

# Transport Planning Network Conference

.....

Creating visions for better places

**#tpn2019**

# Welcome

.....  
Victoria Hills MRTPI FICE

Chief Executive

Royal Town Planning Institute

@VictoriaRTPI

#tpn2019

# The history and politics of visioning

.....  
Phil Goodwin

Emeritus Professor of Transport Policy,  
UCL & UWE

#tpn2019

(This presentation is slightly different from the one given at the conference, by addition of two extra slides and some amendments based on discussion at the conference. It may be used freely, with acknowledgment, but note that some of the images, copied from the internet, may be copyright of the original producers, who are rarely identified)



# A Collective Institutional Cognitive Dissonance of Town Planning?

- Visions in conflict with the images used to express them?
- Clarity of intent vs confusion of practice?
- Self-fulfilling forecasts?
- 'Long- term' taken to mean 'Later'?
- Strategies with incompatible components... ?

(I shall argue it's not as bad as that)





# *Liveable* NEIGHBOURHOODS 2019



Published by:

landor  
LINKS

In partnership with:



TRANSPORT  
FOR LONDON





**‘The hidden beauty of Spaghetti Junction’ (Mail Online 2012)**





# The Technocratic Tradition since 1920s

Films, Science Fiction, Toys, Cars

(*not* the solution to planning issues, but it affects people's minds)



