

TRANSPORT INFRASTRUCTURE IRELAND

NATIONAL ROADS NETWORK INDICATORS

2019



A: KEY TREND SUMMARY

TRAVEL HOTSPOTS: N40 Cork area: M50 Dublin area: 150,000 vehicles per day 87,000 vehicles per day Hotspot: Hotspot:

M50 KEY NETWORK STATISTICS:



13,212

Highest hourly flow recorded on the N3 - N4 between 4pm and 5pm on 5th June



1.61 billion

Vehicle km travelled. This represents a 1.9% increase on 2018





FATAL COLLISIONS ON THE NATIONAL ROADS NETWORK 2014 - 2019:

Total fatal collisions on National Roads:







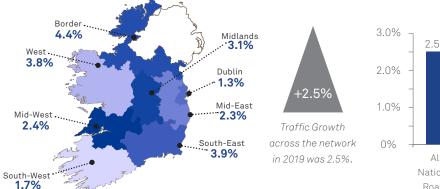


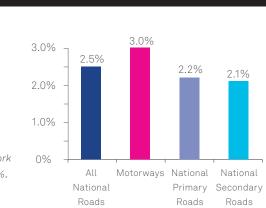






TRAFFIC GROWTH:

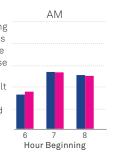


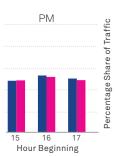


CHANGES IN PEAK HOUR SPREAD M50:

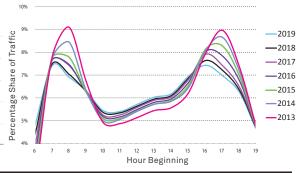
The peak hours remain the SHARE OF DAILY TRAFFIC same as 2018: 6.30 - 9.30 and 15.30 - 18.30, with peak spreading occurring resulting in an increased share of trips between 6.00 and 8.00 in the morning and a slight increase between 15.00 and 16.00 in the evening. This was a result of continued growth on the National Roads network and traffic demand reaching previously unreached levels

especially on the M50.



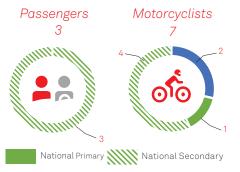


2018 2019



TOTAL FATALITIES ON THE NATIONAL ROADS NETWORK IN 2019:









Transport Infrastructure Ireland National Roads Network Indicators 2019

^{*}In 2019 50 fatal collisions on national roads resulted in 53 fatalities

B: NEWS & INFORMATION

News

Traffic Indices

The TII Traffic Indices represent a measure of global traffic demand over time for a particular grouping of traffic monitoring units (TMUs) on the National Roads Network. An index is a statistical measure of changes in a representative group of individual data points over a time period.

TII Traffic Indices for all traffic and HGVs only are available nationally, by region, by road type, by TEN-T network status and for certain corridors of interest. This allows for broad estimates in traffic growth trends on a national or regional basis and on the basis of road type, route corridor and vehicle type.

The traffic indices are produced on a quarterly basis and annual growth rates can also be output. The base for the TII Traffic Indices is Q3 2013. The TII Traffic Indices can be found at *indices tii* ie

National Transport Model (NTpM)

Since its release in 2013 the NTpM is updated annually using data from the TMU network. An updated version of the NTpM representing 2016 traffic patterns and 2019 demand has been used in the production of these 2019 Network Indicators.

Documentation regarding the National Transport Model can be located on the TII Traffic Indices website at www.tii.ie/ tii-library/strategic-planning/

Information

Traffic Monitoring Units

TII has over 380 TMU sites around the country which are used to monitor traffic volumes and to plan future interventions. Additional TMU sites were delivered in 2019 and a programme of works to deliver additional TMU sites in 2020 is on-going.

See website: www.nratrafficdata.ie

Motorway Service Helpline

A Motorway Service Helpline has been set-up to assist roads users in difficulty on a Motorway. All calls are directed through the Motorway Traffic Control Centre (MTCC) and the number is:



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

CONTENTS

INTRODUCTION	P5
1. ROAD NETWORK	P6
2. ECONOMIC	P24
3. ROAD CONDITION	P26
4. SAFETY	P33
5. ACCESSIBILITY + ENVIRONMENT	P37

INTRODUCTION

Transport Infrastructure Ireland's mission is to deliver transport infrastructure and services that contribute to the quality of life of the people of Ireland and support the country's economic growth

For this purpose, TII has overall responsibility not only for the planning and supervision of the construction and maintenance works on these roads, but also for ensuring the efficient use and safe operation of the National Roads network.

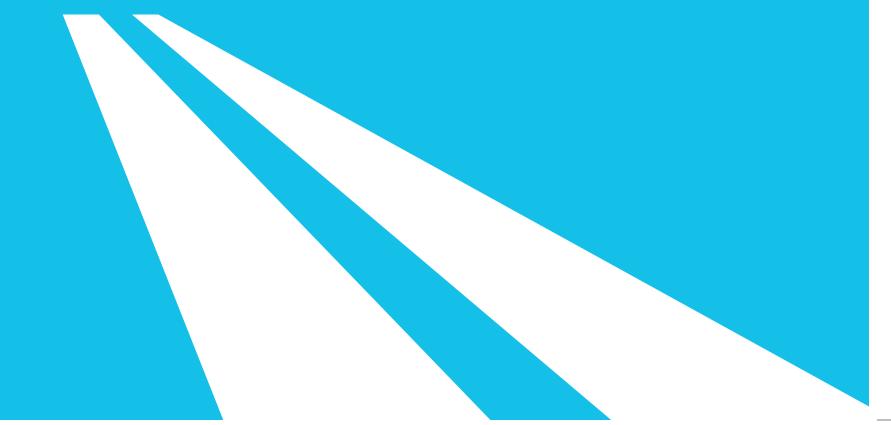
Efficient use of the National Roads network provides benefits to road passengers, bus users and road freight users in the form of shorter journey times, reduced congestion

and reductions in the cost of operating vehicles. Society as a whole benefits from increased economic productivity, reduced energy consumption and a better environment.

If the National Roads network is operated to a high standard, then road users will enjoy safe journeys with predictable journey times.

Transport Infrastructure Ireland considers it important to monitor the performance and use of the National Roads network and to share this information with the public.

This publication sets out some key indicators of performance and usage of the National Roads network.



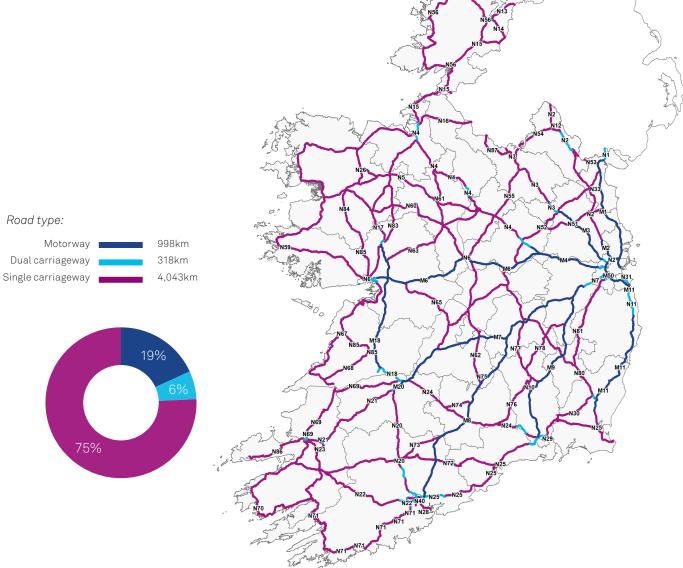
A: LENGTH OF NATIONAL ROADS NETWORK

Length of National Roads network by road type 2019

There are in excess of 5,300 kilometres of National Roads network in Ireland.

