





RSTG Conference 2024 15th May - Day 1

Networking \ Exhibition & Coffee Break

We will resume at 14.25 pm

Session 3- Climate Adaptation, Rehabilitation of Roads Over Peat Guidelines, Regional and Local Roads Safety Statistics

Chair Dominic Mullaney

14.30-14.50	Critical Infrastructure Routes & Climate	
	Adaptation	Kevin Motherway & Brian Cross
14.50-15.10	Revision of the Roads Over Peat Guidelines	James Mc Crum - DoT, Oliver Brennan-Wicklow County Council
15.10-15.30	Road Safety Authority - Stats on RLR Network	Velma Burns - RSA



Join the Q&A session at Slido.com and enter 5812867 Or via the QR Code







ROADS Services Training Group

LOCAL AUTHORITY ROADS CONFERENCE and EXHIBITION - 2024

Day 1-Session 3-Presentation 1

Kevin Motherway & Brian Cross

Sligo Radisson Hotel, Sligo, May 2024







ROADS Services Training Group

LOCAL AUTHORITY ROADS CONFERENCE and EXHIBITION - 2024

Kevin Motherway & Brian Cross

Sligo Radisson Hotel, Sligo, May 2024

CARO

Initiative of Local Government Funded by DECC :

- Build on Experience & Expertise
- Drive Climate Action & Build Capacity within LA Sector
- Coordinate Engagement acrossVarious Agencies and GovernmentDepartments
- Translate Sectoral Efforts to Local Level
- Assist in drafting and implementation of LA Climate Action Plans



