



Future Uncertainty in Transport – Understanding and Responding to an Evolving Society

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 multi-lane street in Paris, France. The street is filled with cars, vans, and taxis, moving in both directions. In the background, a large yellow construction crane is visible against a hazy sky. The street is lined with trees and buildings, and a traffic light is visible on the right side. The overall atmosphere is one of a dense, active urban environment.

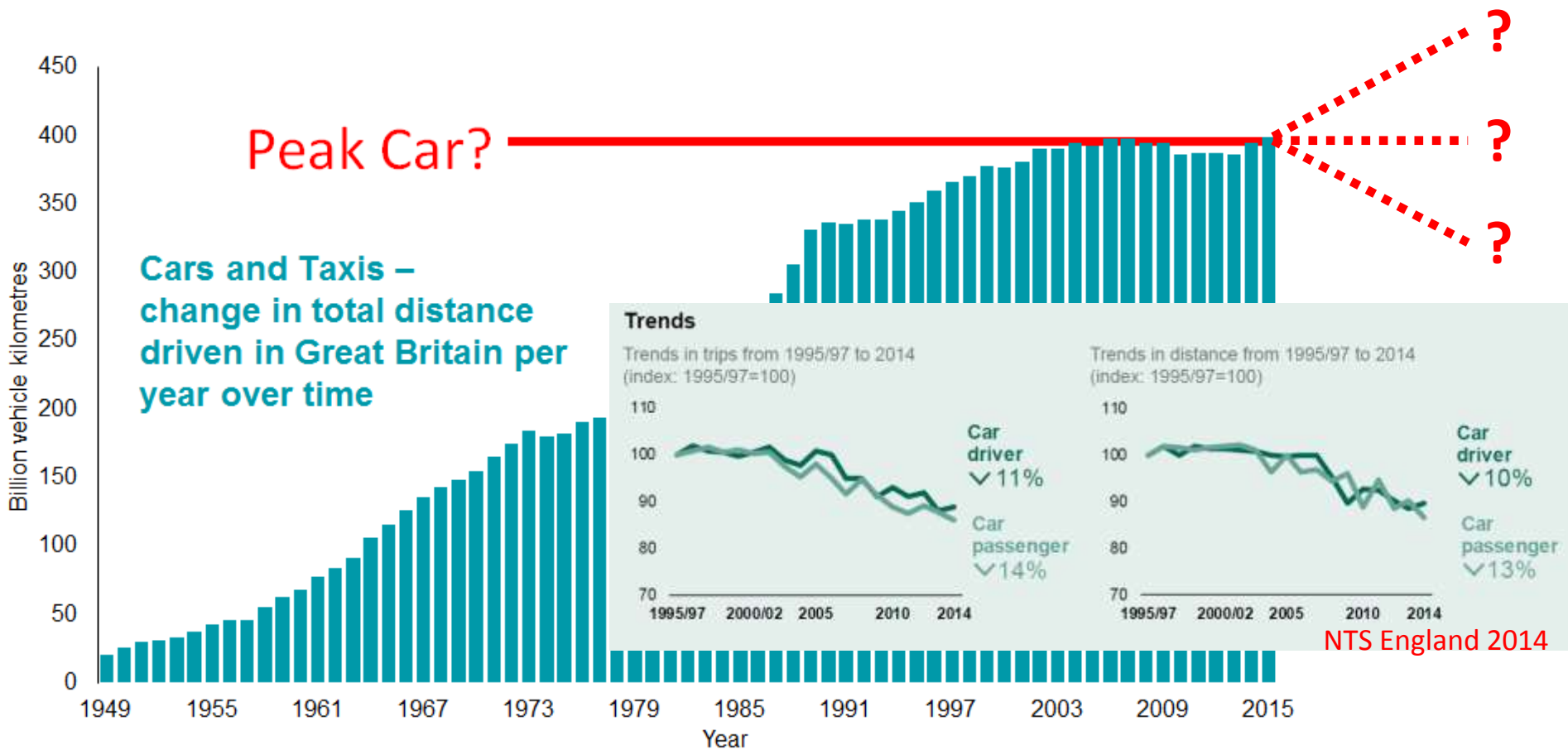
Givens of automobility?

