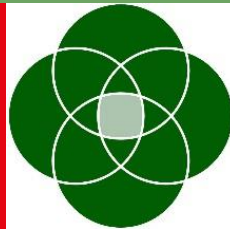


Road Investment Strategies

Speaker 1: Glenn Lyons

**UWE
Bristol**

University
of the
West of
England



Centre for
Transport &
Society

Why don't we just...

The perplexing future of road investment

Professors Glenn Lyons and Steve
Gooding
University of the West of England, Bristol

Overview

- **Once upon a time...** (a very brief history of roads)
- **Winds of change** (affecting the context of road investment)
- **Under scrutiny** (causes of concern that need to be addressed)
- **Conundrums** (why the future of road investment is in deep fog)

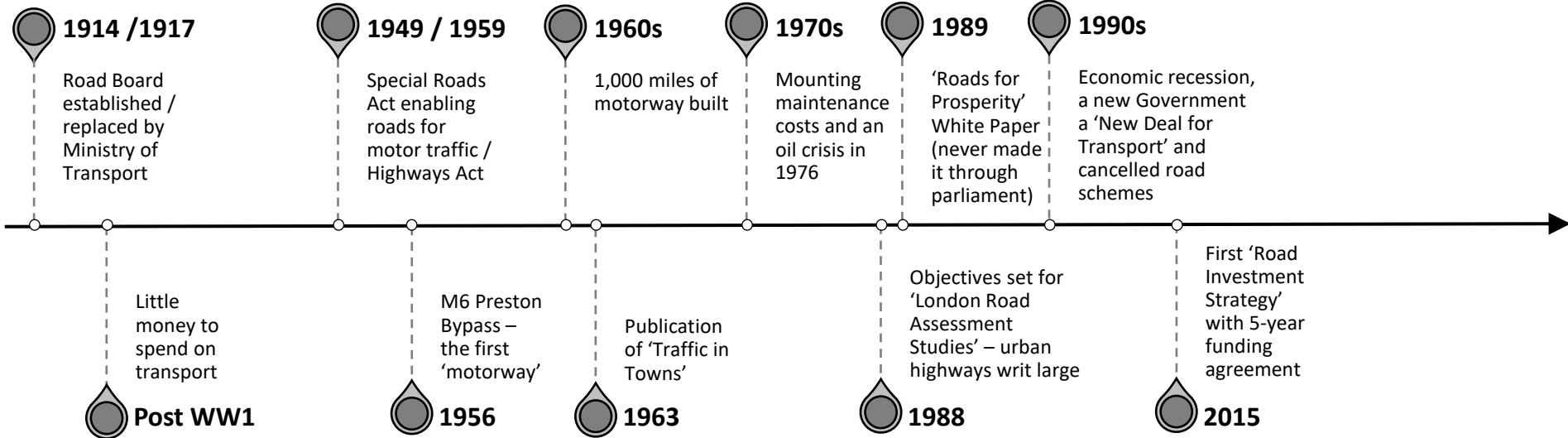


Spoiler alert (look away now)

- In 1957 the UK didn't have a motorway, now it has a quarter of a million miles of roads overall
- With a climate emergency and a huge asset to maintain, building more road capacity may not be a good idea
- Road investment and expenditure face some tough questions if we are to be persuaded of sound decision making ahead
- Road investment evades the clutches of technocratic governance leaving subjective judgement in the face of conundrums

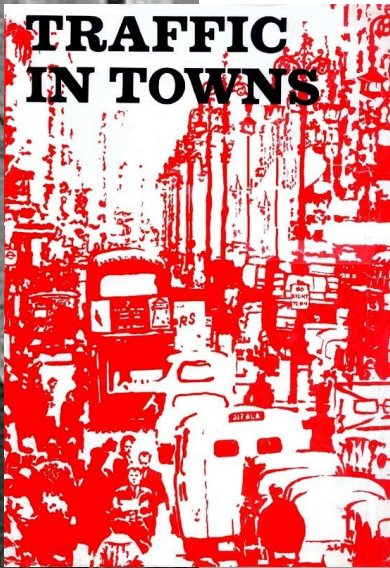
Once upon a time...

Timeline





Ernest Marples, Minister of Transport,
1962



“ we must try to plan our towns so as to **give the maximum use of this great and beneficial invention, the motor car, ...**

... which at the same time, if it is proliferated too much, **will strangle us** ”

London Assessment Studies

Volume 137: debated on Wednesday 13 July 1988

 [Download text](#)