The National Roads network is comprised of 998 km of motorway, 318km of dual carriageway and 4,043km of single carriageway.

The actual length of the National Roads network fluctuates year on year due to road reclassification, realignments to existing National Roads and completion of new roads.



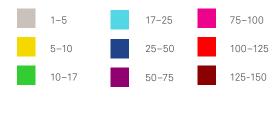
B1: LEVEL OF USAGE OF THE NATIONAL ROADS NETWORK

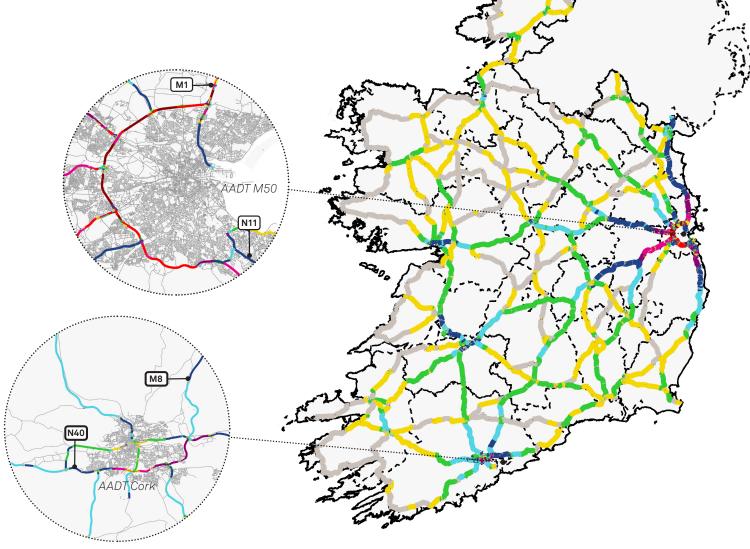
Level of usage of the National Roads network as measured by Annual Average Daily Traffic (AADT)

The continued growth in the Irish economy is reflected by the growth in traffic on the National Roads network.

In Dublin, the M50 continues to experience growth in levels of usage as measured by Annual Average Daily Traffic (AADT) flows, with the section between Junction 5 (N2) and Junction 9 (N7) carrying in excess of 150,000 AADT. Increased economic activity outside of the Dublin region is also apparent with further AADT growth being experienced on the N40 (Cork South Ring Road) in 2019.

AADT (thousands per day)





Source: TII National Transport Model, 2019

B2: FREIGHT MOVEMENTS ON THE NATIONAL ROADS NETWORK Level of usage of the National Roads network by freight vehicles as measured by Heavy Goods Vehicle (HGV) AADT The level of usage of the National Roads network by freight vehicles, as measured by Heavy Goods Vehicles (HGV) AADT, AADT M50 continues to experience growth particularly in economic centres near major ports. HGV AADT (thousands per day) N40 AADT Cork

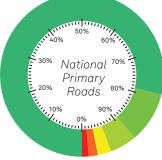
C1: LEVEL OF SERVICE: MORNING RUSH-HOUR, NATIONAL ROADS

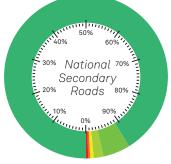
Proportion of the National Roads network operating under each level of service condition

The level of service (LOS) provided by roads may be assessed using recognised international standards. LOS is a quality measure describing operational conditions within a traffic stream. Following the substantial investment in National Roads in recent times, most route sections are operating to the highest standard of service.

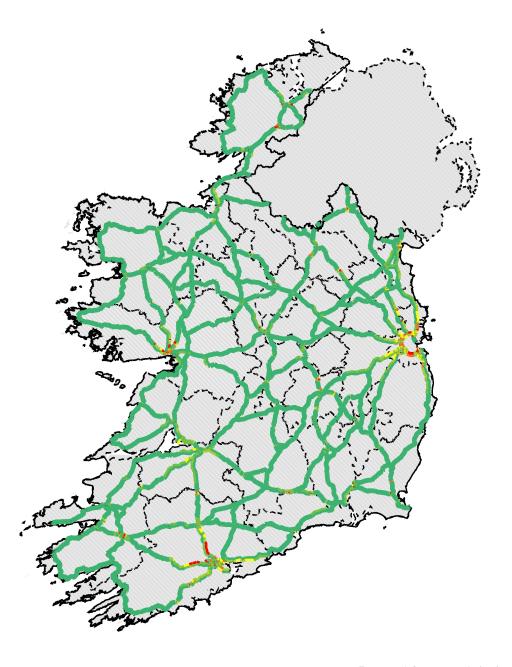
For further information see: Transport Research and Information Note: A Study of Lane Capacity, online at www.tii.ie/tii-library/ strategic-planning











Source: TII National Transport Model, 2019

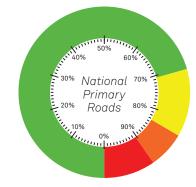
C2: VOLUME TO CAPACITY RATIO: NATIONAL PRIMARY ROADS

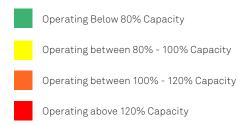
Proportion of the National Primary Roads network operating at each level of capacity

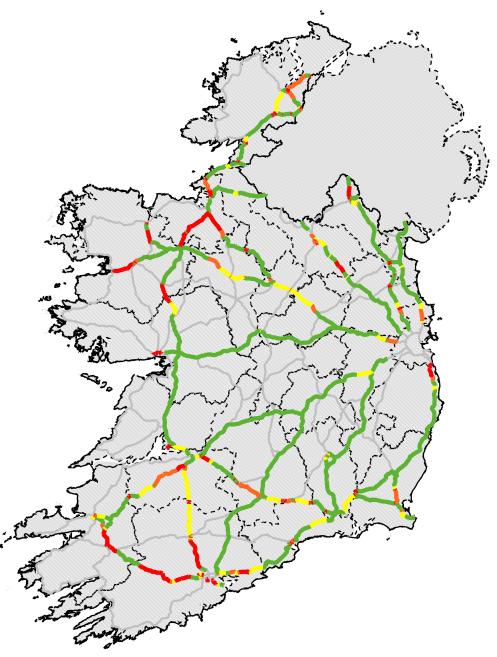
The Volume to Capacity (V/C) Ratio relates the AADT volume carried on a section of road to its daily operational capacity*.

The V/C Ratio for the National Primary Roads network indicates that over 70% of the network is operating at or below 80% of its daily capacity. This reflects the significant investment made in the National Primary Roads network in recent times.

*Capacity based on TII Rural Road Link Design Standard Table 6.1 (DN-GEO-03031)







Source: TII National Transport Model, 2019

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National Roads Network Indicators 2019

C3: VOLUME TO CAPACITY RATIO: NATIONAL SECONDARY ROADS

Proportion of the National Secondary Roads network operating at each level of capacity

The Volume to Capacity (V/C) Ratio relates the AADT volume carried on a section of road to its daily operational capacity.

The V/C Ratio for the National Secondary Roads network indicates that just under 50% of the network is operating at or below 80% of its daily capacity. This indicates that investment is required in the National Secondary Roads network to match the performance of the National Primary Roads network.