Car traffic keeps on growing

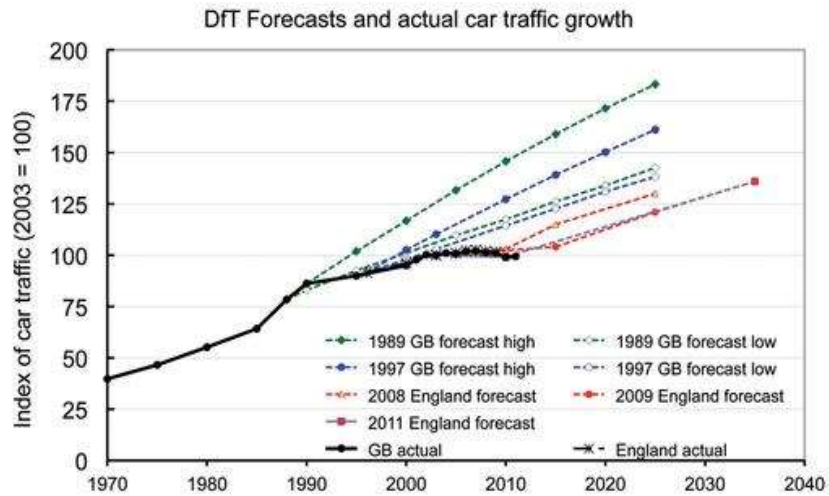
You can't have economic growth without traffic growth



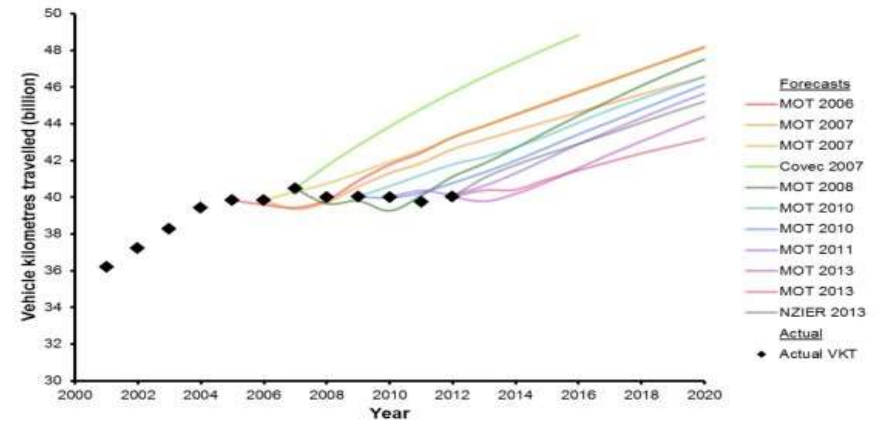
Change, uncertainty and regime transition