FEBRUARY 1951

35 CENTS

# POPULAR MECHANICS MAGAZINE

WHATEVER YOU CAN UNDERSTAND IT



See page 118

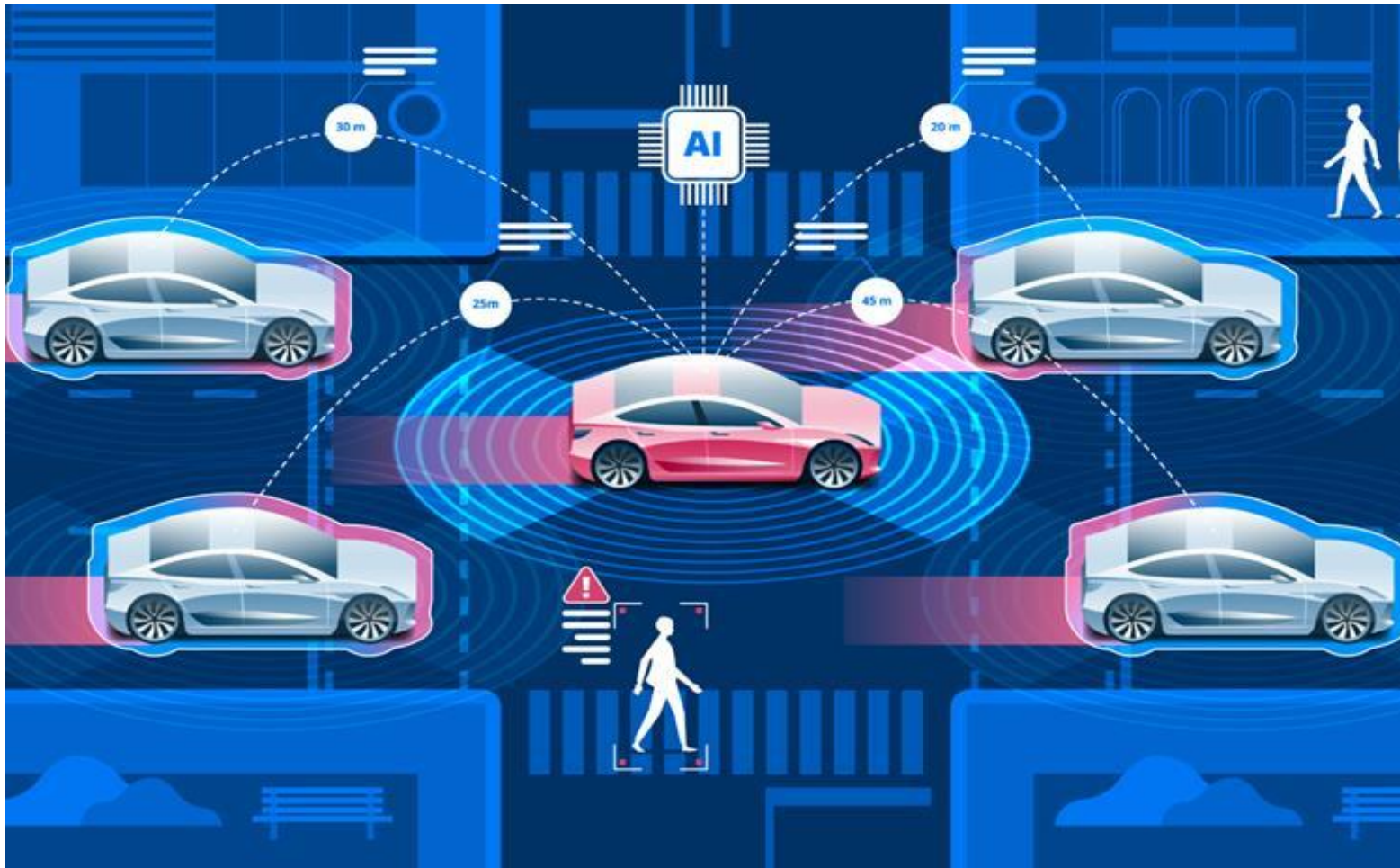




**“Flying cars could cut emissions, replace planes, and free up roads”**

**but “not soon enough”**



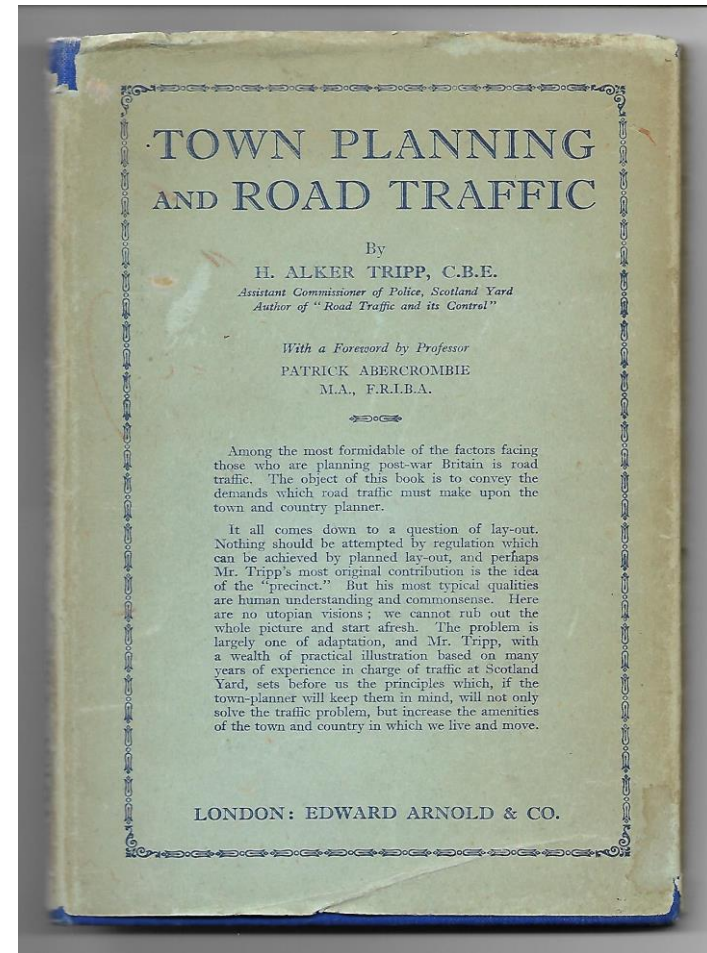


# The Planning Tradition 1930s-1950s

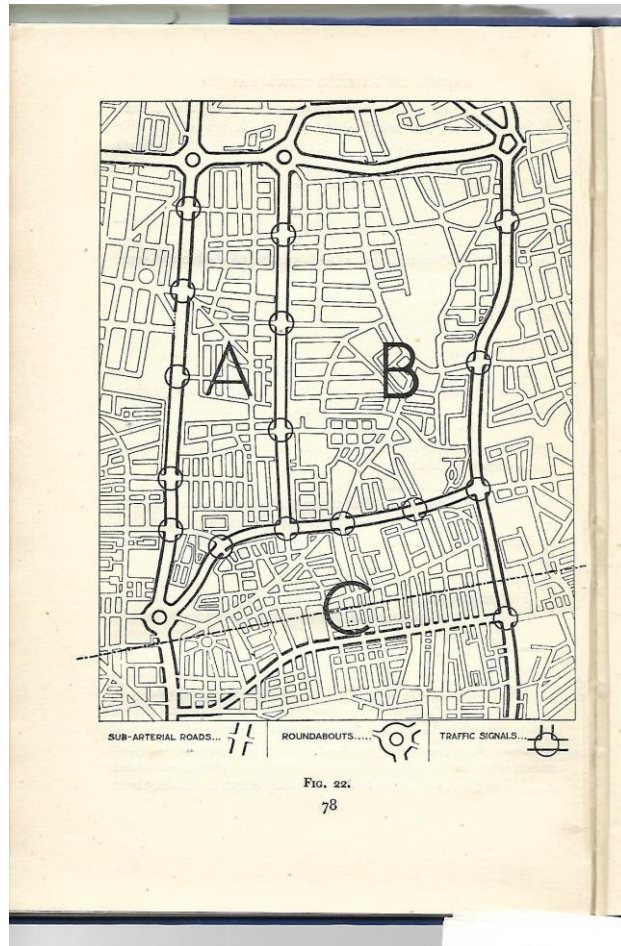
A strong welfare tradition in town planning, often with socialist orientation, which sought better living conditions by slum clearance, decentralisation, modern suburbs, and roads to match - but simply did not understand the feedback mechanisms that would increase car ownership and undermine the intentions.



# Alker Tripp, Assistant Commissioner of Police, the 'father of traffic calming'...



... in precincts, vehicle priority on arterials, and  
fresh air in the country



*Plan ahead*

It is largely because of these factors that we consider it essential to plan ahead on comprehensive lines. The road plan we put forward takes cognisance of and uses most of the main thoroughfares and, with the help of additional ones where deemed necessary, co-ordinates both new and old into a carefully ordered and workable system. As mentioned earlier, the Highway Development Survey, 1937, has been taken as a basis for the proposals. Recent destruction of buildings has, however, opened up possibilities which did not exist when this Survey was prepared. In addition we have been encouraged by the prospect of new legislation which promises to remove many of the difficulties under which planning authorities have been labouring in the past.

[196

Abercrombie, 1944

A new road plan, based on  
decentralisation of population and  
employment...



# GREATER LONDON PLAN 1944

## COMMUNITIES 5

PROPOSED EXTENSION  
OF EXISTING BUILT-UP  
AREAS AND SITES FOR  
NEW SATELLITE TOWNS

- EXISTING BUILT-UP AREAS  
(INCLUDES RIVERBEDS)
- PROPOSED EXTENSION OF  
BUILT-UP AREAS
- SITES FOR NEW SATELLITE  
TOWNS
- BOUNDARY OF  
SUBURBAN AREA



PREPARED FOR THE  
MINISTRY OF TOWN AND  
COUNTRY PLANNING



*The age of mobility*

In England, the ratio of cars to population is about one to twenty-two; in America it is one to six or seven. It is perhaps doubtful whether this country will equal America in this respect, but it is generally agreed that there is every likelihood of a rapid approach to the American figure and that the increase in numbers of vehicles will far outstrip the 500 cars per day increase which was taking place in the years preceding the present war. It is not an idle speculation, therefore, to assume that within a few years the numbers of mechanical vehicles on the roads will be twice or thrice those of 1938. Nor is it idle to speculate on what will be the effect of this on the roads and streets of London. The war has made a vast number of people for the first time mechanically-minded, and has given a great impetus to the production of motor vehicles. The plant and many of the vehicles themselves will be available and ready at the end of the war to turn over to peace-time requirements. This will tend to accelerate the rate of increase in the number of vehicles on the roads. [193

... and increases in car ownership. County of London Plan 1943 “it is not an idle speculation, therefore, to assume that within a few years the numbers of mechanical vehicles will be twice or thrice those of 1938....The war has made a vast number of people for the first time mechanically minded, and has given a great impetus to the production of motor vehicles...”

# GREATER LONDON PLAN

MILES 0 1 2 3 4 5 6 7 8 9 10

## COMMUNICATIONS ARTERIAL ROAD SYSTEM

- EXPRESS ARTERIAL ROAD
- ARTERIAL ROAD
- 2ND ARTERIAL ROAD
- EXISTING BUILT-UP AREA (INDUSTRIAL)
- THE ADMINISTRATIVE COUNTY OF LONDON



# Abercrombie had lasting effect on transport planning

1944 plan became the 1960s proposal for three concentric ringways in London, the Motorway Box which led directly to the 'Homes Before Roads' protest movement in the 1970s, which, in parallel with professional rethinking, later gave an intellectual critique of 'predict and provide', which is now an essential part of the new urbanism, and recognition of 'better places'. But not immediately...

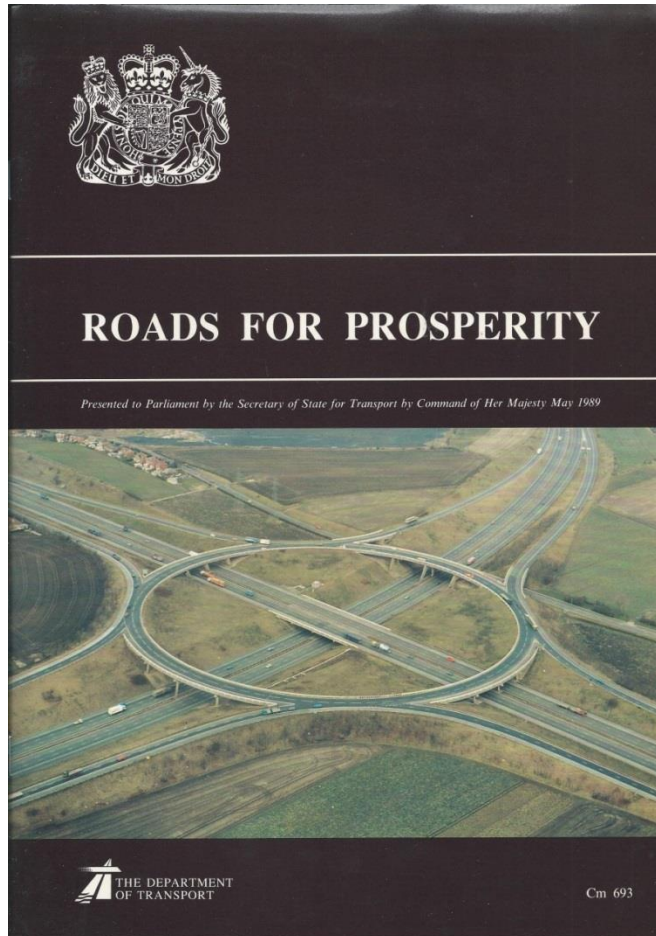


# Buchanan 1964



**Figure 5: Los Angeles, USA** *"There is nothing to suggest that we would gain by spreading out our own cities, or still further spreading the conurbations, in order to reproduce the conditions of Los Angeles. All the American experience of sprawl suggests that in our small country we would do well to have no more of it", Traffic in Towns para. 424*

# 1989: the high point of 'predict and provide', and its downfall



Margaret Thatcher - 'the biggest road programme since the Romans' - but 'New Realism' 1991: even twice as much road building would not keep up with traffic forecasts, so demand management especially of car use would become necessary