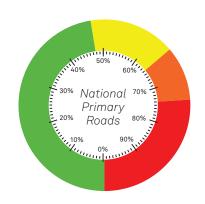
*Capacity based on TII Rural Road Link Design Standard Table 6.1 (DN-GEO-03031)

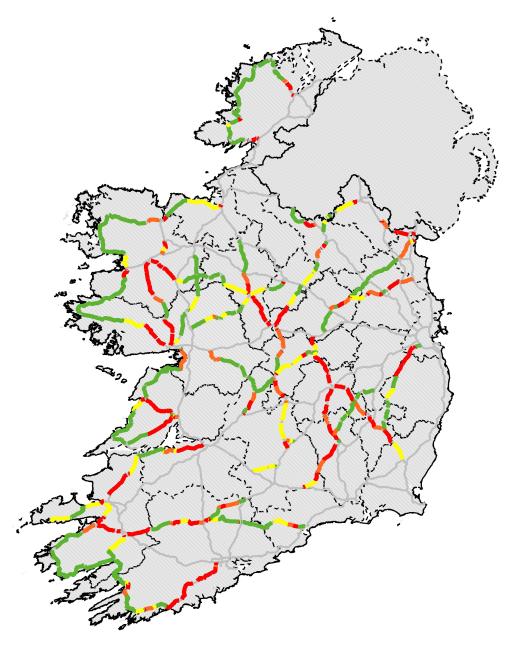
Operating Below 80% Capacity

Operating between 80% - 100% Capacity

Operating between 100% - 120% Capacity

Operating above 120% Capacity





Source: TII National Transport Model, 2019

Transport Infrastructure Ireland
National Roads Network Indicators 2019

D1: M50 PERFORMANCE SUMMARY 2019 Key network statistics

The M50 is the most heavily trafficked road in the country with nearly 150,000 vehicles using several sections on an average day.



13,212

Highest hourly flow recorded on the N3 - N4 between 4pm and 5pm on 5th June



1.61 billion

Vehicle km travelled. This represents a 1.9% increase on 2018



176.890

Highest Daily Flow Recorded on M50 between the N2-N3



1,161

Total No. of Incidents of which 525 were **Traffic Collisions**





Busiest Typical Day



11 minutes

Average Response Time





28 minutes

Median Duration of Incidents



M50 Schematic Layout 2019 Annual Average Daily Traffic (%HGV) on M50

D2: M50 PERFORMANCE SUMMARY

Traffic growth and typical working day conditions represented by level of service

160,000

The level of service (LOS) provided by roads may be assessed using recognised international standards. LOS is a quality measure describing operational conditions within a traffic stream.

Average hourly levels of service for the full year were analysed from TII Traffic Monitoring Units which give an indication of what the busiest times of a typical day were, and what sections of the M50 were most congested in 2019. A typical working day in 2019 refers to all weekdays excluding school holidays and public holidays.

A. Free flow

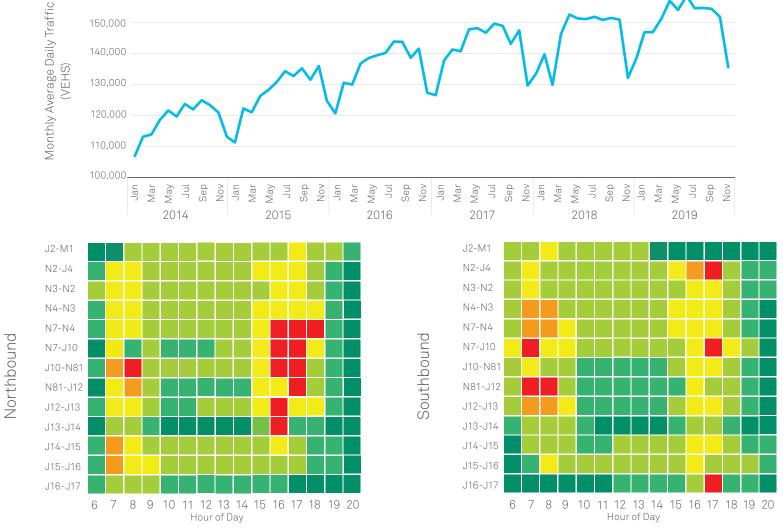
C. Stable flow

E. Unstable flow

B. Reasonably free flow

D. Approaching unstable flow

F. Forced or breakdown flow



MADT at M50 (e-flow toll between J6 & J7)

A technical error resulted in a loss in data from the TII C2 Traffic Database from late June to early August 2019. The traffic volume based statistics presented here exclude data from this period.

D3: N40 PERFORMANCE SUMMARY

2019 Key network statistics

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



7,934

Highest hourly flow recorded on the Kinsale Rd - Douglas section between 4pm and 5pm on 14th February



102,760

Highest Daily Flow Recorded on the Kinsale Rd - Douglas



FRIDAY

Busiest Typical Day







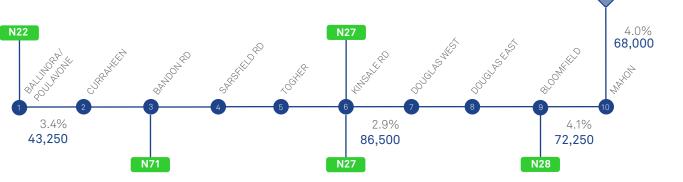


Traffic Collisions



0.34 Billion

Vehicle km travelled. This represents a 0% increase on 2018



N40 Schematic Layout 2019 Annual Average Daily Traffic (%HGV) on N40 JACK LYNCH

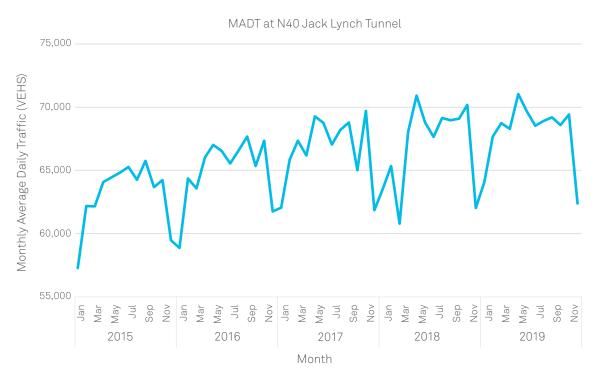
TUNNEL

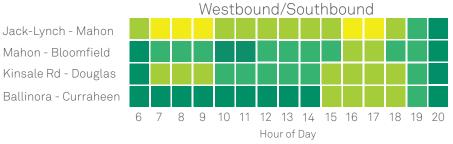
D4: N40 OPERATIONAL PERFORMANCE

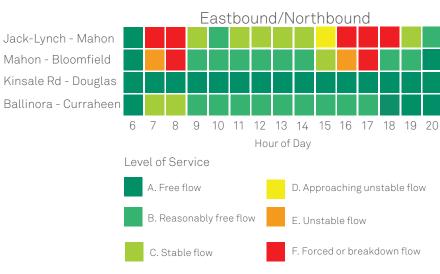
Traffic growth and typical working day conditions represented by level of service

The level of service (LOS) provided by roads may be assessed using recognised international standards. LOS is a quality measure describing operational conditions within a traffic stream.

Average hourly levels of service for the full year were analysed from TII Traffic Monitoring Units which give an indication of what the busiest times of a typical day were, and what sections of the N40 were most congested in 2019. A typical working day in 2019 refers to all weekdays excluding school holidays and public holidays.







D5: DUBLIN RADIALS PERFORMANCE SUMMARY

Traffic growth and typical working day conditions represented by level of service

The Dublin Radials represent a system of routes providing access to the Dublin Area, converging onto the M50. They are made of National Primary Routes designated M1 to M11 as one travels anticlockwise around the M50.

