

# Application of the NTpM

## National Roads 2040

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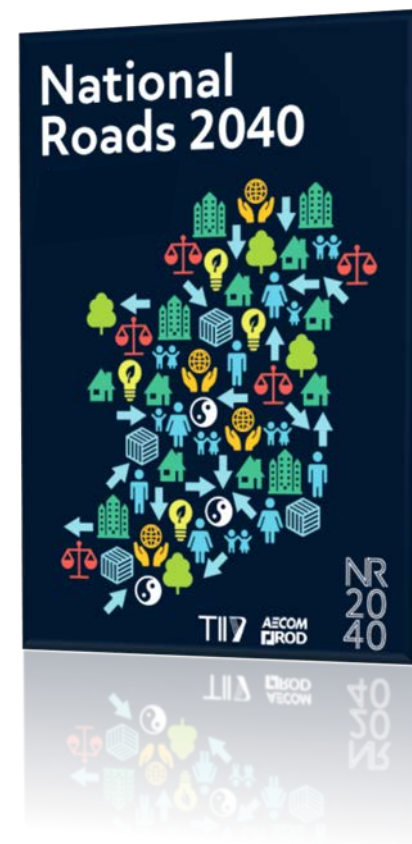
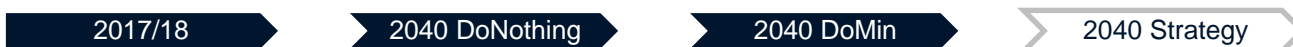


# National Roads 2040

NR2040 is being developed to ensure that the National Roads network fulfils its role in national transport and spatial planning to 2040 and beyond. In particular, it will **address the needs of the NPF. Autumn 2018** – updates via Strategic & Transport Planning

Assessment within NR2040 Due	How the NTpM was used
Current National Roads network performance	Provide a 2017/18 base
The role of the National Roads network in the <b>Project Ireland 2040 National Planning Framework</b>	Assess spatial growth
The key future trends to 2040	Assessing trends / changes
Effectiveness of the NDP 2018-2027	Assess the 2040 DoMin

## Scenarios



# The National Planning Framework (NPF) and NR2040

The NPF (Project Ireland 2040) sets 10 National Strategic Outcomes. NR2040 must seek to achieve or support several of the NSOs, in an environment where the following growth is forecast:

- Population increase by 23% (1.1M people)
- Employment increase by 33% (660k jobs)
- Households increase by 29% (500k households)

NR2040's main responses are to:

**NSO2** – Providing connectivity between urban centres (notably NPF key settlements: Dublin, Cork, Limerick, Galway, Waterford, Sligo, Letterkenny, Athlone, Drogheda and Dundalk).

**NSO3** – Maintaining connectivity to Ireland's rural areas (National Secondaries)

**NSO4** – Sustainable mobility (in NR2040, taken as UN Sustainable Development Goals)

**NSO5** – A strong economy, as facilitated by high freight mobility with low delay

**NSO6** – International connectivity driven by National Roads port and airport connections

**NSO8** – NR2040 supporting the decarbonisation of transport

Core NDP outcomes:

Inter-urban & North-West connectivity improvements



# National Roads 2040

NR2040 uses the NTpM to assess expected effects and interventions nationally:

