Trevor Gordon, BEng, CEng, MIEI Project Manager Road Management Office Co. Donegal

## Local Authority Road Schedules

Statutory, Asset Management and Data Implications









## **Contents**

- The "Lore"
- The Evolution
- Circular RW24/2025 & Guidelines for Road Classification & Road Schedule Management 2025
  - Why?
  - What?
  - Who?
  - How?
- Summary/Takeaways









#### Road Schedule 'Lore'



- □ Classification of national, regional and local roads.
- ☐ ...Minister may by order classify....(N & R)
- □ ...shall assign a number or other identifying mark
- ☐ ...road authority shall keep a schedule and map
- □ ...may be kept otherwise than in a legible form
- ☐ ...schedule and map as soon as practicable after the commencement of this section











#### **Road Schedule Evolution**

- From end of county road No. 170 at Effishmore to end of Crooked Tree bog road. (Distance 160 perches)
- From end of County road No. 230 at Glenagannon to Charles Mooney's turf bank. (Distance 410 perches)
- 7. From county road No. 304 at Meenaoiln East to Joseph Cunningham's turf bank and west to James Diver's turf bank. (Distance 375 perches)
- From county road No. 306 at Meenahonor to James Callaghan's turf bank and also branch to 'Paddy the Mans' brook. (Distance 305 perches)



#### Pre '93

"Paddy the Man's Brook"

#### Post '93

- Dusty Books?
- Digitisation
- MapRoad AMS

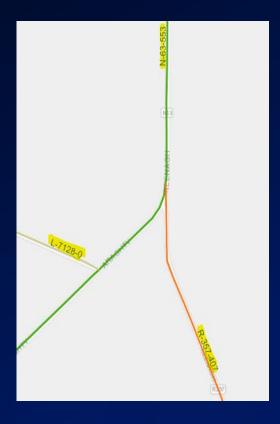


#### Guidelines

for

Classification and Scheduling of Roads

In Ireland



September 2013

#### **2013 DoT Guidelines**

- Standard Numbering System
- ☐ Segments & Nodes
- Standard specification of road segment information recorded



















## Why does your Local Authority need to maintain an accurate record of public roads? What are the implications for your Local Authority if you

Because the Roads Act says so.... Asset
Management
Recording Works &
Expenditure

Pon'T? Network Data

Interpretation of the condition of t

Traffic, Condition, Surface Material, TIN, Safety Licenses and Permits

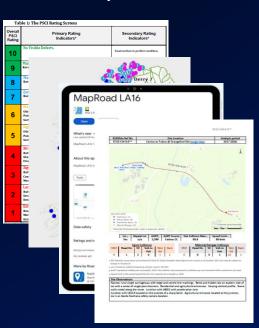
Consents, Inspections & Enforcement

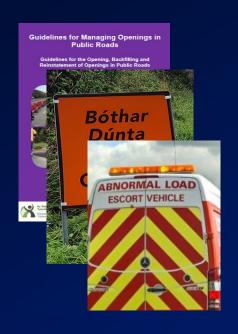
**Speed Limits** 

National Defaults, By-Laws, Enforcement









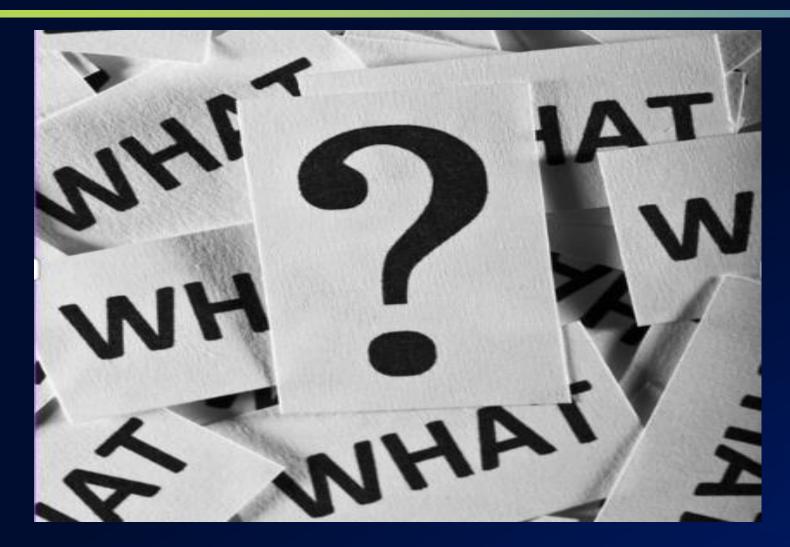




















## Circular RW25/2024 and Revised Guidelines for Road Classification & Schedule

Management

An Roinn Iompair Department of Transport

14th November 2024

RW 25 of 2024

#### INVENTORY OF PUBLIC ROADS

Dear Chief Executive.