Peter Bottomley, Minister of Roads and
Traffic

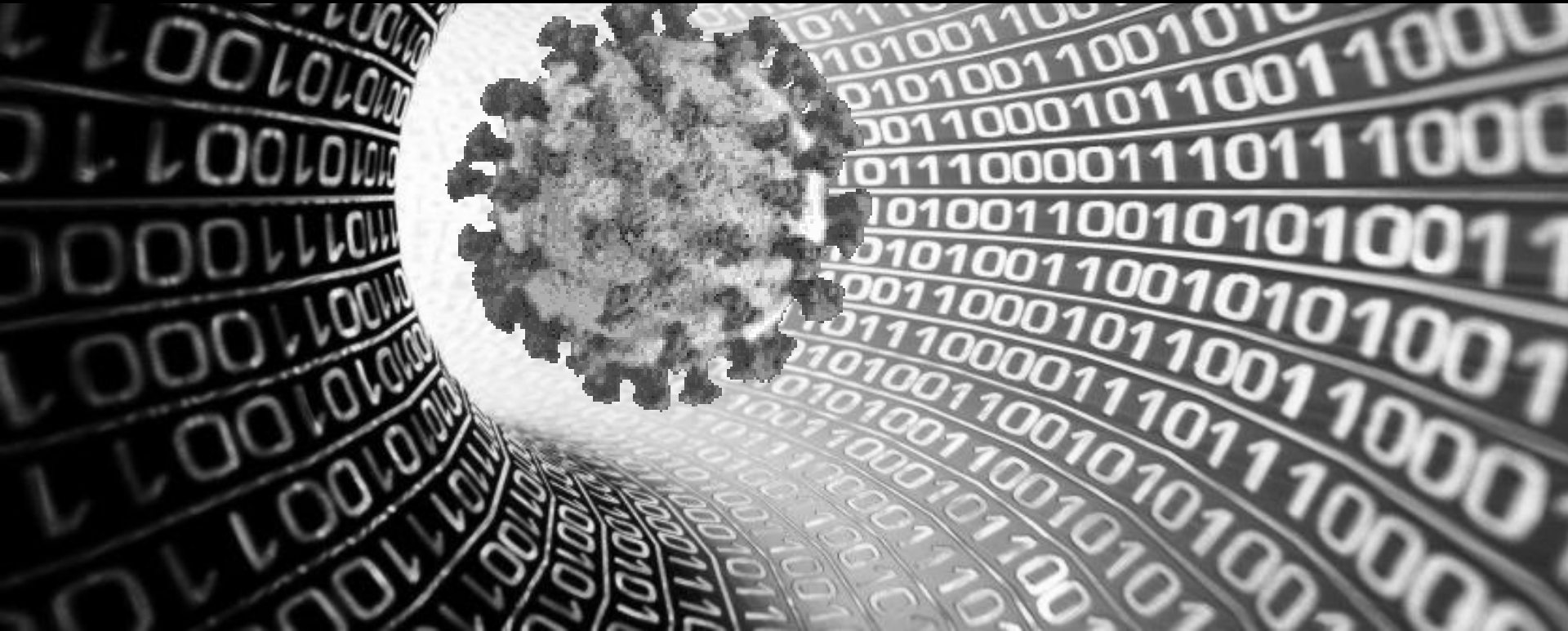
“

It should be noted that **these objectives cannot be considered individually, they need to be considered together**. For example freedom of choice should not be regarded as an absolute condition and will be assessed as it relates to the other objectives.

”

Winds of change

The digital age changing how we access people, employment, goods and services in society – and propelled further forwards by the Covid-19 pandemic



A heightening sense of urgency surround climate change





Stop the road to climate chaos

Road building is making it harder to tackle climate change, increasing CO₂ emissions when we urgently need to reduce them



Legal challenges to new capacity-enhancing road schemes

Under scrutiny

**Key questions for
road investment and spending**

January 2023



Time to speak up about road investment

7

**decarbonisation biodiversity health and
social impacts maintenance and optimisation
safety consideration of alternatives
robustness of investment decisions in a
changing world**

The seven questions the panel poses

1 What would make us feel confident that decisions on future road investment, at both the scheme and aggregate level, are consistent with the legal obligation to deliver a credible pathway to the **decarbonisation** of the UK economy by 2050?

2 What would make us feel confident that the policy imperative and opportunities to promote **biodiversity enhancement** are being recognised and pursued on their own merits, as opposed to biodiversity being ‘accommodated’ in pursuit of other goals?

3 How can we be persuaded that the **health and social impacts** of road spending experienced by individual people and communities are well understood and given sufficient weight at all stages of decision-making?

4 What would give us confidence that appropriate financial provision is being made for **operating, maintaining and optimising** the performance of the existing road network?

5 What would persuade us that options for investing in **improving road safety** are being identified and weighed appropriately?

6 What would persuade us that road investment and expenditure decisions - at the scheme and programme level - are the result of serious consideration of a **genuinely broad range of options** and their merits?

7 What would persuade us that road investment and expenditure decisions are likely to represent **value for money over the long term**?

LTT 186 24 January 2023 18
LtT The Future of Road Investment and Scrutiny
2023 seems set to be a critical point in aligning transport spending priorities with broader national objectives on economic, environmental and social policies. An in-depth look at how to approach the necessary alignment has just been published by a panel of transport professionals. LTT invited the panel's convener **Gwen Lyons** to outline their thinking and each individual contributor to say what they feel is most significant

Eight professors speak with one voice of constructive concern on the future of road investment

Summarising the “what”, “why”, “when”, “how” and “who” of all these factors is not an exercise in itself. It is a task that should be undertaken by those who are best placed to do so. It is a task that should be undertaken by those who are best placed to do so. It is a task that should be undertaken by those who are best placed to do so.

The seven questions the panel poses

- 1 What would make us feel confident that decisions on future road investment, at both the scheme and aggregate level, are consistent with the legal obligation to deliver a credible pathway to the decarbonisation of the UK economy by 2050?
- 2 What would make us feel confident that the policy imperative and opportunities to promote biodiversity enhancement are being recognised and pursued on their own merits, as opposed to biodiversity being ‘accommodated’ in pursuit of other goals?
- 3 How can we be persuaded that the health and social impacts of road spending experienced by individual people and communities are well understood and given sufficient weight at all stages of decision-making?
- 4 What would give us confidence that appropriate financial provision is being made for operating, maintaining and optimising the performance of the existing road network?
- 5 What would persuade us that options for investing in improving road safety are being identified and weighed appropriately?
- 6 What would persuade us that road investment and expenditure decisions - at the scheme and programme level - are the result of serious consideration of a genuinely broad range of options and their merits?
- 7 What would persuade us that road investment and expenditure decisions are likely to represent value for money over the long term?

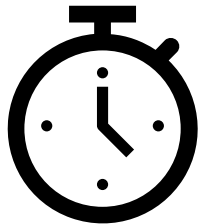
“Our goal was to illuminate matters that give us all cause for concern and where we felt something could and should be done to address that concern”