## Population and growth

- In-line with the NPF
- Additional 27% traffic

## Connectivity improvements

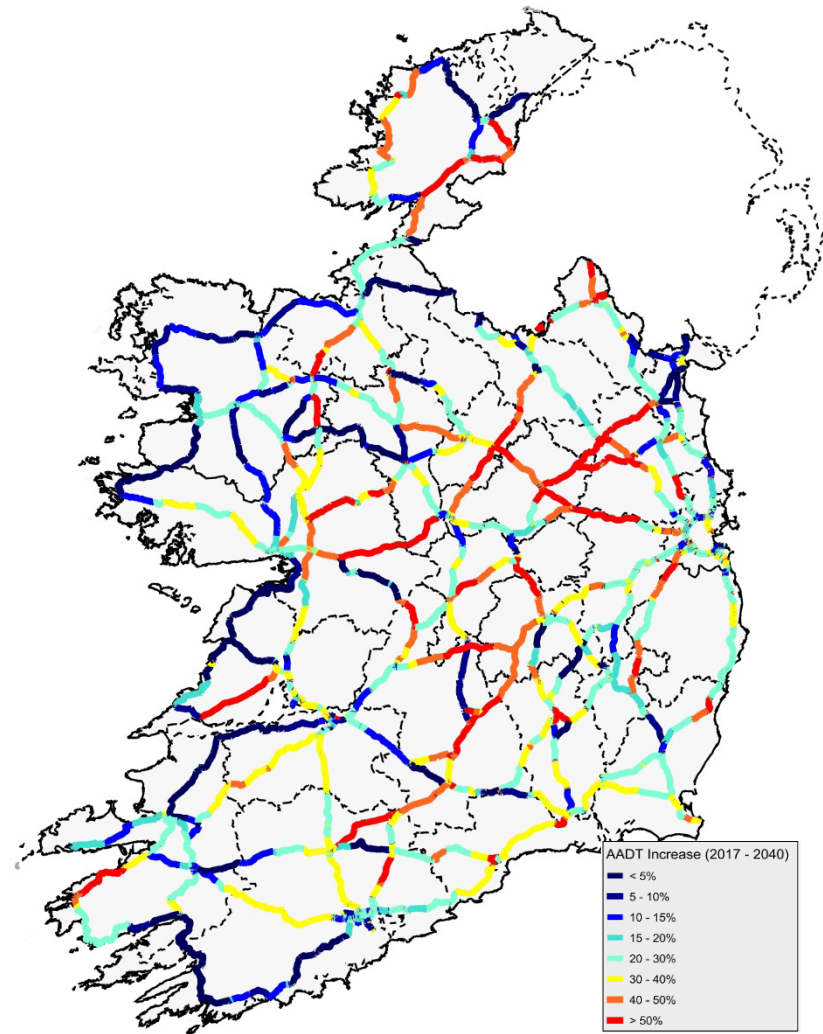
- Journey times and average speeds
- National accessibility
- Economic infrastructure connectivity (freight, ports and airports)