The Dublin Radial Routes consisting of the M1, N2, N3, M4, N7, N81 and M11 are some of the busiest routes in the country. The schematic on the right contains AADT data of these routes for 2019 from the Traffic Monitoring Units which are displayed as inner and outer cordons on the map of the Greater Dublin Area. Generally there is a very significant drop off in traffic demand between the inner and outer cordons as you would expect as the population and job densities decrease.

The N7 shows significant traffic demand at the outer cordon. Traffic demand at the M1,M4 and N11 outer cordon locations is lower than the N7 but still remains reasonably high.



123,489

Highest Daily Flow Recorded on the M4 between the M50 andLiffey Valley



163,284

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



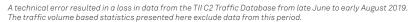
126,181

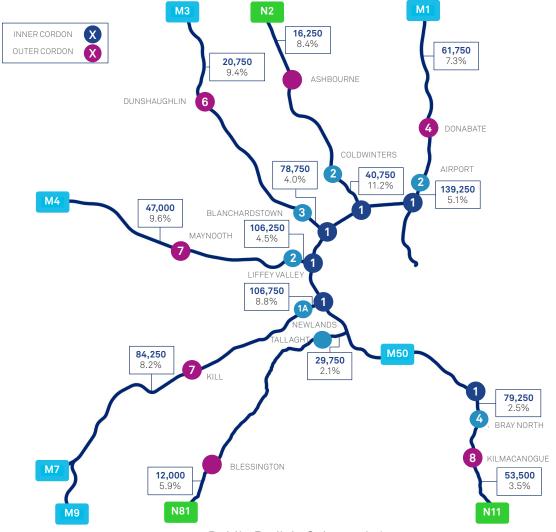
Highest Daily Flow Recorded on the N7 between the M50 and Newlands



89.409

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





Dublin Radials Schematic Layout 2019 Annual Average Daily Traffic (%HGV) on Dublin Radials

D6: DUBLIN RADIALS PERFORMANCE SUMMARY

Traffic growth and typical working day conditions represented by level of service

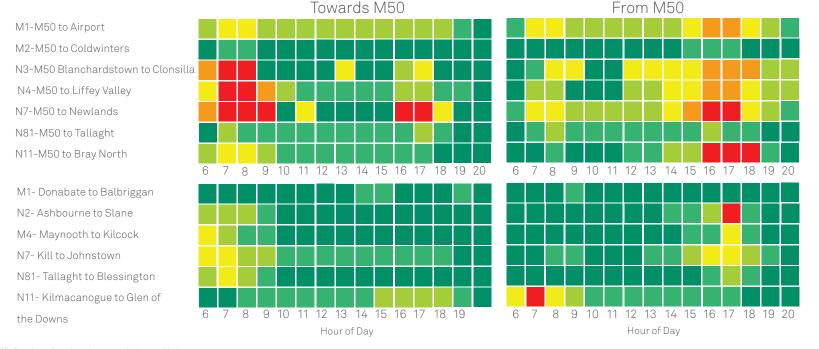
The level of service (LOS) provided by roads may be assessed using recognised international standards. LOS is a quality measure describing operational conditions within a traffic stream.

Average hourly levels of service for the full year were analysed from TII Traffic Monitoring Units which give an indication of what the busiest times of a typical day were, and what sections of the Dublin radial routes were most congested in 2019. A typical working day in 2019 refers to all weekdays excluding school holidays and public holidays.

The LOS figures show congestion occuring at inner cordon locations during the peak periods. Congestion at the outer cordon location is limited to the evening peak at specific locations where TII currently have schemes at the construction/design stage.



90 2013 2013 2014 2014 2014 2015 2015 2015 2015 2015 2016 2016 2016 2017 2017 2017 2017 2018 2018 2018 2018 2019 2019 2019 2019 203 04 01 02 03 04 01



A. Free flow

B. Reasonably free flow

C. Stable flow

D. Approaching unstable flow

E. Unstable flow

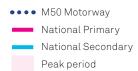
F. Forced or breakdown flow

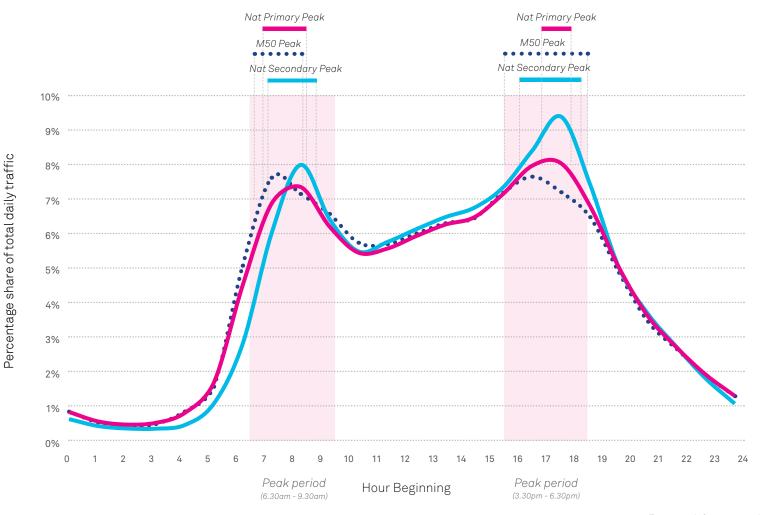
E: ROADS USAGE OVER THE DAY

Profile of the usage of the National Roads network by time of day

The peak periods on our National Roads are extending outwards due to increased demand and congestion.

In the morning, the peak period lasts between 6.30am and 9.30am whilst in in the evening, the peak covers the period between 3:30pm and 6:30pm. Peak traffic hours have a level of traffic some 30% to 50% above off-peak levels. The M50 is the most used road in the country with daily weekday traffic of up to 150,000 along its busiest sections. The peaks on the M50 are more prolonged than other roads with significant traffic flows being maintained during inter-peak periods. The trend of 'peak hour spreading' continued in 2019, with the peak period share of total daily M50 traffic reducing by 0.4% in both the AM and PM Peaks compared to the previous year.





Source: TII National Transport Model, 2019

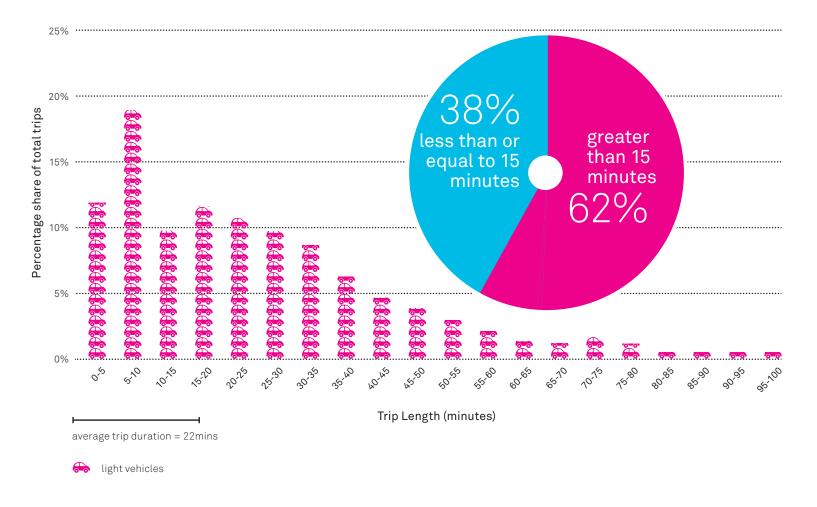
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F: TRIP DURATION

NATIONAL ROADS AND REGIONAL ROADS - AM PEAK

Profile of the trips made on the National and Regional Roads network by their duration

Across the road network, a significant portion of trips that people make are of short duration. In total, 38% of trips are of 15 minutes duration or less.

