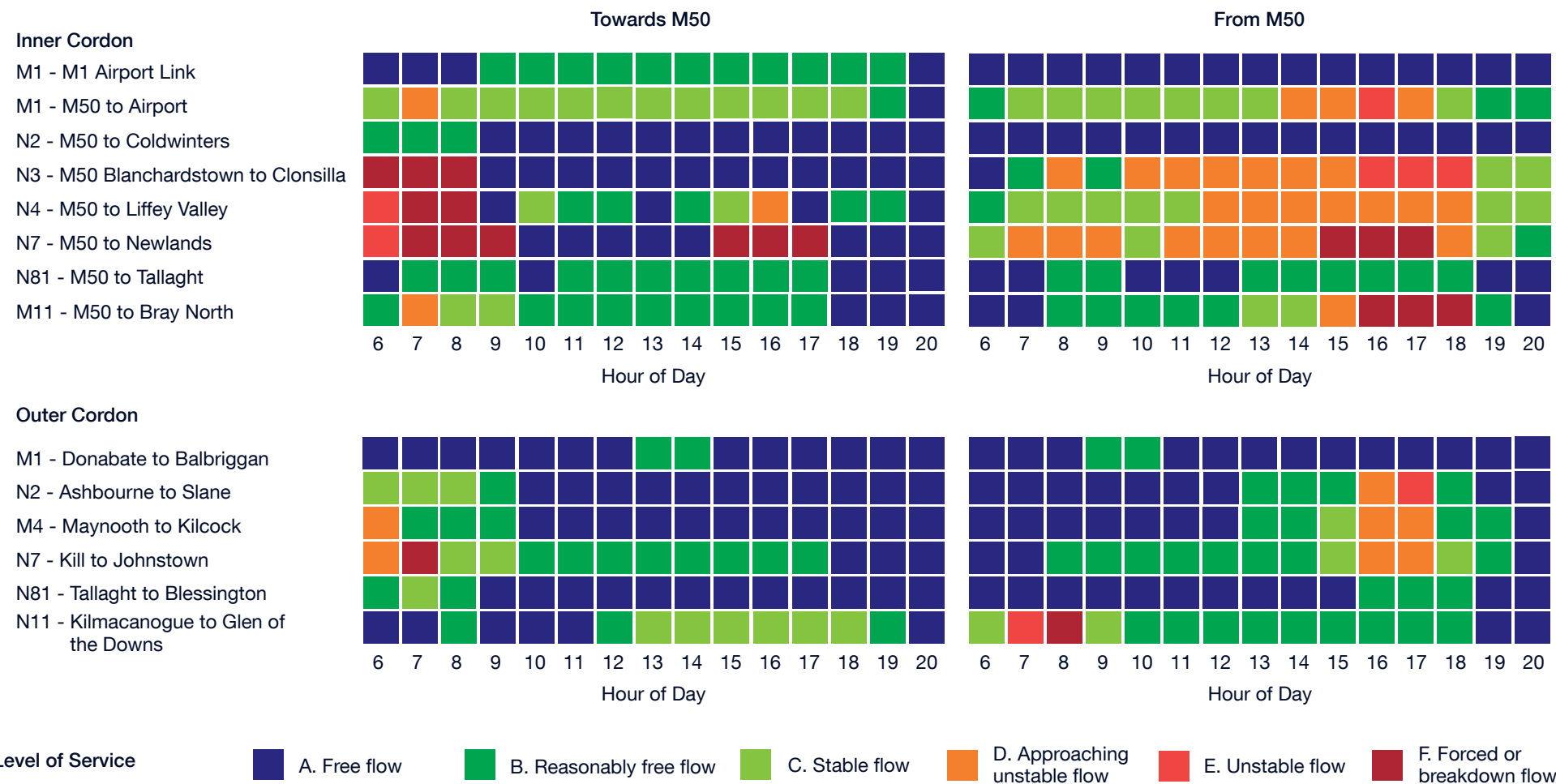
Quarterly Traffic Profile of Dublin Radials (2017-2024)
Traffic Volume Index (Base Q3 2013)



Trends in traffic volumes on the Dublin Radials are represented above as a quarterly index of aggregate traffic volumes on each route between 2017 and 2024.

Dublin Radials Level of Service

Typical Working Day in 2024



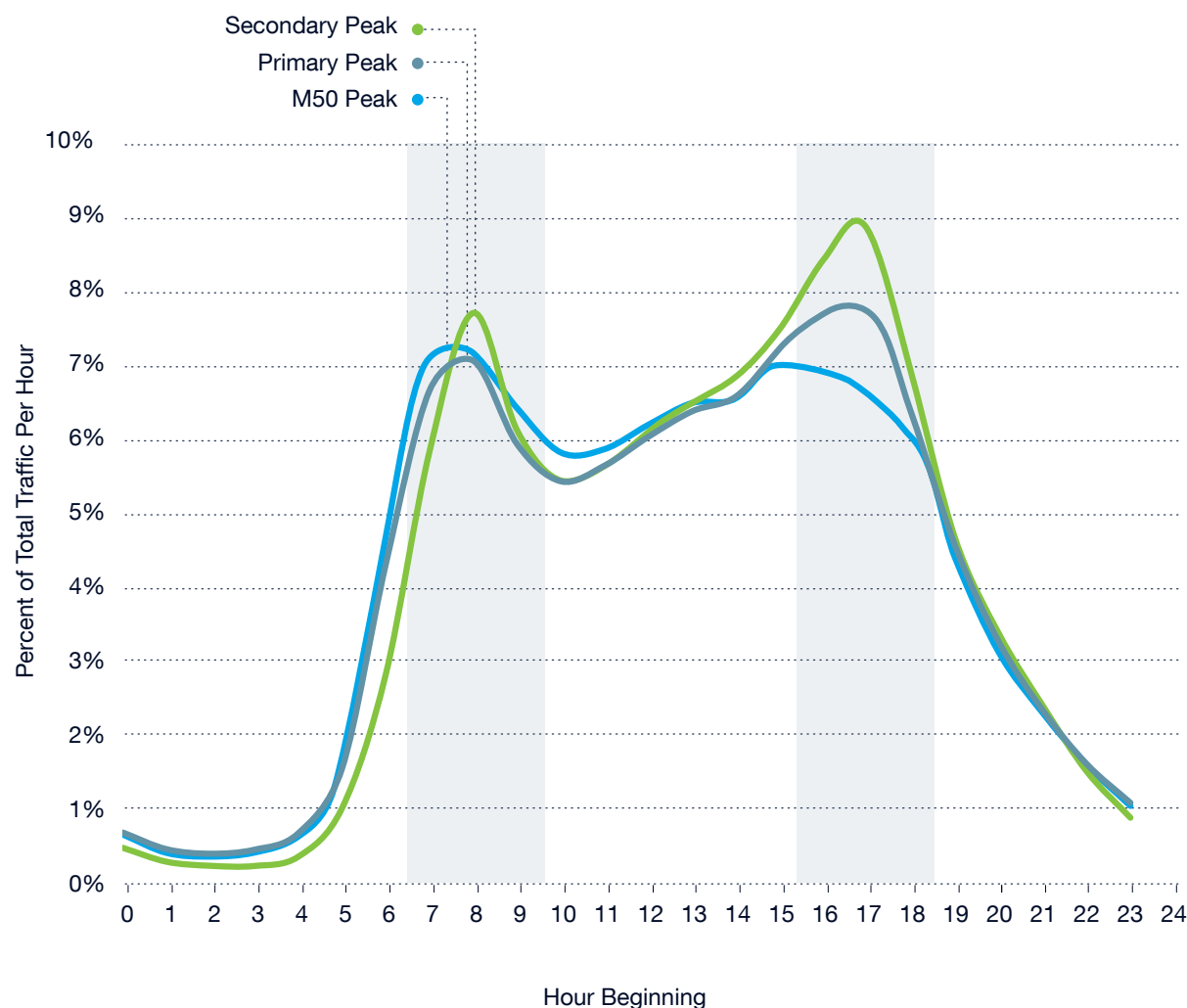
Average hourly levels of service for 2024 were analysed from TII Traffic Monitoring Units to give an indication of travel congestion and typical working days. A typical working day in 2024 refers to all weekdays, excluding school holidays and public holidays. The inner and outer cordons presented above match the locations shown on the map of the Dublin Radials on Page 28.

E: Roads Usage Over the Day

Peak periods on Ireland's National Roads are defined by the demand for travel along the network at a given time. Peak periods have a level of traffic that is usually 30-50% above off-peak levels.

- Traffic on the M50 is spreading out more throughout the day. While peaks are still visible, significant traffic flows are maintained during the inter-peak periods. The afternoon peak is starting earlier now.

