



Future **U**ncertainty in **T**ransport – **U**nderstanding  
and **R**esponding to an **E**volving **S**ociety

# What has CIHT FUTURES told us about the transport profession and the need for change?

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# Overview

- The rearview mirror
- Change, uncertainty and regime transition
- From Future Demand in New Zealand to CIHT FUTURES in the UK
- Insights from the UK transport profession
  - Plausibility of different futures versus official forecasts
  - Responding to an uncertain future
- Recommendations

A wide-angle photograph of a busy street in Paris, France, showing heavy traffic. The street is filled with cars, vans, and a few buses. In the background, a large yellow construction crane is visible against a hazy sky. The street is lined with trees and buildings. The overall atmosphere is one of a congested urban environment.

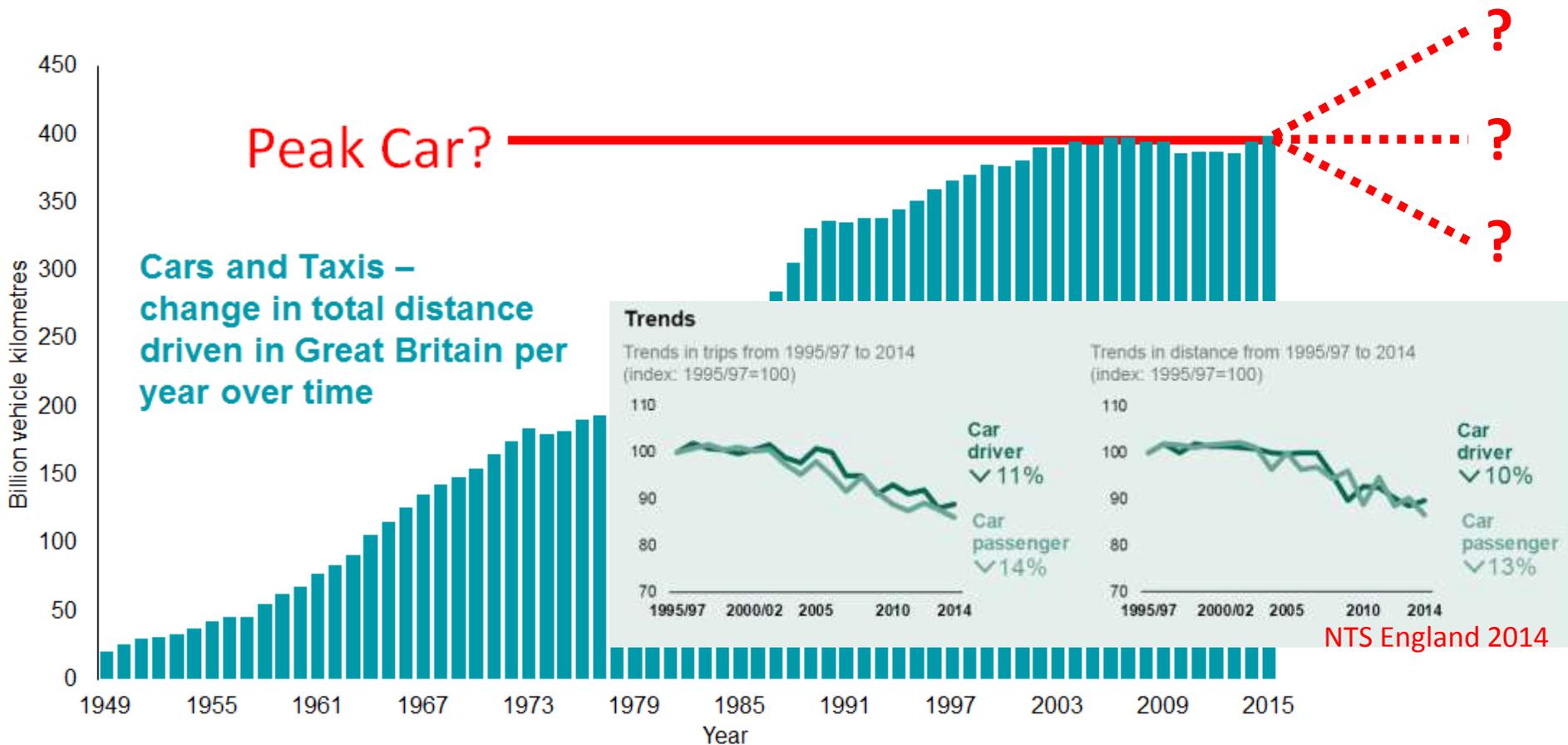
Givens of automobility?