# 'Roads to Prosperity' abandoned by 1994



# Predict and Provide - but

## Government forecasts vs actual road traffic

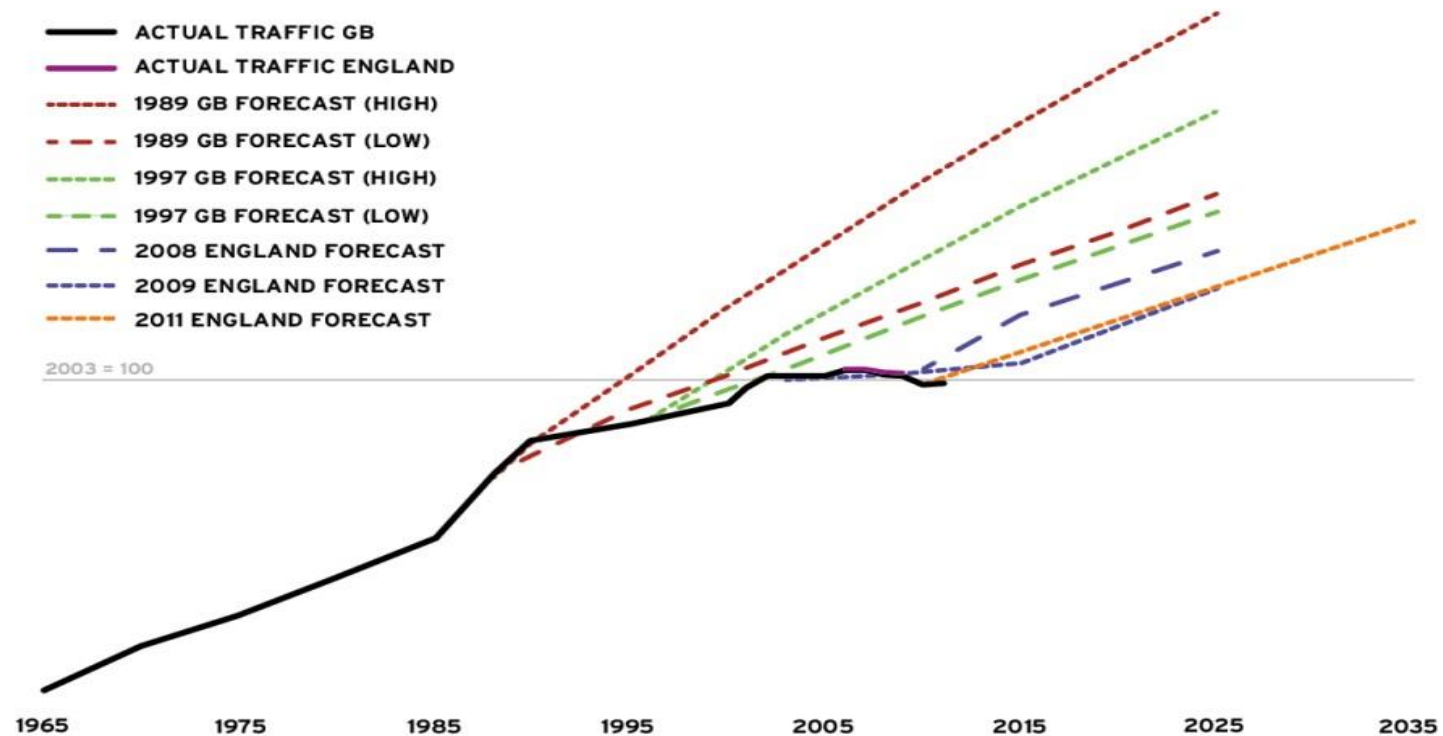


Chart first published in 'Due Diligence, Traffic Forecasts, and the Pension Infrastructure Programme' by Phil Goodwin, Local Transport Today, 13.4.2012  
Source data calculated by Mitchell, Stokes, Goodwin, IAM Motoring Facts, from DfT original sources.

# REVISIONS 1990s

LEARNING – German town centre pedestrianisation, Dutch traffic calming...

+

RESEARCH - Induced traffic, 'disappearing' traffic

=

'New Realism' that predict and provide road building doesn't work – and alternative policies to reduce car dependence do work

Led by Conservative local authorities in SE 1991-94, New Labour White Paper 1998, but loss of momentum after 2000



# Around 1991, car use in towns started declining (but not noticed for 15 years)

Figure 7: Miles travelled by car/person/year by local authority area type<sup>52</sup>

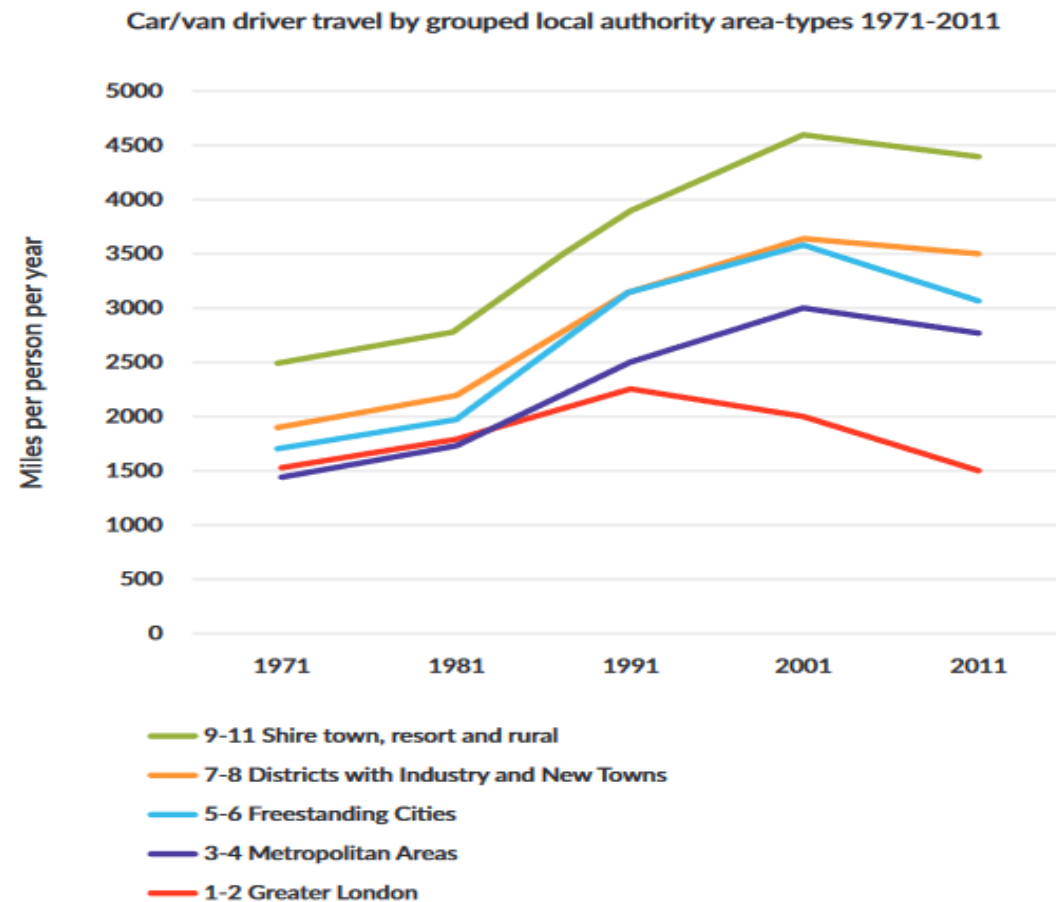


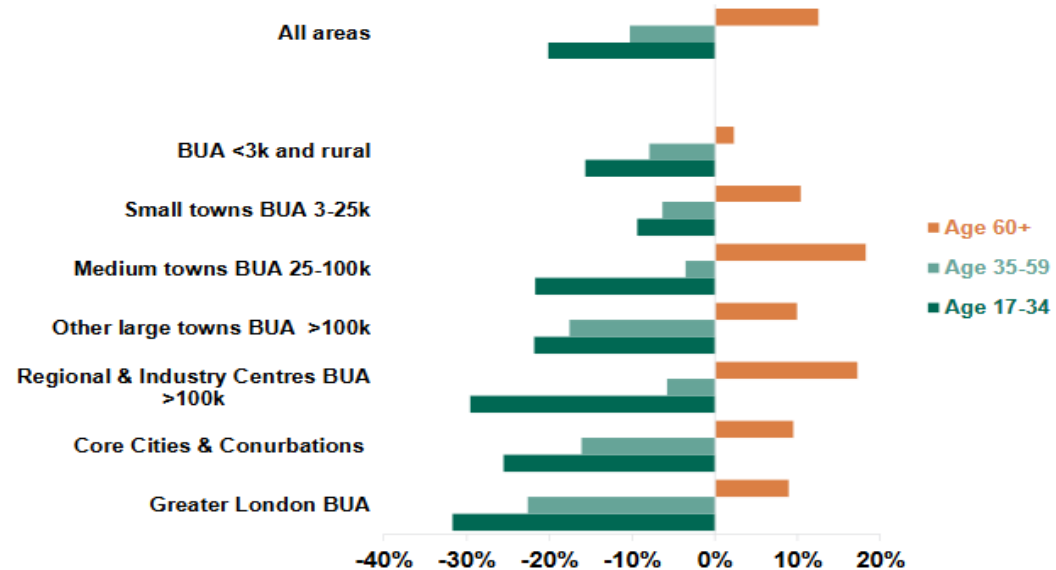
Image courtesy of: Peter Headicar

# ...especially for young people

(Peter Headicar, Chatterjee et al)

**Chart 17: Percentage change in car driver miles per head per year by age group and area type and BUA size: England 2002-5 to 2011-14**

Percentage change



# Urban Policy/Density/Transitions

**Rich, economically successful cities with high incomes and growing population – greatest reduction in car use (London – similar trends to cities like Munich, Paris – and smaller cities like Freiburg, Strasbourg...)**

- Also reductions in medium size towns especially English 'sustainable travel towns' 2004-8 ,
- and lower car use in high density new urban developments.