Average Daily Traffic Profile and Peak Periods on the National Roads Network (2024)

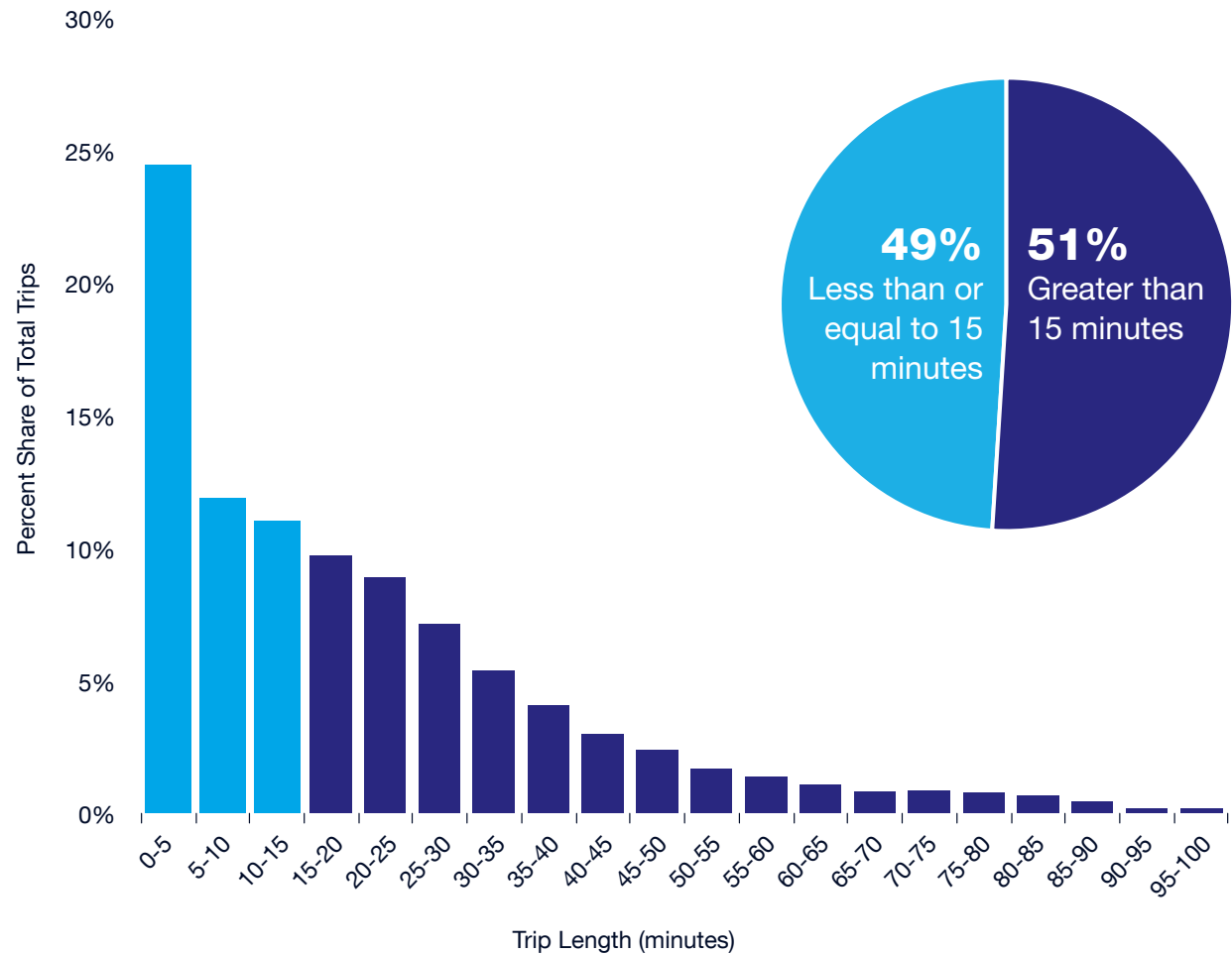


F: Trip Duration on National and Regional Roads

Across Ireland's National and Regional Roads networks, a significant portion of trips that people make are of short duration.

In total in 2024, 49% of trips were of 15 minutes duration or less. The average trip duration was 22 minutes.

Trip Duration on National and Regional Roads - Light Vehicles AM Peak



G: Annual Traffic Growth Rates

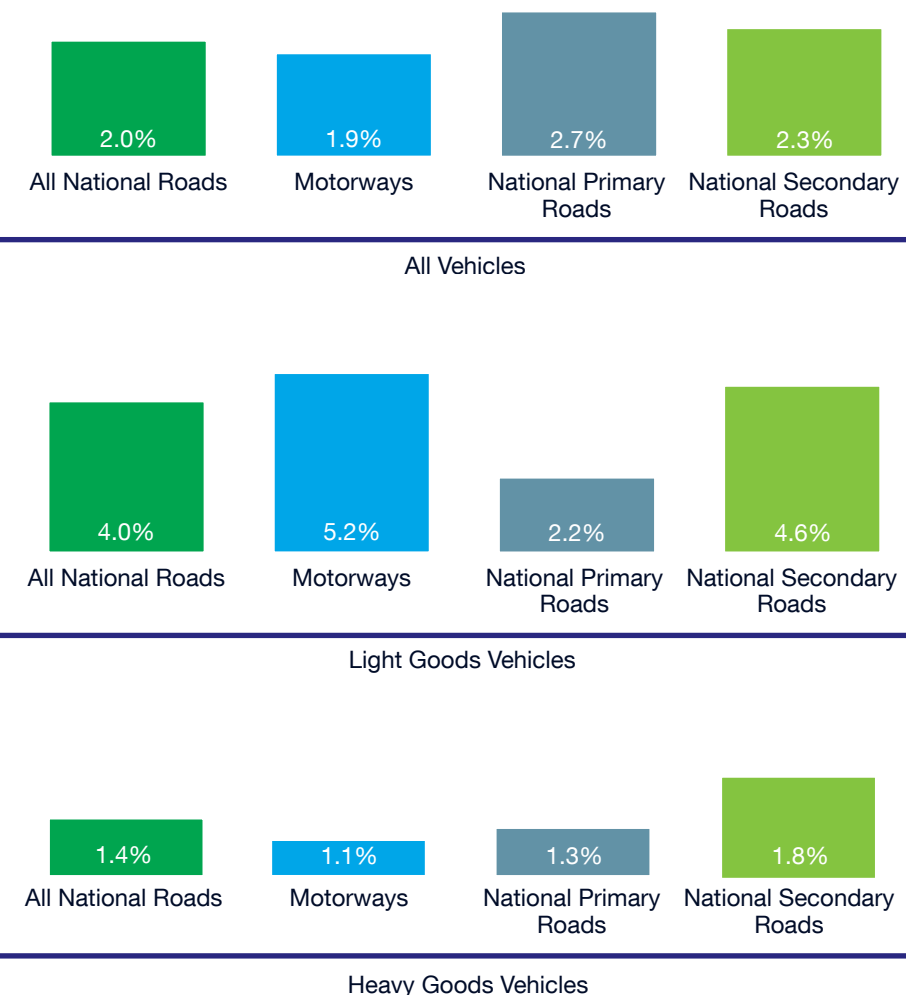
Traffic levels were up 2% across the National Roads Network in 2024 compared to 2023.

Annual traffic growth rates vary by road type and vehicle type. Roads across different regions of Ireland experienced different levels of growth throughout 2024.

Heavy Goods Vehicle* traffic increased slightly by 1.4%.

Light Goods Vehicle** traffic increased by 4%.

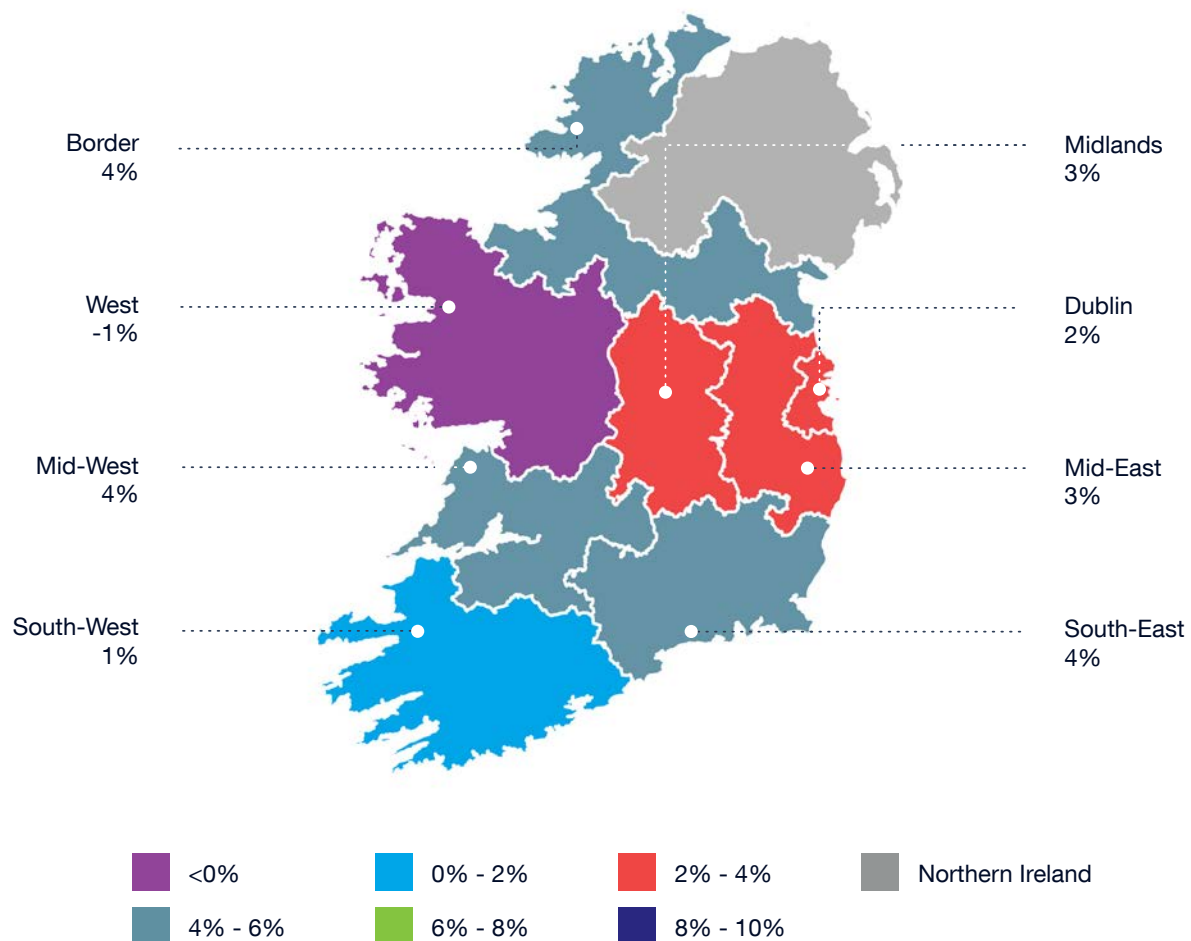
Annual Traffic Growth Rates by Road Type (2023-2024)