## Identify strategic intervention

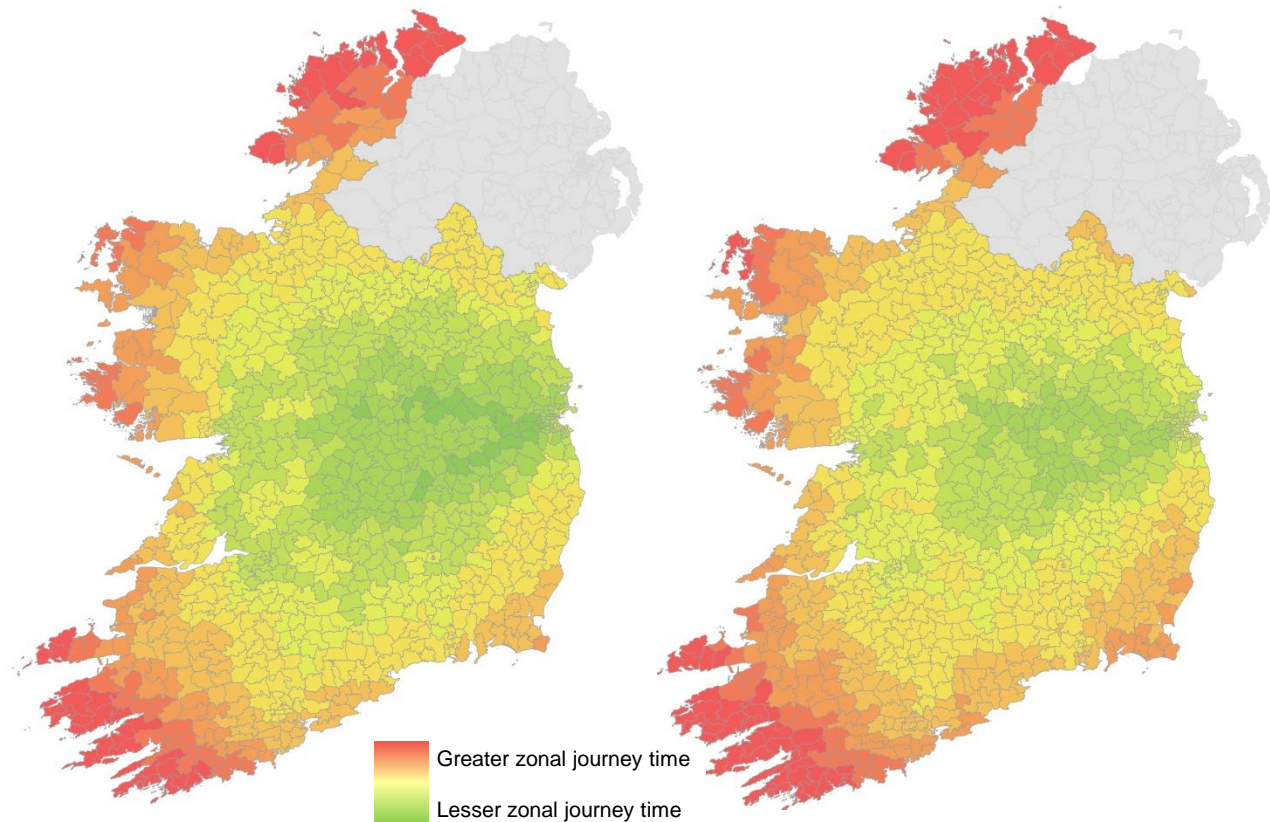
- Congestion issues and intervention (v/c)

## NR2040 considerations

- Moving towards operating and maintaining
- Increasingly sustainable travel
- Technology (C-ITS / CAV / Electrification etc.)