Car traffic keeps on growing

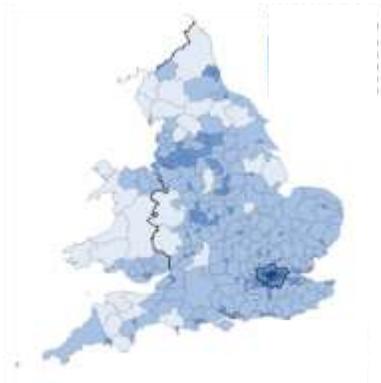
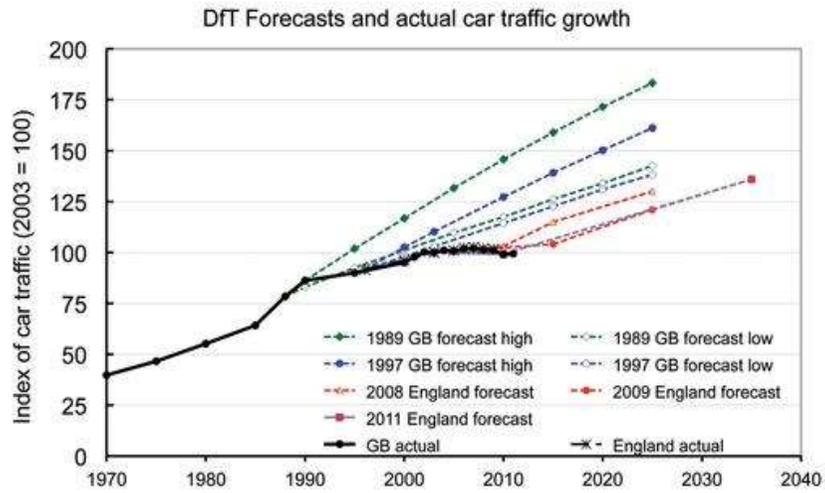
You can't have economic growth without traffic growth



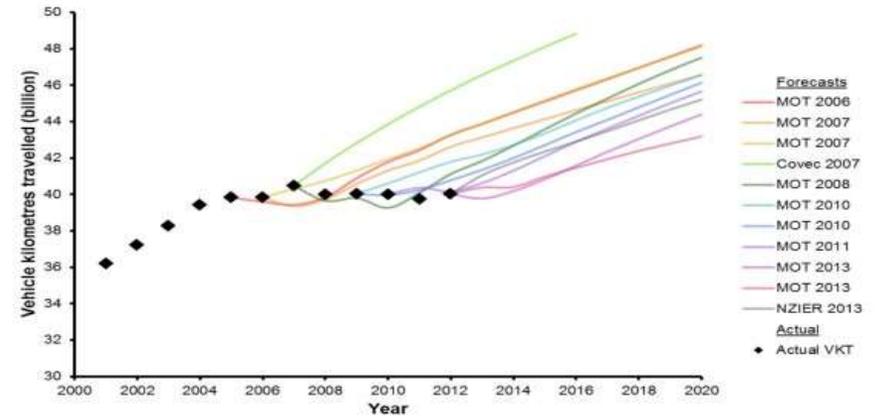
# Change, uncertainty and regime transition