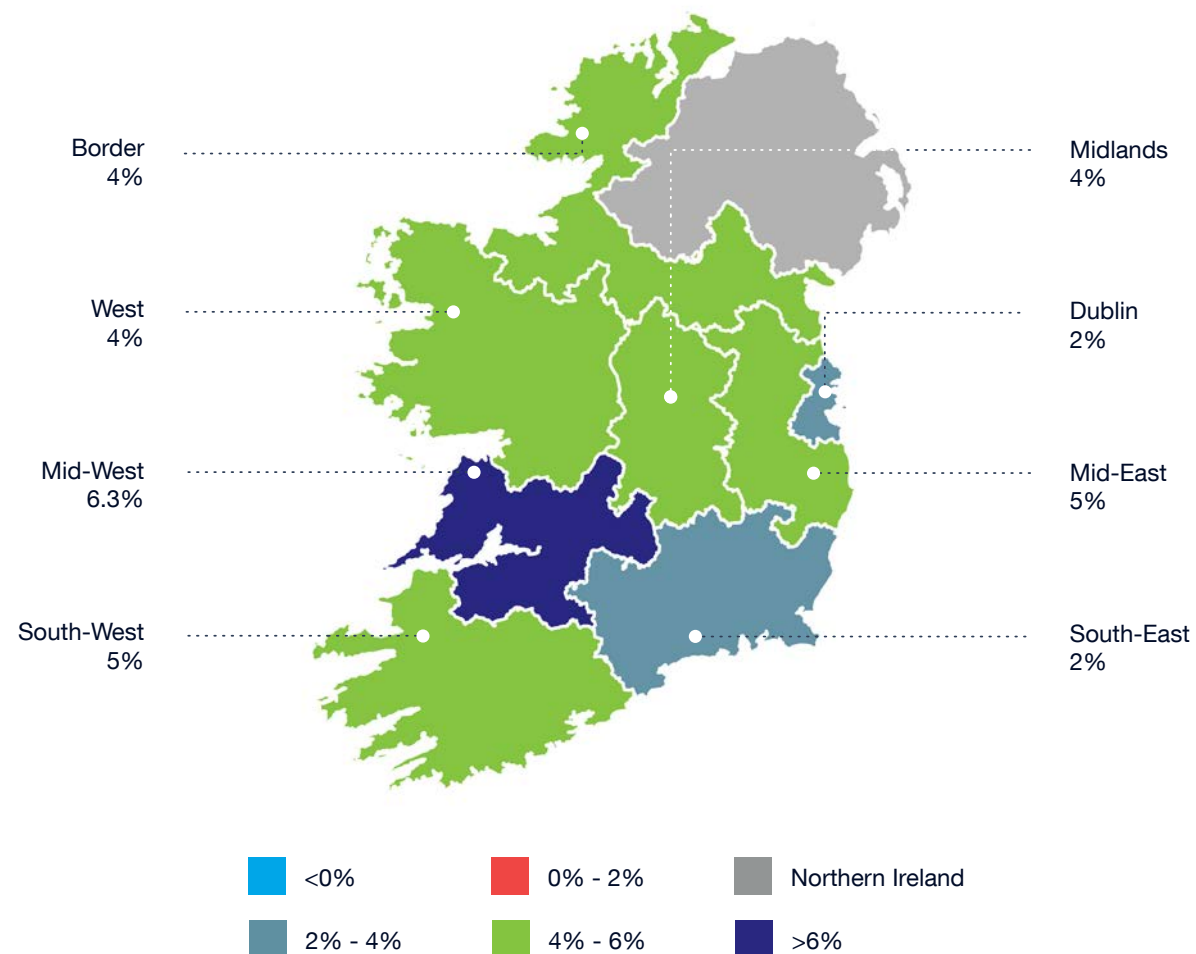
*Heavy Goods Vehicles have total weight over 3,500kg, including the cargo being transported.

**Light Goods Vehicles have total weight under 3,500kg, including the cargo being transported.

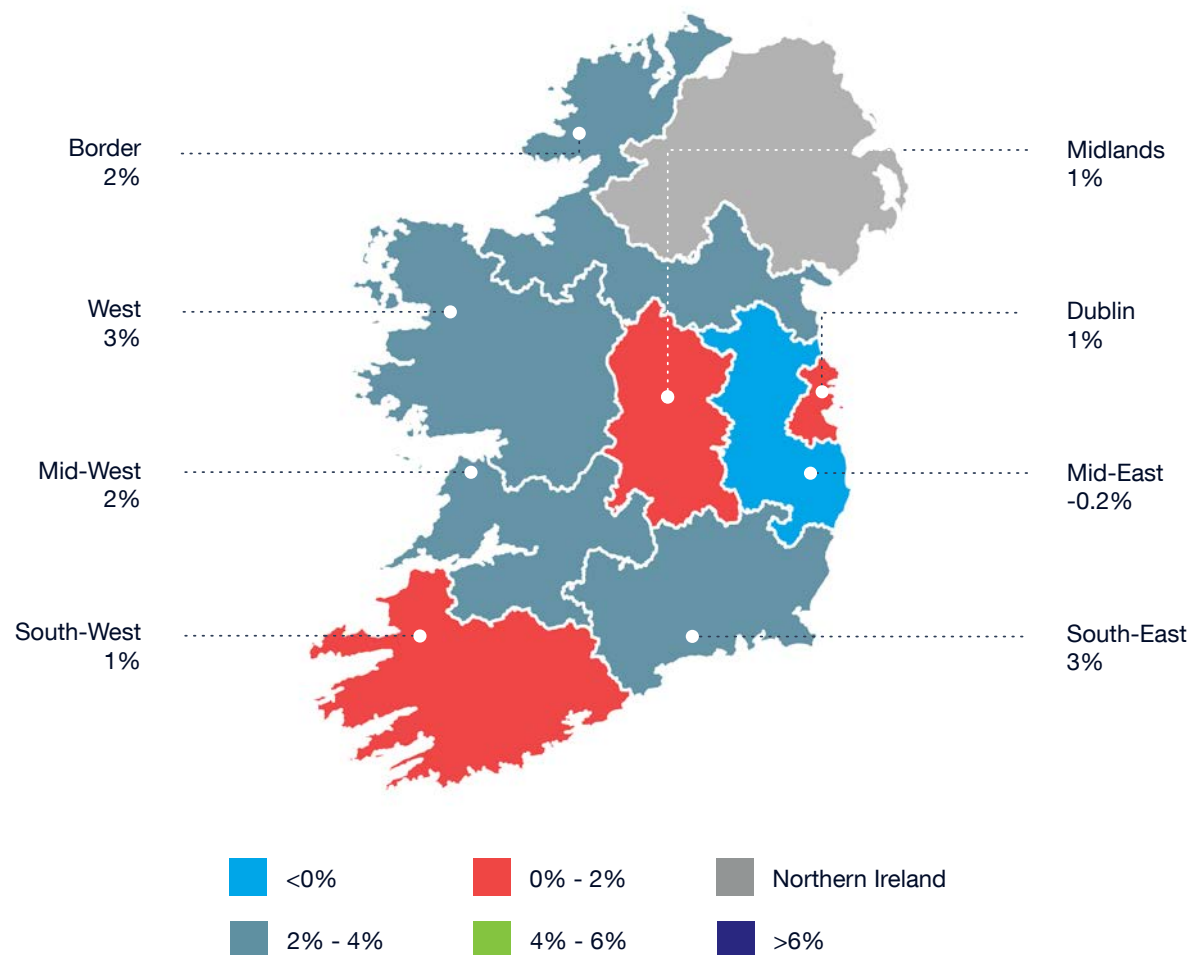
Annual Traffic Growth Rates by Region - All Vehicles (2023-2024)



Annual Traffic Growth Rates by Region - Light Goods Vehicles (2023-2024)



Annual Traffic Growth Rates by Region - Heavy Goods Vehicles (2023-2024)

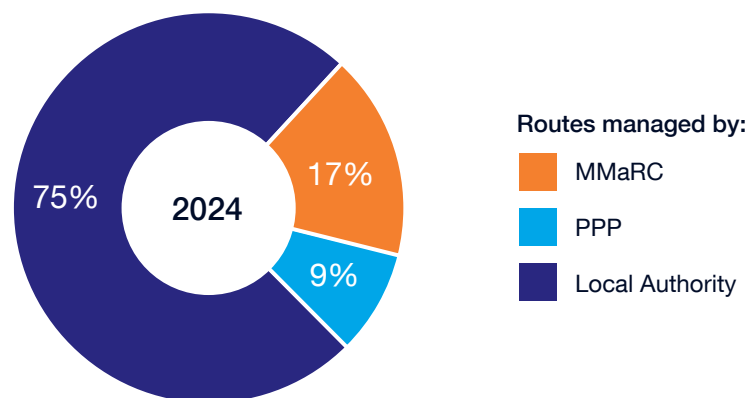


H: Network Management

The responsibilities for the Management of the National Roads Network are assigned to a number of bodies, with the majority share of National Primary and National Secondary roads administered by local authorities.

Motorways are managed under Motorway Maintenance and Renewal Contracts (MMaRC) or by Public-Private Partnership (PPP) concession companies.

Route Management Breakdown (km)*



Overview of the responsibilities for the Management of the National Roads Network



*Percentages are rounded off and may not add up to 100%.

Network Management Key Facts:

**134**

weather stations in operation on the National Roads Network

**37,525**

tonnes of salt were used on National Roads Network in 2024

**67**

nights in 2024 where the temperature dropped below zero

**1,608**

SOS phones in the country

**340**

demountable snow ploughs

**15,538**

all emergency calls received by Motorway Traffic Control Centre including SOS phones

**401**

salt spreaders

2.