CARO Work Programme



Management & Governance



Adaptation



Mitigation



Communications & Citizen Engagement



Training & Education



Knowledge Development









Climate Action

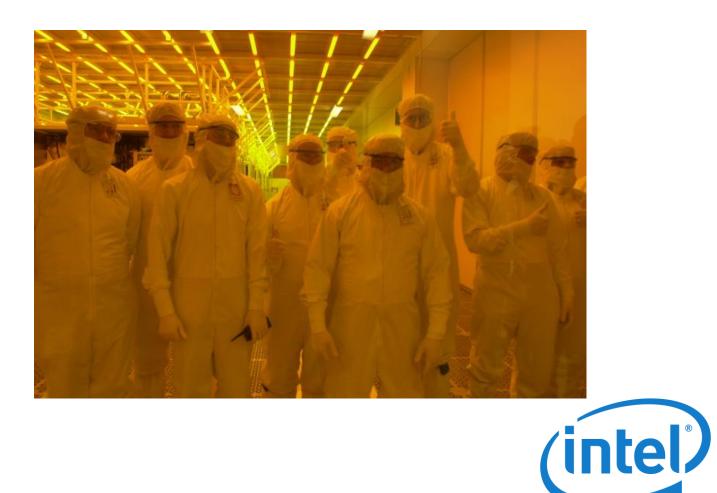
Climate Mitigation +

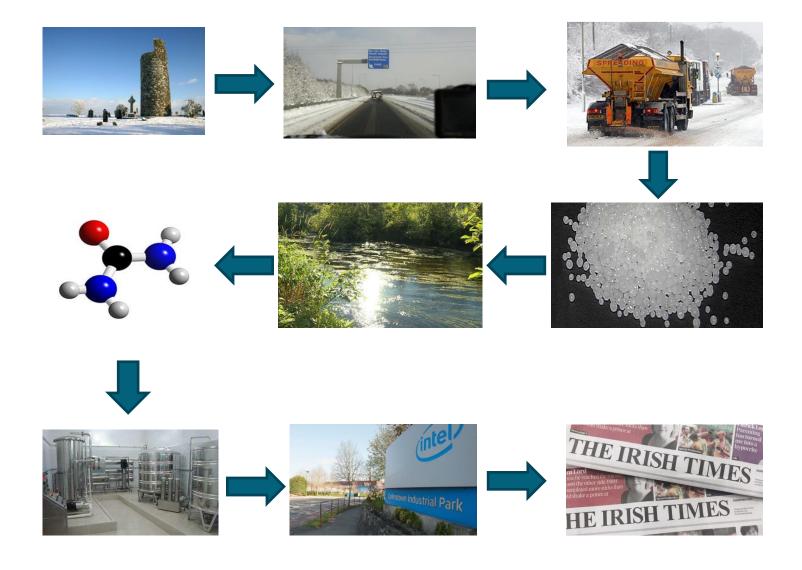


Climate Adaptation

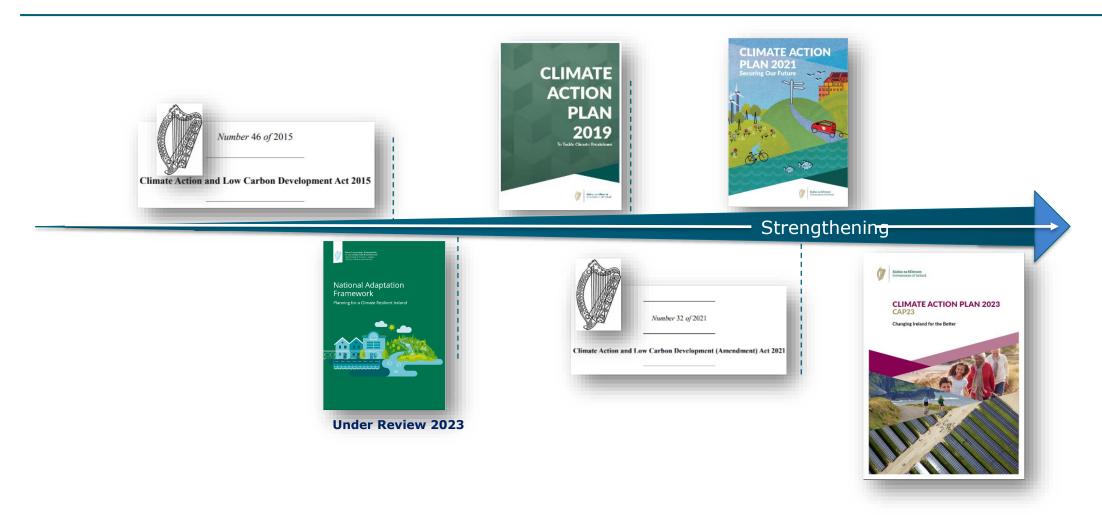


The Intel Parable





Climate Action Policy Context



Climate Action: CARO Regional & Local Roads





An Roinn Iompair

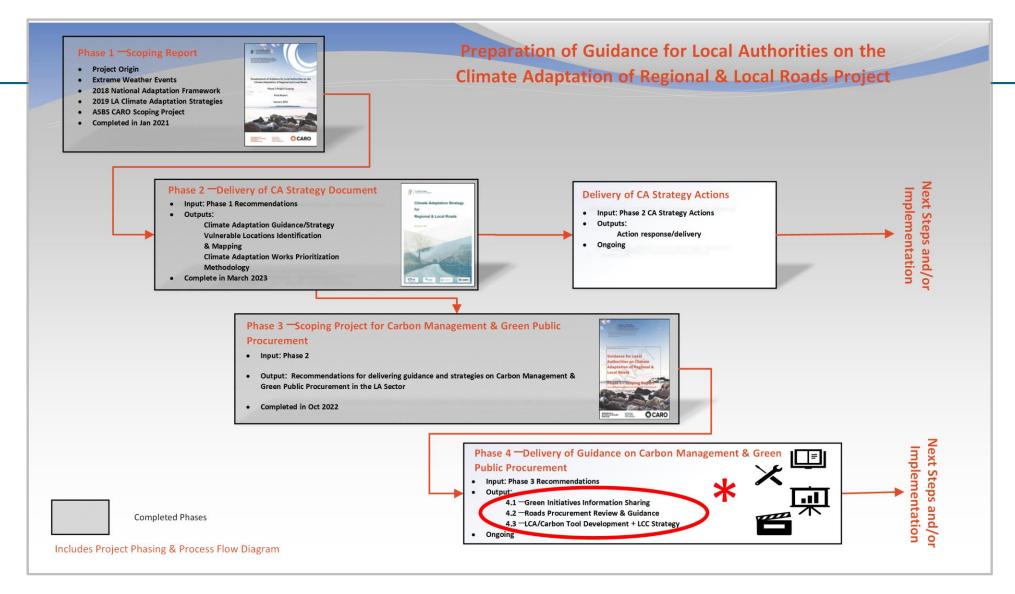
Department of Transport

- Loss of road function
- Damage to road infrastructure
- Flooding
- Increased emergency events
- Service outages (e.g. power)
- Other social, environmental & economic consequences

CARO is assisting the Local Authority sector by providing guidance and training to adapt to Climate Change impacts by:

- Increasing infrastructure resilience
- Reduce carbon emissions
- Limiting loss of road function
- Enhancing management systems and processes
- Identify "Lifeline roads" CIR

Project Outline



07/06/2024

Project Outputs to date

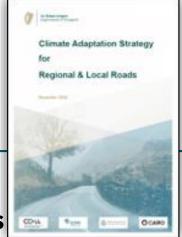
- 2021 Climate Adaptation Works Prioritization Methodology
- 2023 Climate Adaptation Strategy for Regional& Local Roads
- Input to EPA RAP by-product rules

Ongoing Work

- Climate Adaptation Strategy for R&LRs Implementation
 - ✓ Critical Infrastructure Routes (CIRs) (support role to DoTSO)
 - ✓ Geotechnical Asset Management Guidance
 - ✓ Common Failure Types (CFTs)
- Development of an LCA/Carbon <u>Measuring</u> Tool for R&LR Sector 'Embodied Carbon', Pilot Project

Pipeline Work

- Life Cycle Costing (LCC) /Whole Life Costing (WLC) Strategy/Guidance......
- Guidance Document for Green Public Procurement & Carbon Management.....





Reference Number: BP-N001/2023

of the 3rd October 2023

Local Authority Climate Action Plans

31 LACAPS

4 CARO regions

3,919 actions

395 stakeholders

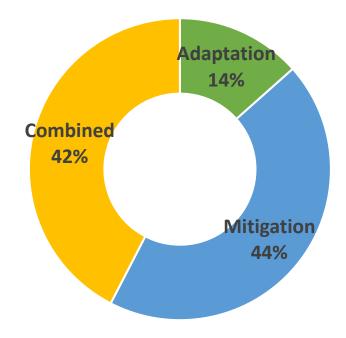
57 themes

25 sectors

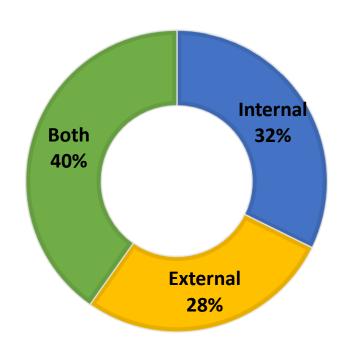


LACAP - Overview

Adaptation / Mitigation



Internal/External

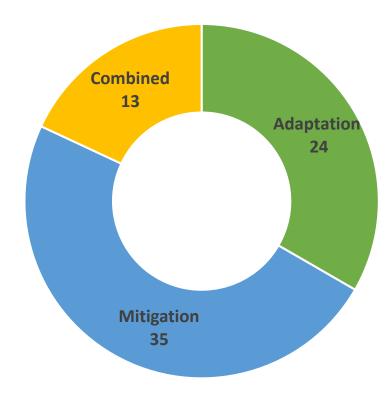


LA CAP: Roads Actions

3,919 LA CAP actions

72 Road-related actions

Roads Actions



LA CAP: Adaptation Actions

Bridge Repair Programmes (6LAs)

Control Parking/facilitate modal shift

Continue to deliver Restoration Improvement (RI) Restoration Maintenance (RM) programmes

Review Winter Maintenance approach

Footpath maintenance

Drainage

Implement Climate Adaptation Strategy

LA CAP Mitigation Actions

Explore new Low Carbon materials

Explore cold recycled mixes / RAP

Identify areas for road space reallocation

Use of HVO in Road Fleet

Maintain a high standard of active travel routes by use (cleaning/Maintenance)

Review roundabouts for improvements: Consider Dutch style cycle lanes

Increase planting on roundabout centre

Speed limit review - 30km/hr on roads

LA CAP Combined Actions (Mitigation/Adaptation)

Undertake Risk Assessment on Climate Impacts

Explore ways to minimize expected increase in maintenance

Install sensors to gather active travel use

Incorporate Active travel measures into road improvement schemes

Implement alternative treatments for winter maintenance.....respond to weather warning appropriately