Common themes

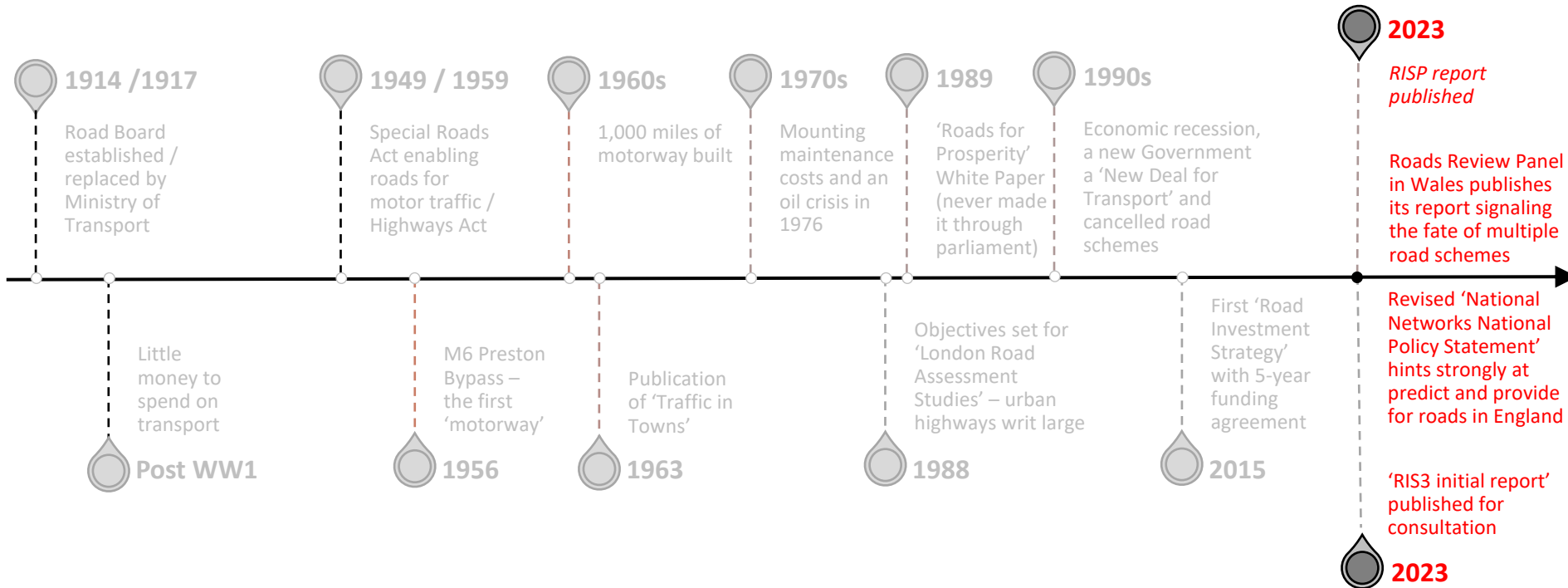
- the need for more **transparency** to allow scrutiny of decisions
- a need for a more clearly **coherent** approach to decisions - demonstrably consistent with broader obligations, including statutory requirements in areas such as decarbonisation and biodiversity
- a wish to see that individual schemes are fully and proportionately **compliant** with evolving procedural obligations and standards
- a need to ensure that decision-making is **well-informed** and draws upon a wide and **diverse range of expertise and perspectives**
- a sense that all of the above could be well-served by a greater role for **independent scrutiny** of decision-making

RISP recommendation

- However challenging, Government should:
 - i. publish a projection of the change in vehicle miles by carbon-emitting vehicles necessary or prudent to stay within an acceptable carbon reduction trajectory (recognising that this will have to be carried out against an uncertain cross-sectoral backdrop)
 - ii. indicate with sufficient confidence how such change can be achieved in practice in the required timescale (recognising that time is getting very short for fresh measures to be developed and implemented)
 - iii. make this analysis available as the basis for decisions on individual capacity-increasing road schemes



Timeline



Conundrums

Governing road investment

- i. Where, and by what means, should we create **additional road capacity**?
- ii. How should we manage the **consumption of the road capacity** that we have?
- iii. How should we **look after the road capacity** that we have?

Except between these questions, and answers that can win wide support, are two

...**a conundrum being**...

Conundrum:

a question or problem having
only a conjectural answer



Conjecture:

an opinion or conclusion formed on
the basis of incomplete information

Perplexing:

completely baffling;
very puzzling

1

What makes you confident that the nature and extent of the benefits you seek to achieve will be realised?

*Central
forecast
False
precision
Benefit-Cost
Ratio*

2

What future is best for society and why?



*Halcyon
days?*



These questions remain conundrums
whether addressed technocratically or
politically or in combination



Yet perplexing though they may be,
answer them we must, since even
doing nothing is really a decision to
carry on regardless

Our conclusion on providing road capacity

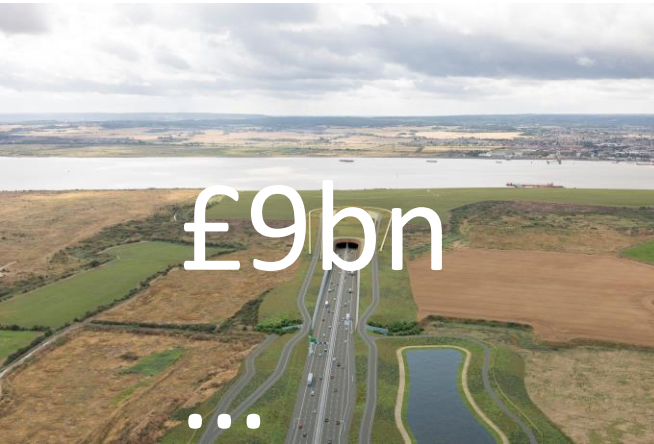
All judgements about the provision of road capacity are necessarily subjective, because they hinge on **forecasts** and assessments of **relative values**

Nevertheless they should be:

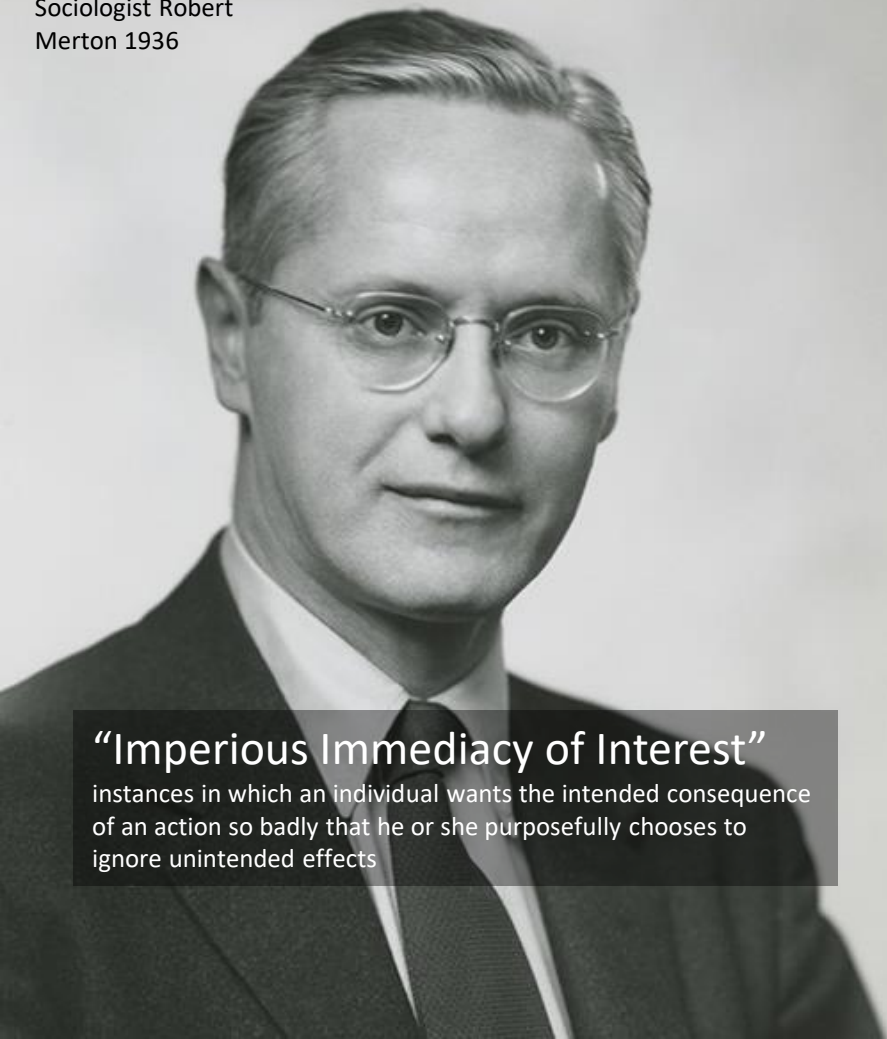
- as **well-informed** as they reasonably can be
- taken and documented in a way that allows for **transparency**
- taken with as clear and sharp a focus on the **downside risks** as on the upside benefits

Our conclusion on road expenditure

We judge that there is now a strong argument for re-calibrating our public policy attention away from capacity enhancement and toward capacity preservation (maintenance and resilience) and management (road space allocation)



Sociologist Robert
Merton 1936



“Imperious Immediacy of Interest”

instances in which an individual wants the intended consequence of an action so badly that he or she purposefully chooses to ignore unintended effects

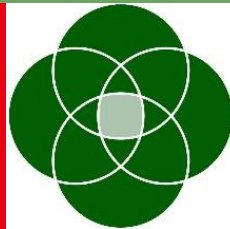


Road Investment Strategies

Speaker 2: John Parkin

**UWE
Bristol**

University
of the
West of
England

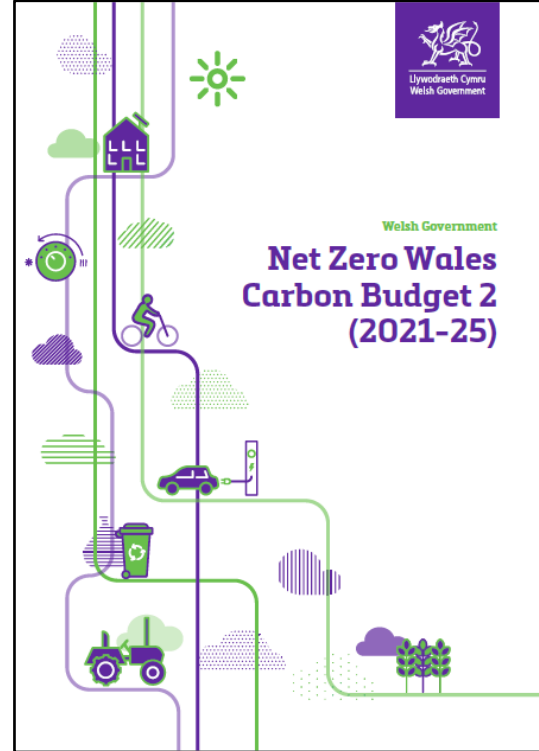


Centre for
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Behind the headlines: the Welsh Road Review Panel's future road planning and design recommendations