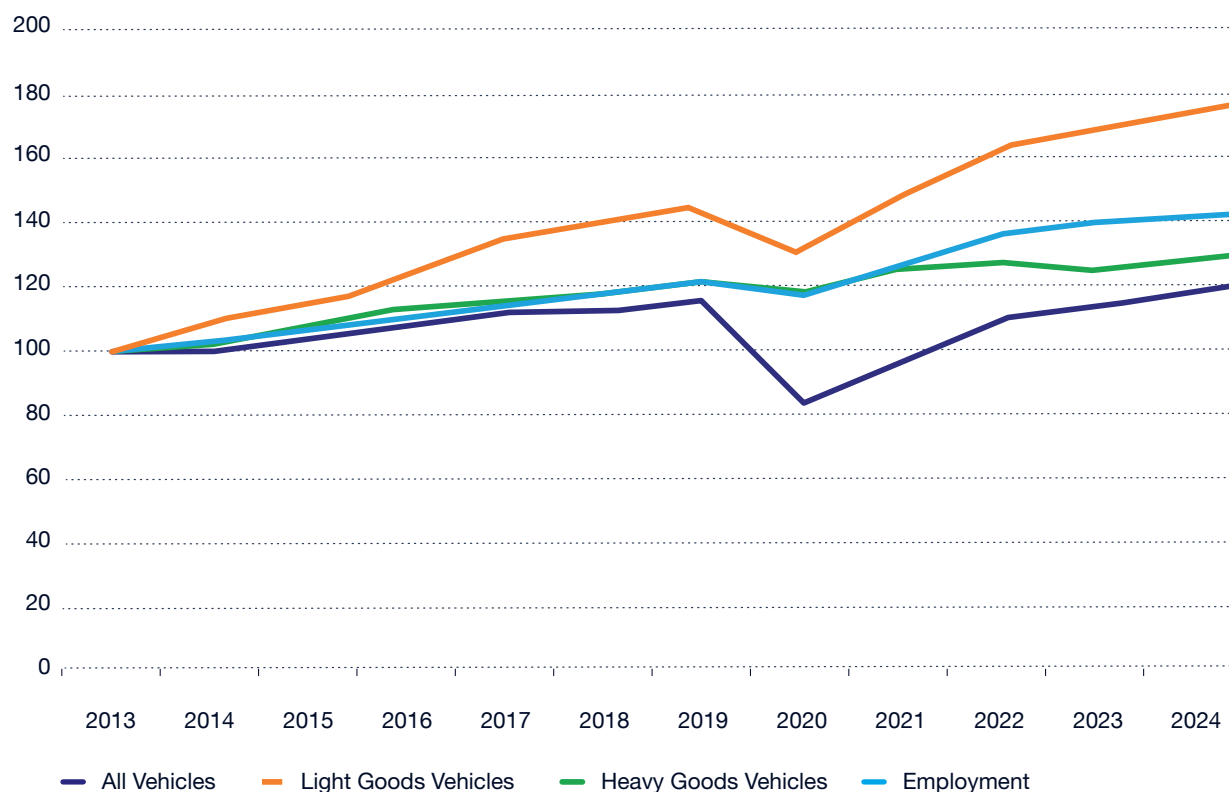
Economics



A: Economic Trends in Transport

After recovering to post-pandemic levels, traffic growth on the National Roads Network has stabilised. Since this recovery, traffic growth has continued to follow the same trend as economic growth, which is measured by employment levels. However, there remains a gap between the two indices. This gap may reflect a structural transformation in travel behaviour, driven by hybrid work models, improvements in public transport and enhanced active mode infrastructure.

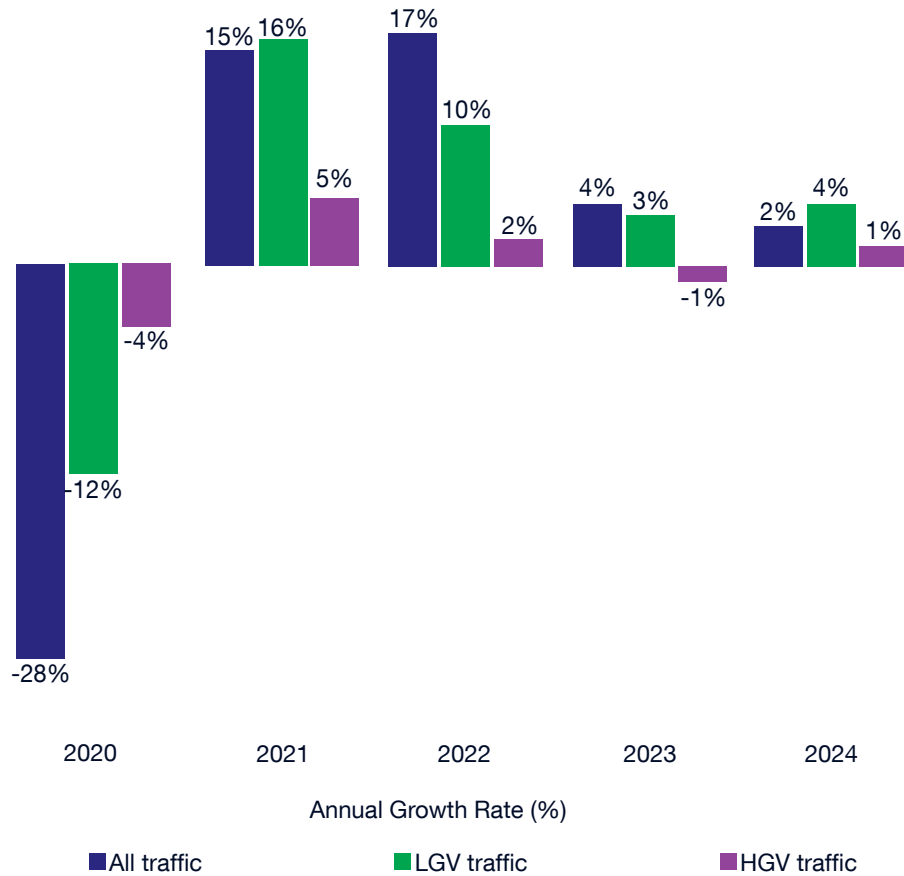
Index of Vehicle Kilometres of Travel on All National Roads and Employment*



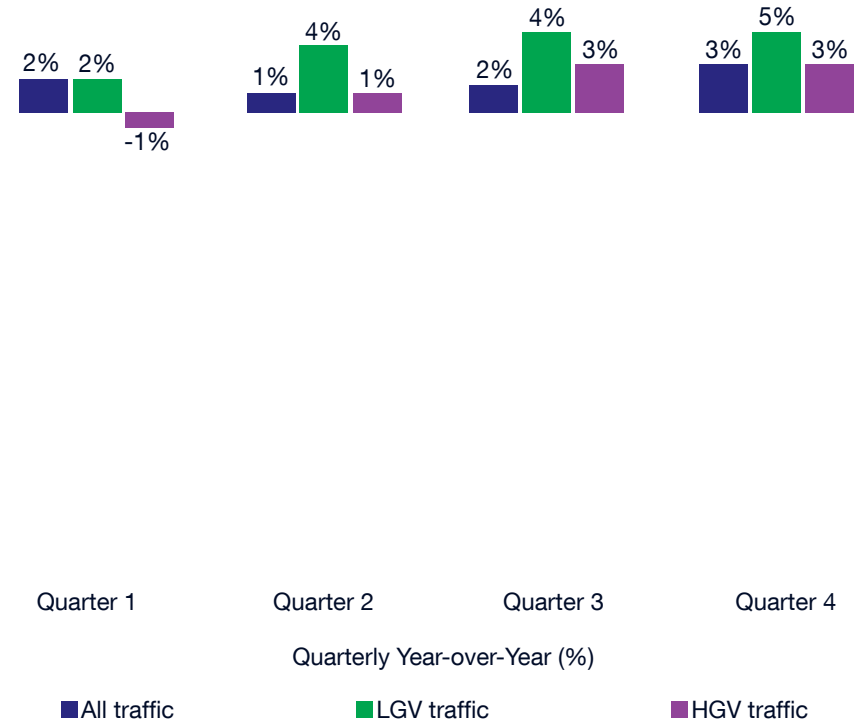
* Source of traffic data: <https://traffic.tii.ie/>

* Source of employment data: <https://data.cso.ie/table/QLF01>

Annual Growth Rate on the National Roads Network (2020 - 2024)



Quarterly Year-over-Year Growth Rate on the National Roads Network (2023-2024)



3.

Road Condition



A1: Pavement Maintenance

There is over 5,300 kilometres of road pavement within the National Roads Network that must be monitored and maintained. To effectively manage this diverse network, a series of five subnetwork types were established.

National Roads Network Pavement Condition Classification by Subnetworks (2024)			
Subnetwork		Classification	% of Network
0	Motorways + dual carriageways	High speed, high volumes pavement, made up of Motorway and Dual Carriageway sections of the network.	24%
1	Engineered pavement	Typically carry reasonably large volumes of traffic, and are identified by presence of hard shoulders adjacent to the carriageway.	23%
2	Urban Areas	Low to medium speed, typically short sections through towns that are not bypassed, also includes longer sections within the cities and larger towns where National Roads start and end.	12%
3	Legacy pavement – high traffic	Legacy subnetwork, typically constructed without formal geometric or pavement design. Typically carries traffic volumes less than 10,000 AADT.	23%
4	Legacy pavement – low traffic	Legacy subnetwork, typically constructed without formal geometric or pavement design. Typically carries traffic volumes less than 5,000 AADT.	18%

Overview of National Roads Network Pavement Condition Classification by Subnetworks (2023)*



Subnetworks:

- Subnetwork 0: Motorways + dual carriageways
- Subnetwork 1: Engineered pavement
- Subnetwork 2: Urban Areas
- Subnetwork 3: Legacy pavement – high traffic
- Subnetwork 4: Legacy pavement – low traffic

* Source: TII Pavement Condition Report, 2024

A2: Measuring Performance of Pavements on the National Roads Network

The condition of road pavements i.e., the surface of roads, is a critical element in ensuring the safety and efficiency of the National Roads Network. To maintain acceptable performance levels of pavements, significant investment is required annually. Timely upgrades of pavement surfaces can prolong the lifecycle of the sub-surface and structural layers of the pavement.