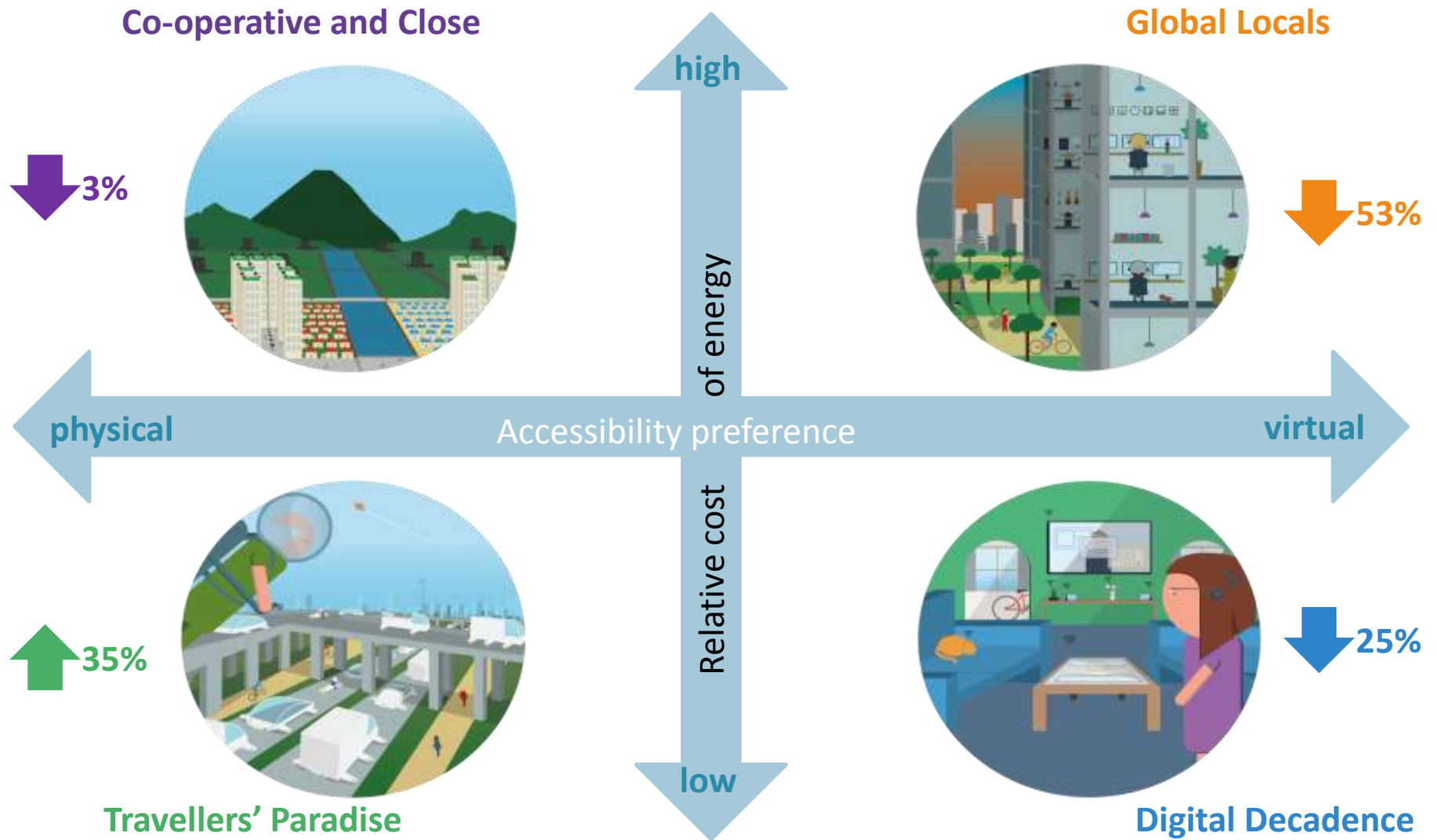
The future isn't what it used to be



Historic New Zealand light vehicle traffic forecasts vs actual growth



