An Roinn Iompair
Department of Transport

Kildare County Council
Comhairle Contae Chill Dara

GUIDELINES FOR SETTING AND MANAGING SPEED LIMITS IN IRELAND

‘*The Guidelines*’ – An Overview

‘THE GUIDELINES’

INTRODUCTION 1 →

THE MAIN CHAPTERS

- When addressing road safety issues a reduced SSL **should not** be the immediate response;
- Guidelines are MANDATORY – by Ministerial Direction;
- Trained/competent to use & Chartered if ‘signing off’ /report to Elected Members;
- LA’s & TII review @ 5yr intervals;
- Can also review when deemed appropriate/necessary;
- Keep everything mapped on the MapRoad Pavement Management System;
- Have Bye-laws/RWSLO’s posted on **www.speedlimits.ie**

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THE MAIN CHAPTERS

1 INTRODUCTION

STRUCTURE OF SPEED LIMITS 2 →

- Sets out the range of speed limits available

DEFAULTS

Motorway

Regionals and Locals


Alt. sign for 80 km/h on single lane LT’s and LS’s

Nationals

Built-up area

SPECIALS, VARIABLE AND PERIODIC SPEED LIMITS

All values

CAUTIONARY SPEED LIMITS AT ROAD WORKS

Values ending in 5 i.e. 75, 65, 55, 45, 35, 25 km/h

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THE MAIN CHAPTERS

- Responsibility with LA/Elected Members (Reserved Function)
- LA and TII to review their speed limits every 5 years
- Don’t rely on Default Speed Limits – set appropriate limits

TII	120 km/h on duals 100 km/h on singles only where appropriate (stage 1) 80 km/h on singles where appropriate
LA	80 km/h on singles where appropriate 100 km/h on singles where appropriate (e.g. former Nat’s) 80 km/h Default when appropriate (i.e. review 60 km/h SSL)

- MapRoad – Inventories & monitor.
- Identify inappropriate signs on the network and remove
- Queries from public (separate from Appeals)

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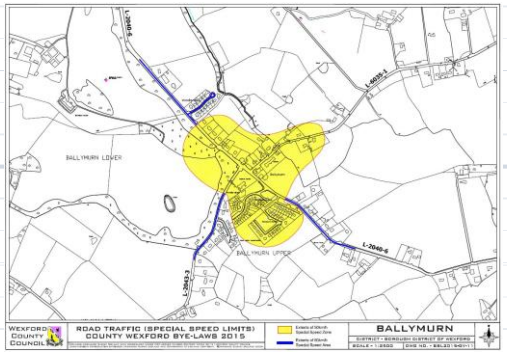
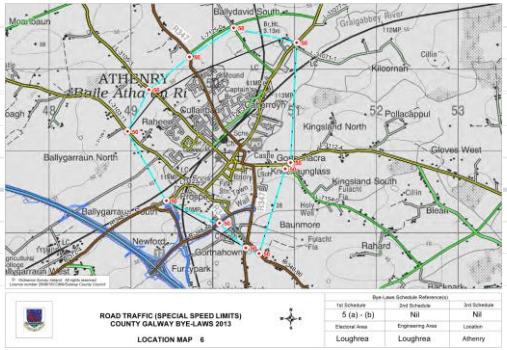
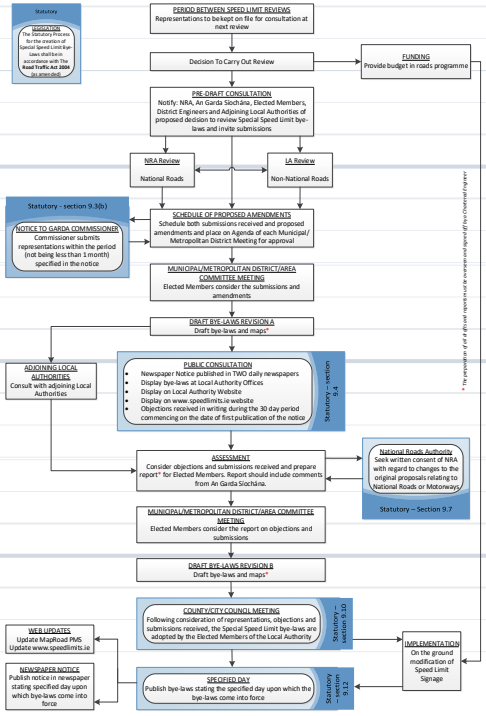
- Advice to those making bye-laws
- Examples of existing bye-laws
- Illustrations of map based bye-laws (zones / road by road)
- Flowchart of the process







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- Speed and Collision Risk

  Driver perception / speed choice / risk assessment >

  reduced safety

- Self-explaining roads

  (speed limits should be supported by engineering measures that elicit safe and appropriate behaviour

  through designs that evoke correct expectations from road users [change in road character])

- Reducing speed limits unsuccessful without other measures

  Engineering, Enforcement, Speed management strategy

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THE MAIN CHAPTERS

6.1

Default
100 km/h

Is this ok?