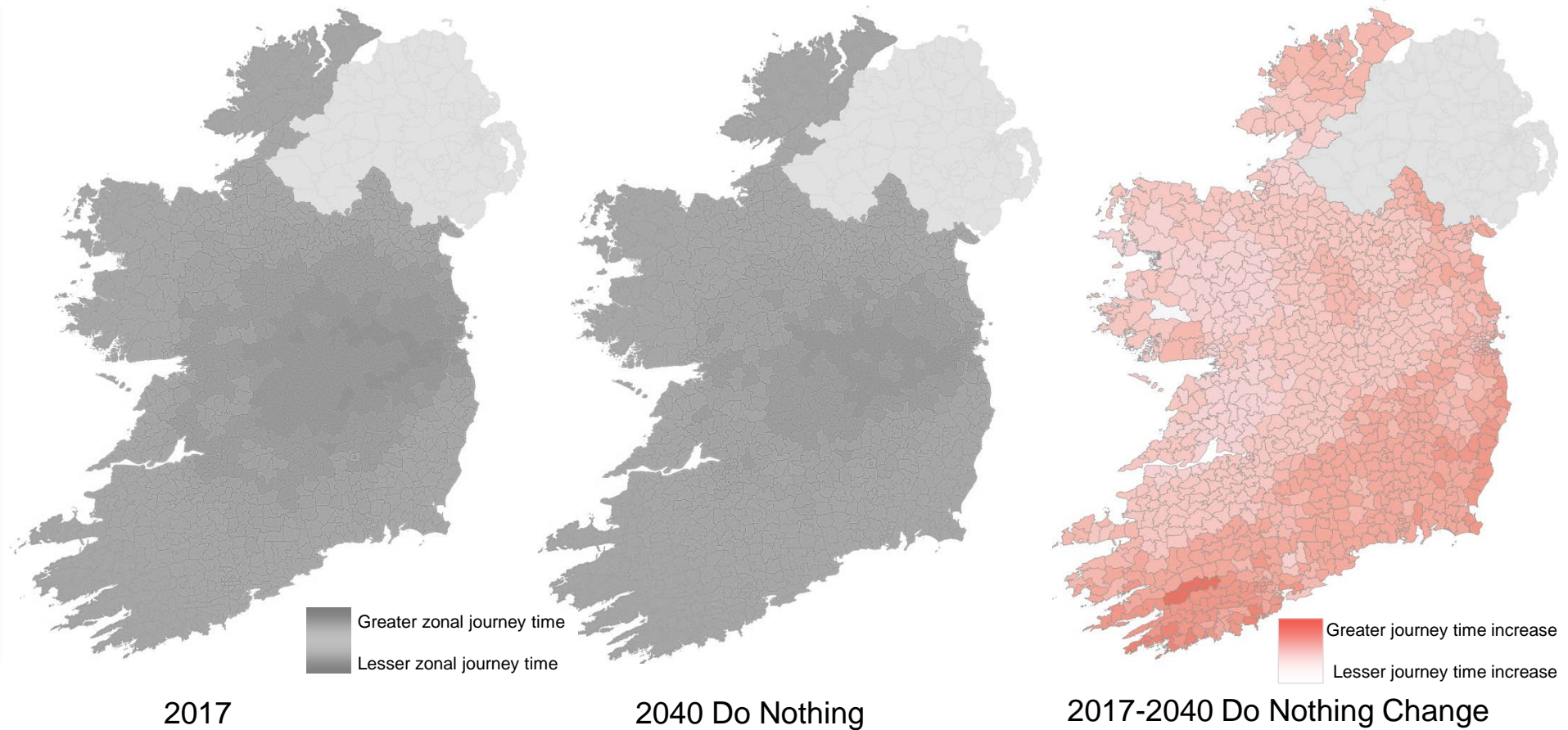
# National Roads 2040 – Journey Time Accessibility