Professor John Parkin

John.parkin@uwe.ac.uk



Centre for
Transport &
Society

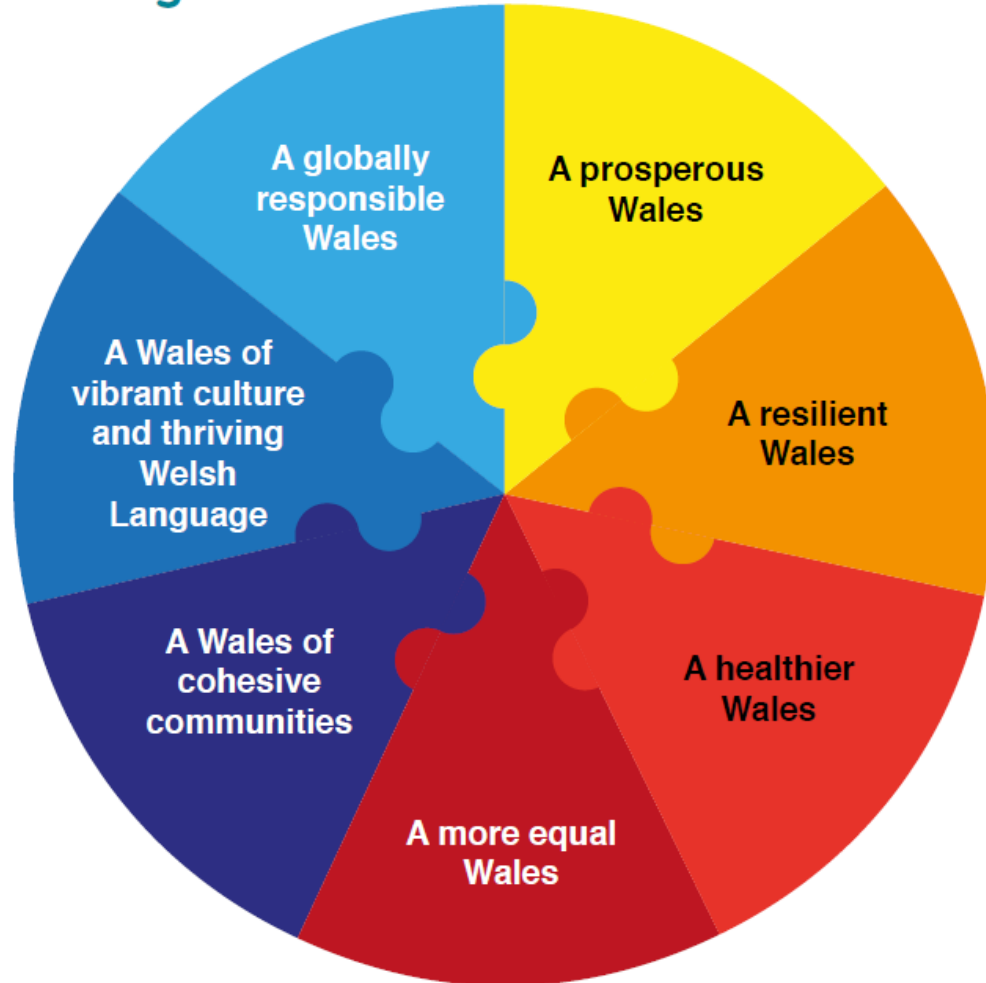
**UWE
Bristol**

University
of the
West of
England

“Transport generates around 17% of all our emissions, so must play its part if we are to reach our target of net zero emissions by 2050. We need to move away from spending money on projects that encourage more people to drive, and redirect this money on maintaining our existing roads and investing in real alternatives.”

Lee Waters, the Deputy Minister for Climate Change, when announcing the review of planned expenditure on roads

Well-being Goals



<https://gov.wales/well-being-of-future-generations-wales>

OUR VISION

An accessible, sustainable and efficient transport system

Priority 1

Bring services to people in order to reduce the need to travel

Priority 2

Allow people and goods to move easily from door to door by accessible, sustainable transport

Priority 3

Encourage people to make the change to more sustainable transport

WELL BEING AMBITIONS

Good for people and communities

Good for the environment

Good for places and the economy

Good for culture and the Welsh language



The Sustainable Transport Hierarchy

We will continue to make best use of existing transport infrastructure by maintaining and managing it well.

We will also adapt it to a changing climate and upgrade it to support modal shift.

Where we need new infrastructure, we will use the Sustainable Transport Hierarchy.



Walking and Cycling



Public Transport



Ultra-Low Emissions Vehicles

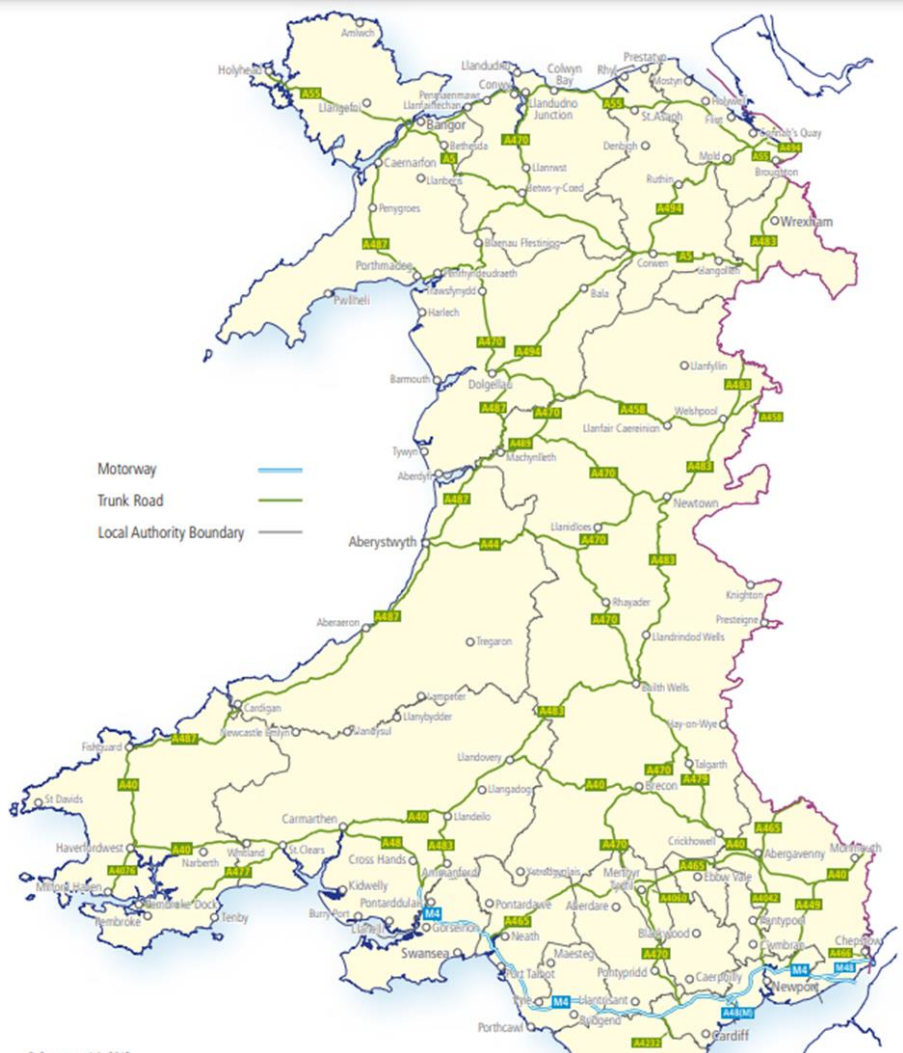


Other Private Motor Vehicles

Carbon

The relevant part of the Net Zero Wales transport sector ambition statement is to:

- Reduce emissions from passenger transport by 22% in 2025 and 98% in 2050, through demand reduction, modal shift and uptake of low carbon technologies
- Reduce the number of car miles travelled per person by 10% by 2030, and increase the proportion of trips by public transport and active travel to 35% by 2025 and 39% by 2030



REVIEW CRITERIA



Has the case for change been made?



Are the objectives of the scheme aligned with current policy?



Did the scheme development process examine all appropriate options?



What is the effect on carbon dioxide emissions?



Will the scheme be good for people and communities?



Will the scheme be good for the environment?



Will the scheme be good for places and the economy?



Will the scheme be good for culture and the Welsh language?



How robust is the case for the scheme to different possible futures?