I am directed by the Minister to refer to S10(6) of the 1993 Roads Act

"A road authority shall, at the request of the Minister and in such manner as may be specified by him, carry out an inventory of all public roads, or of any class or subclass of public road. in respect of which it has responsibility."

The Minister hereby requests that an inventory of public roads within your administrative area be carried out and delivered to this Department on a phased basis as set out below.

- 31st April 2025 inventory submission for all Local Roads
- 31st July 2025 inventory submission for all Regionals Roads
- 31st October 2025 inventory submission all National Roads

#### Background

Since 2012 the overall length of regional and local roadway has increased by an estimated 3,400km. In addition, it should be noted that approximately 615km (1,900 individual segments) of dedicated Active Travel infrastructure has also been constructed.<sup>1</sup>

Section 10(5) (a) of the 1993 Roads Act requires that a road authority shall keep a schedule and map of all public roads in respect of which it has responsibility.

This requirement is set out in circulars including RW 06 and RW 07 of 2012 and is reiterated annually by circular, most recently in RW 02 of 2024 RLR Allocation, where the requirement to keep this schedule up to date on MapRoad AMS is set out in order that there is a single repository for all road schedules.

The information is a necessary support to a number of government policies including.

- . Connecting Government 2030: A Digital and ICT Strategy for Ireland's Public Service
- The Road Safety Strategy 2021-2030<sup>i</sup>
- National Sustainable Mobility Policy<sup>iii</sup>
- Climate Action Plan 2024<sup>iv</sup> and supporting policies for example.
  - o Electric Vehicle Charging Infrastructure Strategy 2022-20
  - Whole of Government Circular Economy Strategy<sup>v</sup>
- The National Development Plan 2021-2030vi
- Recommendations of the Housing for All Expert Grou Probate.<sup>vii</sup>

Lána Líosain, Baile Átha Cliath, D02 TR60, Éire Leeson Lane, Dublin 2, D02 TR60, Ireland T+353 1 6707444 | rlr@transport.gov.ie www.gov.ie/transport



#### Supported by Revised Guidelines →

- Changes in legislation
- Evolution of technology

Guidelines: "The MapRoad Asset Management System (AMS) is the platform which must be used by Road Authorities to manage and maintain their road schedules in compliance with the Roads Act 1993 and this is mandated as such by various

#### Use of MapRoad

MapRoad AMS is to be used to record the inventory. Exported data from the Road Schedule information recorded in MapRoad AMS is to be used to create the tabular and Shapefile data required under this circular.



Guidelines for Road Classification and Road Schedule Management 2025

& Schedule Management

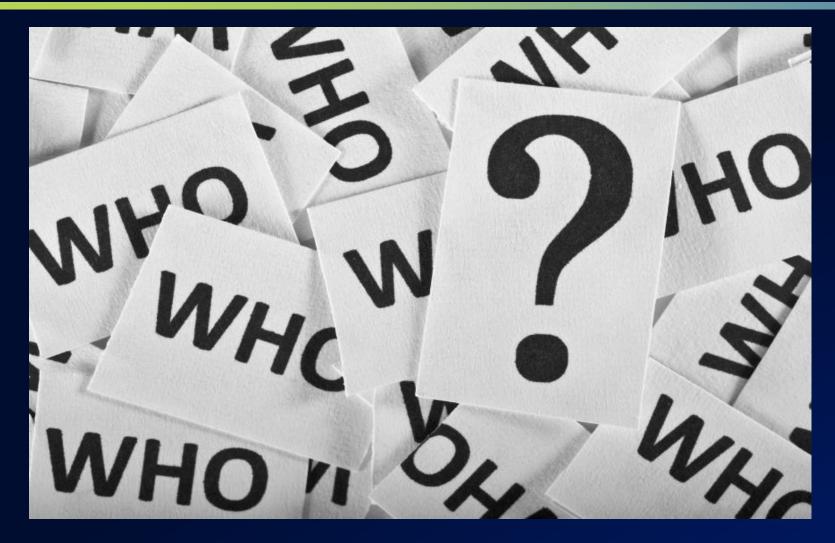
Technical and Compliance Section, Regional and Local Roads Divisio