Road pavements are made up of different layers. The surface layer is key in the road-to-wheel interface and influences both the safety and overall condition of the pavement.

TII determined that the Key Performance Indicators (KPIs) of an efficient pavement network include pavement surface health, surface friction, and structural health. The easiest way to track this is to rank pavement subnetworks on a five-point scale: very poor, poor, fair, good and very good.

TII research indicates on average, it takes approximately seven years for a pavement to transition between points on the scale.

To ensure the safety and efficiency of the network, TII has set performance targets for each of the subnetwork categories under each of the performance indicators.



Pavement Surface Health



Pavement Surface Friction



Pavement Structural Health

B1: Current Condition of Road Pavements

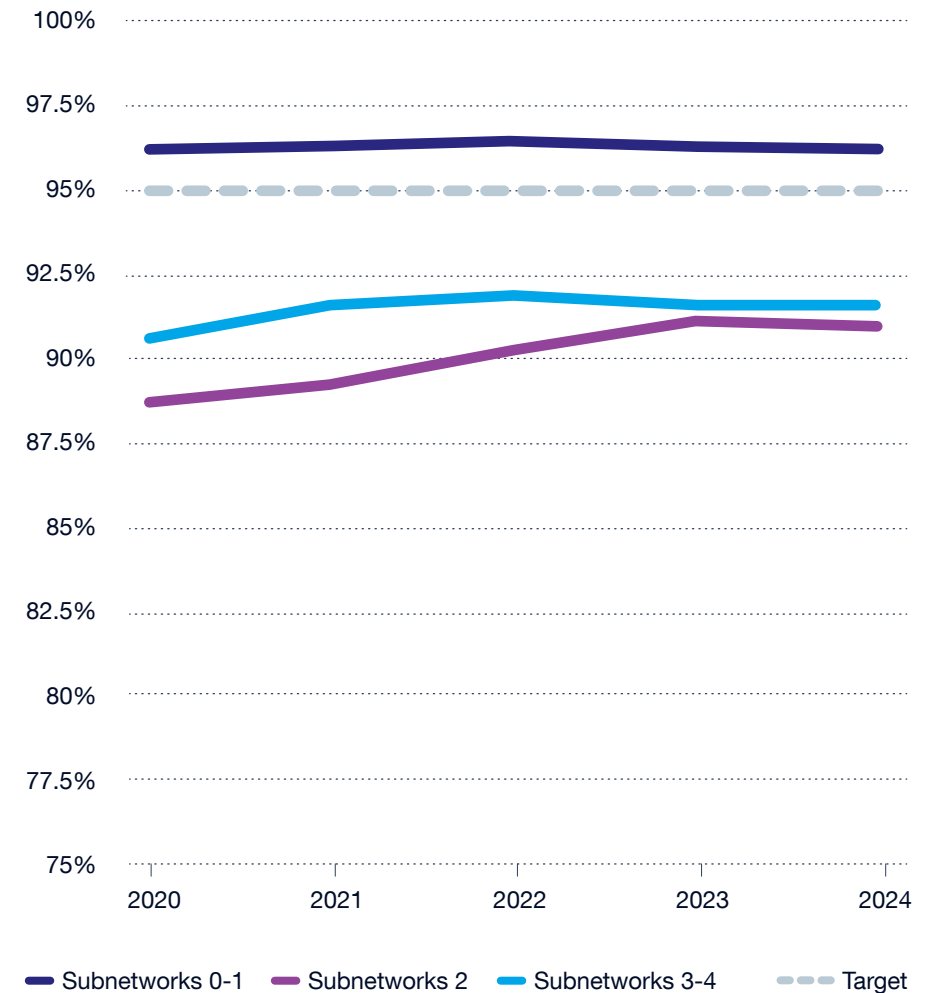
Pavement Surface Health



TII target 95% performing fair or better for all subnetworks.

- Subnetworks 0-1 remained consistently above target levels for 2020-2024
- Subnetwork 2 showed a slight downward trend line for 2024
- Subnetworks 3-4 remained unchanged in 2024

Trends in Pavement Surface Health KPI
(% Fair or Better) 2020 - 2024



B2: Current Condition of Road Pavements

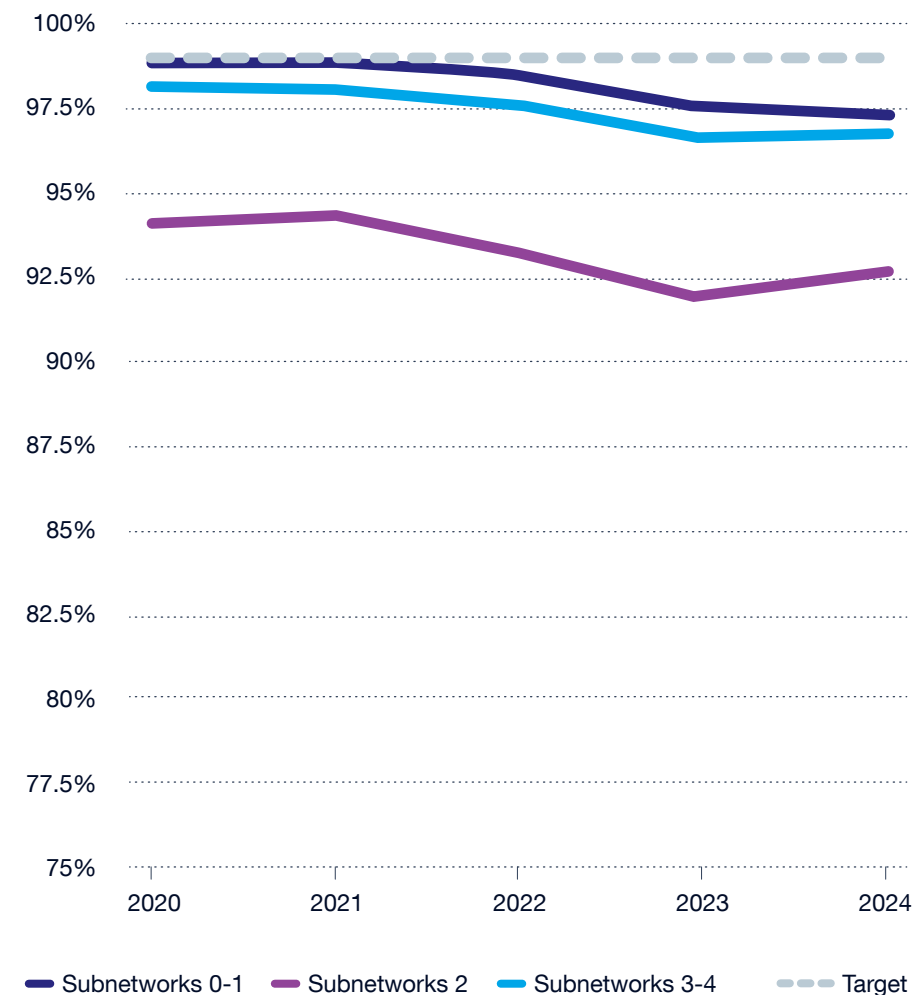
Pavement Surface Friction



TII target 99% performing fair or better for all subnetworks.

- Subnetworks 0-1 experienced a downward trend line below the 99% target continuing from 2023
- Subnetwork 2 remained significantly lower all other subnetworks, experiencing a slight upward trend
- Subnetworks 3-4 experienced a slight upward trend, but remained below the 99% target

Trends in Pavement Surface Friction KPI
(% Fair or Better) 2020 - 2024



B3: Current Condition of Road Pavements

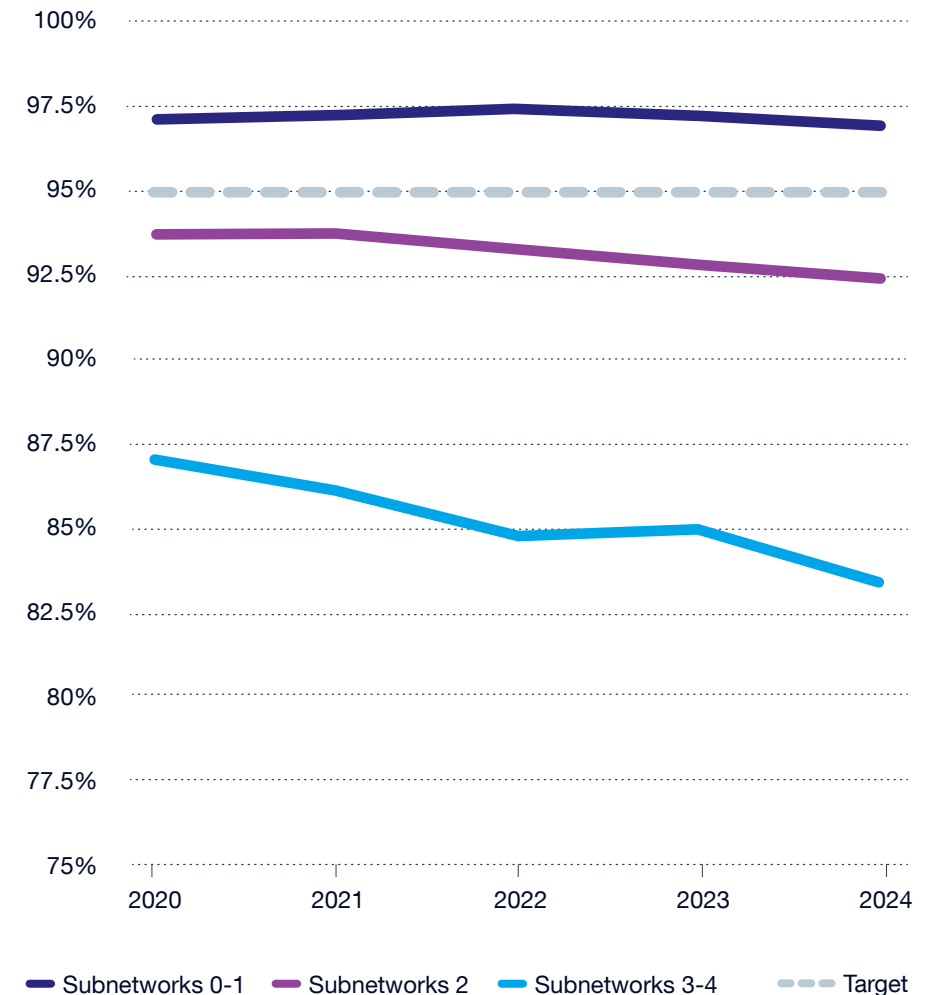
Pavement Structural Health



TII target 95% performing fair or better for all subnetworks.