Recommendations 1 and 2





STRATEGIC INVESTMENT THEMES

- 7.2 Strategic investment priorities
- 7.3 Regional multimodal investment
- 7.4 Allocation of road space to support modal shift
- 7.5 Making our roads safer
- 7.6 Opportunities for allocation of financial savings



CARBON AND WELL-BEING THEMES

- 7.7 Carbon emissions
- 7.8 Supporting biodiversity
- 7.9 Supporting economic well-being
- 7.10 Supporting social and cultural well-being




POLICY THEMES

- 7.11 Demand management
- 7.12 Freight
- 7.13 Maintenance and asset renewal
- 7.14 Rural areas
- 7.15 Economic development and land use planning



TECHNICAL, APPRAISAL AND DELIVERY THEMES

- 7.16 Application of the Well-being of Future Generations Act
- 7.17 Traffic forecasting
- 7.18 Scheme appraisal and the WelTAG process
- 7.19 Assessment of value for money
- 7.20 Scheme design issues
- 7.21 Role of the professions

An aerial photograph of a lush green valley. A road winds through the landscape, which is characterized by rolling hills and fields. The text is overlaid on the lower half of the image.


4. Capital works on the trunk road network should from now on be identified and prioritised in one of two ways: (a) as part of **regional multimodal programmes** to reduce car use and achieve modal shift to active travel and public transport; and (b) through trunk road programmes focussed on achieving the aims of the Wales Transport Strategy: for example, a **Trunk Road Modal Shift Programme** and a smaller scale **Trunk Road Safer Speeds and Routes Programme**.

47 Welsh Government should consider creating national application annexes for design speed selection that would then lead to more appropriate road layouts in line with policy.

48 Roundabout designs for rural situations should be further developed in Active Travel Act Guidance.

Implications

1. Conceive and implement large-scale active travel schemes.
2. Active travel design needs to be a part of the skill set of every highway and traffic engineer.
3. New skills to minimise embodied carbon.
4. Wider understanding of decarbonisation requirement timescales
5. Constraints of short-term and medium scale funding overcome

A photograph of a paved path in a park. The path is made of light-colored paving stones on the left and a reddish-brown surface on the right. A person is walking on the left side, and a person is riding a bicycle on the right side. The path is surrounded by lush green trees and grass. A tall street lamp is visible on the left side of the path.

Active travel Act (2013) requires local authorities only to *'produce maps'*, and they *'must in every year secure that there are (a) new active travel routes and related facilities, and (b) improvements of existing active travel routes and related facilities.'*

Cross-party group on Active Travel Act think there is a *disjuncture*. The NWTC would like to see *'strengthened mechanisms'* for delivery.

The Netherlands uses collaborative contractually binding agreements for Snelfietsroutes development

Conclusion

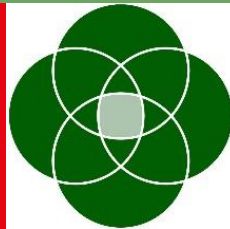
- Welsh Government policy is strong and coherent across transport, carbon budgeting and planning.
- The Roads Review Panel Report provides solid recommendations for a fundamental shift in investment related to roads
- This requires a lot of work now by Welsh Government and local authorities to re-orient
- It also requires a significant re-orientation in the behaviours of professionals working on transport investment in Wales.

Road Investment Strategies

Speaker 3: Alex Bateram

**UWE
Bristol**

University
of the
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A large, thick green circular arc frames the central text on the slide.

Planning 'Nationally Significant' transport infrastructure for their future? The role of young people in the Road Investment Strategy, 2015 to 2020

UWE Centre for Transport and Society Symposium 2023

Alex Bertram, Senior Consultant, Future Mobility

Agenda

01 Introduction

02 What the Literature Says

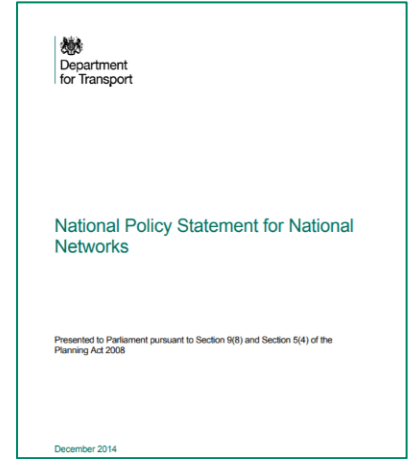
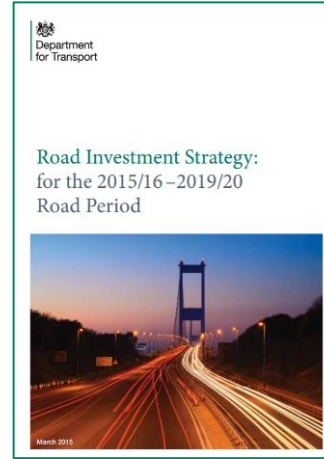
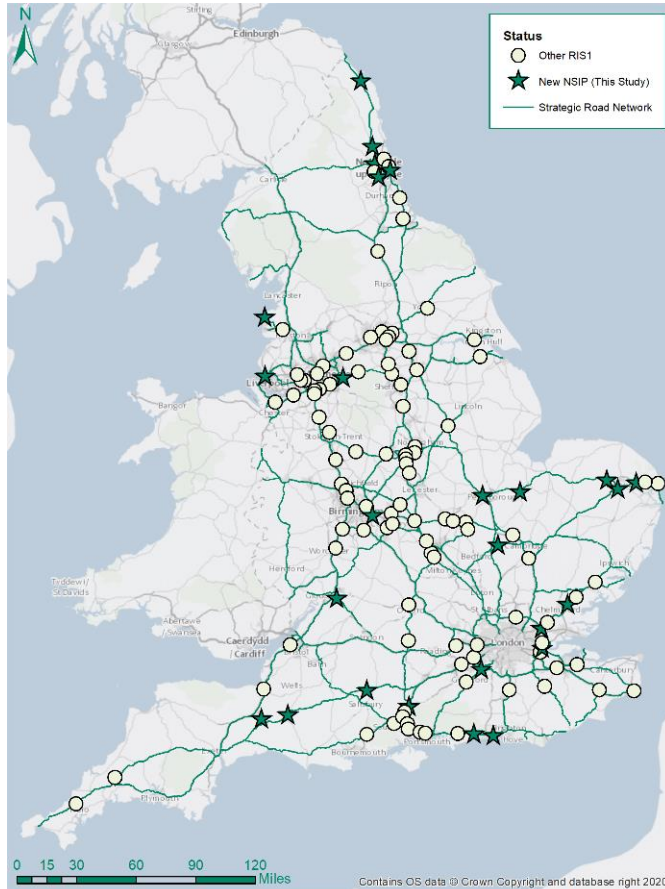
03 Research Approach and Findings

04 What the Findings Could Mean in Practice

05 Final Thoughts

Introduction

Road Investment Strategy 1: 2015 to 2020



£ 15.2 billion:
• 10.8bn new schemes
• 4.4 bn renewals

127
'new' schemes

What the Literature Says

Young People and Transport



29 and under?