Are all the roads on the left suitable for 100 km/h speed limit?

Are all the roads on the right suitable for 80 km/h speed limit?

NO
This is why we must not rely on Default Speed Limits

Default
80 km/h

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WHY NOT? ONE SIZE DOES NOT FIT ALL

- **Approximate Length of Road Network : 100,000 km**

Motorway	1000 km	1%
Nat. Primary	1843 km	2%
Nat. Secondary	2683 km	3%
Regional	11,600 km	12%
Local Primary, Local Secondary, Local Tertiary	82,000 km	82%

120 km/h

100 km/h

80 km/h (94)%

- Variations in cross sections of the same road type causes inconsistency in the network
- Find a best fit for the network by:
  1. Not relying on the Default Speed Limit
  2. Using the practical geometry of the road

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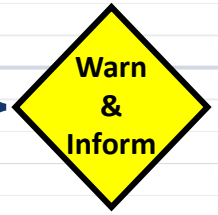
- **Isolated Road Safety locations**
  - Immediate response should not be to just change speed limit
  - Initially, engineering measures should be considered;

Review signage
Road markings
Vehicle Activated Signs



Footway/Cycleway and Public lighting

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THE MAIN CHAPTERS

6.4

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THE MAIN CHAPTERS

- Don’t use a SSL to solve isolated hazards – single road junction or bend

Warn & Inform

Consult Traffic Signs Manual
Chapter 6 (Warning Signs)
Chapter 7 (Road Markings)

- As a mechanism to solve planning issues;
  - to allow additional development
  - to provide additional accesses due to sight lines

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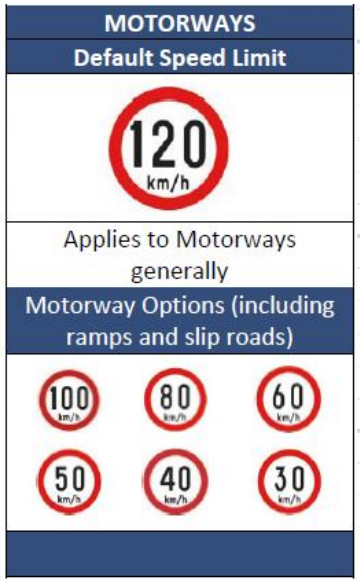
THE MAIN CHAPTERS

7.1

- Considers each Road Type and circumstances where Special Speed Limits may apply
- **MOTORWAYS**
- Rural Roads (single and dual carriageways)
- Urban Roads



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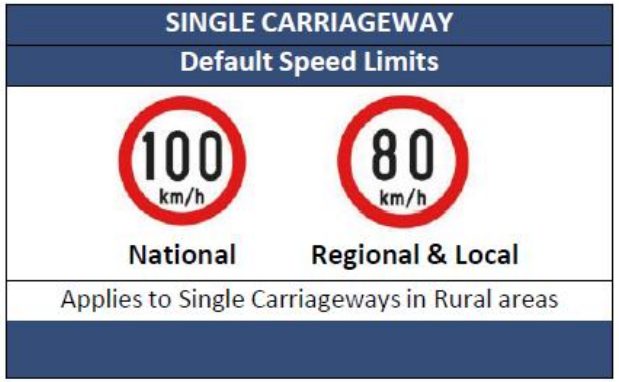
THE MAIN CHAPTERS

7.2

- Debatable whether some 100 km/h roads should be 80 km/h or vice versa.
- Chapter 7 gives better indication of what is an appropriate cross-section for particular speeds and introduces a very simple check.