Divergent, plausible futures



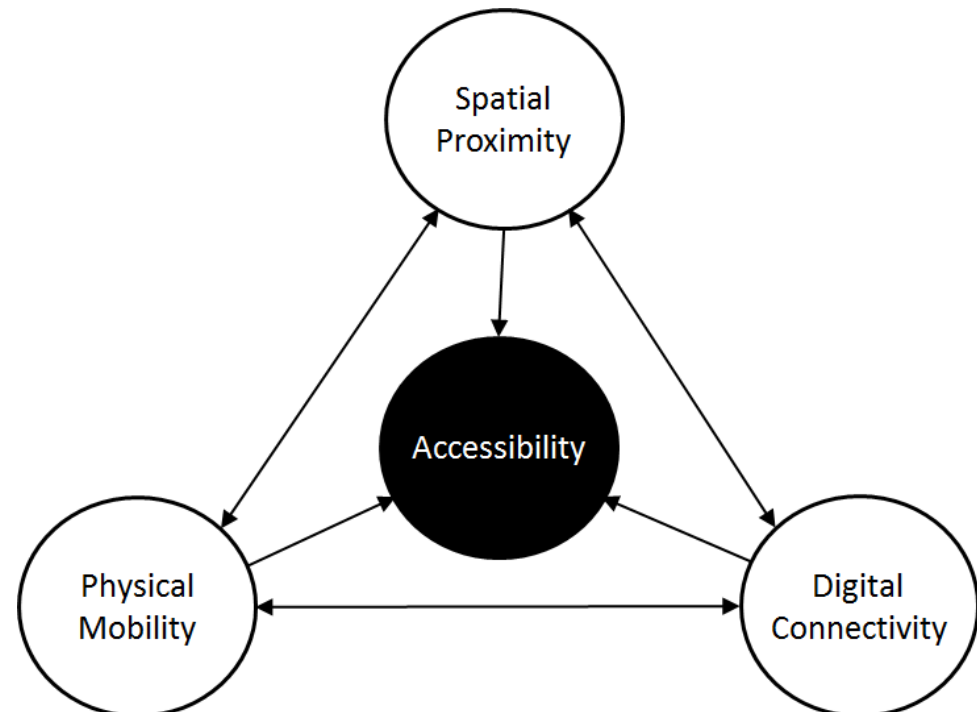
Percentage change in total distance travelled by car from 2014 to 2042