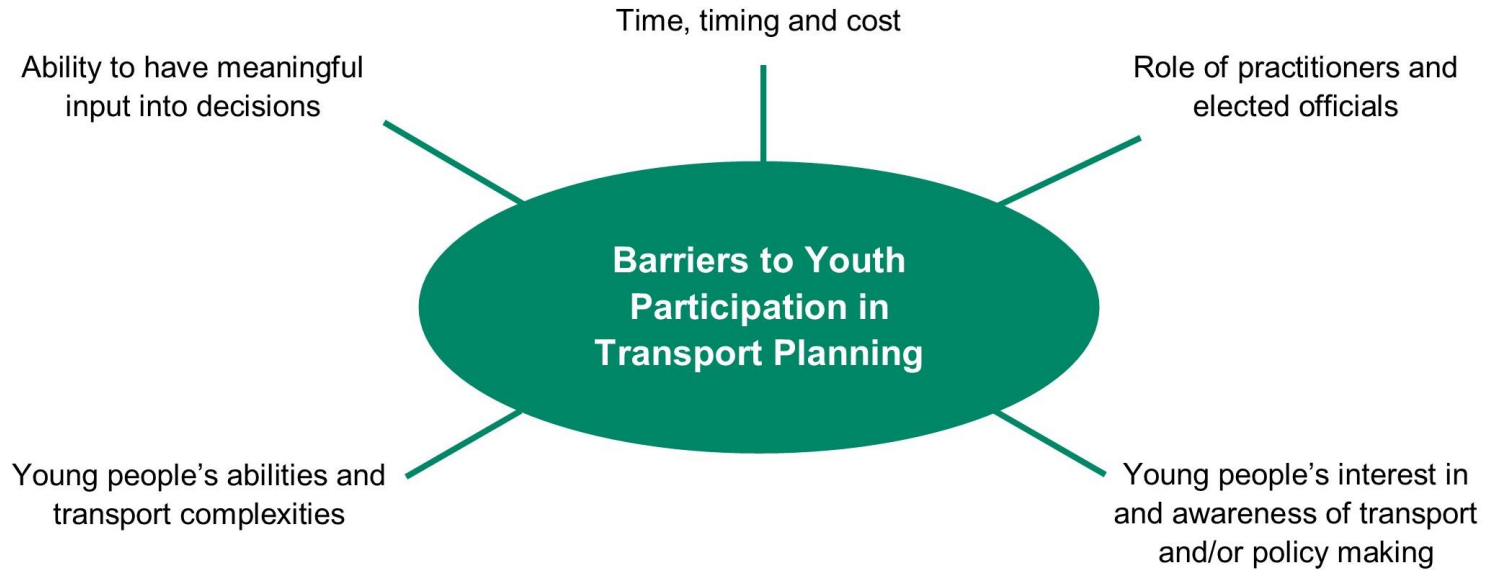
20 million
(2021 Census)

Two key considerations:

- 1) Impacts of Transport on Young People
- 2) Impacts of Young People's Changing Travel Behaviours



Youth Participation Barriers



Research Approach and Findings

Research Approach

Archival
Study

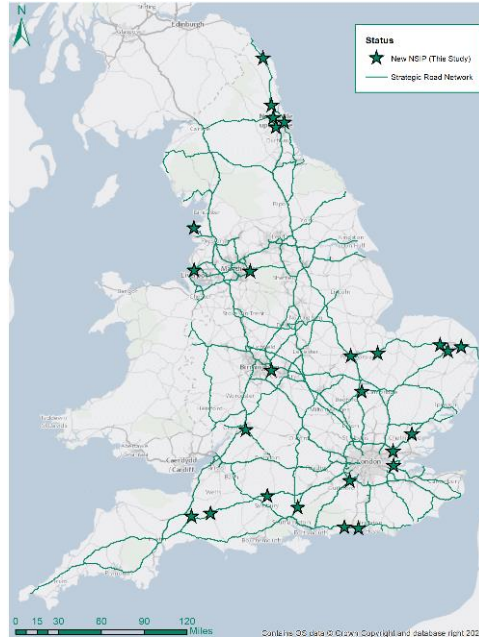
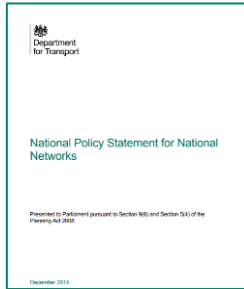
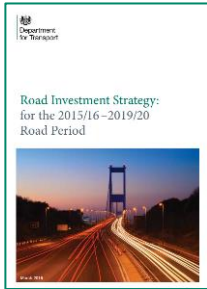
Key Informant
Interviews

What are the time, timing and cost implications for those involved?

How prevalent is youth participation in consultation exercises?

Have young people's views been directly attributed to policy and scheme developments?