- Subnetworks 0-1 were consistently above target levels for 2020-2024
- Subnetwork 2 remains below target levels and experienced a downward trend from 2021-2024
- Subnetworks 3-4 remain significantly below target levels for 2024

Trends in Pavement Structural Health KPI
(% Fair or Better) 2020-2024



C: National Road Bridge Structures

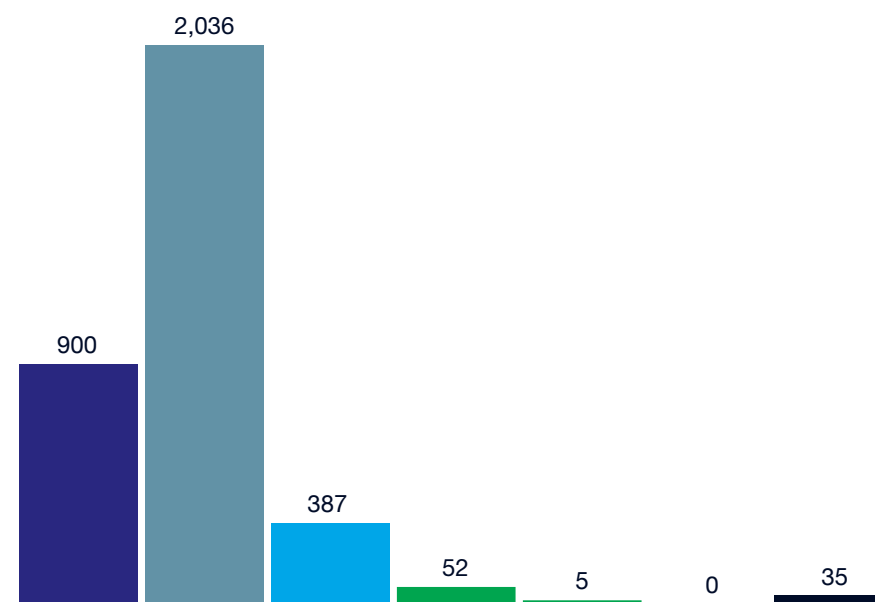
Maintenance and rehabilitation of bridges are an important part of TII's asset management strategy, with bridges throughout Ireland being inspected regularly.

The National Roads Network includes 3,415 bridge structures.

Bridge components that receive a condition rating of 0 or 1 do not require repair work, whereas those assigned a rating of 2 or higher are scheduled for future repair.

- Nearly 86% of bridges assessed require no immediate repair work
- 14% require repair when convenient (i.e., no immediate requirement).

National Road Bridge Structures Condition Rating
(2024, number of bridges)



CR 0: No or insignificant change.

CR 1: Minor Damage but no need of repair.

CR 2: Some Damage, repair needed when convenient.

CR 3: Significant Damage, repair within next financial year.

CR 4: Damage is critical, repair at once.

CR 5: Ultimate Damage. The component has failed or is in danger of total failure.

N/A: Data not available due to access restrictions.

4.

Safety



A: Commitment to Safety Along the National Roads Network

Transport Infrastructure Ireland is committed to promoting safety measures along the National Roads Network to reduce traffic collisions.

The Safe Systems approach, which Ireland has adopted recognises that death and serious injury caused by road collisions are largely preventable and that achieving this should be a shared responsibility at all levels of road operation.

Ireland's Government Road Safety Strategy aims to improve road safety and reduce road fatalities and serious injuries by 50% by 2030. This strategy is part of 'Vision Zero', which was introduced by the Irish Government in 2021 to bring traffic related deaths and serious injury to 0% by 2050.

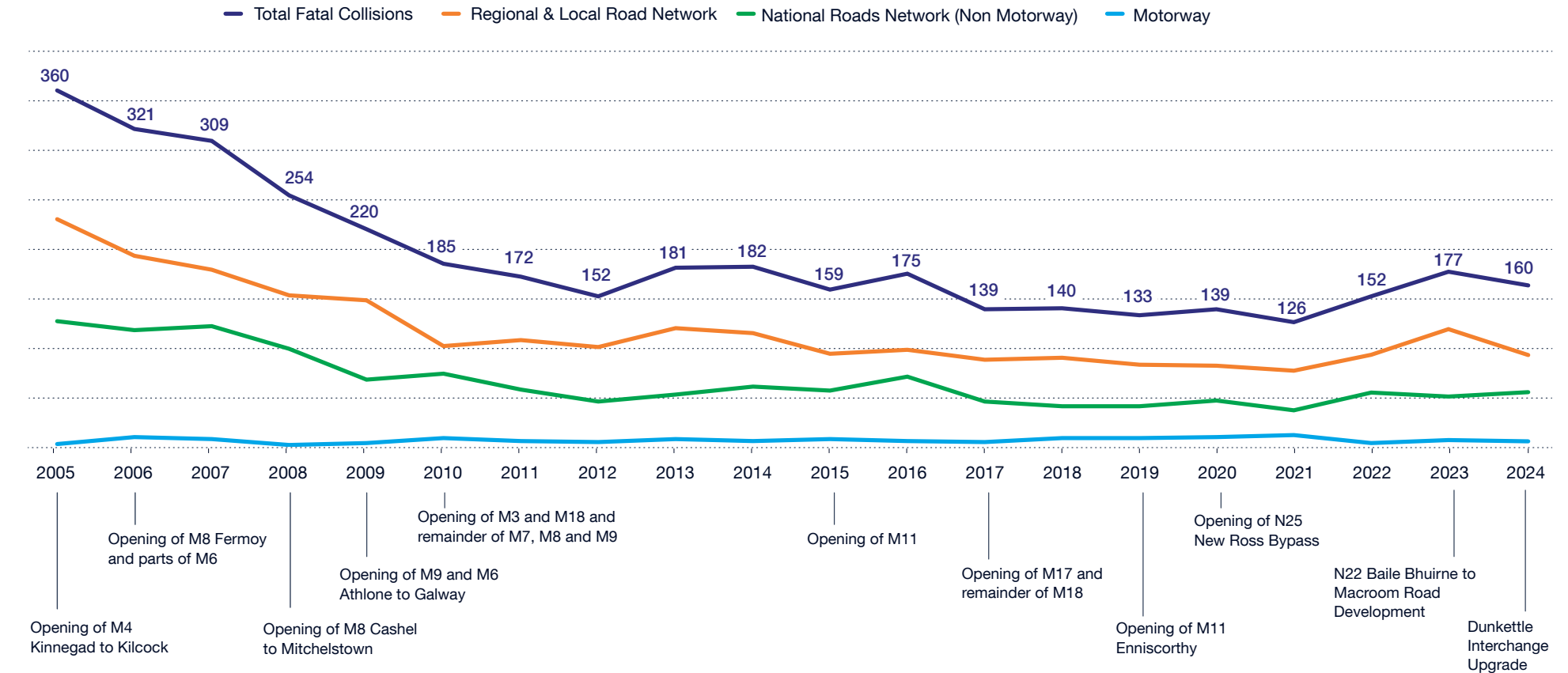
In line with these strategies, TII will:

- Prioritise the delivery of high quality, suitable infrastructure to create forgiving roadsides, self-explaining roads, and a safe environment for vulnerable road users
- Meet asset protection and renewal requirements to help ensure the safety of the network, in line with the National Investment Framework for Transport in Ireland (NIFTI)
- Target investment on sections of national roads with the highest risk of fatal or serious injury in line with the European Union Road Infrastructure Safety Management (RISM) directive

For further details on TII's long term commitments to road safety, see **National Roads 2040** (www.tii.ie/tii-library/strategic-planning/)

B: Fatal Collision Trends (2005-2024) by Network - Highlighting Key Milestones on National Roads

Fatal Collision Trends (2005-2024) by Network with Key Dates of Road Scheme Openings



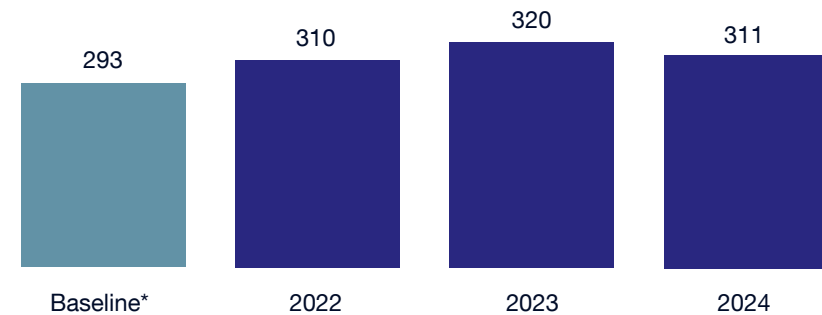
C: Fatal and Serious Injury Collisions on the National Roads Network

It is important to understand the types of collisions occur most frequently on the National Roads Network to work towards overall reduction.

In 2024, there were 311 fatal and serious injury collisions on the National Roads Network.

This represents a 3% decrease compared to 2023 and a 6% increase compared to the Baseline.