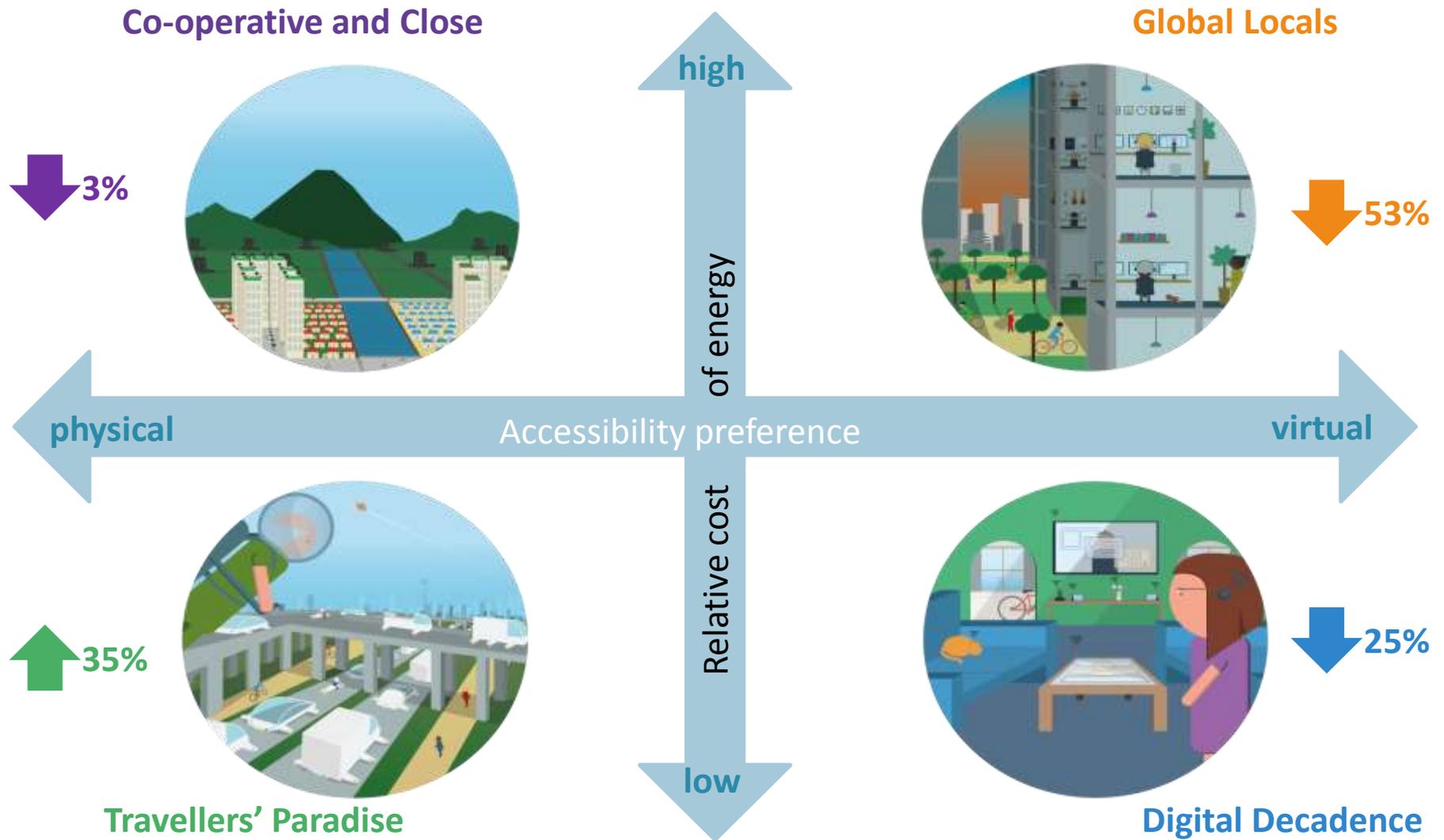
# The future isn't what it used to be



Historic New Zealand light vehicle traffic forecasts vs actual growth