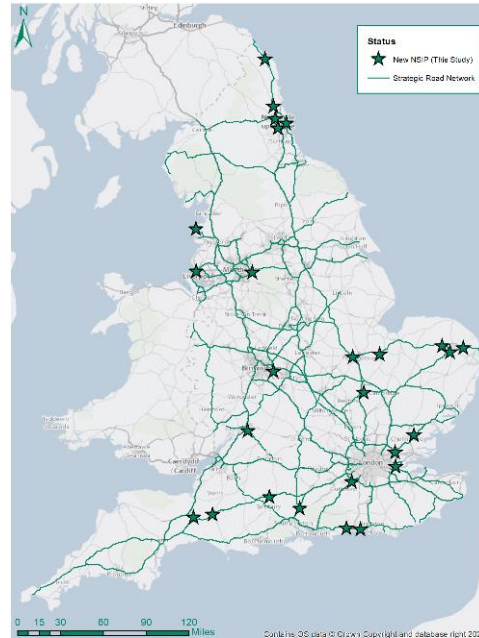
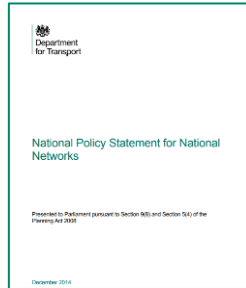
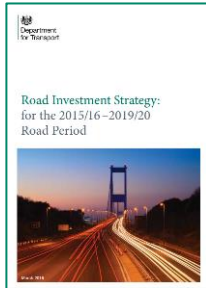
Youth Participation Time, Timing and Costs



out of

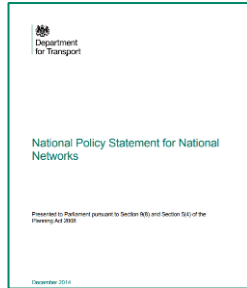
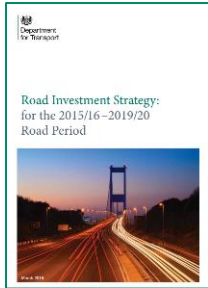


Youth Participation Prevalence



- a) Less than 1,500
- b) 1,500 to 5,000
- c) 5,000 to 50,000
- d) More than 50,000

Youth Participation Impacts

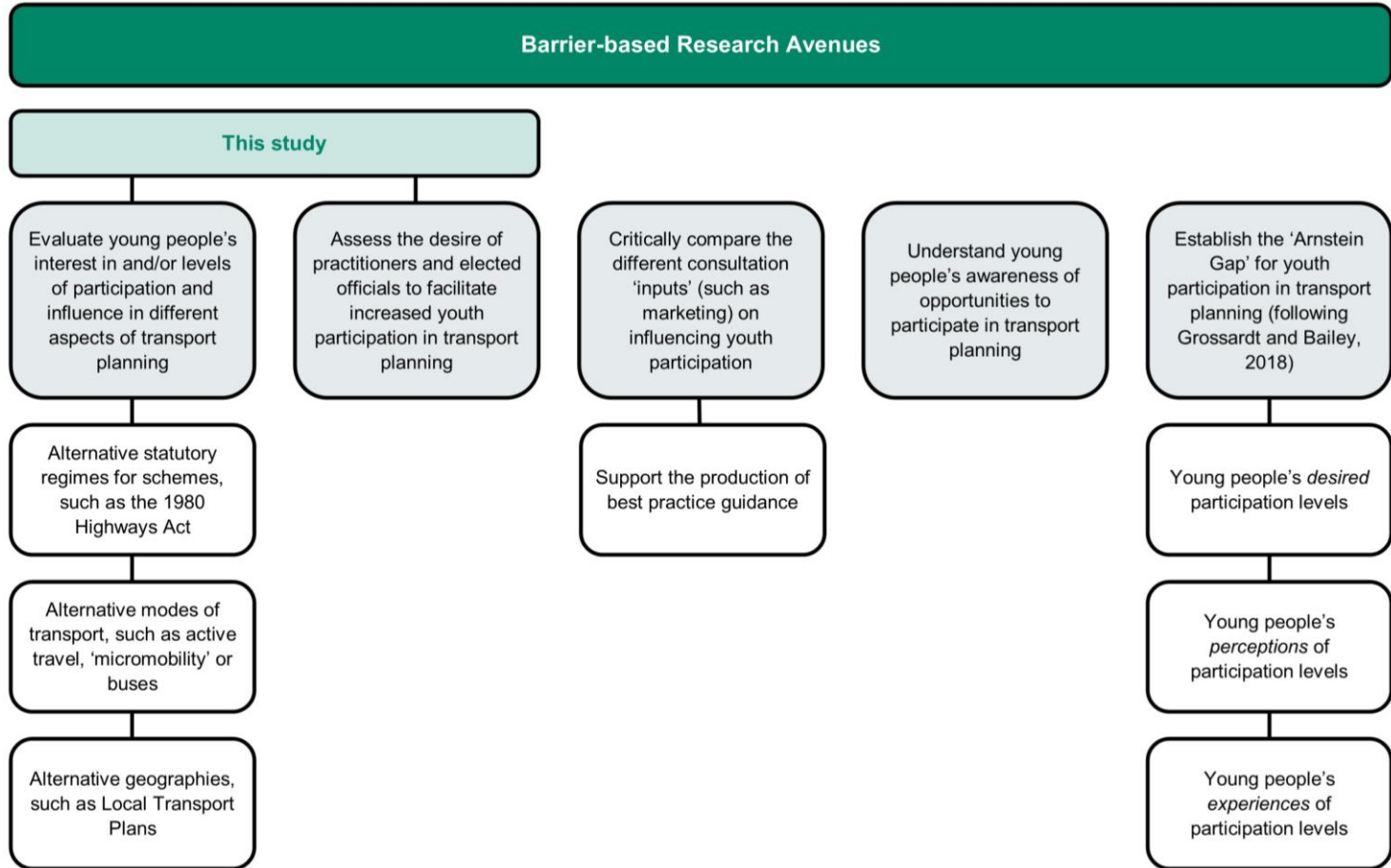


“there were some good suggestions I think, but from the designer's point of view they were just [shrugs]”.

Interviewee, RIS1 Scheme Consultation Lead

What the Findings Could Mean in Practice

Future Research



A New Way Forward?

Scenario Planning:

Young people contribute to the definition of desired or plausible futures

Participatory Prioritisation:

Young people assess different options against set criteria, potentially at workshops with expert input from (preferably independent) practitioners to support them in understanding a full range of potential positive or negative impacts



Alternative Approaches to Increase Youth Participation

Discursive Representation:

Inclusion of young people in (newly formed) independent commission debates, citizens assemblies, or shadow boards to produce outputs which are then considered by decision-makers. Alternative for referenda, with varying degrees of power transfer

Youth Impact Acknowledgement:

The introduction of an English equivalent to the Welsh “Wellbeing of Future Generations” Act, as proposed by Lord Bird in 2019, requiring changes in public expenditure or policy to be accompanied by a ‘future generations impact assessment’

Final Thoughts

Thank you

Contact details:

alex.bertram@aecom.com

[LinkedIn](#)

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better world