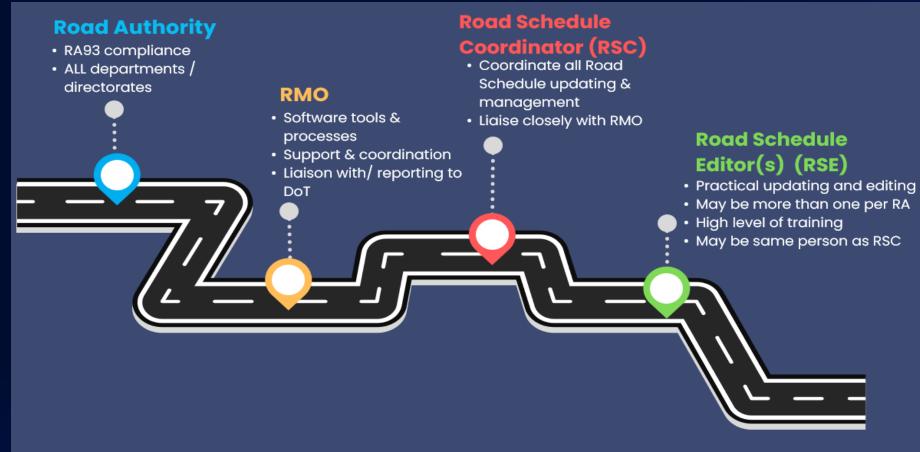








## Guidelines for Road Classification & Schedule Management – Roles and Responsibilities





















### Road Schedule Management

TWO OBJECTIVES OF AN ACCURATE ROAD SCHEDULE ON MAP ROAD AMS

### = Continually Updated & Accurate Schedule

Capture <u>ALL</u> public roads & report accurately on road schedule length

Have an accurate digitised schedule to facilitate proper road asset management

Roads Act 1993 (S2 & S68) defines cycleways and footpaths as public roads.

→ cycleways and footpaths must be recorded on an authority's road schedule and be assigned a road number.

#### **Public Road?**



#### **Public Road?**



#### **Public Road?**











### How to Ensure a Continually Updated & Accurate Schedule: Tools and

#### BUPDESISE SOOLS:



Roads Act 1993, S10(6) & Circular RW24/2025

→ MapRoad IS the "manner specified"

#### **2025 Guidelines:**

- MapRoad AMS must be used for all Road Schedule editing
- MapRoad AMS is primary source of data for consumption across other platforms and for data provision to other stakeholders.

The digital Road Schedule is "Dynamic" data supporting other processes & stakeholders

agility to update promptly & accurately essential.



#### **MapRoad Network Editing Functionality**

- ✓ New functionality to make and publish edits to network linework in real time.
- ✓ Deployment July 2025
- ✓ Significant reduction in time to update Network Segments.
- ✓ Allows integration with TII LRS linework for National Roads these will be imported directly from TII GIS Data.

MapRoad IS the Road Schedule The Road Schedule IS MapRoad











### How to Ensure a Continually Updated & Accurate Schedule: Tools and

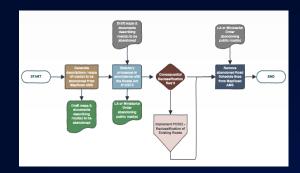
### PK9665565 (Revised Guidelines)

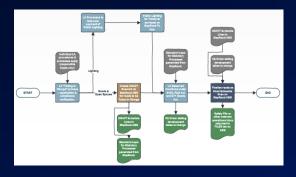
Clear Process Charts
ensuring Road
Schedule Updating on
MapRoad is an integral

Segments Types for Road Schedule / Asset Management

Statutory Instrument (SI) review and updating

- Taking in Charge
- Abandonment
- New Roads/Realignments
- Reclassifications



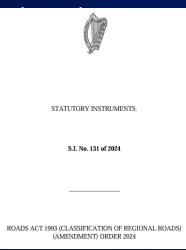


- Road Schedule Segments centreline representation of public road & form schedule length
- Road Inventory Segments dual sections, on/off ramps, roundabouts,
   footpaths do not form schedule length. Asset management only.
   Legal document describing Reg & Nat routes in standard format.
- Reviewed & updated periodically. AMS schedule = single data source
- SI text & mapping generation → automated based on schedule data

#### Routine road schedule auditing and verification by the Local Authority is essential.

AMS Schedule = primary data source for all LA platforms + data provision to other stakeholders.