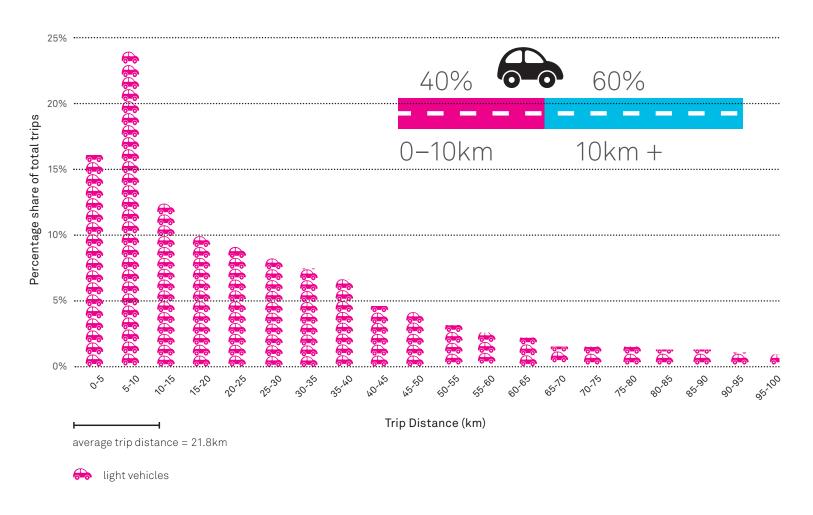


Source: TII National Transport Model, 2019

G: TRIP DISTANCE NATIONAL AND REGIONAL ROADS - AM PEAK

Profile of the trips made on the National and Regional Roads network by their distance

Across the road network, a significant portion of trips that people make are short distance. In total, just over 52% of trips are 15 kilometres or less.



H: ANNUAL TRAFFIC GROWTH RATES

Annual Traffic Growth 2018-2019

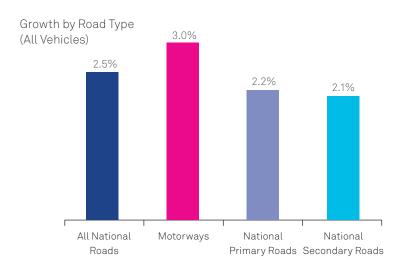
Traffic growth was 2.5% across the network in 2019.

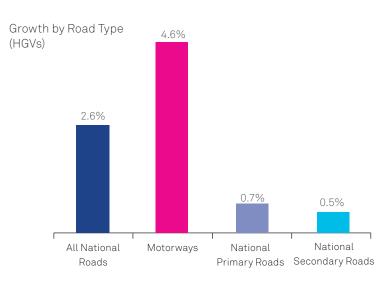
The highest regional growth recorded in 2019 was in the Border region with 4.4% for the year. The South-East and West also experienced significant growth of 3.9% and 3.8%.

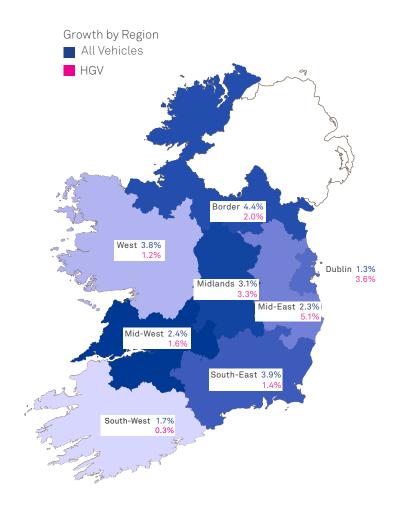
For HGVs the Mid-East recorded the highest regional growth at 5.1%. The South-West and West recorded the lowest levels of HGV growth at 0.3% and 1.2% respectively.

The greatest year on year traffic growth for all vehicles by road type was recorded on motorways; where traffic increased 3.0%. For HGVs, the highest growth by road type was on Motorways with a growth of 4.6%.

Note - Due to technical reasons a number of TMU sites did not record data during June/July 2019. The 2019 indices rely on in-filled data for these missing periods.







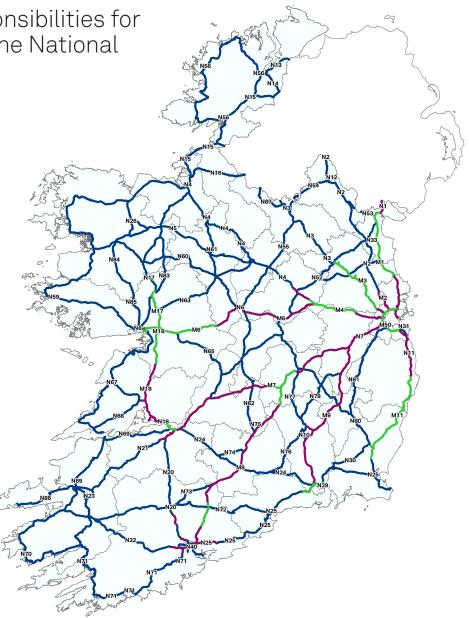
Source: TII Traffic Monitoring Units

I: NETWORK MANAGEMENT

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

The management of the National Roads network is assigned to a number of bodies with the majority share of National Primary and National Secondary roads being managed by Local Authorities. Motorways are managed under the Motorway Maintenance and Renewal Contracts (MMaRCs) or by PPP Concession companies. TII manages the maintenance of 2,665 bridges, which includes all bridges on National Roads other than on PPP roads. PPP Consession companies manage a total of 569 bridges.





Key facts:



327

-demountable snow ploughs

Our winter service fleet consists of:



salt spreaders



7,810

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



1,478 SOS phones country

weather stations in operation on the

National Roads

Network

nights in 2019

where the

temperature

reached below

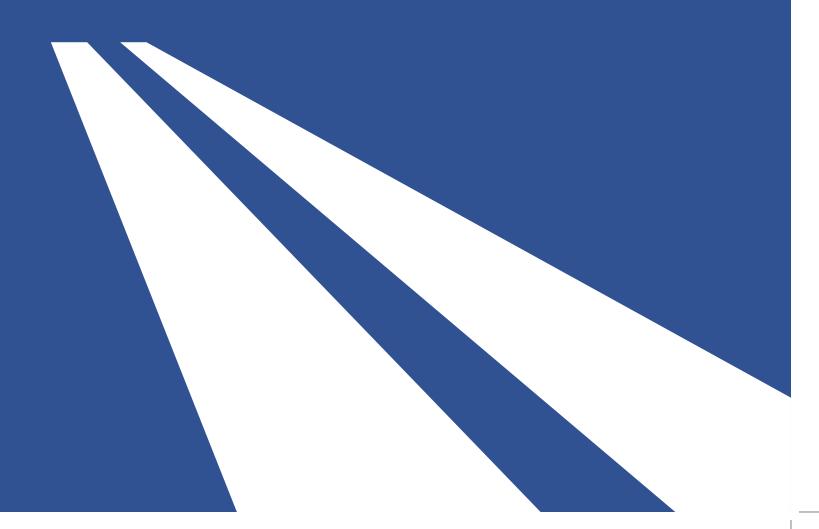
zero



tonnes of salt were

28,951 used on National Roads Network in 2019

TWO: ECONOMIC



A: ECONOMICS TRENDS AND TRANSPORT

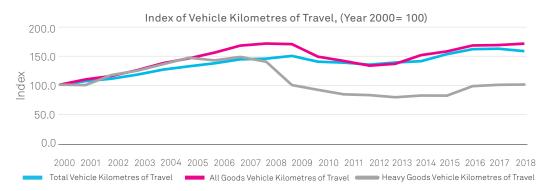
Recent Trends

In the period up to the peak of the economic boom in 2008, vehicle kilometres of travel on all roads grew at an annual average rate of 4.6% per annum. In aggregate, vehicle kilometres of travel increased by 43% between 2000 and 2008. In same period, goods vehicle kilometres of travel grew at an annual average rate 6.7% per annum, with an aggregate growth of 69% between 2000 and 2008.