Increase planting on roundabout centres

Speed limit review – for safety & emissions

Participate in Rehabilitation of roads over peat working group







Thank You

Questions to be entered through SLIDO when entering your question please direct it to **Kevin Motherway** and they will be addressed at the end of the session:

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Climate Adaptation Strategy for Regional & Local Roads

Technical Annex 1

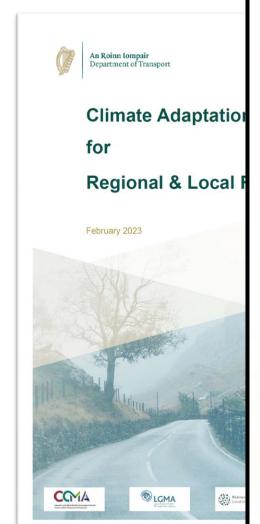
Critical Infrastructure Routes (CIR's)

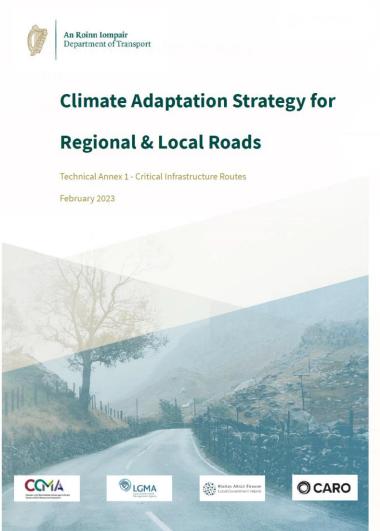
Brian Cross Senior Executive Engineer Dept of Transport Support Office

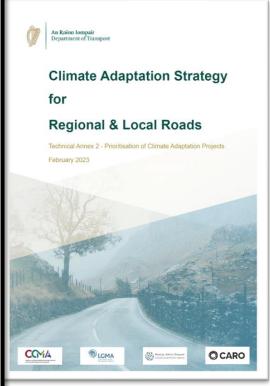












Action Responses

Action 1 Drainage

Action 2 Climate Adaptation added Roads Asset Guidance

Action 3 Climate Adaptation added to Bridge Guidance

Action 4 Geotechnical Assets & Climate Adaptation

Action 5 MapRoad AMS & Climate Adaptation

Action 6 Vulnerability Mapping

Action 7 Identify Critical Infrastructure Routes (CIR)

Action 8 Climate Adaptation Prioritisation Methodology

Action 9 Monitor & Review













What are Critical Infrastructure Routes?

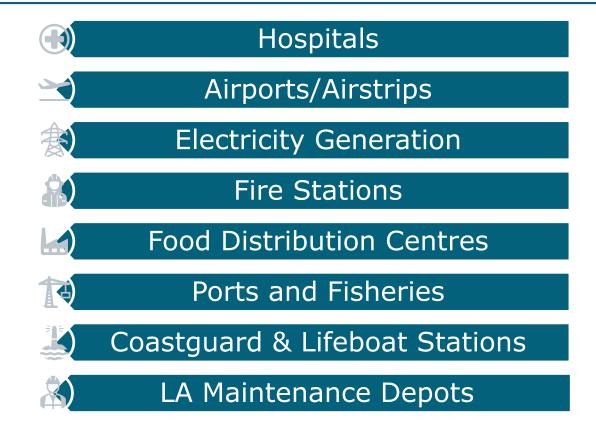
Answer CIR's

Critical Infrastructure Routes are those parts of the Regional and Local road network which are of **greatest importance** from a social, economic or emergency response perspective.

Critical Infrastructure Routes Technical Annex 1

'Greatest Importance'?

Strategic Facilities and the Methodology















Critical Infrastructure Routes with Strategic Facilities



CIR's Regional & Local Roads



Motorways and National Roads #Regionals







CRITICAL INFRASTRUCTURE ROUTES IDENTIFIED IN CO. GALWAY				
No Identified	30	Approx. Total Network Length	6926 km	
Total Length	131.90km	Approx. % of Network identified as CIR's	1.90%	



CIR's	
Identified	Pilot
Counties	

CRITICAL INFRASTRUCTURE ROUTES IDENTIFIED IN CO. CLARE				
No Identified	21	Approx. Total Network Length	4387 km	
Total Length	78.89 km	Approx. % of Network identified as CIR's	1.80 %	



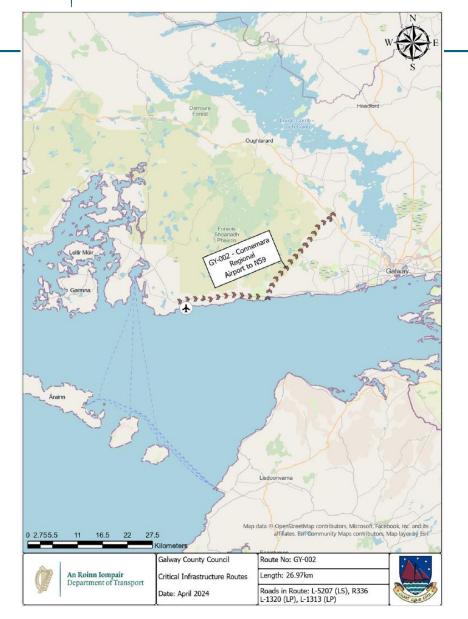
CRITICAL INFRASTRUCTURE ROUTES IDENTIFIED IN Fingal County Council				
No Identified	9	Approx. Total Network Length	1562 km	
Total Length	7.78 km	Approx. % of Network identified as CIR's	0.50%	