→ Periodic verification / adoption by CE Order by Roads Authorities of MapRoad Schedule to ensure reliable data for consumption by all stakeholder, including enforcement activities, e.g. AGS











#### **Summary / Key Takeaways**

A "healthy" Road Schedule is the heartbeat of:

- Statutory compliance
- Asset management
- Network data collection
- Speed limits & bye-laws
- Consents/permits
- Enforcement.

Looking after may not always be exciting, but MapRoad is your Mediterranean Diet and Healthy Lifestyle

If you neglect it, it will catch up with you in the end!

















Darragh Mc Gowan CEng MIEI. MEng. BEng (Hons). BEng (Ord). Road Management Office

## **AMS Updates**









#### **Contents**

- MapRoad Traffic Module (Launched August 2024)
- MapRoad Material Database Update/Material Removed Capture (Launching July 2025)
- MapRoad Network Edges Editing System (NEES) (Launching July 2025)



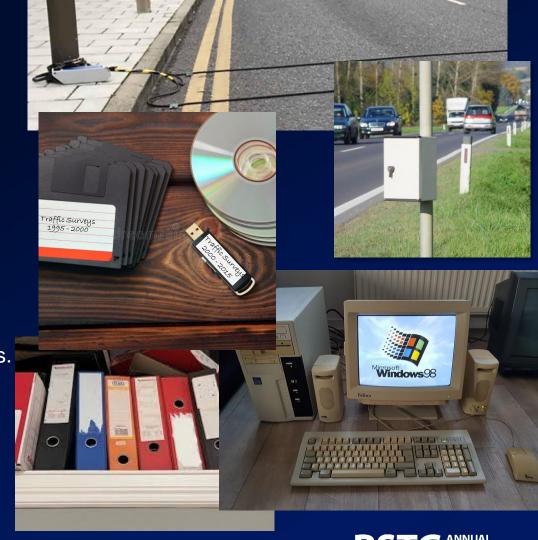






## **Background?**

- Traffic survey data historically collected using various tools and providers.
- Data stored locally on individual drives and devices across the country.
- Limited accessibility for engineers, planners, and stakeholders.
- No national standard or asset management solution for traffic counts storage.
- RMO engaged with stakeholders to assess existing methods and needs.
- Resulted in the development of the MapRoad Traffic Module.
- Provides a centralised, structured system for storing and managing traffic data.



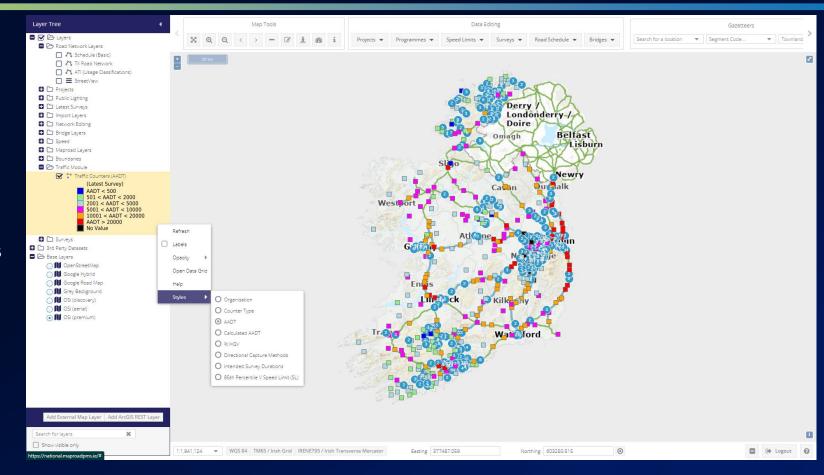






## Why develop a Traffic Module?

- Enables analysis of traffic volumes, composition, and peak flow patterns.
- Centralised storage in MapRoad ensures long-term access and consistency.
- Traffic module supports asset management principles and best practices.
- Improves data usability for planning, monitoring, and decision-making.
- Reduces risk of data loss, fragmentation, or inconsistency.