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STAGE 1 ASSESSMENT

SPEED LIMIT (km/h)	PAVED ROAD WIDTH
80	Less than or equal to 7.0 m
100	Greater than 7.0 m

- Based on average width over minimum length of 3km
- Paved Road Width = Traffic Lanes + Hard Shoulder/Strips (but not on-road cycle tracks)
- Stage 1 Assessment devised by evaluating 32 NS routes

National Secondary Routes			
	Direction 1	Direction 2	Average
Length (km)	2604.92	2605.74	2605.33
Ave Paved Width (m)	3.65	3.64	3.64
Paved Width < 3.5m	58.60%	58.50%	58.55%
Paved Width > 3.5m	41.40%	41.50%	41.45%
Total (km) < 3.5m	1526.57	1524.48	1525.52
Total (km) > 3.5m	1078.36	1081.26	1079.81

Routes analysed (32)

N51 - Drogheda to Delvin	N71 - Killarney - Cork
N52 - Dundalk to Nenagh	N72 - Killorglin - Dungarvan (area)
N53 - Dundalk to Castleblayney	N73 - Mallow - Mitchelstown
N54 - Monaghan - N3 (Butler's Bridge)	N74 - Tipperary - Cashel
N55 - Athlone - Cavan	N75 - Thurles - Twomileborris
N56 - Letterkenny - Donegal Town	N76 - Kilkenny - Clonmel
N58 - Ballina - N5 (Ballyvary)	N77 - Durrow* - Kilkenny
N59 - Ballysadare - Galway	N80 - Moate* - Enniscorthy
N60 - Castlebar - Roscommon	N81 - Dublin* - Ballon
N61 - Roscommon - Athlone	N83 - Tuam - N17
N62 - Athlone - Horse and Jockey	N84 - Galway – Castlebar
N63 - Galway - Longford	N85 - Ennistymon – Ennis
N65 - Loughrea (area) - Borris-O-Kane	N86 - Tralee – Dingle
N66 - Loughrea - Gort	N87 - Belturbet – Ballinlough
N67 - Tarbert - Kilcolgan	
N68 - Kilrush - Ennis	
N69 - Tralee - Limerick	
N70 - Tralee - Kenmare	

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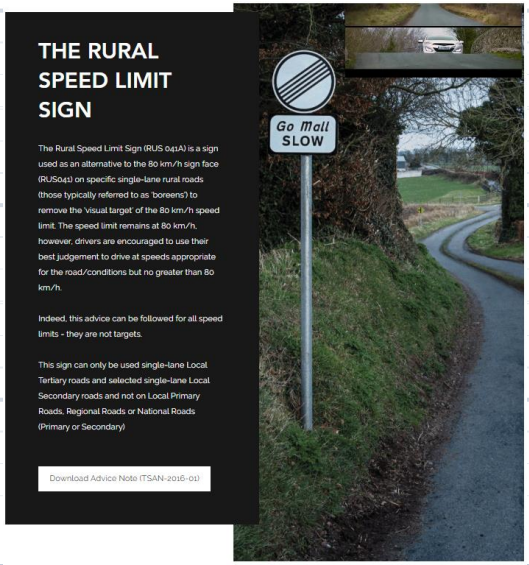
STAGE 2 ASSESSMENT

- Borderline cases arising from Stage 1 (6.8-7.2m)

Assess the following;

- Geometry (long straights, good visibility)
- Roadside development
- Forgiving nature of roadsides
- Collision History
- AADT
- Mean speed and 85th percentile speeds
- Level of use by vulnerable road users

On single-lane Local Tertiary roads (and selected single-lane Local Secondaries) use the Rural Speed Limit sign in place of the 80 km/h sign (see TSAN-2016-01)



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THE MAIN CHAPTERS

URBAN ROADS

- Speed Limit Matrix: the relationship between place, movement and speed (function v context) - See the Design Manual for Urban Roads and Streets (DMURS)

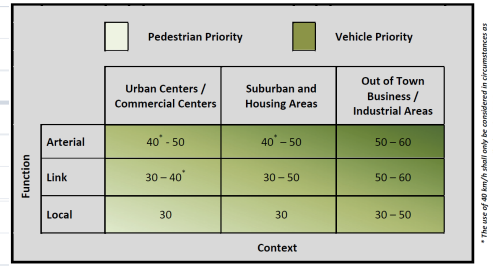

Table 7.3 – Recommended Speed Limits for Urban Areas (km/h)

30 km/h Slow Zone

- **Only** for housing estate roads and slow zones (per TSAN-2016-02)
- 30 km/h self contained speed zones
- Self-enforcing utilising traffic calming measures
- Observe/record speeds

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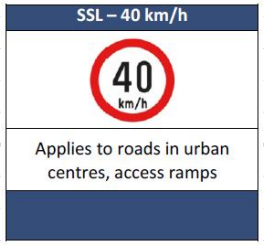
URBAN ROADS



- High VRU concentration
- Low radii curves on ramps
- Roads in urban areas with through road function and not in housing estates (see DMURS 7.3.2)

Pedestrian Priority Vehicle Priority

Function	Urban Centers / Commercial Centers	Suburban and Housing Areas	Out of Town Business / Industrial Areas
Arterial	40* - 50	40* – 50	50 – 60
Link	30 – 40*	30 – 50	50 – 60
Local	30	30	30 – 50

Context

* The use of 40 km/h shall only be considered in circumstances as prescribed section 7.3.2.