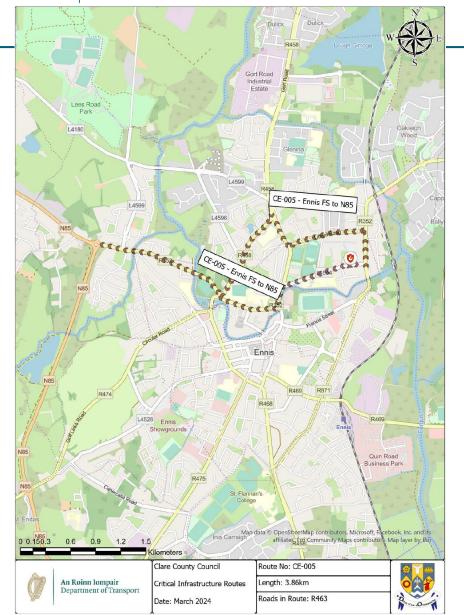
Easy one ? Connemara Airport to N59



An Roinn IompairDepartment of Transport







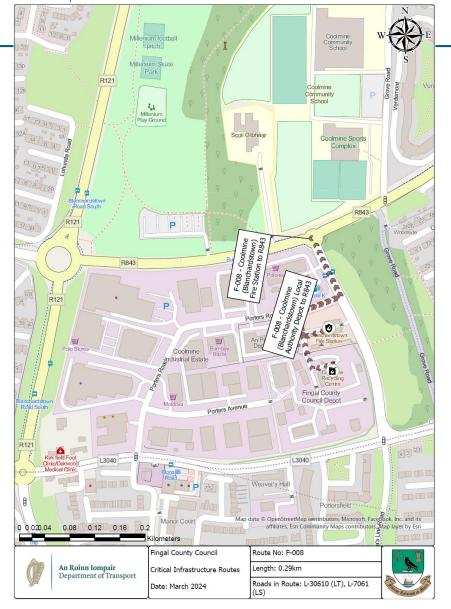
Multiple, Ennis County Clare



An Roinn IompairDepartment of Transport







Fingal, 290m







What Next

- Booklets of CIR's are being issued to each LA Review
- Forward corrections back to DoTSO as per the email instructions
- CIR's proposed to be part of the MapRoad AMS

Funding

Refer to Technical Annex 2 – Prioritisation of Climate Adaptation Projects







Thank You

Questions to be entered through SLIDO when entering your question please direct it to **Brian Cross** and they will be addressed at the end of the session:

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ROADS Services Training Group

LOCAL AUTHORITY ROADS CONFERENCE and EXHIBITION - 2024

Day 1-Session 3-Presentation 2

James McCrum & Oliver Brennan

Sligo Radisson Hotel, Sligo, May 2024







Thank You

Questions to be entered through SLIDO when entering your question please direct it to <u>James McCrum & Oliver</u>

<u>Brennan</u> and they will be addressed at the end of the

session:

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ROADS Services Training Group

LOCAL AUTHORITY ROADS CONFERENCE and EXHIBITION - 2024

Overview of collision trends and dangerous behaviours
Velma Burns
Research Manager
Road Safety Authority

Sligo Radisson Hotel, Sligo, May 2024

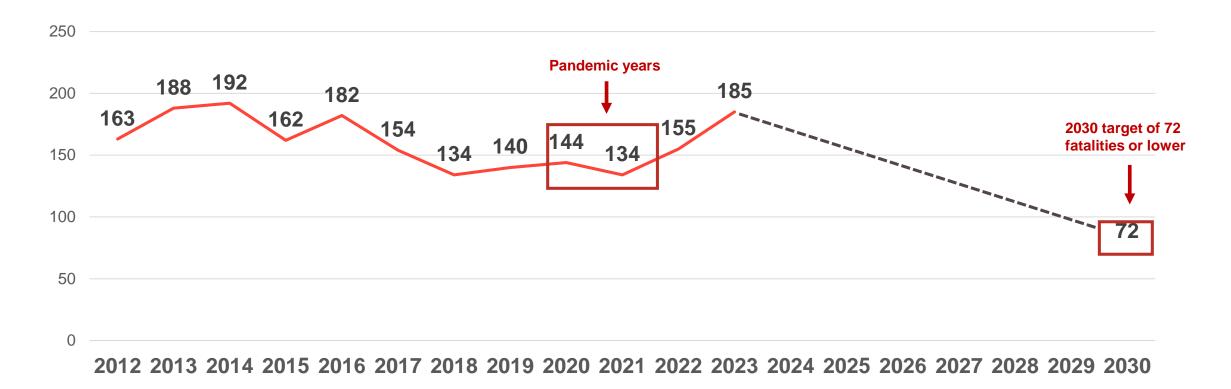


Presentation outline

- National trends: fatalities and serious injuries
- Profile of collision type: Regional, National and Local Roads
- Overview of dangerous behaviours
- Data sharing progress update



Long-term trend fatalities



Fatalities



Summary of fatalities 2023

1 January – 31 December 2023

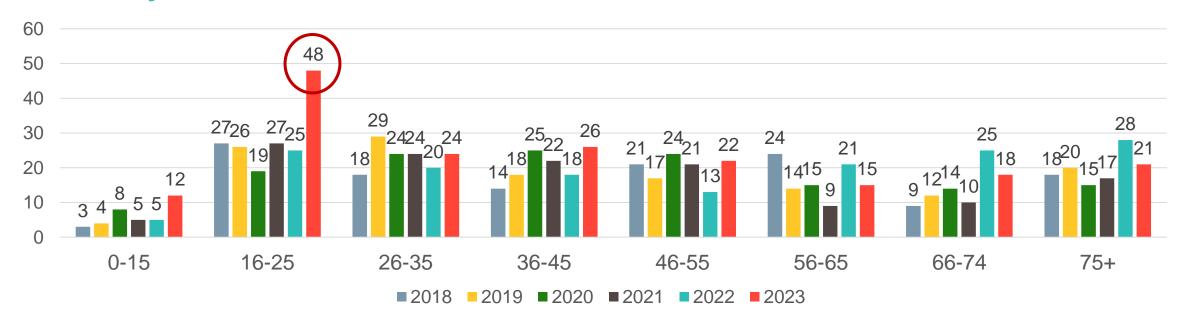
- Fatalities are highest since 2014 when there were 192 fatalities.
- Average of 15 fatalities a month
- Increasing number of fatalities among passenger, pedestrians and motorcyclists

- A quarter of fatalities were aged 16-25 years
- Almost half (47%) of fatalities occurred between 8pm and 7am
- Almost half (48%) of fatalities occurred between Friday and Sunday
- Approximately 7 in 10 on rural roads, with a speed limit of 80km/h or greater