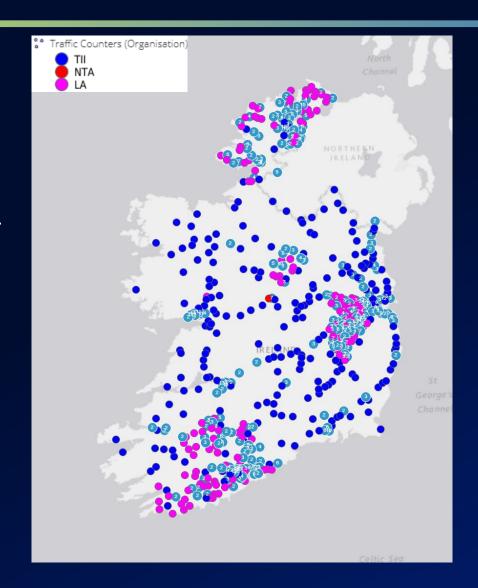




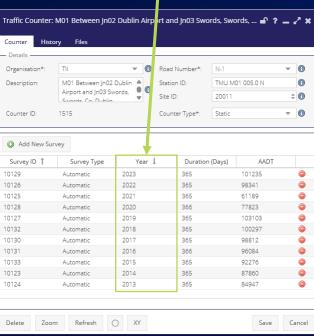


#### **Current Statistics**

- Enables multiple surveys to be linked to known traffic counter locations.
- Supports annual trend analysis and longterm infrastructure planning.
- Facilitates assessment of impacts from infrastructure changes.
- Example: 11 years of TII data captured at a single location now in MapRoad.
- Over 1,200 traffic counters and 4,700+ surveys imported to date.
- Ongoing engagement with sector to gather and upload historical data.



1 Counter 11 Years of Survey Data.



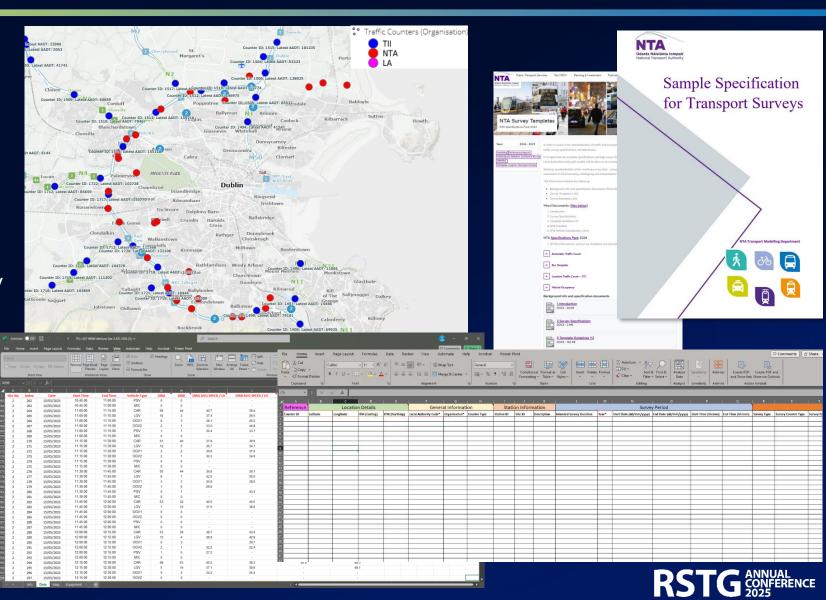






## **Collaboration with the Stakeholders**

- Developed standardised template (with NTA) for bulk ATC data import into MapRoad.
- Created schema for importing summary traffic data.
- Enables large-scale, structured access to coherent traffic data.