Recent Trends in Fatal and Serious Injury Collisions



*Baseline calculated in line with RISM Directive as an average of 2017-2019 figures for fatal and serious injury collisions

Fatal and Serious Injury Collisions by Type on the National Roads Network (2024)



Vehicle to Vehicle
31 %



Single Vehicle
22 %



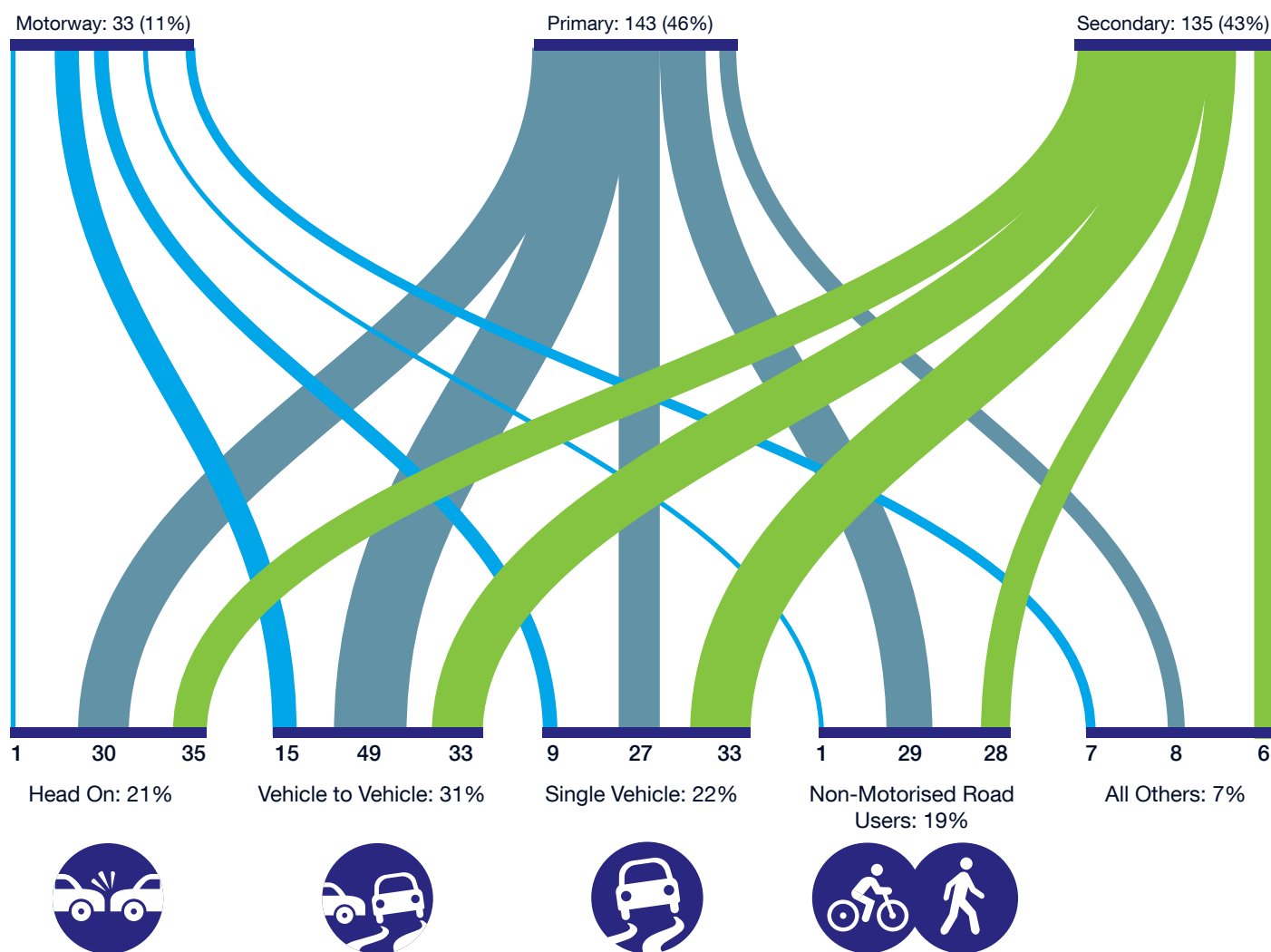
Head-On
21 %



Non-Motorised
Road Users
19 %

All Other
7 %

The Distribution of Fatal and Serious Injury Collisions Across the National Roads Network by Broad Collision Type in 2024



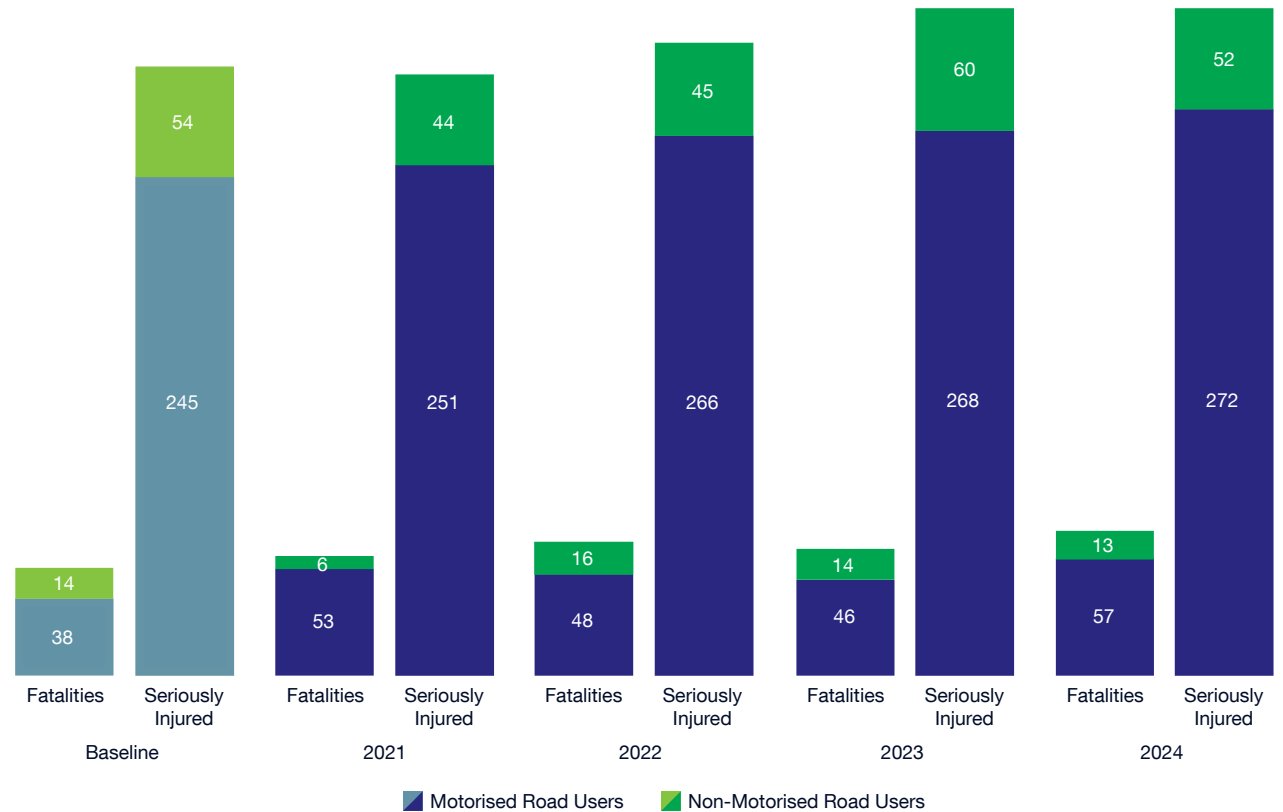
D: Fatalities and Seriously Injured on the National Roads Network

In 2024, 60 collisions on the National Roads Network resulted in 70 fatalities, representing a 17% (+10) increase compared to 2023, a 9% (+6) increase compared to 2022, and a 35% (+18) increase compared to the Baseline.

In 2024, 324 people were seriously injured in road traffic collisions reported along National Roads. This is a decrease of approximately -1% (-4) on 2023 figures, a 4% (+13) increase on 2022 figures and an 8% (+25) increase on the Baseline.

The recent upwards trend in fatal and serious injury collisions show that more attention on fatalities and serious injuries is needed to meet the targets set out in the RISM Directive.

Fatalities and Seriously Injured on the National Roads Network



5.

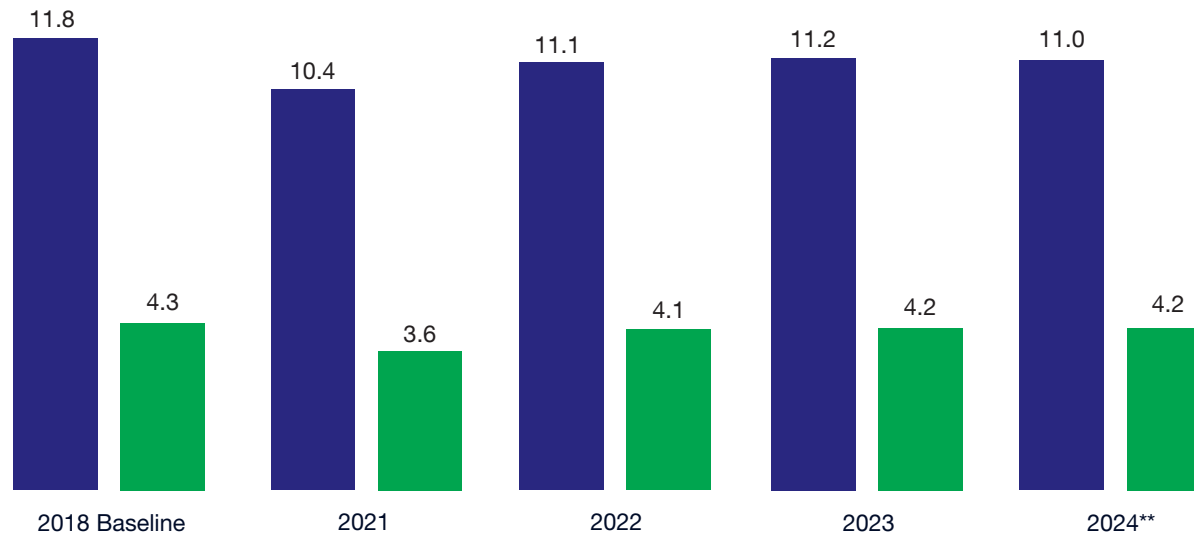
Emissions



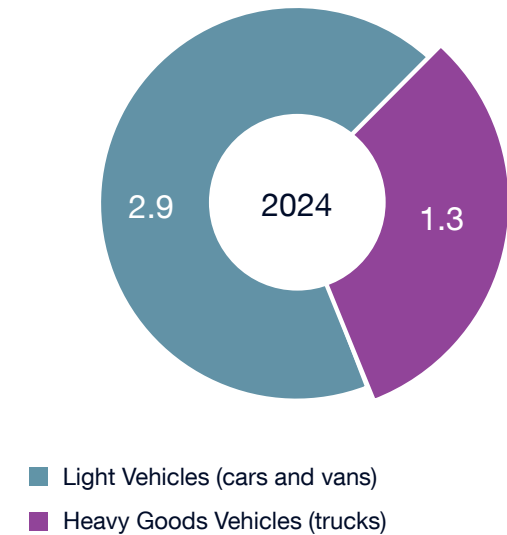
A1: Vehicle Emissions on the National Roads Network