Fatalities by Age Group

1 January – 31 December

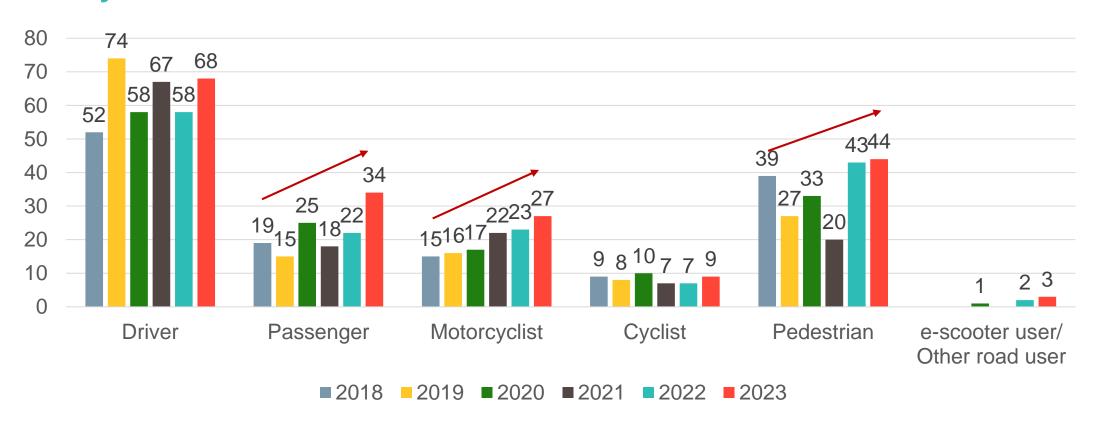


- In 2023, the highest risk age group was those aged 16-25 years (26%). Of fatalities, 78% (145) were male and 22% (41) were female.
- Of those 48 fatalities **aged 16-25**, 15 were drivers, 16 were passengers, 8 were pedestrians, 7 were motorcyclists, 2 were cyclists. Of these 48 fatalities 38 were male and 10 were female.



Fatalities by Road User Type

1 January – 31 December



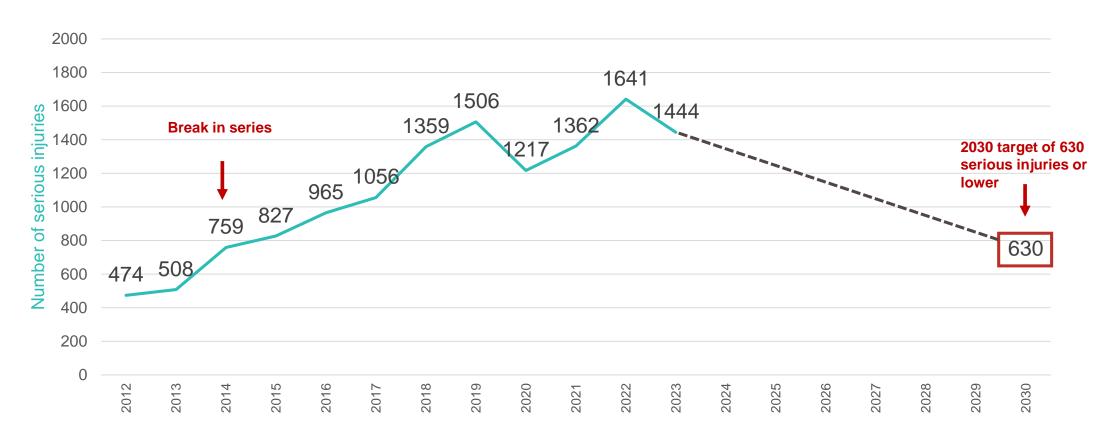
Fatalities by County

In 2023, Tipperary (16), Cork (15), Dublin (15), Galway (12) and Mayo (12) saw the highest numbers of fatalities. Together they represent 38% of all fatalities.



Long term trend serious injuries





*2020-2023 serious injury data is provisional and subject to change. There can be significant fluctuations in serious injury numbers until such time as records are fully updated.































Serious injuries 2019-2023



9 serious injuries for every fatality

Differences versus fatality trends:

- Road user profile: similar to fatalities except for cyclists (5% of fatalities; 19% of serious injuries).
- Age profile: broadly similar, but greater share of those killed were aged 66+ (24%) compared to those seriously injured (13%).
- Road type: Fatalities mostly on high-speed rural roads (3 in 4), while half of all serious injuries on urban roads (53%). Peaks among cyclists (8 in 10 on urban roads) and pedestrians (9 in 10 urban roads).
- Time of day: More than half (54%) of serious injuries occurred 12pm 8pm, (44% of fatalities). Higher proportions of fatalities between 8pm and 4am compared to serious injuries (33% vs 22%).



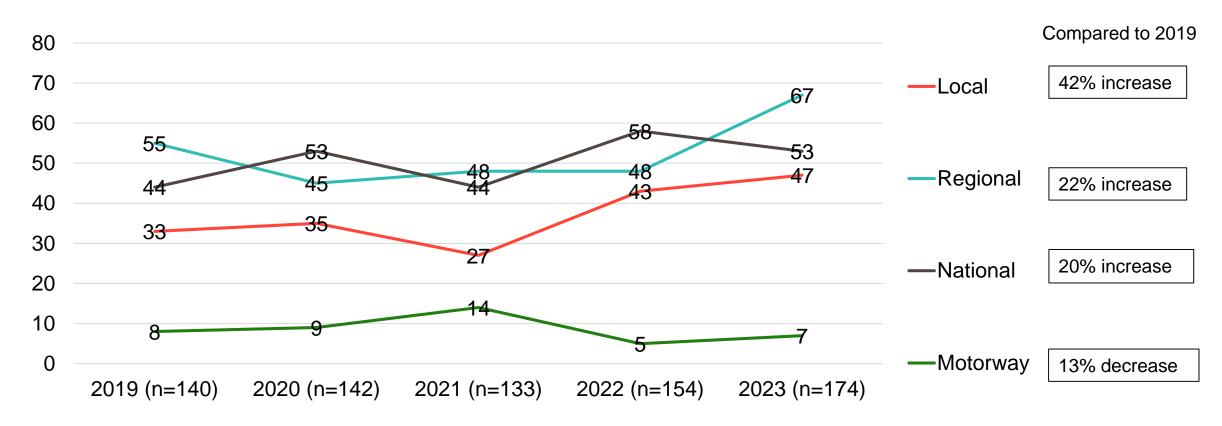
Fatal and serious injuries by collision type

Regional, national and local roads.