Table 7.3 – Recommended Speed Limits for Urban Areas (km/h)

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PERIODIC SPEED LIMITS

- Sets rigid times for periodic speed limits at schools.
- Ensures these signs are not active out of hours; this can cause problems if perceived to be on unnecessarily.
- Familiarity breeds contempt (as with isolated hazards)

Figure 5.3:
Periodic Speed Limit Sign in Combination with Other Signs

Morning	Start	30 minutes before school starting time	End	at school starting time
Early Collection	Start	Start 5 minutes before collection time	End	15 minutes after collection time
Late Collection	Start	Start 5 minutes before collection time	End	15 minutes after collection time

Table 7.5 – Special Speed Limit Timings at Schools

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SPEED LIMITS ON SEPARATE CARRIAGEWAYS

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SPEED LIMITS AT ROADWORKS

Road Traffic Act 2004, S10

- Min 30 km/h (NOTE, 20 km/h **not** allowed)
- Max period one year
- Precise location start/end
- TII consent if National Road
- Notify An Garda Síochána - Chief Superintendent

Extracted from Traffic Signs Manual

APPROACH SPEED LIMIT	TSM REFERENCE	SIGN SIZE NORMAL SIGN	SIGN SIZE REPEATER SIGN[1]	APPROX REPEATER SPACING	SIGNFACE
120 km/h	RUS 039	900 (1200)[2]	-	-	120 km/h
100 km/h	RUS 040	750 (900)[2]	600 (750)[2]	500m	100 km/h
80[3] km/h	RUS 041	600 (750)[2]	450 (600)[2]	500m	80 km/h
60 km/h	RUS 042	600 (750)[2]	450 (600)[2]	500m	60 km/h
50 km/h	RUS 043	600 (750)[2]	450 (600)[2]	500m	50 km/h
40 km/h	RUS 064	600	450	200 to 500m	40 km/h
30 km/h	RUS 044	450 (600)	300 (450)	200 to 500m	30 km/h

1. Repeater speed limit signs shall be at least one step in size below the normal speed limit sign used.
2. The larger bracketed size may be used on dual carriageways and motorways, or where it is considered that greater prominence of the sign is necessary.
3. Sign RUS 041A (Rural Speed Limit Sign) is not permitted for use at road works.

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APPENDICES

SPEED ASSESSMENT FRAMEWORK

- Research completed in 2020 with regard to replacing it with a more suitable assessment methodology that can be applied to all rural single carriageway roads (Efficiency Index [EI] derived from Safe Profile Velocity [V_{sp}])
- 7 routes as case studies
- Potential trial
- Further details to follow

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APPENDICES

SPEED LIMIT SIGNS

- See presentation (at speedlimits.ie)

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APPENDICES

POSITIONING OF SPEED LIMIT SIGNS

- See presentation (at speedlimits.ie)
- Consult Traffic Signs Manual and applicable Traffic Signs Advice Notes (speedlimits.ie and trafficsigns.ie)

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1 INTRODUCTION
2 STRUCTURE OF SPEED LIMITS
3 MANAGING SPEED LIMITS
4 THE MAKING OF SPEED LIMIT BYE-LAWS
5 THE CONTEXT FOR SPEED LIMITS
6 SETTING SPEED LIMITS – GENERAL
7 SETTING SPEED LIMITS – DETAILED
8 TEMP SPEED LIMITS AT ROADWORKS
A SPEED ASSESSMENT FRAMEWORK*
B SPEED LIMIT SIGNS
C POSITIONING OF SPEED LIMIT SIGNS

MAPROAD PMS AND SPEED LIMITS APP D →

APPENDICES

MAPROAD PAVEMENT MANAGEMENT SYSTEM

- See presentation (at speedlimits.ie)
- Speed Limit Guidelines Appendix D

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APPENDICES

LEGISLATIVE PROVISIONS

- See Speed Limit Guidelines Appendix E

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EXTRACTS FROM STANDARDS F →

APPENDICES

EXTRACTS FROM STANDARDS

- See Speed Limit Guidelines Appendix D
- DMURS
- TII Publications (tiipublications.ie)