2017

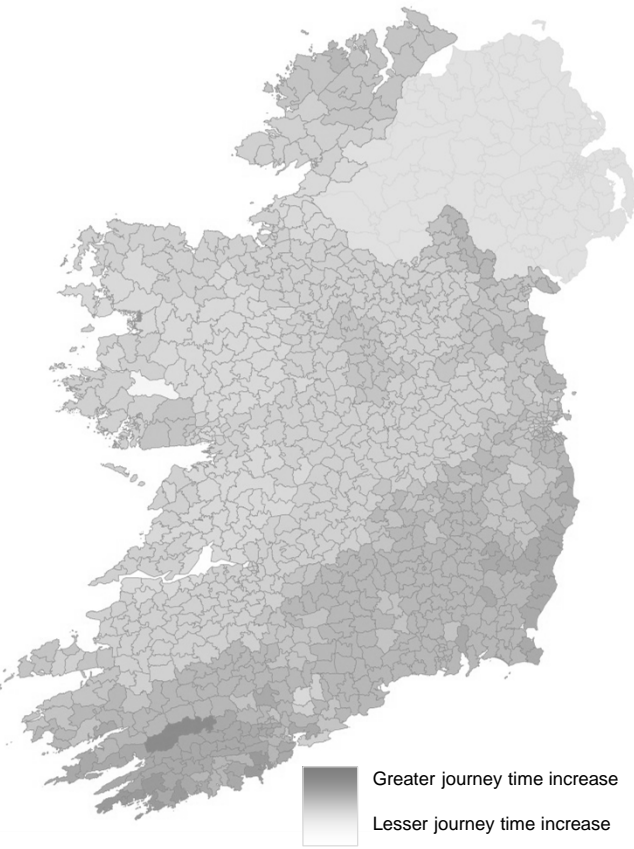
2040 Do Nothing

# National Roads 2040 – Journey Time Accessibility

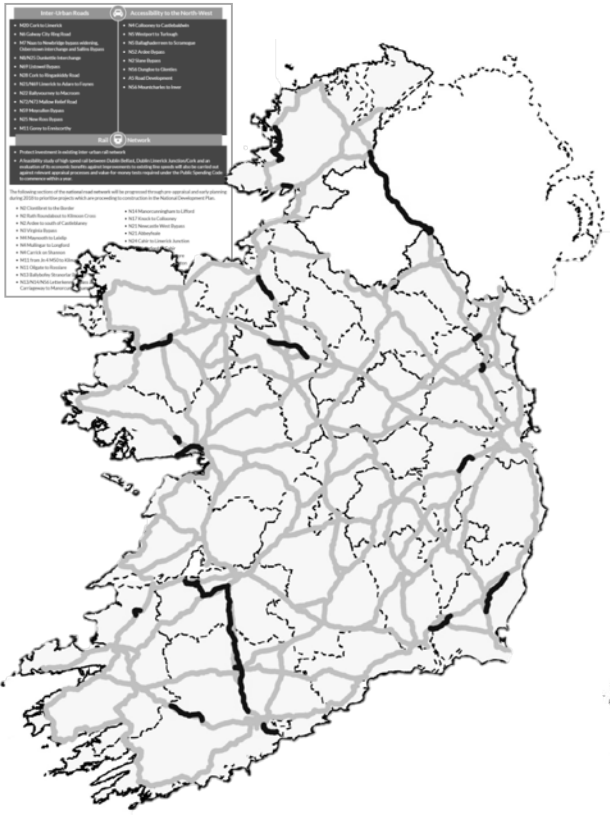




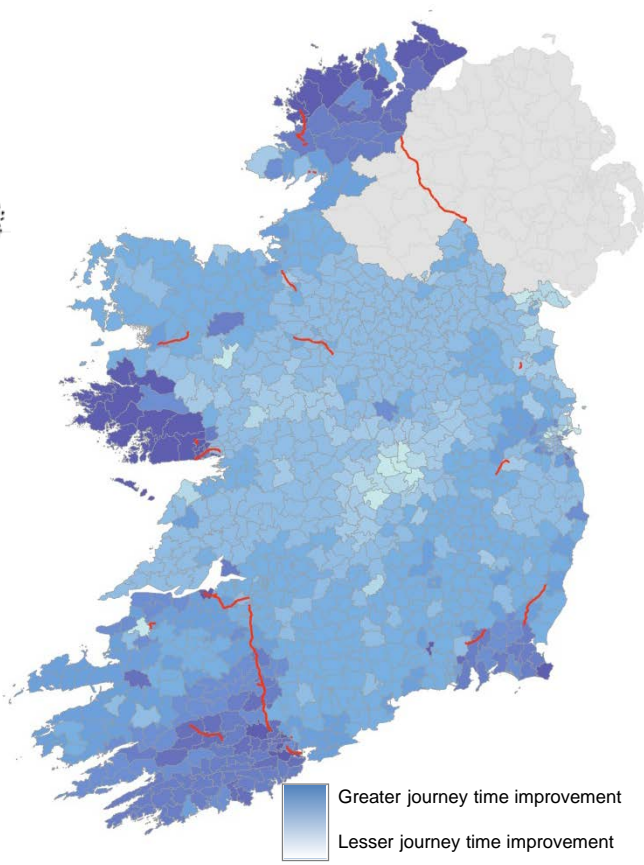
# National Roads 2040 – Journey Time Accessibility