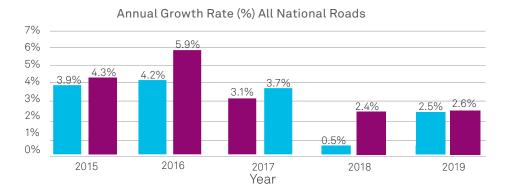
When the economic and financial crisis occurred, vehicle kilometres of travel in total declined by 10% and goods traffic by 22% between 2009 and 2012. The greater decline in goods traffic reflected in part the near collapse of the building and construction sector. Economic growth began to recover in a sustained way in 2012 and employment levels a year later. By 2015, total vehicle kilometres of travel had recovered to its pre-crisis levels. Goods traffic vehicle kilometres has still not attained its previous peak levels.

Overall transport demand comprises both personal travel and carriage of goods. With regard to personal travel, a broad distinction may be made between commuting and non-commuting. Trends in overall employment in the economy drive commuting traffic and personal incomes are the major determinant of non-commuting traffic. With regard to the carriage of goods, economic output is the major determinant and, particularly, the output of the building and construction sector, which is very transport intensive. The slow initial recovery in the building and construction sector is the reason why goods vehicle traffic is still slightly below its former peak level.

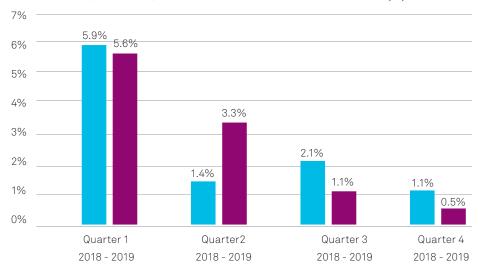
The annual growth in traffic in 2018 did not reflect the economic trends due to the influence of Storm Emma in Q1 2018. 2019 shows a higher annual growth than 2018 with a significant growth in Q1 2019 which is due to the occurrence of Storm Emma. Although traffic levels are still growing there is an overall downward trend in traffic growth as economic growth slows and full employment is reached.





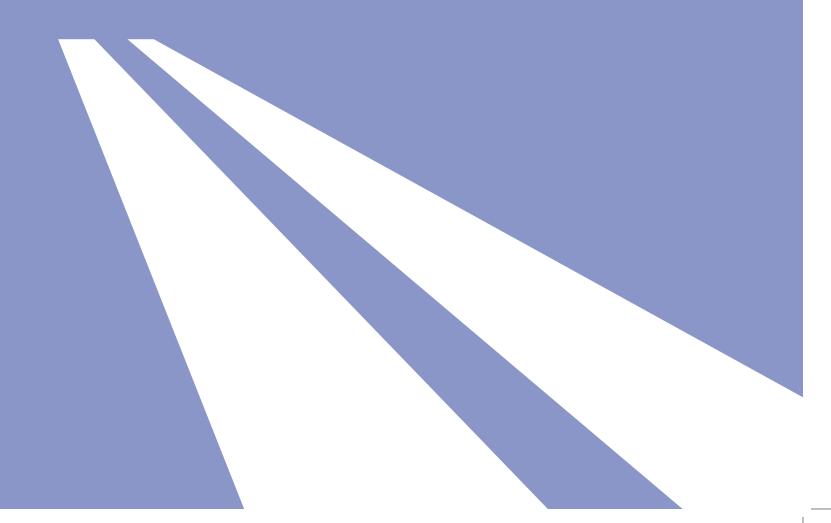


Quarter to Quarter Growth Rates on National Roads (%)



Transport Infrastructure Ireland National Roads Network Indicators 2019

THREE: ROAD CONDITION



THREE | ROAD CONDITION

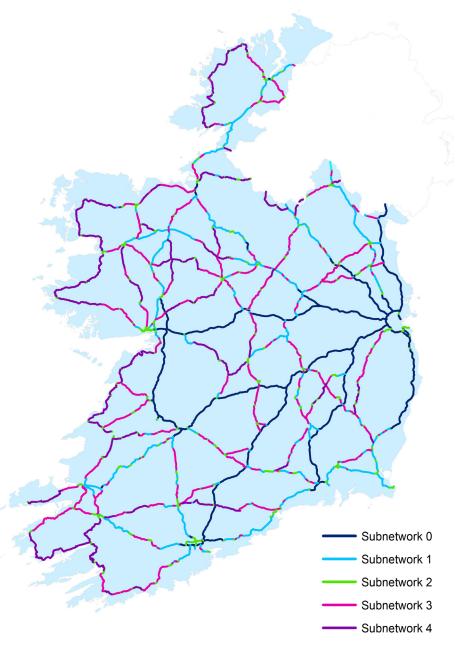
A1: PAVEMENT MAINTENANCE

Overview of subnetwork classification of National Roads network

The National Roads network consists of over 5,300 kilometres of road pavements. There is a very significant variation across the TII network in terms of pavement construction, pavement age, carriageway width, lane width, geometric design and traffic volumes carried.

In order to effectively manage this diverse network, a series of 5 subnetwork types have been defined to significantly reduce the variation in pavement condition, traffic and construction type within each subnetwork. The breakdown of subnetworks and map to the right are shown for 2017 when the Pavement Condition Report was published.

Sub	network	Classification	% of Network
0	Motorways + dual carriageways	High speed, high volumes pavement, made up of Motorway and Dual Carriageway sections of the network. Much of this subnetwork is less than 10 years old.	22%
1	Engineered pavement	Significant geometric and pavement design has taken place in the construction and/or rehabilitation of the pavement sections. Typically carry reasonably large volumes of traffic, and are identified by presence of hard shoulders adjacent to the carriageway.	22%
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.	13%
3	Legacy pavement – high traffic	Legacy subnetwork, typically constructed without formal geometric or pavement design. Typically carries traffic volumes less than 10,000 AADT.	24%
4	Legacy pavement – low traffic	Legacy subnetwork, typically constructed without formal geometric or pavement design. Typically carries traffic volumes less than 5000 AADT.	18%



Source: TII Pavement Condition Report 2019

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National Roads Network Indicators 2019

A2: MEASURING PERFORMANCE OF PAVEMENTS ON NATIONAL ROADS NETWORK

Overview of the strategic indicators used across the National Roads network pavement sub networks

Road pavement condition is a critical element in ensuring the safety and efficiency of the National Roads network. In order to maintain acceptable performance levels of road pavement significant investment is required annually.

Road pavements are made up of different layers. The surface layer is key in the road-wheel interface and influences both the safety and overall condition of the pavement. Timely upgrade of the pavement surface can prolong the lifecycle of the sub-surface / structural layers of the pavement.

Various engineering parameters are used to measure the performance of aspects of the pavement but these do not give an understanding of overall performance of the pavements on the network.

TII has therefore developed strategic level performance indicators which address three key characteristics – Pavement Surface Health; Pavement Surface Safety, Pavement Structural Health.

Within the pavement sub networks, pavement condition is ranked on a five point scale:

Very Poor, Poor, Fair, Good, Very Good.

TII research indicates that on average it takes approximately 7 years for a pavement to transition between points on the scale.