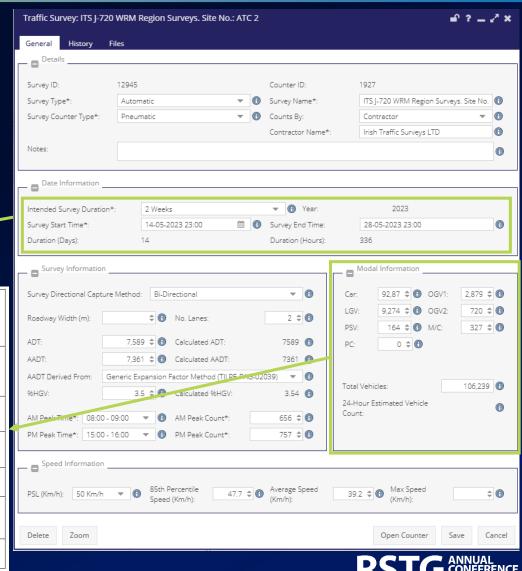
## Collaboration with the **Stakeholders**

Standardised survey durations and automated ADT and %HGV calculations.

Ensures consistent traffic count analysis

across the network.













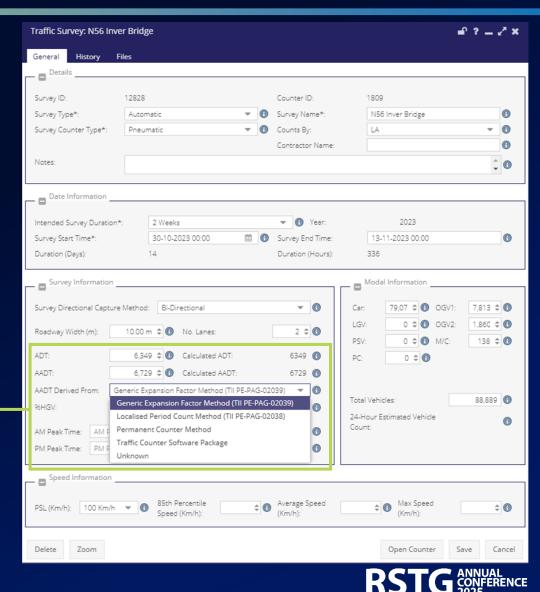
## **Collaboration with the Stakeholders**

- Developed automated AADT calculation process, based on TII's Project Appraisal Guidelines.
- Uses expansion factors for short-period counts.
- In collaboration with National Road Design Offices.
- Ensures consistency with national standards.
- Improves reliability of traffic data.





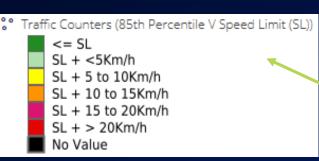




## Collaboration with the **Stakeholders**

- Introduced visual analysis tools for survey data.
- 85th percentile speed calculations help identify trends in road user speeds.
- Supports planning for targeted interventions.