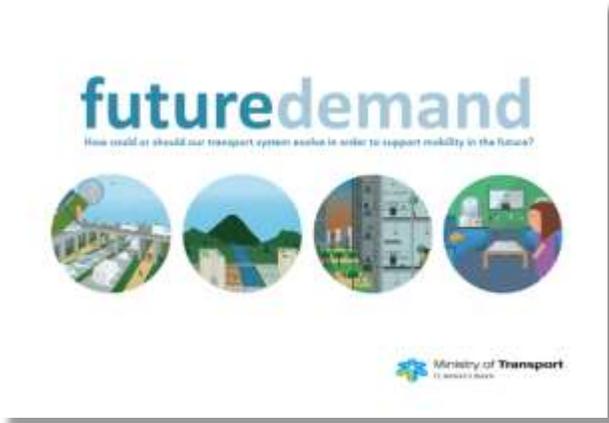


# Divergent, plausible futures



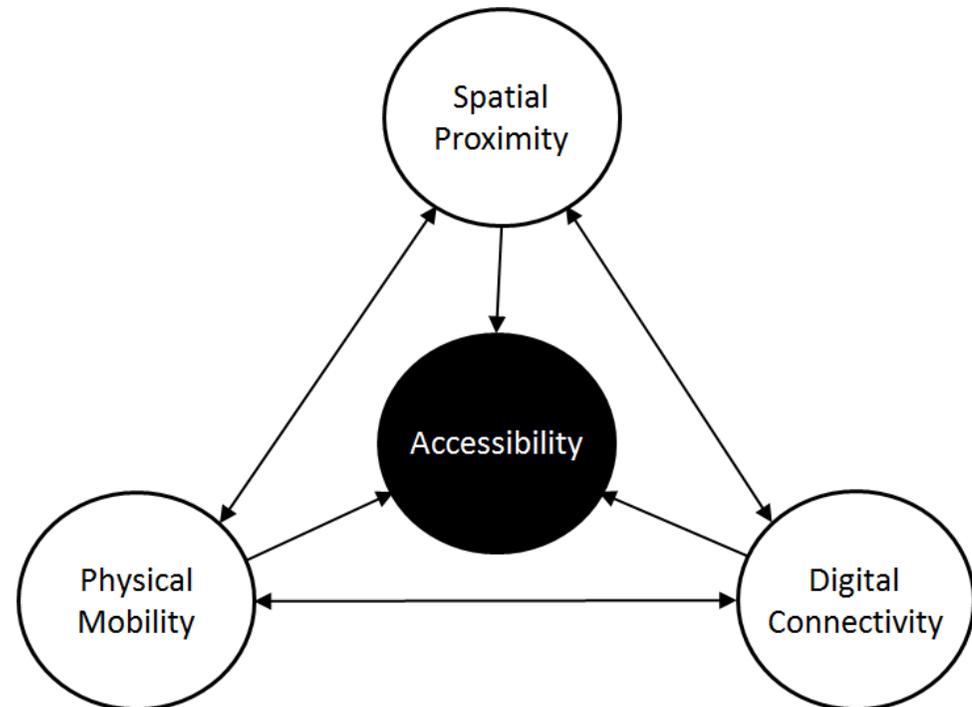
Percentage change in total distance travelled by car from 2014 to 2042