Emerging principles from engaging with uncertainty

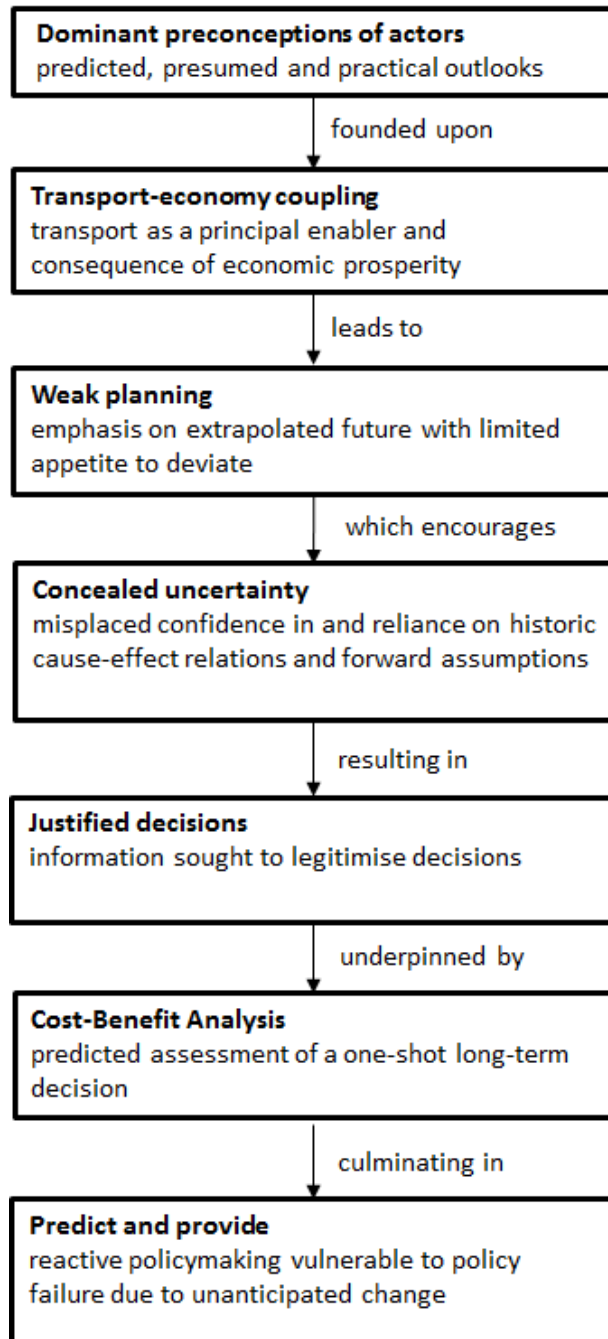


<http://www.transport.govt.nz/ourwork/keystrategiesandplans/strategic-policy-programme/future-demand/>

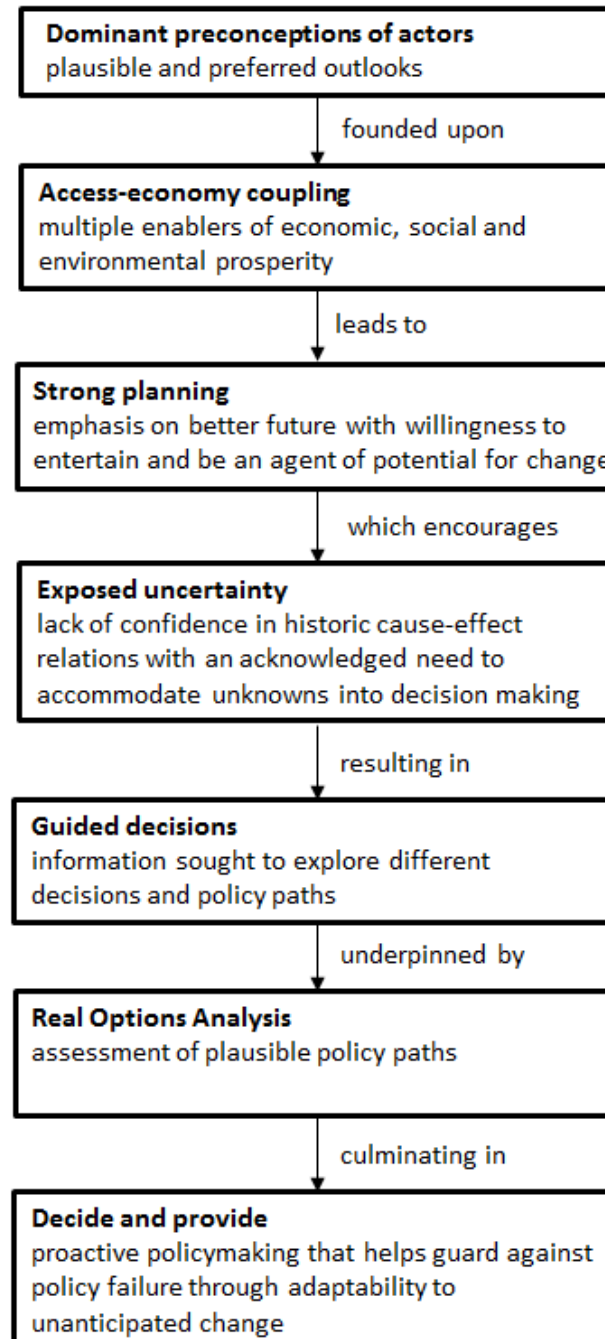
- **Access** not mobility is key to a thriving society
- A need for **resilient** provision of access that provides for **adaptability** of behaviour over time
- A focus on evolving our transport system for the demand we believe to be **appropriate** rather than that we are tempted to predict