2017-2040 Do Nothing Change



2040 Do Min (NDP Committed Schemes)



2040 Do Minimum



# National Roads 2040 – Journey Time Between NPF Key Settlements

% Speed Difference		Destination									
		Dublin	Cork	Limerick	Galway	Waterford	Drogheda	Dundalk	Letterkenny	Athlone	Sligo
Origin	Dublin	-	-6%	-4%	-3%	-5%	-8%	-7%	-6%	-5%	-5%
	Cork	-10%	-	-4%	-3%	-5%	-10%	-9%	-3%	-3%	-3%
	Limerick	-11%	-7%	-	-2%	-4%	-10%	-9%	-3%	-1%	-2%
	Galway	-14%	-4%	-1%	-	-3%	-3%	-3%	-3%	-1%	-2%
	Waterford	-10%	-8%	-2%	-2%	-	-10%	-9%	-8%	-1%	-4%
	Drogheda	-9%	-7%	-5%	-3%	-6%	-	-4%	-6%	-4%	-4%
	Dundalk	-6%	-6%	-5%	-4%	-5%	-2%	-	-5%	-5%	-1%
	Letterkenny	-4%	-3%	-2%	-3%	-4%	-3%	-2%	-	-3%	-5%
	Athlone	-20%	-6%	0%	-1%	-4%	-4%	-3%	-3%	-	-2%
	Sligo	-11%	-3%	-1%	-1%	-4%	-2%	-1%	-5%	-1%	-

Average speed deterioration of 4.1 km/h across 90 routes

2017-2040 DoNothing Change

The most explicit action of **NSO2** is, “Improving average journey times targeting an average inter-urban speed of 90km/h”.

Prior to undertaking strategic actions of NR2040, the following performance is expected:

- 2017 achieves 33 of 90 routes >90km/h
- 2040 Do Nothing achieves 20 of 90 routes >90km/h
- 2040 Do Minimum achieves 27 of 90 routes >90km/h

Key settlement connectivity issues worse over time. **Doing nothing, or only the NDP schemes (2040 DoMin), continues to leave poor inter-urban performance in 2040.**

# National Roads 2040 – Journey Time Between NPF Key Settlements

		Destination									
		Dublin	Cork	Limerick	Galway	Waterford	Drogheda	Dundalk	Letterkenny	Athlone	Sligo
Origin	Dublin	-	-6%	-4%	-3%	-5%	-8%	-7%	-6%	-5%	-5%
	Cork	-10%	-	-4%	-3%	-5%	-10%	-9%	-3%	-3%	-3%
	Limerick	-11%	-7%	-	-2%	-4%	-10%	-9%	-3%	-1%	-2%
	Galway	-14%	-4%	-1%	-	-3%	-3%	-3%	-3%	-1%	-2%
	Waterford	-10%	-8%	-2%	-2%	-	-10%	-9%	-8%	-1%	-4%
	Drogheda	-9%	-7%	-5%	-3%	-6%	-	-4%	-6%	-4%	-4%
	Dundalk	-6%	-6%	-5%	-4%	-5%	-2%	-	-5%	-5%	-1%
	Letterkenny	-4%	-3%	-2%	-3%	-4%	-3%	-2%	-	-3%	-5%
	Athlone	-20%	-6%	0%	-1%	-4%	-4%	-3%	-3%	-	-2%
	Sligo	-11%	-3%	-1%	-1%	-4%	-2%	-1%	-5%	-1%	-