# Emerging principles from engaging with uncertainty

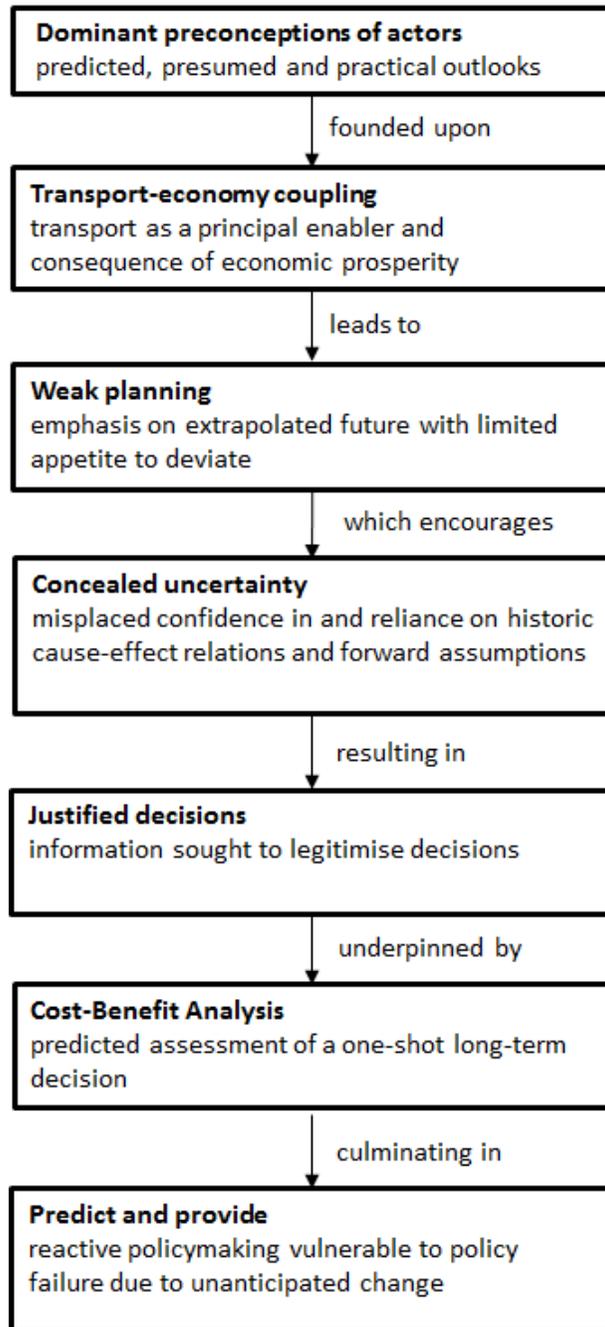


<http://www.transport.govt.nz/ourwork/keystrategiesandplans/strategic-policy-programme/future-demand/>

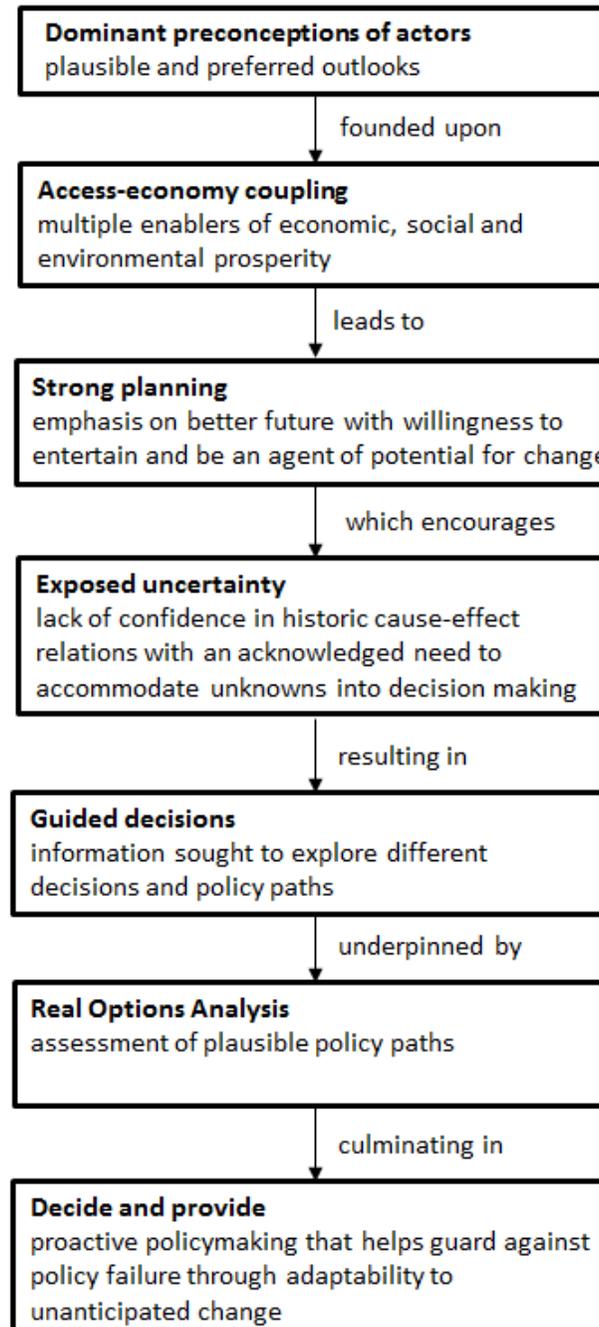
- **Access** not mobility is key to a thriving society
- A need for **resilient** provision of access that provides for **adaptability** of behaviour over time
- A focus on evolving our transport system for the demand we believe to be **appropriate** rather than that we are tempted to predict



## REGIME-COMPLIANT PATHWAY



## REGIME-TESTING PATHWAY



Which  
path-way  
are we on?

Which  
path-way is  
desirable and  
achievable?