Fatalities by road type over the past five years



Deaths on Regional and Local roads highest in 2023 compared to the previous 4 years



Figures are provisional and subject to change. Road Type known for 2 fatalities in 2020, for 1 fatality in 2021, for 1 fatalities in 2022, and for 11 fatalities in 2023 which are not included in the graph above.



































Analysis of Primary Collision Type (PCT)

e.g. head on; non-motorised users; vehicle to vehicle; single vehicle collision; other



Regional roads

- Single vehicle collisions (SVC) dominant feature in fatalities over past 6 years
- Non motorised users represent largest share in 2023
- Compared to 2022:
 - Increase in fatalities in Head-on collisions (+9), NMU fatalities (+6) and fatalities in SVCs (+5).



National roads

 Greatest share of fatalities in headon collisions, while greatest share of serious injuries in vehicle to vehicle collisions.



Local roads

- SVCs increasingly dominant in fatalities on L roads.
- Greatest share of fatalities in SVCs, while greatest share of serious injuries among NMU.

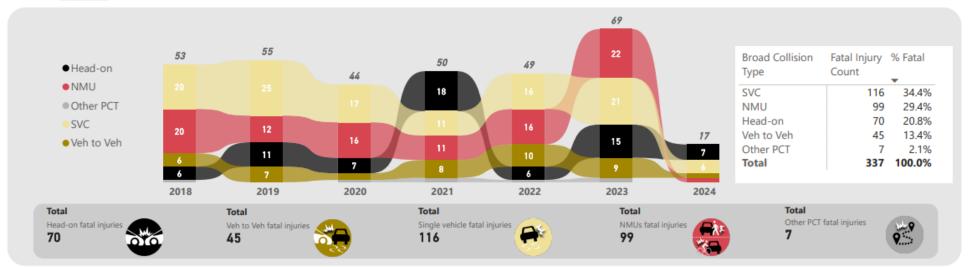
Source Tii 16 April 2024.



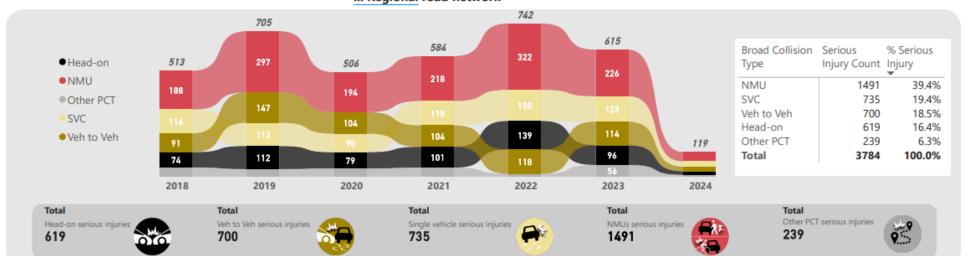
Report dated: 16/Apr/2024

Fatal injuries and serious injuries by broad collision type on the Regional road network

-RSA



Serious injuries by broad collision type reported on the ... Regional road network





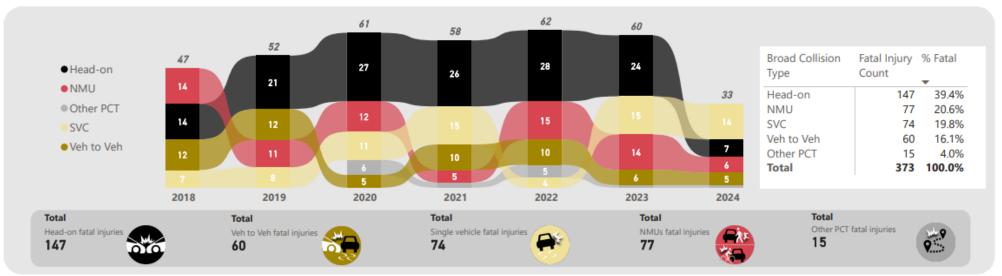




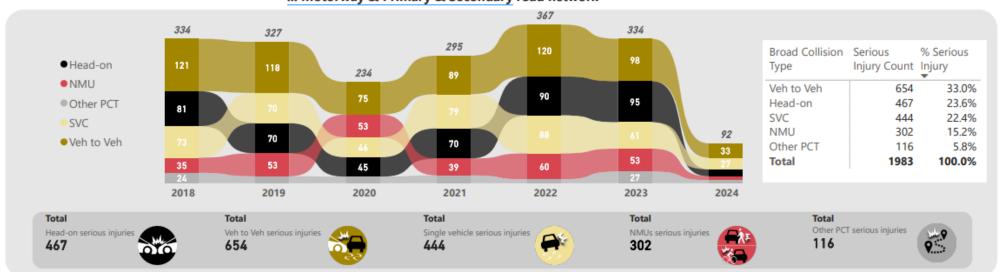
Report dated: 16/Apr/2024

Fatal injuries and serious injuries by broad collision type on the National road network





Serious injuries by broad collision type reported on the ... Motorway & Primary & Secondary road network





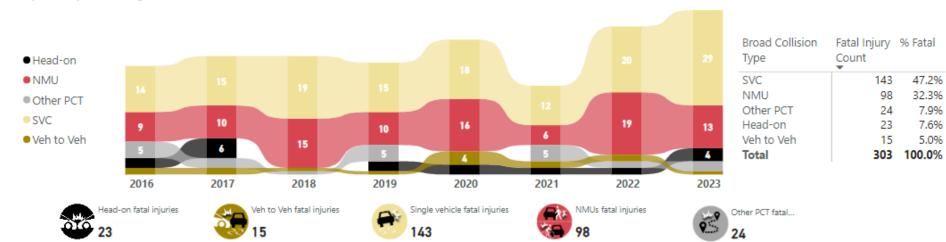




Fatal injuries by broad collision type on the Local and not defined road network

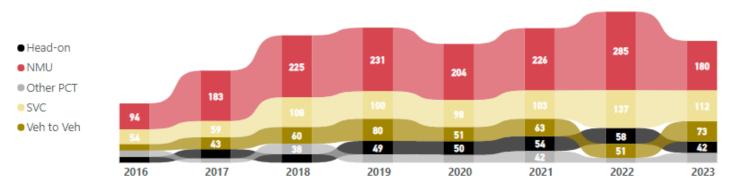


Injuries reported along the Local & Not Defined network



Serious injuries by broad collision type

Injuries reported along the Local & Not Defined network



Broad Collision Type	Serious Injury Count	% Serious Injury
Other PCT	228	6.69%
Head-on	339	9.94%
Veh to Veh	444	13.02%
SVC	771	22.61%
NMU	1628	47.74%
Total	3410	100.00%