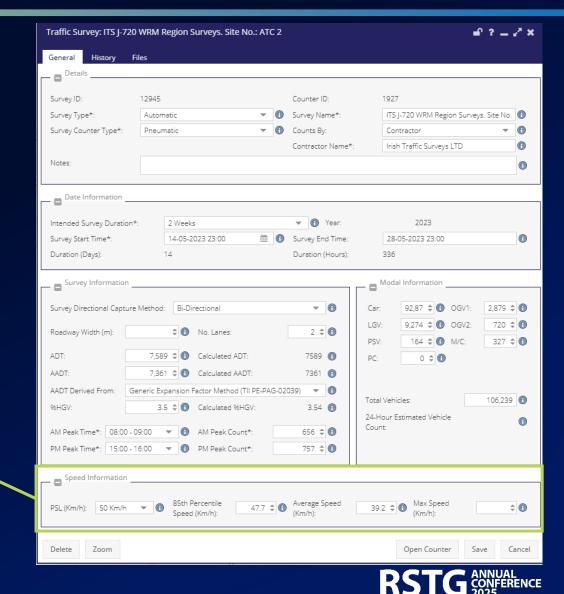






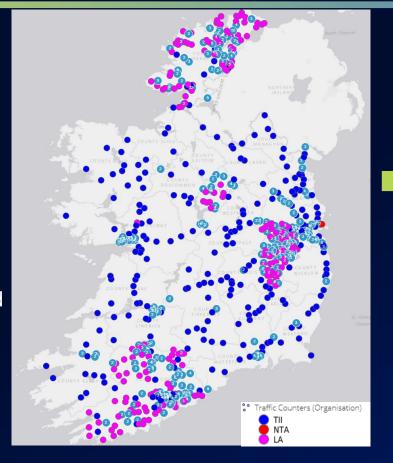


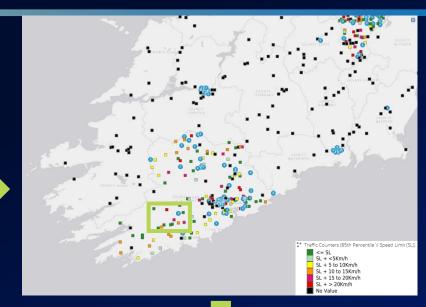




## **Importance of Data Quality**

- Traffic attribute data gives meaning to survey locations, beyond just spatial points.
- Accurate analysis depends on maintaining related datasets (e.g. road schedule, speed limits).
- Integrated in MapRoad to ensure accurate thematics, calculations, and data consistency.















#### Circular RW 08 of 2025

#### An Roinn Iompair Department of Transp



29 April 2025

Circular RW 08 of 2025

Traffic Count Data Collection and upload to MapRoad AMS

Dear Director of Services - Roads and Transportation,

The Department of Transport requires Local Authorities to collate all legacy traffic count survey data gathered in their administrative area since 1\*\* January 2022 and upload this data to MapRoad AMS. Local Authorities must also upload all future traffic count survey data procured or otherwise obtained to ManRoad AMS from the date of this circular.

Relevant, accurate and up to date traffic count survey data is a major component in aiding road authorities' understanding of how their road networks operate. Quality data centrally stored at a local and national level can help with the optimisation of road networks and to target investment through identification of possible locations for intervention.

Traffic count survey data is a key enabler for road authorities in understanding the volume of traffic, the composition of traffic and when peak flows occur at specific locations across the road network

Recording and storing this data on MapRoad ensures that the data is maintained and accessible, for use over the long term. By centralising this information, MapRoad can serve as a reliable reposition, allowing relevant stakeholders to easily retrieve and utilise the data whenever necessary. This is particularly beneficial for future planning, monitoring, and decision-making processes, as it reduces the risk of information loss or inconsistency over time.

To achieve the above objective, Local Authorities should identify all relevant traffic count data sources available to them, for example:

- Traffic count data collected directly by Local Authorities through the use of roadside
- Traffic count data collected on behalf of Local Authorities by consultants as part of planning and design of proposed schemes.
- . Traffic data collected by other means such as driver feedback signs

Lána Líosain, Baile Átha Cliath, D02 TR80, Éire Leeson Lane, Dublin 2, D02 TR80, Ireland T 4/85, 1 6/07/444 info@ftranport gov ie

#### What next?

- Identify all traffic count data sources: counters, consultants, driver feedback signs.
- Submit legacy data to RMO by 11th July 2025 for validation and upload.
- RMO validates and uploads suitable data to MapRoad
- Unvalidated data reviewed with Local Authorities, may not be uploaded.
- Procured surveys must use NTA templates (submit to <u>trafficcounts@rmo.ie</u>).
- Individual LA surveys to be input directly into MapRoad AMS

Local Authorities are requested to nominate a traffic count traffic count survey data gathered in their administrative provide this to the RMO for review by Friday 4th July 2025

Any other queries in relation to this circular techqueriesrlr@transport.gov.ie or your Departmental Insp.

Yours sincerely.



Larry Kelly

Higher Executive Officer Technical and Compliance Section Regional and Local Roads Division

Senior Engineers – Roads and Transportation

Traffic Count Upload Request [Local Authority] [Survey Date]

Emails should include a contact name and contact details in the main text

Points 1 and 2 below set out guidance for Local Authorities regarding the recording of

survey count data on all roads within a Local Authorities administrative are

Authorities must use the MapRoad AMS traffic module and associated traffic sun

a) Local Authorities must issue traffic count data held for the specified period

b) The RMO will validate the data provided for suitability for upload to N

c) Validated data will be uploaded to MapRoad AMS by the RMO on beha

d) Where data cannot be validated for upload the RMO will liaise with tl

a) Local Authorities must utilise a data capture approach to facilitate up

b) For all procured traffic count surveys encompassing multiple count location

c) All procured traffic count surveys recorded in accordance with the NTA

Templates should be emailed to trafficcounts@rmo.ie with a subject hear

Authorities must use the specification documentation and data to

accessible via the NTA website publications; NTA Survey Templates - I

consistent traffic count survey data to MapRoad AMS.

Authorities to assess options. Data that cannot be validated will not be u

templates when completing both processes.