Behaviour change builds up over time triggered by life events – same profile as time-dependent lagged elasticities

# Better Transport for Better Places

Long lived images from the past

County of London Plans 1943-45

Two traditions 1970s-1989

Clarity of intent 1990s...

... but inconsistency of application

Where next?

# *Congestion, Mobility, Health, Quality of life, & Equity*

The *central* policy problem is the dominant role of private car use. If we don't tackle that, all other solutions will be partial, temporary, or self-defeating.

It can be solved by reduced car use, better provision for alternatives, and more sensible pricing, taxation, regulation, development and planning - including planning of non-transport services.

Better, cleaner, fairer and more comfortable conditions for nearly everybody.

# Resistance to this approach

- Politicians fearful they will not be supported,
- Deeply rooted illusions that predict-and-provide policies can work
- Vested interests in continuing and expanding the market for cars
- Most *millions of people have got locked in to car dependence, and see no viable alternative*

public transport services are expensive, poor quality, or crowded, walking and cycling poorly funded, and continually impeded by excessive traffic.

*This resistance can be overcome and turned into support by a careful and far-sighted implementation strategy which makes the necessary improvements at the same time as any restrictions, and gives people **time to adjust** their life styles and choices.*

Such a policy takes time - a **10-20 year timetable**, with conditions that would still be improving for **another 20 years** after that.

From year 1 all policies, initiatives and projects to be tested for consistency with this long term process.

1% reduction in car use per year - *a policy to form the habits of the next generation.*



# But Climate Change as an Emergency?

*change the habits of the present generation*

- *we do not have 10-20 years to implement the policies and another 20 to see the full impacts.*
- Even on the most optimistic assumptions about the role of electric vehicles, we need to reduce the amount of car use by a minimum of something like a third in the next 10 years,
- *A reduction in car use of about 3% a year.*

# The Collective Institutional Cognitive Dissonance of Town Planning

“Every City Hall in North America has this problem - cities make clear statements about the kind of growth they want (smart growth) and the kind they don't want (sprawl)

But their rules, policies, standards, incentives etc make growth in WRONG places much easier than in RIGHT places”

Brent Toderian 2019

# The challenges facing transport planning

---

## Four provocations

#tpn2019

# Unlocking development and economic productivity

.....

**Keith Mitchell**

Director, Community Development &  
Infrastructure

Peter Brett Associates (now part of Stantec)

**#tpn2019**



# Housing & Growth Vs People & Place?

## RTPI/ TPS Transport Planning Network Conference

Keith Mitchell, Director, Community  
Development & Infrastructure, Stantec





# Housing & Growth – our current trajectory?

MORE HOUSING:  
MORE GROWTH



now  
part of



Stantec Designing with community in mind

Loneliness Depression  
wellbeing obesity  
health Air-Quality  
diversity diabetes cancer  
**Emergency**  
Climate-Emergency  
Nitrous-Oxide  
P/M10  
inclusion  
Emergency





# Heading in the opposite direction of current trends

## MEETING THE NEEDS OF A CHANGING SOCIETY

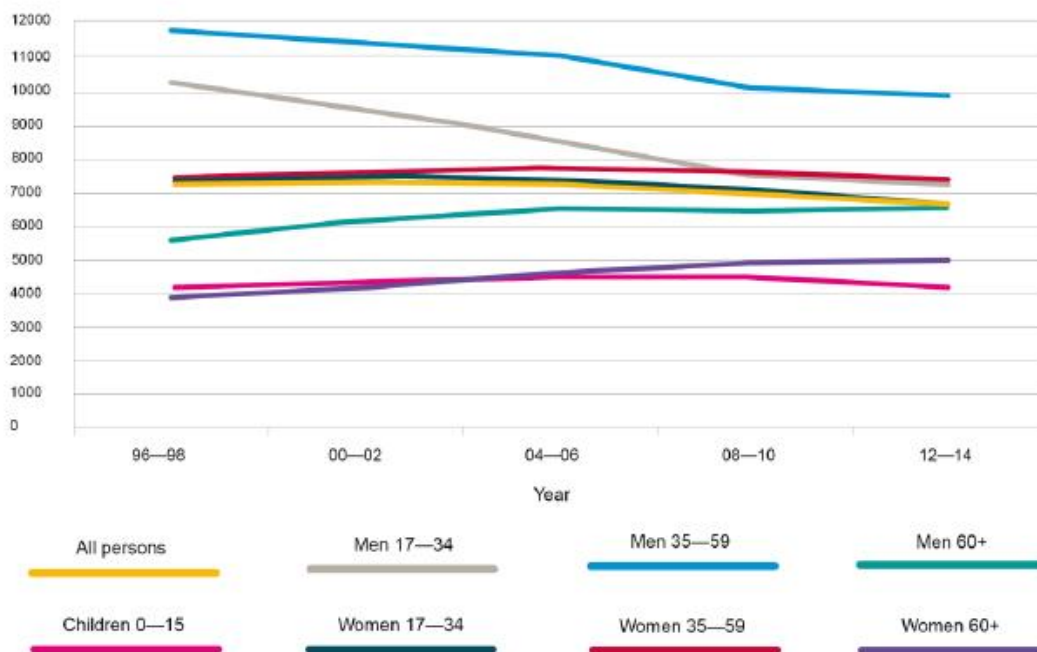


PLANNING  
TRANSPORT &  
DEVELOPMENT

ALL CHANGE?



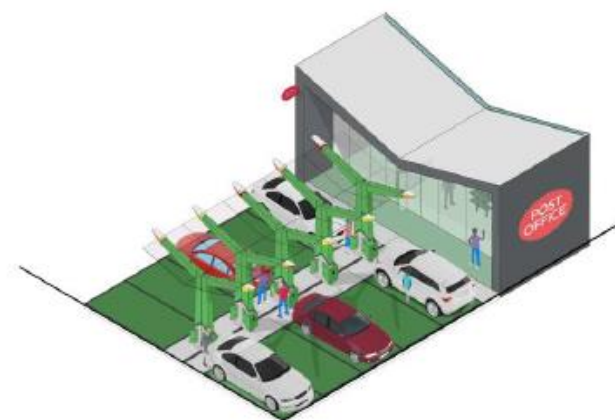
Car driver: Miles per person per year by age and gender 1996—98 to 2012—2014