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



Pavement Surface Health



Pavement Surface Safety



Pavement Structural Health

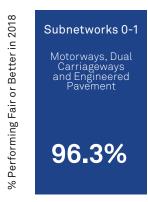
B1: CURRENT STATUS OF THE ROADS PAVEMENT CONDITION

Pavement Surface Health

The Engineered pavement subnetworks are consistently above the target level over the five year analysis period. The remainder of the network is at a higher KPI level than the Pavement Structural Health parameter, but the rate of improvement in performance is lower than that seen with Structural Health. An increased investment in the Legacy Subnetworks shows an improved upward trend line.

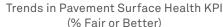


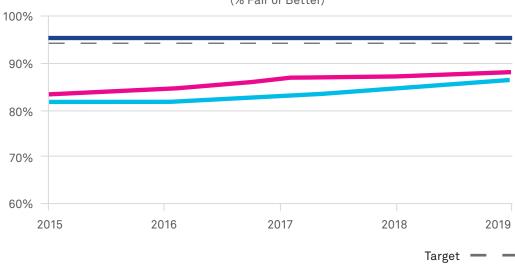
TII target 95% performing fair or better for all sub-networks











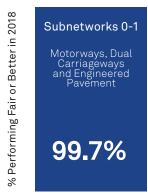
B2: CURRENT STATUS OF THE ROADS PAVEMENT CONDITION

Pavement Surface Safety

This KPI is derived from network level Skid Resistance surveys. The target level is set to have 99% of the network in a safe condition based on annual skid resistance measurements. This has been consistently achieved on the Engineered Subnetworks (0 and 1) over the 5 year period as seen by the trend line. The Legacy Subnetworks are below but close to the target line, the trend line is generally flat but has improved in 2018. The Urban subnetwork is considerably below the remainder of the network. There has been an increased emphasis on treatment within urban areas in the past 2 years, and this has produced an improvement in the KPI level.

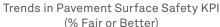


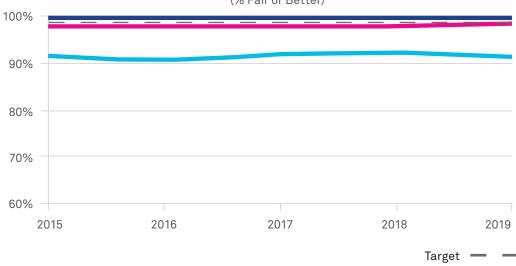
TII target 99% performing fair or better for all sub-networks











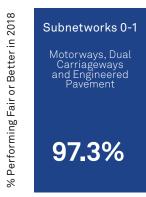
B3: CURRENT STATUS OF THE ROADS PAVEMENT CONDITION

Pavement Structural Health

There is a very clear difference between Subnets 0 and 1 (Engineered Pavements) and the remainder of the network. Subnet 0-1 is consistently above the target of 95% in Fair or Better condition, reflecting the relatively new age profile of the majority of the road sections in this category. The Urban subnetwork (Subnet 2) is in significantly better condition than the Legacy Subnetworks (subnets 3 and 4). The 5 year trend lines show an overall upward trend, reflecting a concentration on improving the worst-performing sections over the five year period.



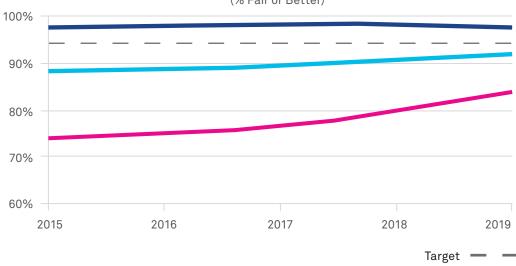
TII target 95% performing fair or better for all sub-networks







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



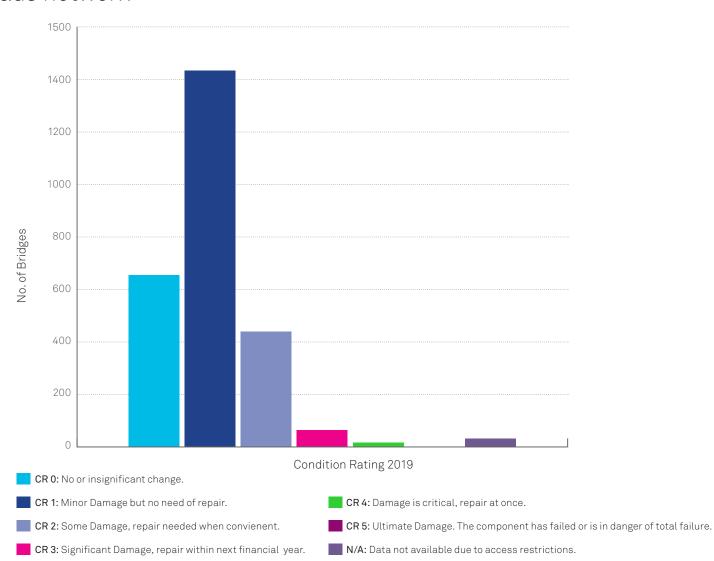
C: NATIONAL ROAD BRIDGE STRUCTURES

Overview of the quantum and condition of bridge structures on the National Roads network

Bridges are key elements of the National Roads system and maintenance and rehabilitation of bridges is a key part of the TII's asset management strategy.

The National Roads network includes 3,234 bridge structures of which 569 are on roads provided by public private partnerships.

Bridges are inspected on a regular cycle. Bridge components which are allocated 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.



FOUR: SAFETY

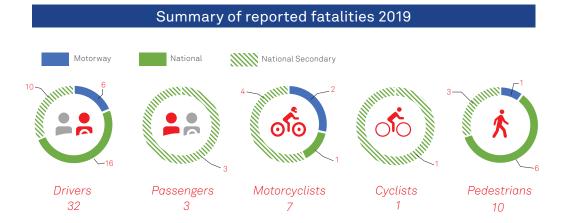


A: FATAL COLLISIONS ON THE NATIONAL ROADS NETWORK:

Key Statistics* for 2019 are presented. For further details on road safety and national trends please see www.rsa.ie

According to the Safe Systems approach, death and serious injury in road accidents are largely preventable. It should be a shared responsibility at all levels to ensure that road accidents do not lead to serious or fatal injuries. The Directive (EU) 2019/1936 amended Directive 2008/96/EC on road infrastructure safety management.

However, the amended Directive includes the strategic goal to move close to zero fatalities by 2050.

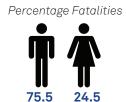


2019 Count of fatalities by Collision Category

2019 Reported figures for National Roads







Head-On

20

All other vehicle on vehicle

13

Non Motorised

11

Single Vehicle

9

Percentage of fatalities by Collision Category







All Other 24.5%



Non-motorised 20.8%



Single vehicle 17%

63.6%

36.4% female

75%

25% female

88.9% male

11.1% female

76.9% male

female

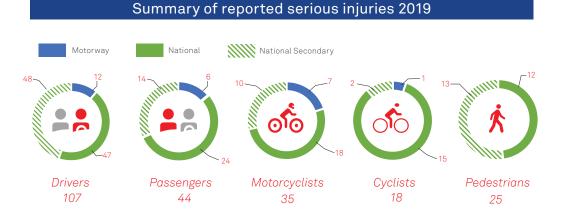
^{*}Pedestrians on Motorways include individuals who have left their vehicle. All figures shown are provisional and subject to revisions.