RMO by 11th July 2025 for review

1. Legacy Traffic Count Survey Data

to MapRoad AMS.

- d) For individual traffic count surveys undertaken by or obtained by a Local A they must input the resultant data records directly into MaoRoad AMS.
- Further guidance and support in respect of the above will be provided by the RMO in a follow up Notification (<u>contact@rmo.ie</u>).

The Department will review the traffic count data once it has been uploaded to MapRoad and may investigate funding the future collection of traffic count data at specific locations of strategic interest.

3





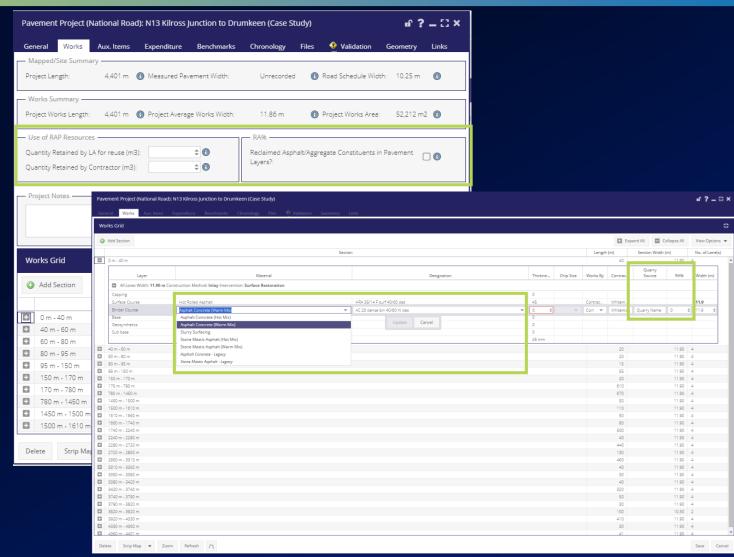


# COMING SOON TO A MAPROAD MARTOAD MAR

NEAR YOU...

## MapRoad Material Library Update

- New fields for RAP usage and %RA in pavement layers.
- Capture of material reuse quantities (LA or contractor)
- Record of quarry source of materials.
- Overhaul of existing materials list to align with current specs e.g. warm mix etc.
- Supports national carbon assessment.





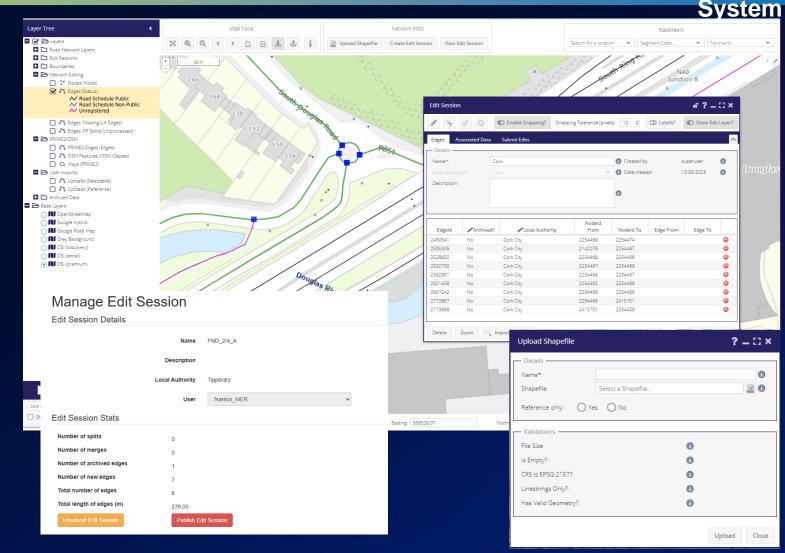






## **Network Edge Editing System**

- RMO to centrally manage all network edge updates for the sector.
- Uses all spatial sources, mapping providers, GIS imports, and internal edits.
- New tools for splitting, merging, creating, deleting, and archiving edges.
- Enables direct import of GIS-compatible datasets.
- Integration with TII's network model, systematises TII attribute data into MapRoad's road schedule.











Darragh Mc Gowan & Trevor Gordon

## THANK YOU









Join the Q&A session at Slido.com and enter 3873601 or via the QR Code. Questions must include name and associated Local Authority to be considered by the panel.