now part of



Stantec Designing with community in mind



# An inflexion point – from next generation to this generation?

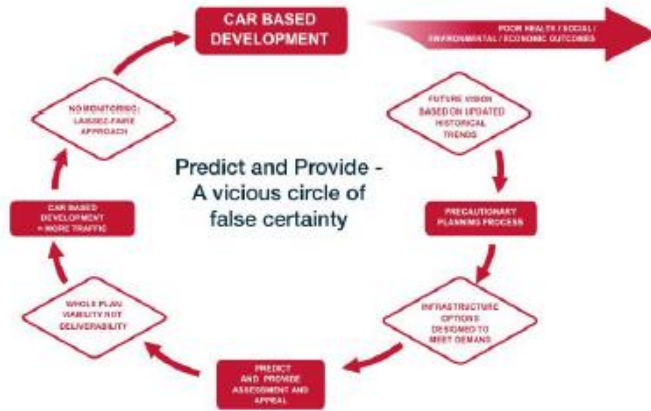




# Disruptive change needs a new approach to planning

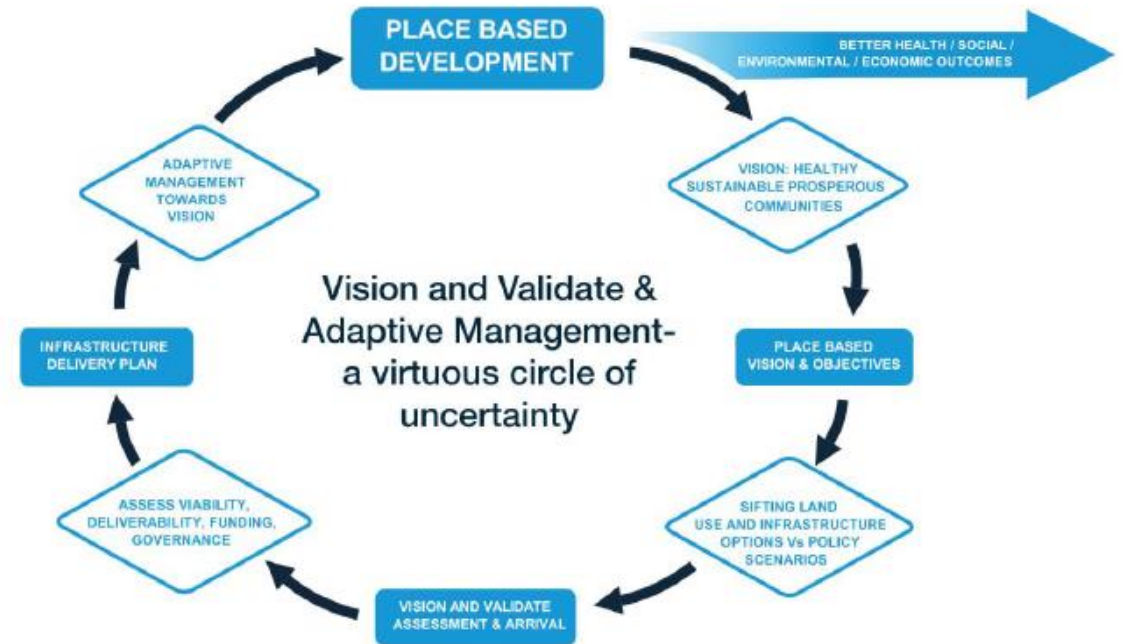


## PREDICT AND PROVIDE: A VICIOUS CIRCLE OF FALSE CERTAINTY



pba now part of Stantec Designing with community in mind

## VISION AND VALIDATE AND ADAPTIVE MANAGEMENT - A VIRTUOUS CIRCLE OF UNCERTAINTY



pba now part of Stantec Designing with community in mind

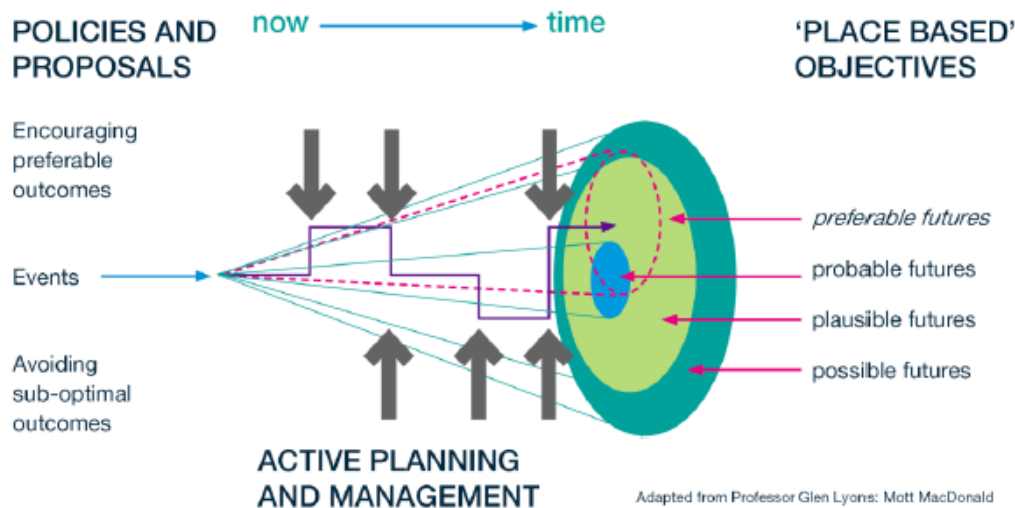
# Three Steps towards change



# 1. Turn planning on its head – vision replaces prediction

## HANDLING UNCERTAINTY: SETTING THE VISION

Handling uncertainty in planning and decision making



### Examples of Overarching Objectives

Prioritisation of objectives should reflect the views of local communities and influence the outcomes of the plan.

#### Community A Priority Objectives:

1. Provide access to a range and choice of jobs for everyone seeking to work
2. Offer quality homes that are affordable for all
3. Deliver reliable fast internet connection for all
4. Enable a fulfilled life without the need to own a car

#### Community B Priority Objectives:

1. Ensure no child is harmed by poor air quality where they live, study and play
2. Enable the creation of a supportive, safe, friendly community
3. Provide convenient access to high quality and available health services
4. Provide protection from flooding, diseases and other hazards

## CONTINUOUS LEARNING: MONITOR, EVALUATE, ADAPT, MANAGE

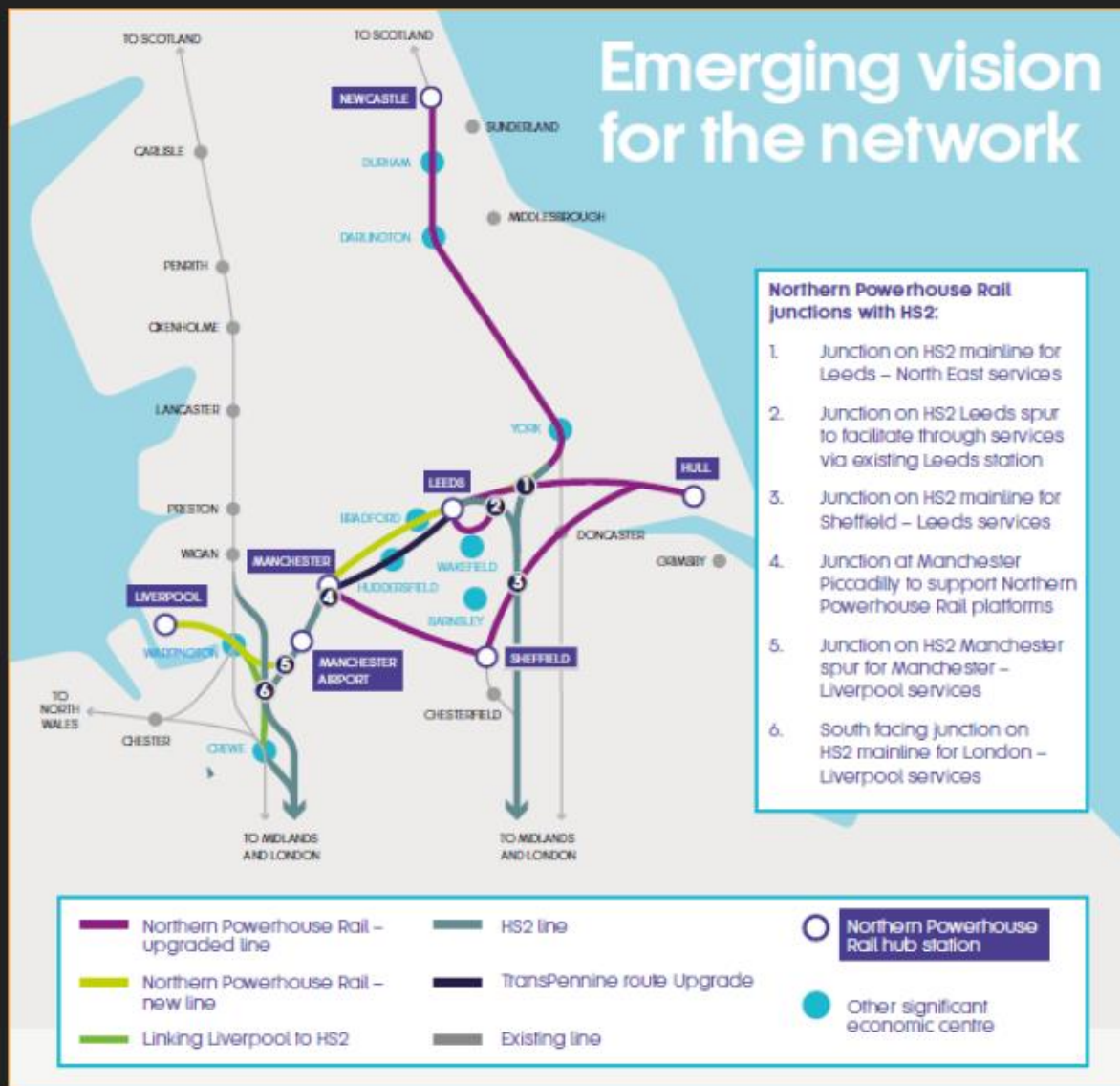


pba now part of Stantec Designing with community in mind

## Adaptive management replaces hope for the best



## 2. The right development in the right places





# 3. A Smarter Approach to Infrastructure





**RTPI**  
Royal Town Planning Institute

**RTPI  
Research  
Paper**

SEPTEMBER 2019

## A SMARTER APPROACH TO INFRASTRUCTURE PLANNING

Overcoming complexity in city regions  
and counties



rtpi.org.uk

Registered charity number: 262865  
Scottish registered charity number: SC 037841





# How do we influence decision makers to accelerate change?



Public Health England; Infrastructure & Projects Authority; National Infrastructure Commission; Homes England; Highways England; Network Rail; Independent Transport Commission; Devolved Nations; Sub National Transport Bodies and Combined Authorities; Professional Bodies including RTPI, CIHT, RICS, BPF; Academia including UCL Bartlett School, UWE, University of Leeds, CREATE; Third Sector including Campaign for Better Transport, CPRE; Transport Operators; Local Government; Consultancy; Investor Developers; House Builders and more....