# CIHT FUTURES



11 workshops covering all 12 CIHT regions

Over 200 CIHT members engaged



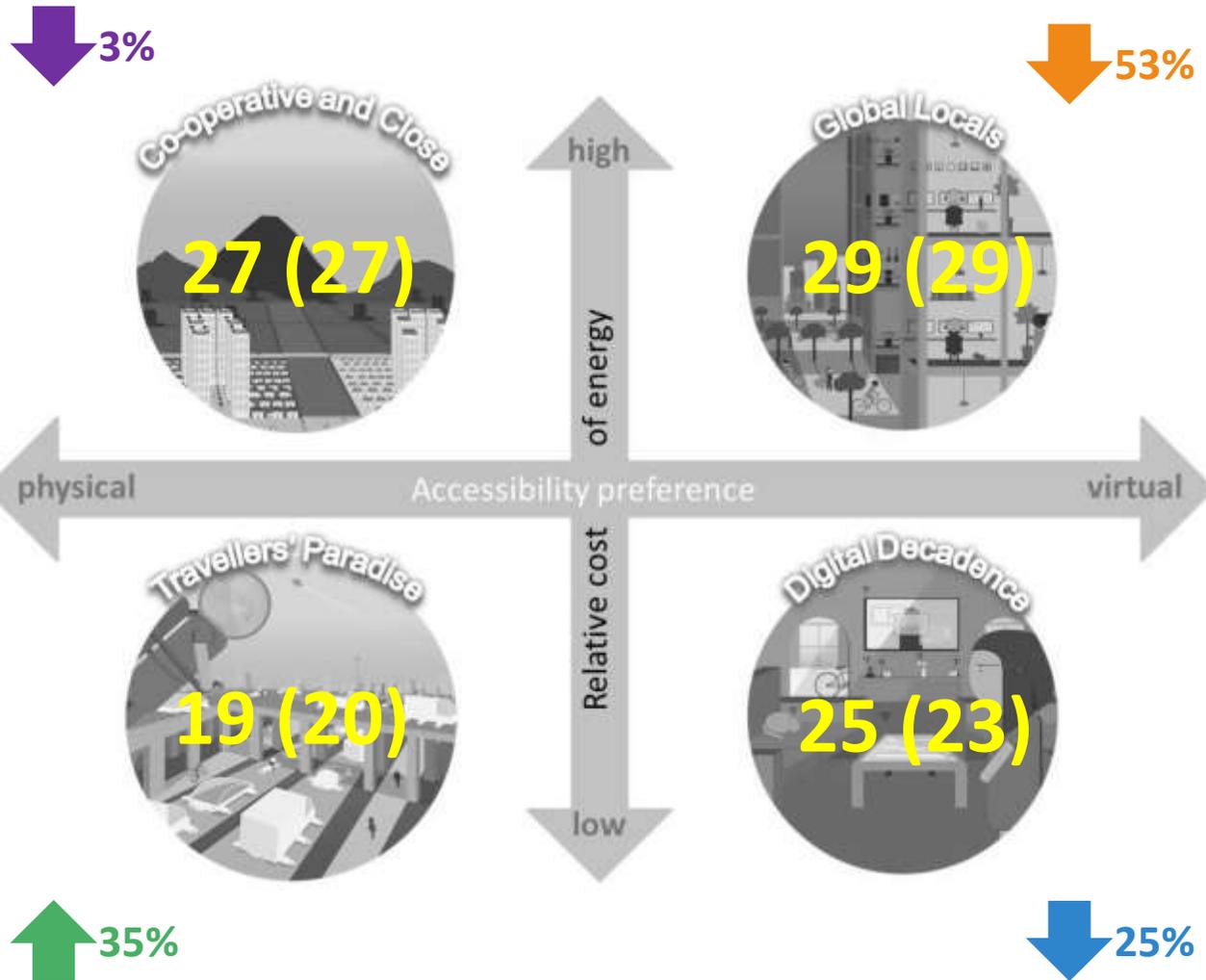
Examining uncertainty and plausibility



Reviewing policymaking pathways

Drawing out life experience

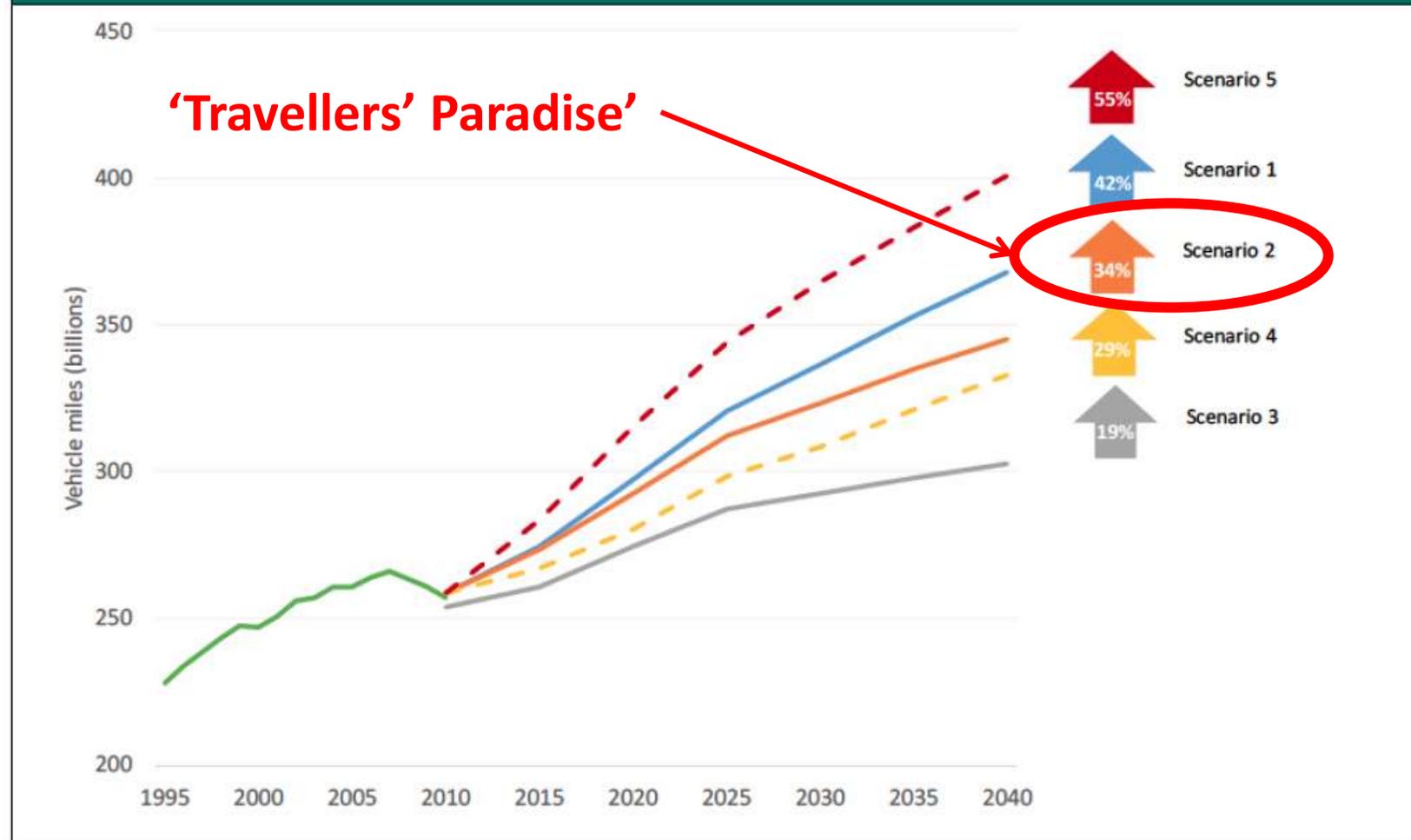
# Percentage of plausibility assigned to each scenario before (and after) discussion



- Collective uncertainty confirmed
- High > low energy future
- Virtual > physical future
- Travellers' Paradise considered least likely
- Modest changes from before to after discussion (though more individuals changed)

# DfT Road Traffic Forecasts 2015

Figure 3.4: Traffic growth by scenario (bn miles, all vehicles)