Average speed deterioration of 4.1 km/h across 90 routes

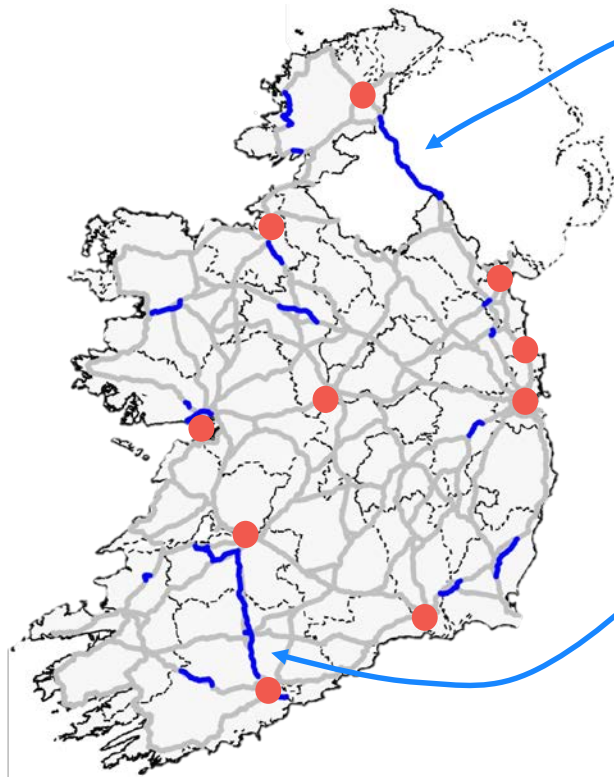
2017-2040 DoNothing Change

		Destination									
		Dublin	Cork	Limerick	Galway	Waterford	Drogheda	Dundalk	Letterkenny	Athlone	Sligo
Origin	Dublin	-	1%	0%	0%	1%	1%	1%	12%	0%	6%
	Cork	0%	-	21%	11%	-1%	-2%	-1%	5%	9%	8%
	Limerick	0%	23%	-	-1%	0%	-2%	-1%	0%	0%	0%
	Galway	0%	13%	1%	-	0%	0%	1%	0%	0%	0%
	Waterford	0%	-1%	0%	-1%	-	-2%	-1%	4%	0%	14%
	Drogheda	1%	1%	1%	0%	1%	-	0%	14%	0%	2%
	Dundalk	1%	1%	1%	-1%	1%	0%	-	14%	-1%	0%
	Letterkenny	11%	5%	0%	0%	8%	13%	15%	-	3%	1%
	Athlone	0%	14%	0%	-1%	0%	0%	2%	3%	-	7%
	Sligo	-5%	8%	0%	-1%	3%	0%	0%	0%	6%	-

Average speed improvement of 2.2km/h across 90 routes

2040 DoMin (NDP Committed Schemes)

# National Roads 2040 – Journey Time Between NPF Key Settlements



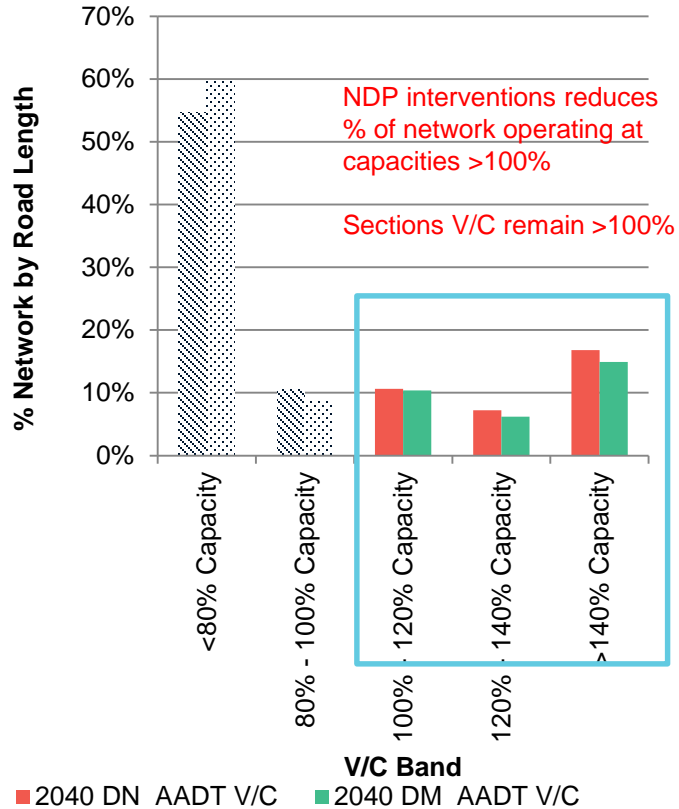
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	Cork	0%	-	21%	11%	-1%	-2%	-1%	5%	9%	8%
	Limerick	0%	23%	-	-1%	0%	-2%	-1%	0%	0%	0%
	Galway	0%	13%	1%	-	0%	0%	1%	0%	0%	0%
	Waterford	0%	-1%	0%	-1%	-	-2%	-1%	4%	0%	14%
	Drogheda	1%	1%	1%	0%	1%	-	0%	14%	0%	2%
	Dundalk	1%	1%	1%	-1%	1%	0%	-	14%	-1%	0%
	Letterkenny	11%	5%	0%	0%	8%	13%	15%	-	3%	1%
	Athlone	0%	14%	0%	-1%	0%	0%	2%	3%	-	7%
	Sligo	-5%	8%	0%	-1%	3%	0%	0%	0%	6%	-