Overview of dangerous behaviours



Intoxicated driving and non-seat belt wearing



































Intoxicated driving - Alcohol

Self-report survey data

- Across studies, on average 1 in 10 drivers surveyed drove after consuming any alcohol (12 months)
- Social acceptability of drink-driving has increased since 2019
- 1 in 4 motorists agree that:
 - Driving short distances after having a drink is acceptable
 - They may have been over the limit when driving the morning after a night out
 - Much higher levels among those who admit to drink driving



































Non-seat belt wearing

Observational, self-report and collision data

- A decline in drivers and front seat passengers wearing seat belts in observation studies
- Highest level of rear seat passengers wearing a seat belt since first survey in observation studies
- Those under 45 years reported higher levels of not wearing a seat belt in all seating positions compared to those 45+ (30 days)
- 1 in 5 drivers do not insist that passengers in the rear seat wear a seat belt
- On average 1 in every 4 drivers and passengers killed were not wearing a seat belt



































Speed





























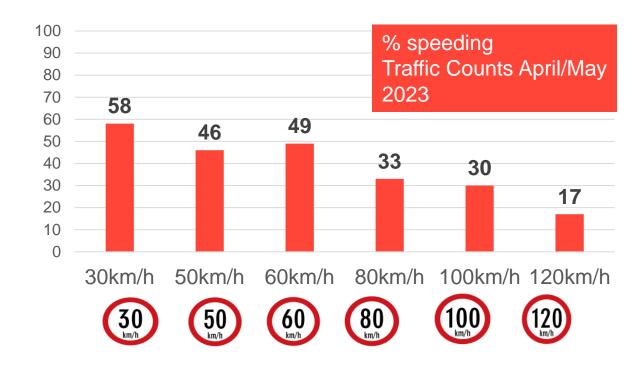




Speeding

Traffic Count Study





- On all road types non-compliance highest between 8pm-8am, specifically between 4am-8am
- Majority of non-compliance on all road types exceeded the speed limit by up to 10km/h

■ 80% of HGV drivers exceed the speed limit on 100km/h roads (limit 80km/h).





























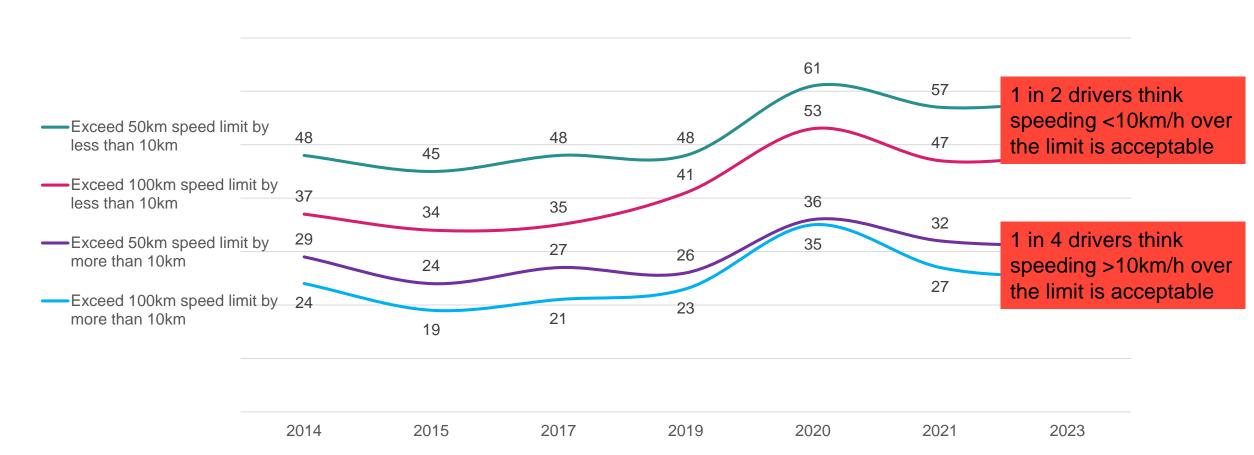






Speeding – levels of self-reported behaviour

Driver Attitude and Behaviour (DAB) surveys, Base: All Motorists (1,000+)



































Topline findings: Understanding urban speeding







In person and online focus groups with drivers

- □ Perception that speeding is **not a problem** in urban areas traffic dictates speed, fewer people killed on urban roads.
- ☐ **Time pressure** frustration with traffic jams/calming, making-up for perceived lost time.
- ☐ Habit/reinforcement e.g. 'The more people do it and get away with it, the more likely they are to do it again'.
- □ Self-serving/self-centredness don't consider impact of their actions on other road users.



































Topline findings: Understanding urban speeding







In person and online focus groups with drivers

- □ Lack of knowledge/understanding don't know what the limits are, and/or the rationale for speed limits, insufficient education about speeding.
- ☐ Unintentional/accidental speeding sudden changes in speed limit with minor road environment changes.
- □ Peer group influences younger drivers tend to speed because their peers are 'egging them on'.





































Impaired driving

Mobile phone use





























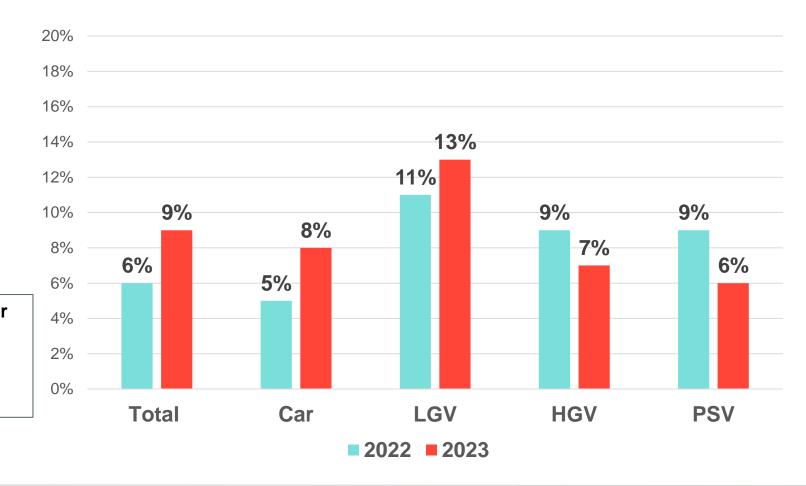




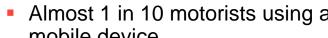
Mobile Device Usage

- Almost 1 in 10 motorists using a mobile device.
- Consistent across urban roads,