B: SERIOUS INJURIES ARISING FROM COLLISIONS ON THE NATIONAL ROADS NETWORK

Key Statistics* for 2019 are presented. For further details on road safety and national trends please see www.rsa.ie

According to the Safe Systems approach, death and serious injury in road accidents are largely preventable. It should be a shared responsibility at all levels to ensure that road accidents do not lead to serious or fatal injuries. The Directive (EU) 2019/1936 amended Directive 2008/96/EC on road infrastructure safety management.

These amendments included a new interim target of halving the number of serious injuries by 2030 compared with 2020.



2019 Reported figures for National Roads

Serious Injuries

Percentage Fatalities



Percentage of fatalities by Collision Category



All Other 39.7%



Head-On 21.8%



Single vehicle 21.8%



Non-motorised 16.6%

2019 Count of Serious Injuries by Collision Category

All other vehicle on vehicle

Head-On

Non Motorised

62.6%

37.4% female

48% male

female

62.0%

65.8% male

34.2%

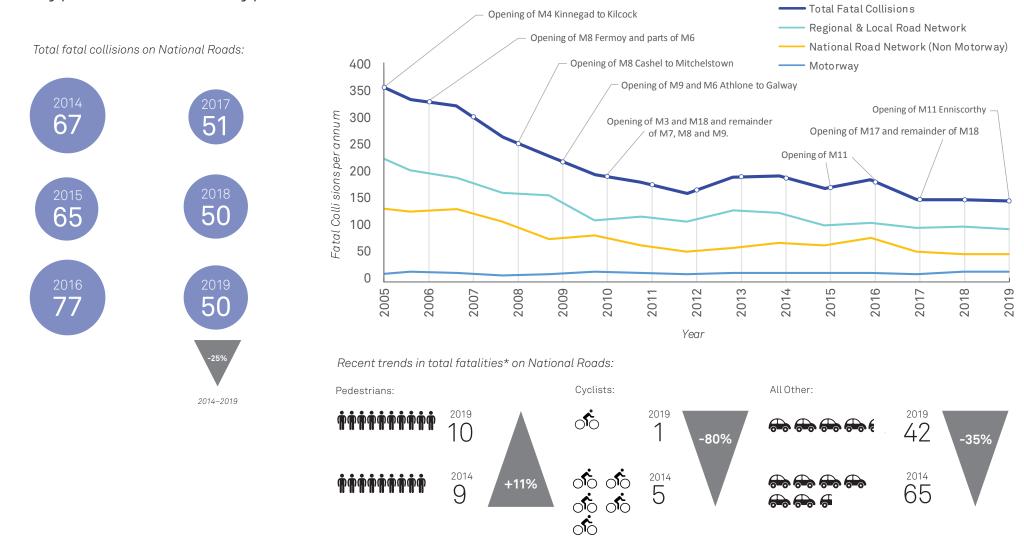
female

^{*}The RSA have noted in their recent reports the increase in reported serious injuries and have said the increase "is attributable in part to enhanced reporting and validation system" and they say that "it will take around five years' before any appreciable trends in the data can be confirmed. As a result this should be considered as a break in the time series for the data on the number of injuries and injury collisions". The RSA and An Garda Síochána continue to use the historic definition of serious injuries: An injury for which the person is detained in hospital as an 'in-patient' or any of the following injuries whether or not detained in hospital: fractures, concussion, internal injuries, crushing, severe cuts and lacerations, severe general shock requiring medical treatment.

FOUR | SAFETY

C: TRENDS ON NATIONAL ROADS NETWORK

Trends in fatal collisions nationally by road type and collision type*



FIVE: ACCESSIBILITY + ENVIRONMENT

FIVE | ACCESSIBILITY + ENVIRONMENT

A1: IMPACT OF ROAD INVESTMENT ON EMPLOYMENT ACCESSIBILITY

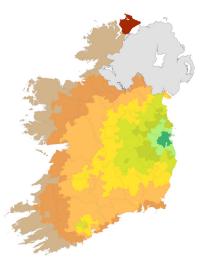
Key milestones in the development of the National Roads network

Building on the methodology put forward within the TII Transport Research and Information Note: Impact of Improvements in the Road Network on the Accessibility & Economic Potential of Counties, Urban Areas, Gateways & Hubs, 2012; TII has plotted accessibility to jobs for a number of key milestones in the development of the National Roads Network.

Employment Accessibility
Score by NTM Zone



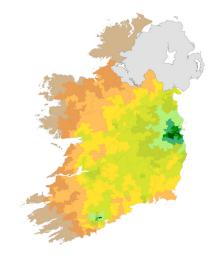
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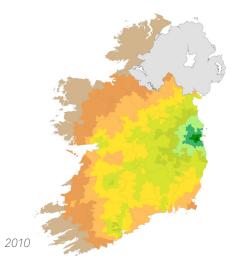
In 2006, prior to the completion of the Major Inter Urban (MIU) corridors linking the capital to the other cities; accessibility to jobs within peripheral regions was weak.

2006

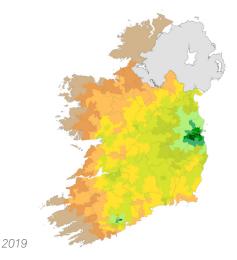
2016



Since 2016, there are only subtle changes in accessibility, related to the reduced capital spend on National Roads infrastructure during that time.



By 2010 the development of the MIUs delivered significant improvements in terms of accessibility to jobs in some of the more peripheral areas.



Both the M17/M18 and M11 Gorey to Enniscorthy projects have been completed since 2016. These projects have enhanced accessibility in the West and South-East of the country.

Transport Infrastructure Ireland National Roads Network Indicators 2019

A2: IMPACT OF ROAD INVESTMENT ON EMPLOYMENT ACCESSIBILITY

2016 versus 2019

A significant proportion of the road capital spend from 2016 to 2019 was within the west and south-east of the country and this has resulted in improved employment accessibility for these areas.

Difference in Accessibility:

+10%



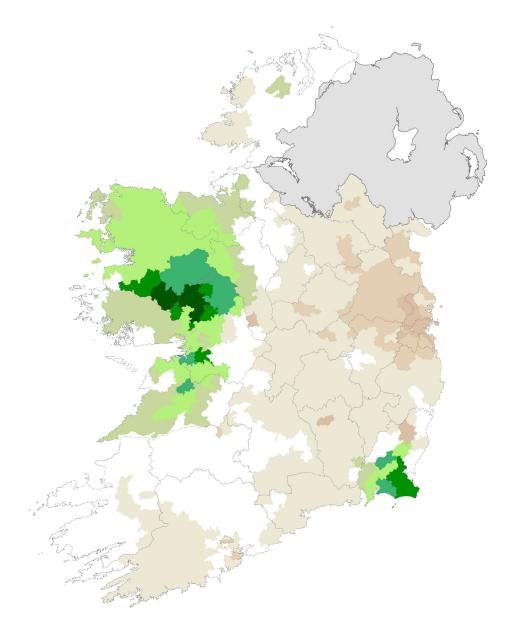


The image compares accessibility to jobs between 2016 and 2019 (relative percentage change), and effectively presents two stories:

1) Improvements in accessibility to jobs in the West and South-East related to the completion of the M17/M18 in 2017 and the recent completion of the M11 Gorey to Enniscorthy project.

2) Ongoing traffic growth in the east, particularly on the routes into Dublin has contributed to increased journey times and in turn slight reductions in accessibility to jobs in the Greater Dublin Area.

Despite the above, peripheral areas in North-West, West and South-west and South-East still tend to suffer from poor accessibility to jobs as shown on Accessibility + Environment - A1.



*Assessment based on the change in accessibility to employment only as a result of the network investment. Employment levels have been held constant at 2016 levels as part of the assessment.



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