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



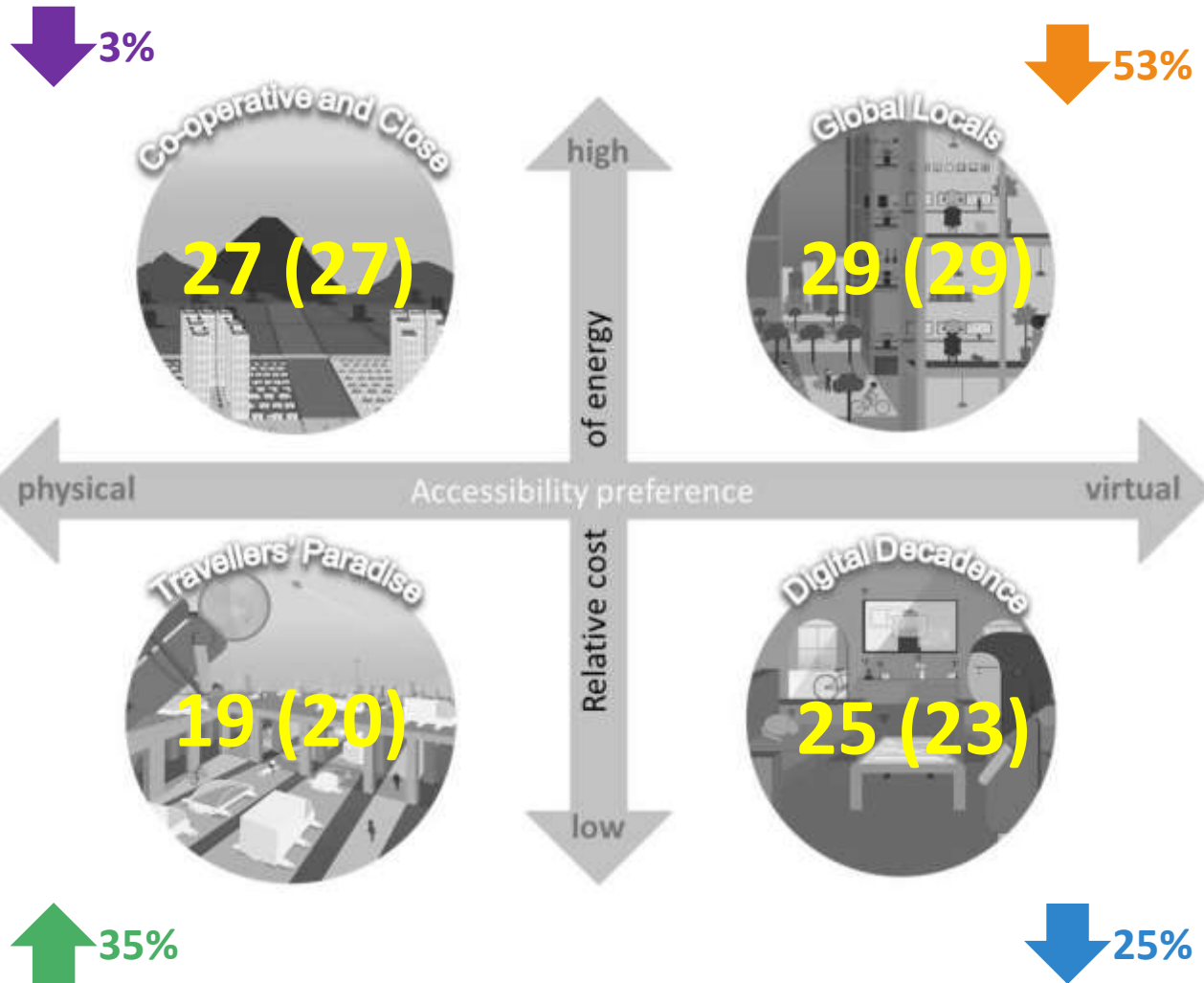
Examining uncertainty and plausibility



Reviewing policymaking pathways

Drawing out life experience

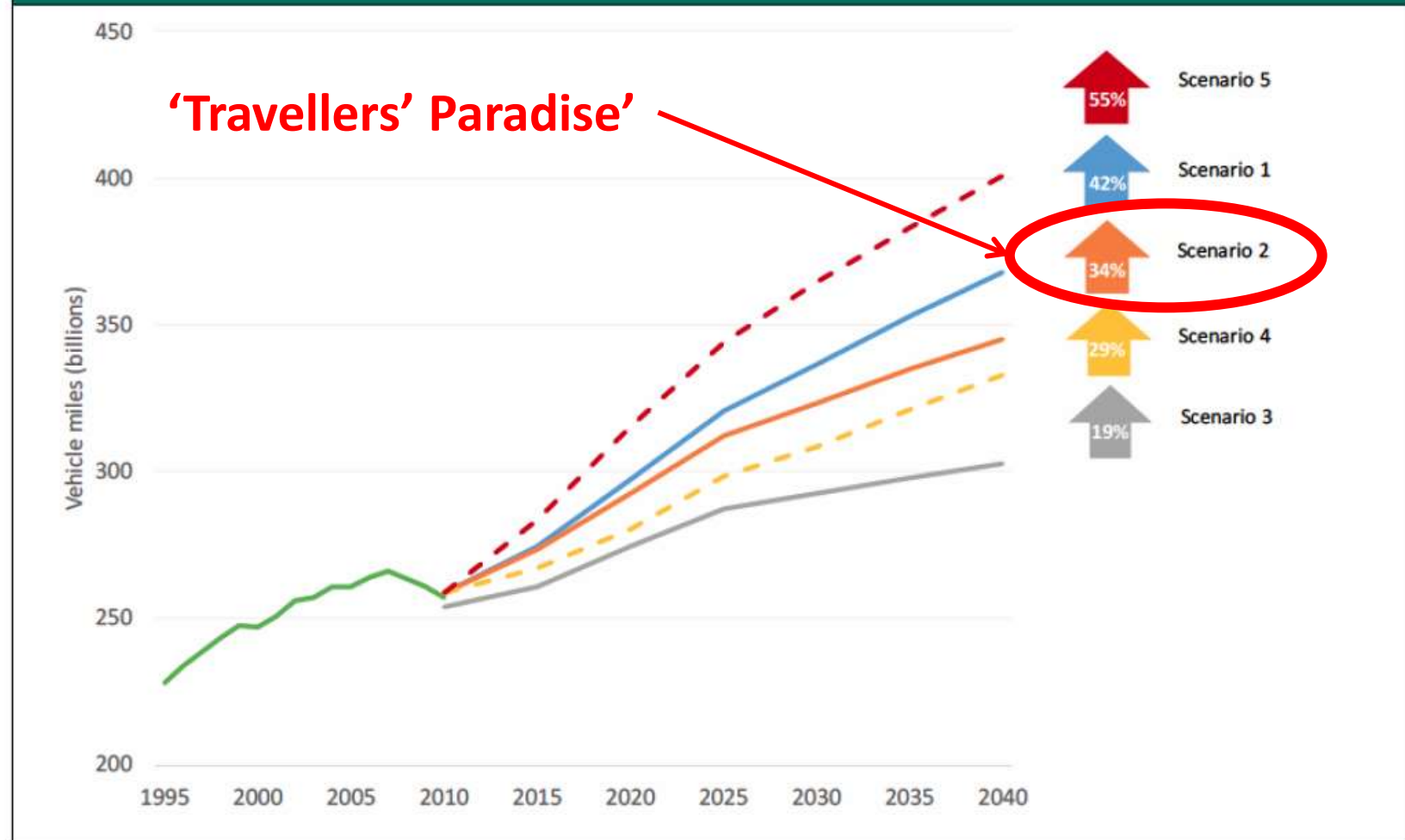
Percentage of plausibility assigned to each scenario before (and after) discussion



- 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^s 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 embrace. The sky is a dramatic mix of orange, yellow, and blue, suggesting a sunset or sunrise. The ground is a mix of asphalt and grass.

“

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