# Insights from the transport profession

## - uncertainty

- A collective voice of rather deep uncertainty about the future
- Overall, professional opinion about future uncertainty is at odds with official forecasts
- Giving a voice to different generations helps to guard against decision bias (cognitive fluency and confirmation bias)
- The transport sector alone is ill-equipped to grasp the extent of socio-technological transformation
- Transport infrastructure's *use* is the big unknown (albeit that when provided, new capacity has typically been well-used)
- Successive political administrations create uncertainty for transport policy and its implementation and hence for the transport profession itself
- Lack of coherent strategy and depleted local government capability limits the ability to steer the transport sector
- New disruptive forces from beyond the traditional transport industry may be moving into the driving seat
- A sense of professional impotence arises from being on the back foot, lacking a national transport strategy and a lack of skills within the profession to confront the uncertainty faced

### Professional Comfort Formula

$$C_{psdf} \propto \frac{1}{C_{pfdj}}$$

**psdf** – plausibility of significantly different futures

**pfdj** - processes followed in the day job

# Insights from the transport profession

## - concerns

- Election imperatives, fashionable ideas and reactive funding stand in the way of a professional approach to long-term planning and a strategy to deliver outcomes
- The transport sector is subject to vested interests, risk aversion and a 'rearview mirror' mentality that results in inertia to change
- Strategic planning and development is at the mercy of the mechanisms employed and motivations at play to arrive at decisions – a sense that the tail is wagging the dog
- Little support is provided to develop transport professionals beyond becoming chartered towards becoming leaders and helping future-proof the profession



The sector needs to challenge its professional models and broaden its field of view

# Insights from the transport profession - which policy and investment pathway?

- A strong call from transport professionals for **change from our current approach of regime compliance**
- Regime compliance suits politicians who need to project an air of confidence in investment decisions – ‘people like numbers’
- Familiarity with tried and tested approaches, existing skillsets and resource constraints contribute to its continued prevalence
- Transport professionals do not necessarily believe in the approaches they follow but which they feel compelled to follow nevertheless and lack the confidence to challenge
- We have seen responsibility eroded in place of a growing culture of accountability
- In terms of pragmatism and fitness for purpose, **some combination of regime-compliance and regime-testing is called for** (and is deliverable, with appropriate support and guidance)
- Leadership of change is crucial – *and possible* - as we enter an era of devolved transport powers and bodies such as Highways England and the National Infrastructure Commission
- Skillsets are perhaps the most challenging resource to address



We are *accountable* to the dogma and procedures of regime compliance instead of *responsible* for stewardship of the future through regime testing

# Insights from the transport profession - engagement

- A need for further events that can foster collaborative exchange of thinking and help individuals to learn and develop – across professions and including decision makers
- The transport profession needs to be more engaged with the IT profession and further other professions
- Silent support is overshadowed by vocal opposition – more creative approaches to public engagement are called for
- Stronger engagement is a potentially important source of creative ideas as well as buy-in if handled effectively



A need for public<sup>s</sup> engagement to replace the vocal minority of usual suspects in consultation

# Recommendations

for CIHT

- Information pack to help enable others explore uncertainty; and collaborative development of a wider set of 'futures' resources
- Professional practice guidance to help challenge and evolve the pathways we follow (including a 'know your limits' campaign in relation to reporting of quantitative results)
- Help establish an early career professionals' network to critically examine development of the profession and build confidence to engage and challenge
- Consider ways of (further) promoting and celebrating best practice in public engagement
- Strategic planning exercises should set aside a modest budget share to introduce constructive challenge from a regime-testing perspective
- Help ensure that candidates for professional qualifications can demonstrate both an awareness and application of the regime-testing approach and a capacity to challenge dogma
- Key transport sector organisations to jointly establish a leadership development programme
- Key bodies, including the Transport Select Committee, to consider the issues raised in the interests of ensuring responsible stewardship of the future

beyond CIHT

A person stands on a paved road that stretches into the distance, with their arms raised in a gesture of triumph or freedom. The sky is a dramatic mix of orange, yellow, and blue, suggesting a sunset or sunrise. The ground is a mix of asphalt and grassy areas.

“

We need to be brave and embrace the uncertainty of the future, recognising the opportunities that this presents to shape the future

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CIHT FUTURES participant