Mobile device usage (mobile phones and other mobile devices) -**20,551 vehicles at 145 sites** Fieldwork was conducted in September and October 2023







rural roads, and motorways





























VISION

ZERO





145 sites in study

Traffic Counts used to extrapolate number of vehicles with distracted drivers





Rock Road, Dublin City, Urban Road Thu 5 Oct,

mobile phone usage: 12%

Estimated traffic count 90 mins: 702

vehicles

84 drivers distracted







Kerry



Limerick

Cork



Tipperary

Waterford

Kilkenny

Wexford

Donegal





















Literature review: Understanding driver mobile phone use



Two processes linked to driver mobile phone use identified, both of which are present concurrently and interact:

1. Controlled cognitive processing

Drivers intend to use their phones, doing so deliberately, and because of conscious decision-making. The behaviour derives from:

- ☐ High self-efficacy e.g., I believe I can handle the car safely while using the phone.
- □ Low risk perceptions e.g., I won't get caught.
- □ Normative influences e.g., belief others use their phones all the time.
- ☐ Justifications e.g., I only use my phone if it is important to take the call.

2. Uncontrolled cognitive processing

Driver behaviour linked to unconscious processes derived from habit formation, Fear Of Missing Out ('FOMO'), smart phone dependence (aka 'addiction'). This dependence is present across all aspects of life, and is not restricted to in-vehicle.

































Topline findings: Understanding young driver mobile phone use





- □ **Normative influences**: All drivers use phones in-vehicle, regardless of age or gender (according to participants). Not helpful to focus on young drivers. Professional drivers viewed as biggest culprits.
- □ Cognitive justifications: 'I'd only send a message if it was a priority to my parents or girlfriend', 'I'd only do it on a rural road I knew well', 'I'd only do it in slow moving traffic in town'.
- Risk perceptions: 'Close to zero chance of being caught'.
- Dependence: 'FOMO is a real thing', 'I think it is addiction to be honest.'
- ■Not all behaviours are equal: e.g., use (navigation, texting, music etc.) and context (stopped on red vs. moving in traffic). Doesn't help to focus on 'mobile phone use' in general.
- □ Inconsistency in how different technologies are regulated leads to a lack of credibility, not consistent to ignore in-vehicle distractions caused by increasingly complex infotainment systems and focus only on driver behaviour/mobile phone use.



































In summary

- Evidence shows concerning engagement across drink-driving, non-seat belt wearing, speeding and driver mobile phone use.
- Social acceptability of drink-driving remains a concern.
- The **peak** in self-report speeding engagement and acceptability observed during 2020 has not returned to pre-COVID levels.
- **High risk groups**: male, under 35, those who drive for work.
- Common themes emerging from the qualitative research include: normative/peer influences, lack of enforcement, subjective justifications.
- Findings from the completed **qualitative studies** will inform policy recommendations in addressing urban speeding and driver mobile phone use.

































Update on data sharing



Ongoing consultation

Action 62

Provide timely and appropriate road traffic collision data to local authorities, and agencies with responsibility for road improvement and maintenance, to inform their work.

- The RSA previously shared 8 key data fields with the LGMA and RMO, who then made this information available on MapRoad. However, the CCMA advised that that arrangement should not continue until appropriate data governance procedures are implemented.
- The **Data Enabler Group (DEG)**, established to support delivery of the government Road Safety Strategy, have prioritised activities to formalise the development of Data Sharing Agreements (DSA) between relevant Road Safety Strategy partners, including the LGMA and RMO.
 - The RSA has consulted with AGS to agree the data fields to be shared with the RSA (necessity and proportionality).
 - The RSA has consulted with the LGMA and RMO (on behalf of the Local Authorities) on data requirements in tandem.
 - The consultation in relation to data sharing is ongoing with the Data Protection Commissioner led by the DoT.
 - A Ministerial Direction will be required for the RSA and an amendment to the Roads Act for the Local Authorities to lawfully receive the data.
 - Resolving current data sharing challenges has been designated a Ministerial priority.









Thank You

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Appendix

Fatalities by County

In 2023, Tipperary (16), Cork (15), Dublin (15), Galway (12) and Mayo (12) saw the highest numbers of fatalities. Together they represent 38% of all fatalities.

County	2019	2020	2021	2022	2023	Total
Carlow	2	3	0	0	3	8
Cavan	3	2	5	5	6	21
Clare	5	3	2	7	6	23
Cork	14	22	8	13	15	72
Donegal	8	10	7	8	10	43
Dublin	19	20	20	14	15	34
Galway	7	5	12	6	12	42
Kerry	6	9	6	8	10	39
Kildare	4	4	7	4	3	22
Kilkenny	6	4	2	9	4	25
Laois	1		2	3	3	9
Leitrim	1	1	0	2	4	8
Limerick	9	4	5	10	7	35
Longford	1	0	3	2	2	8
Louth	4	9	7	8	7	35
Мауо	3	5	5	5	12	30
Meath	7	8	14	7	7	43
Monaghan	2	3	5	6	7	23
Offaly	5	4	0	4	7	20
Roscommon	3	5	2	4	6	20
Sligo	1	2	1	6	4	14
Tipperary	13	7	10	7	16	53
Waterford	3	2	1	3	3	12
Westmeath	3	4	2	3	6	18
Wexford	7	7	7	9	3	33
Wicklow	3	1	1	2	7	14
Total	140	144	134	155	185	758









Thank You

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RSTG Conference 2024 15th May - Day 1

Networking \ Exhibition & Coffee Break

We will resume at 16.00 pm

Session 4-Green Public Procurement & Nature Base Solutions

Chair Marcus O'Connor

16.00-16.20	Green Public Procurement	Aoife Sugrue - Cork County Council
16.20-16.40	Nature Based Solutions	Averil Gannon - DHLGH

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