Average speed improvement of 2.2km/h across 90 routes

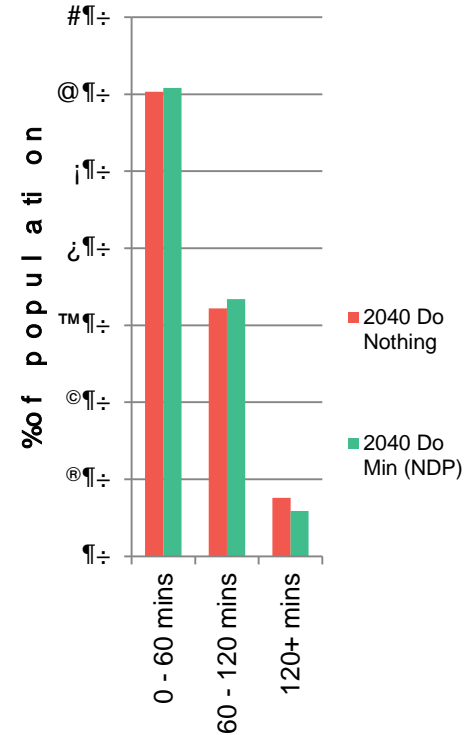
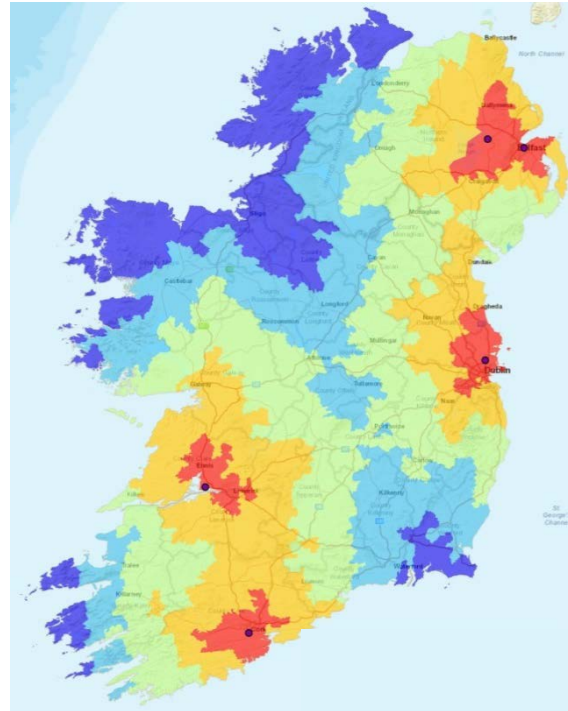
2040 DoMin (NDP Committed Schemes)

# National Roads 2040

## V/C (Volume / Capacity)



# Key Infrastructure Connectivity



# Summary - NTpM assessment of NR2040

- Key tool to understand the impact expected from Project Ireland 2040 growth
- Allows assessment of key issues and challenges facing Ireland's national road network (and wider land transport)
- Enables testing of strategic interventions
- Allows prioritisation of works and seeks value-for-money investment



**Thank You**



27 Sep 2018

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