Annual Road Travel Emissions (mega tonnes CO₂e)*

— Total road transport — National Roads



Annual Road Travel Emissions on National Roads per Vehicle Class (mega tonnes CO₂e)



Travel on National Roads contributed an average of **37%** of total road transport emissions between 2021-2024.

Heavy Goods Vehicles (HGVs) contributed **31%** of National Roads emissions in 2024.

Sources:

1. EPA, 2024 (2018 - 2023 total road transport emissions are based on final EPA data and have been updated from projections used in previous reports).
2. TII National Transport Model (NTpM), TII Road Emissions Model (REM), CSO and UCC (2021) Irish Car Stock Model v2.1.

* In April 2025, the EPA published 'Ireland's Final Greenhouse Gas Emissions 1990-2023'. The total road transport emissions on this page have been updated to reflect these final EPA figures.

** 2024 total road emissions are based on EPA projections.

A2: Air Quality Emissions on the National Roads Network

In 2024, emissions levels were consistent with or lower than 2023, and higher in comparison with 2020 and 2021 when COVID travel restrictions were in place.

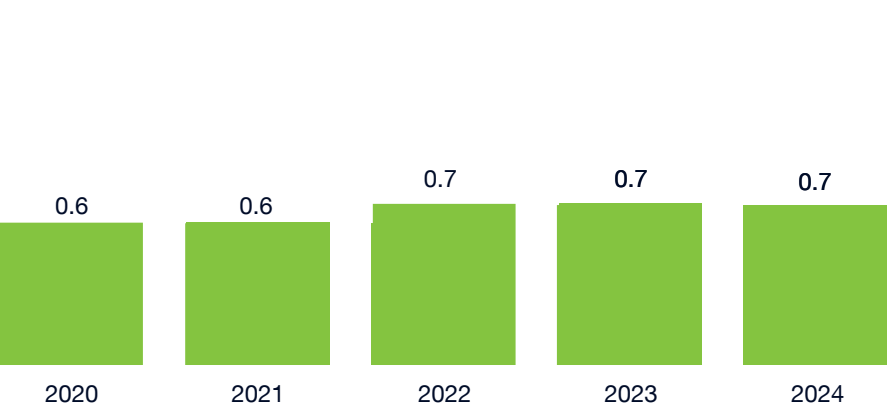
Exhaust emissions from motor vehicles contain a variety of pollutants.

Greenhouse gases (GHG), principally carbon monoxide (CO) and carbon dioxide (CO₂) contribute to climate change.

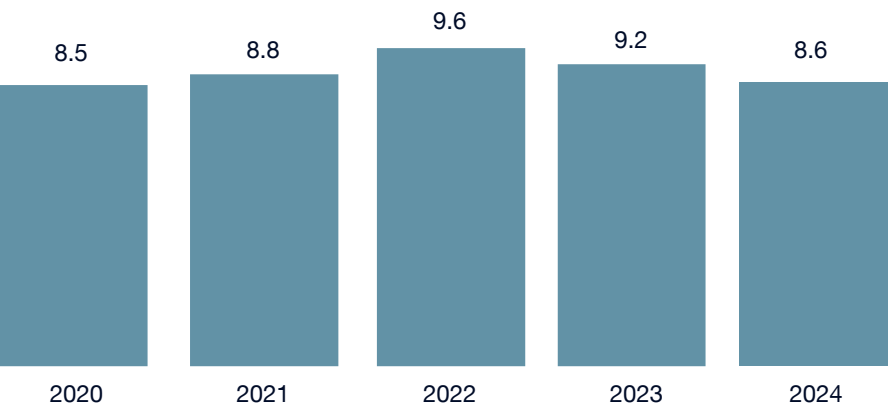
Nitrogen Oxides and very small Particulate Matter, can be harmful to human health and damage a variety of ecosystems.

Total emissions of Oxide of Nitrogen (NO_x) decrease in 2024 from 2023 levels, as the vehicle fleet in Ireland shifted toward more fuel-efficient and lower-emission vehicles. Total emissions of Particulate Matter (PM₁₀) stayed consistent with 2023 levels.

Annual Emissions of PM₁₀ in Megatonnes



Annual Emissions of NO_x in Megatonnes



6.

Greenways



A: Greenways Investment Key Facts

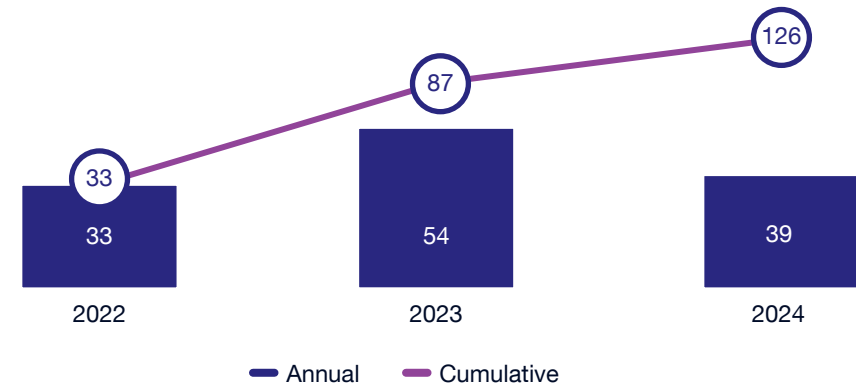
TII became the Approving Authority for greenways in September 2021 and will act on behalf of the Department of Transport in this role.

Since 2022, TII has funded the delivery of 126km of greenways.

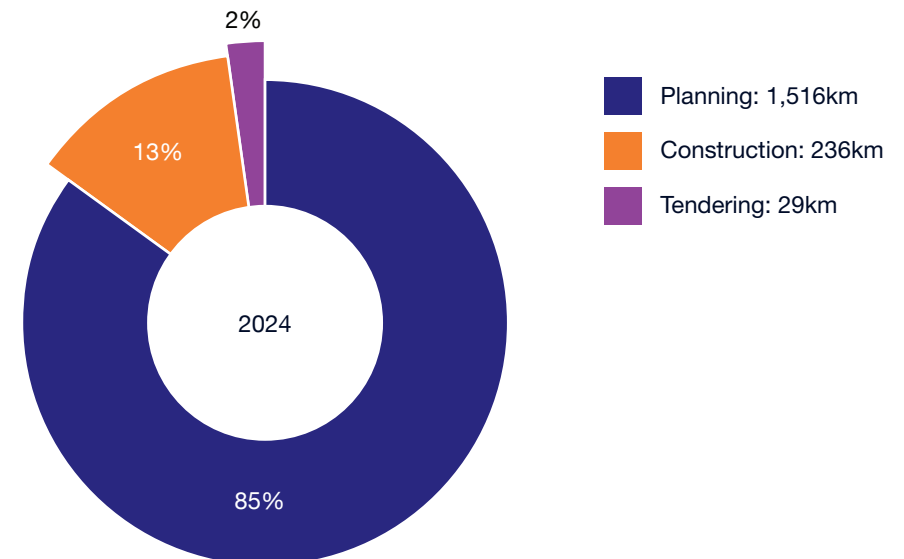
Some of the TII-funded greenways are part of the National Cycle Network (NCN), a network of cycle corridors connecting more than 200 settlements.

TII is also developing active travel facilities on, across or adjacent to the National Roads Network, particularly in built-up areas, villages, towns and cities.

TII Funded Greenways Delivered (Kilometres)



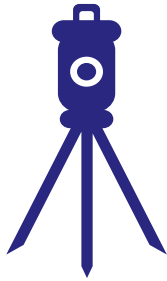
TII Funded Greenways in Planning/Under Construction



B. Greenways Network Management Key Facts

2024 Key Network Statistics

TII implements a data-driven asset management strategy for active travel infrastructure, enabled by advanced pavement inspection technologies to assess asset condition and collect data.



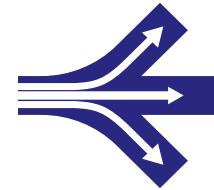
167km Surveyed



35 Greenway Junctions or
access upgraded



7km Greenway fence
renewed



7km Greenway surface
renewed



Bonneagar Iompair Éireann
Transport Infrastructure Ireland

Transport Infrastructure Ireland

Parkgate Business Centre

Parkgate Street, Dublin 8

D08 DK10

T: +353 1 6463600

W: www.tii.ie

Editorial and statistics

Beata.Smyl@aecon.com/Malvern.Chinaka@aecon.com/

Philip.Shiels@aecon.com

Document updated by

Kevin.Carew@aecon.com/Kayleigh.Singer@aecon.com/

Michelle.Walker@aecon.com

Front cover greenway photo credit

Courtesy Fáilte Ireland