# Delivering net zero carbon

.....  
Leo Murray

Co-Director  
Possible

#tpn2019

# Promoting equality and inclusivity

.....

Joanna Ward

Associate Transport Planner

Elliott Wood Partnership

#tpn2019



# elliottwood

engineering a better **society**

# Whose transport system is it anyway ?



elliottwood

# Whose transport system is it anyway ?

*‘Transport is at the heart of how we live our lives. It helps us get to work, stay in touch with friends and family, contribute to society and access vital services like healthcare and education. Easy access to transport is central to building a stronger, fairer economy.’*

Department for Transport - Inclusive Transport Strategy – updated July 2019

# Whose transport system is it anyway ?



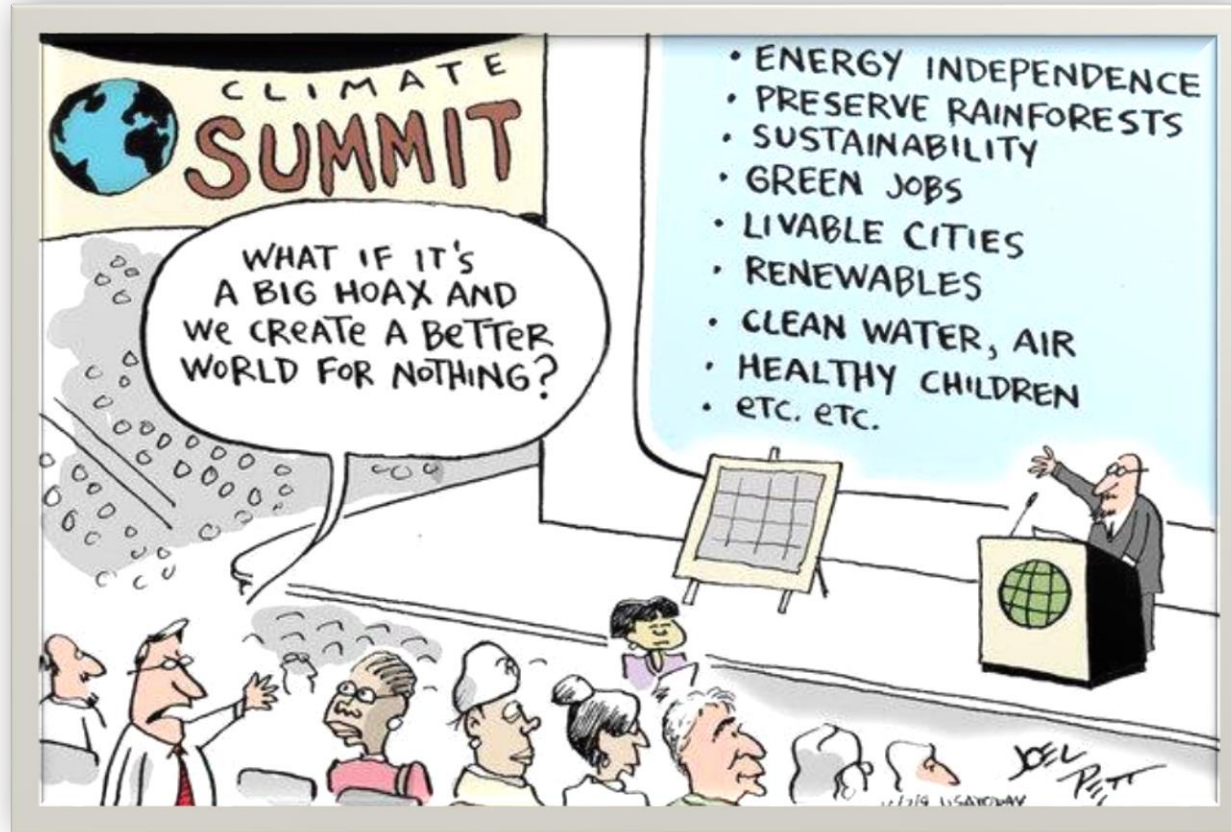


# Whose transport system is it anyway ?

A Transport system fit for everyone;

- Coherent
- Direct
- Safe
- Comfortable
- Attractive

# Whose transport system is it anyway ?



# Whose transport system is it anyway ?



elliottwood

# Whose transport system is it anyway ?

- [j.ward@elliottwood.co.uk](mailto:j.ward@elliottwood.co.uk)
- Elliott Wood <https://www.elliottwood.co.uk/>
- Women in Transport <https://www.womenintransport.com/>
- Transport Planning Society <https://tps.org.uk/>
- Twitter @JRWWRJ





elliottwood

engineering  
a better **society**

# Adapting to future mobility trends

.....  
James Gleave

Director  
Mobility Lab

#tpn2019



Mobility  
Lab

# Adapting to future mobility trends

James Gleave  
Director

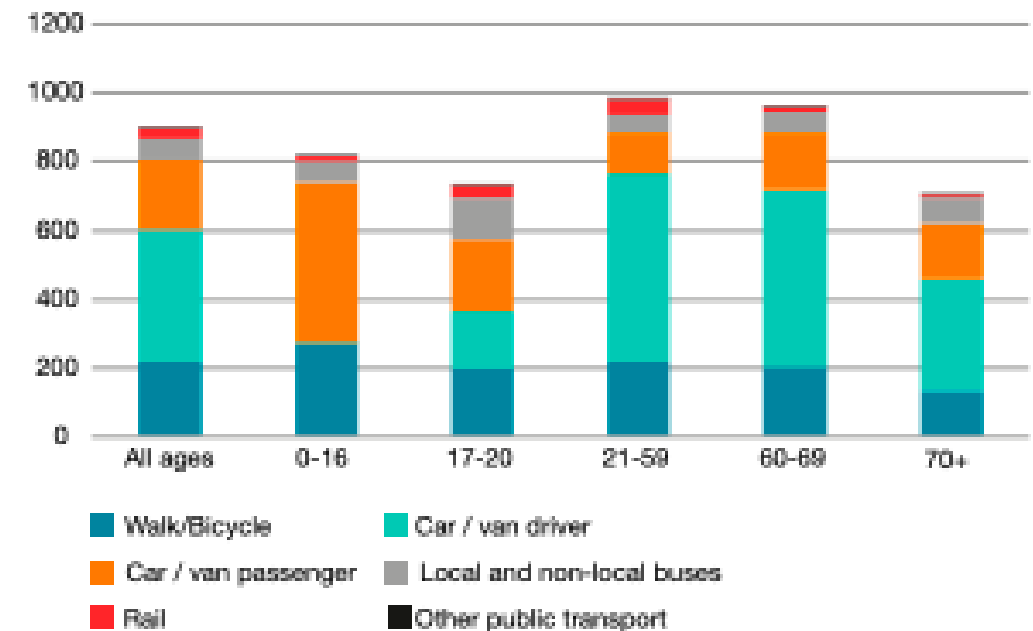
*The future vision of your area isn't just yours to own. And there are big opportunities in doing that.*



# Thinking about impacts of change is good

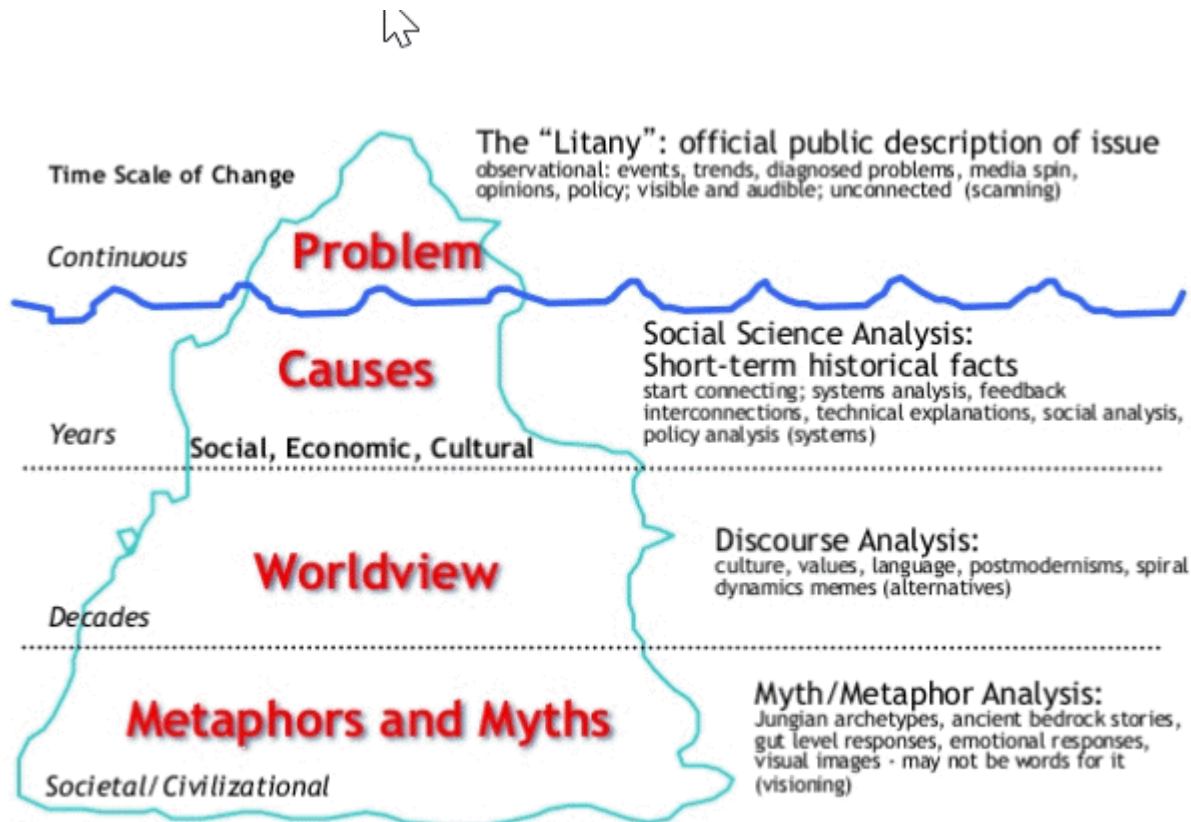
Issues	Optimistic Outcome	Pessimistic Outcome
Sharing	Policies encourage autonomous vehicle sharing.	AVs are promoted as private luxury goods.
Social exclusion	Policies designed to maximize AV affordability and accessibility ensure that they are widely available.	AVs are only affordable and available by privileged (affluent) users.
Environmental sustainability	AV policies support environmental goals.	AV policies give little consideration of to environmental concerns.
Operated cooperation	AV operating systems are programmed based on cooperative, altruistic and ethical principles.	AV operating systems are programmed based on competitive, aggressive and defensive principles.
Public transport	Public policies support public transport, providing funding and favoring shared vehicles in traffic.	Public policies focus too much on AVs and fail to support public transport.
Intermodal traffic regulations	AV policies and programming respect human life. They minimize crash risks and protect vulnerable road users (e.g., through lower speeds).	Public policies and programming favor AV occupants over other road users, and so will favor affluent over more vulnerable groups.
Network information systems	Data networks are designed make more sustainable and efficient decisions regarding route choice and parking at a fleet level.	Data networks are designed to maximize profits so critical information is only available to affluent users.
Sensitive data management	Personal data are carefully managed based on general public interest.	Data are used for commercial purposes. AVs collect an abundance of sensitive private information.
Parking	Policies facilitate the conversion of parking facilities into recreational, green, and building areas, or into active transport infrastructure.	Parking policies remain as they are, so parking continues to consume valuable land that could be used for more sustainable or social purposes.
Curb Access	Curb access is efficiently managed to serve shared vehicle passengers along with other uses.	Curb space is congested and dangerous, and other others (pedestrian and bicyclists) are harmed.
Land use policies	Urban areas become more attractive places to live. Transport policies promote quality of life.	Urban land is managed to accommodate AV travel, to the detriment of other social groups.
Transport network design	Transport networks are designed to be safe for all. Urban transport planning favors sustainable transport modes.	Transport networks are restructured to accommodate AVs' needs. Other modes see no comparable protection or investment.

Source: Litman (2019)



Source: NIC (2018)

# Understanding the change process is good

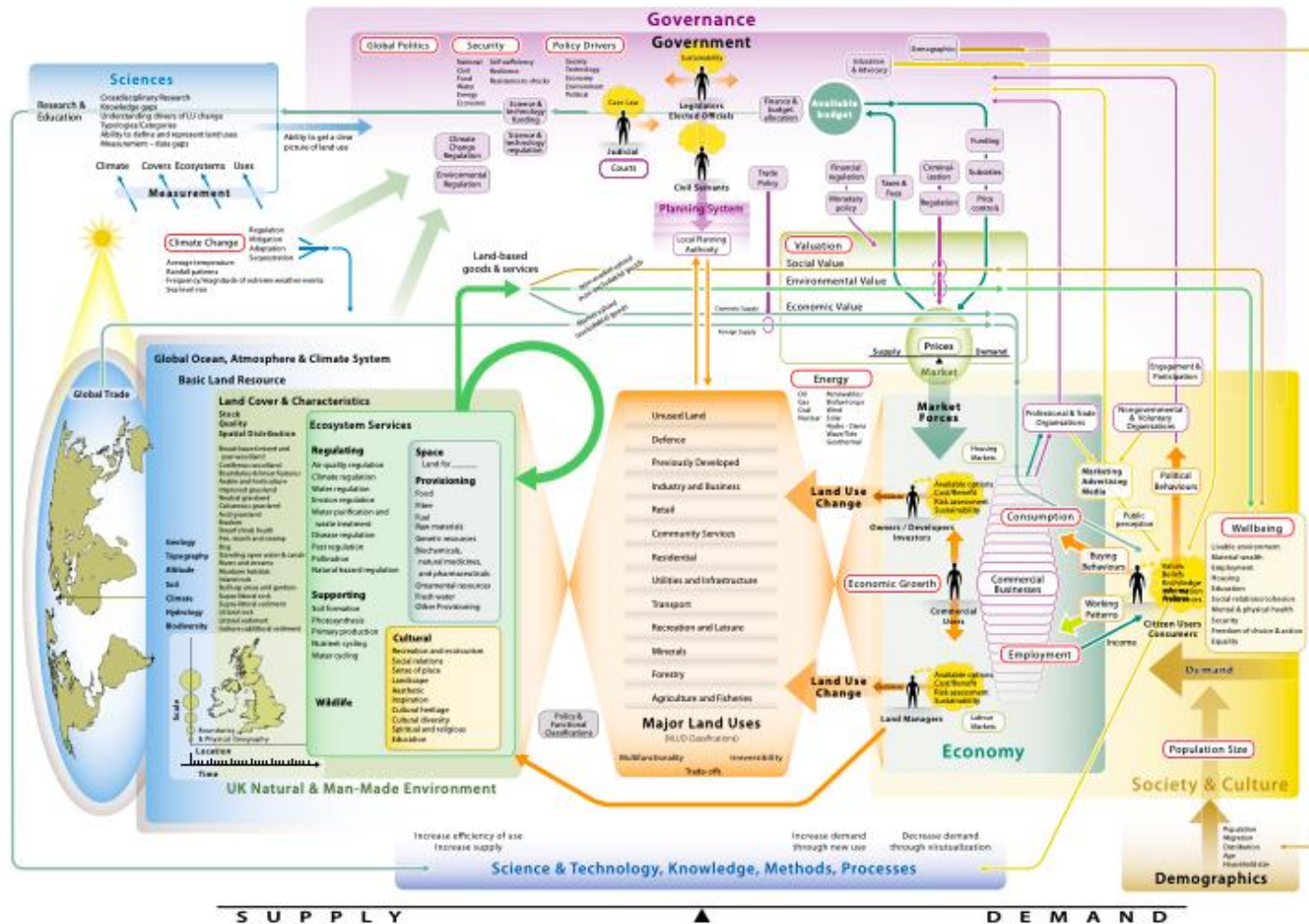


Sources: R. Slaughter, "Integral Operating System" World Future Society, July 2003, drawing on Sohail Inayatullah; Dennis List, "3 Maps of the Future," July 18, 2003; Andy Hines, UH-Clear Lake, 2006.

Facts about what is happening is often our evidence, but understanding deeper levels of causality allows us to ascribe meaning to them.

When you understand that meaning, you can vision successfully.

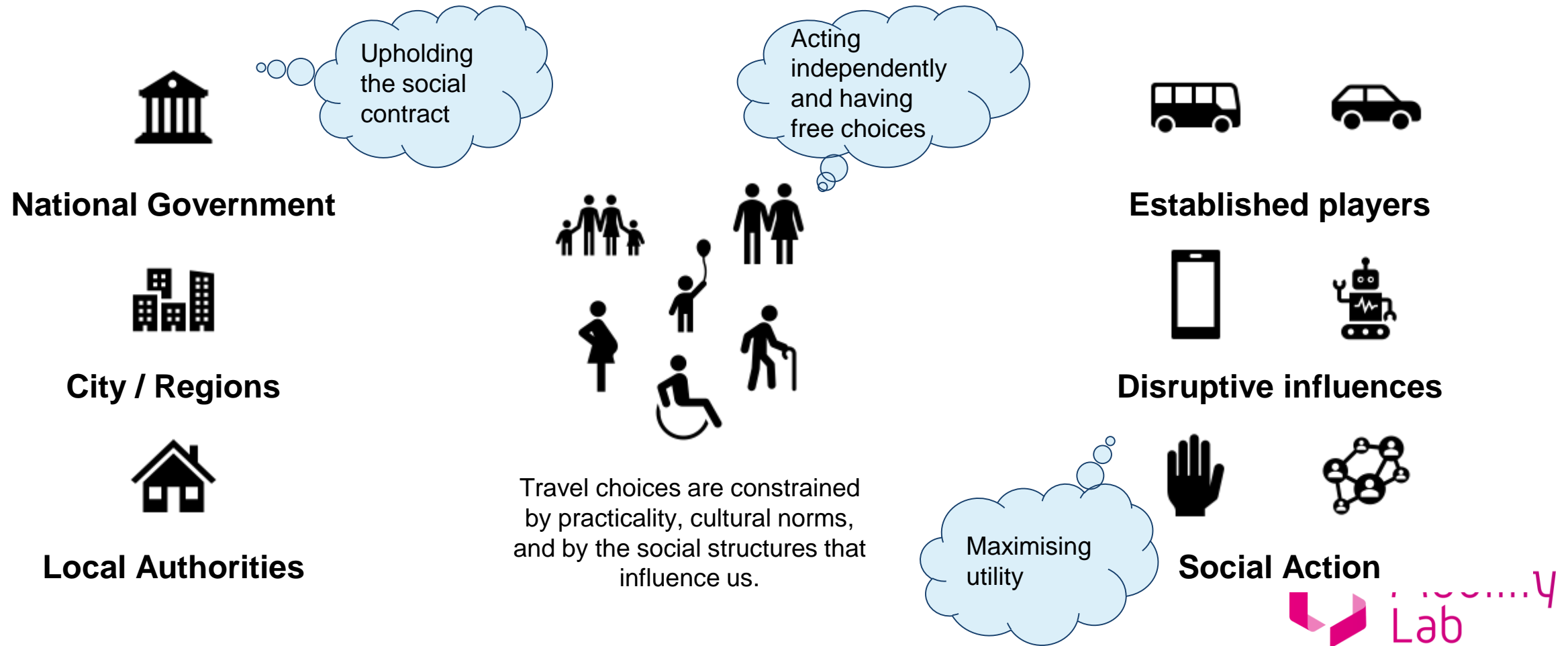
# Current power structures have built up iteratively over time



This is a simplified version of the land use system in the UK!

Source: Government Office for Science (2010)

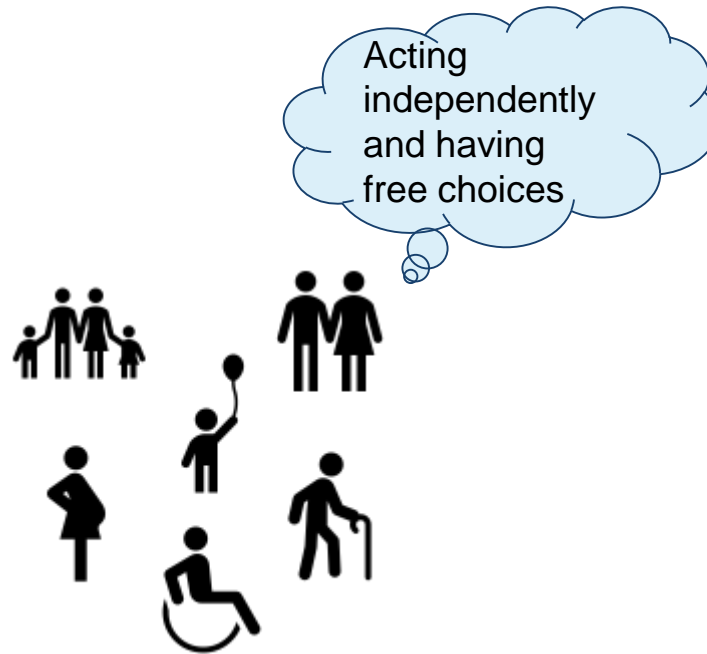
# Considering who should have the agency over the future is better





# What powers over the future would you give up?

- Should communities own the vision for their area, and task authorities with delivering it?
- Does this need to be enshrined in law to happen?
- Will communities care enough about their future to take meaningful action?
- Can they be trusted?



- Should they be empowered to run services?
- Should Neighbourhood Plans be beefed up, with professional support?
- Can they better define 'what works?'
- Should we have a Future Generations Act?

# We then get to break out of what we always do

	Steward	Leader	Customer	Provider	Funder	Regulator	Legislator
Early intervention	Champion	Agenda Setting	Catalyst	Innovator	Early Adopter	Encourage Voluntary Codes	Green Papers
Framing, piloting, market forming	Convening Power	Strategy and Skills Planning	Standard Setting	Reformer	Fiscal Incentives	Governance	White Papers and Draft Bills
Scaling and market building	Connecting Networks	Educating and Informing	Intelligent Customer	Service Provider	Grants and Subsidies	Building Regulatory Environment	Primary and Secondary Law
Mature markets and ecosystems	Co-producing	Collaborating	Consumer and supply chain protection	Choice Architect	Platform Provision	Compliance	Amend Rules

Source: Cabinet Office (2016)



Mobility  
Lab

# Thank You

Email: [james@mobilitylab.org.uk](mailto:james@mobilitylab.org.uk)

Tel: +44 (0) 7958 350159

## Workshop One

---

**Is the planning system equipped to respond to these challenges?**

**#tpn2019**



**Break**

---

**#tpn2019**

## Workshop One

---

**Is the planning system equipped to  
respond to these challenges?**

**#tpn2019**

**Lunch**

---

**#tpn2019**

# Why do we need a vision?

.....

Lynda Addison OBE FCIHT MTPS

Chair of the CIHT Sustainable Transport  
Panel & Immediate Past Chair of the  
Transport Planning Society

#tpn2019





# Is this what we want to create?

## Are we professional taking ENOUGH action?



## Transport is a key ingredient



## Are we exploiting it effectively?



# And climate change!



Transport is part of answer  
to climate emergency

We can't afford to ignore &  
take no action!  
We have a key role!!





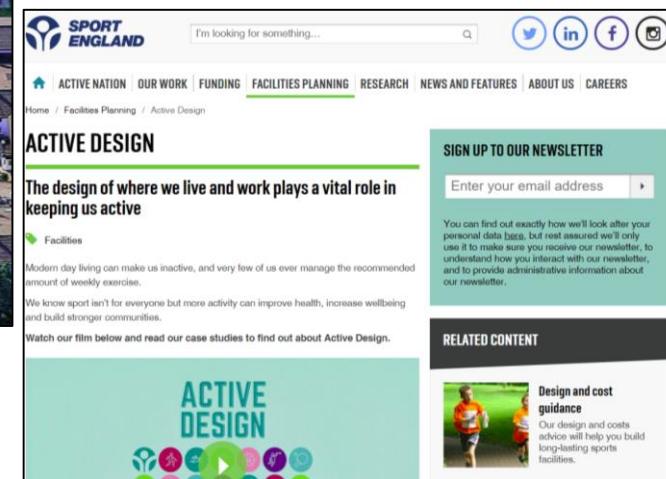
# We aren't only ones saying this...



Aspirations for new homes mirror many aspects of modern society thinking. This envisages more physically active and less isolated lives, reduced congestion on the roads, whilst at the same time promoting a low carbon future. But what are we really building? Which new developments live up to our expectations? Are there some places that have got it right? Transport for New Homes is a mostly field based project visiting the new homes being built.

## Transport for New Homes

**PROJECT SUMMARY AND  
RECOMMENDATIONS  
JULY 2018**





# Can we address these issues without a vision & a plan?

- ✓ Health, well being and happiness

But also

- ✓ Environment / air quality / climate change

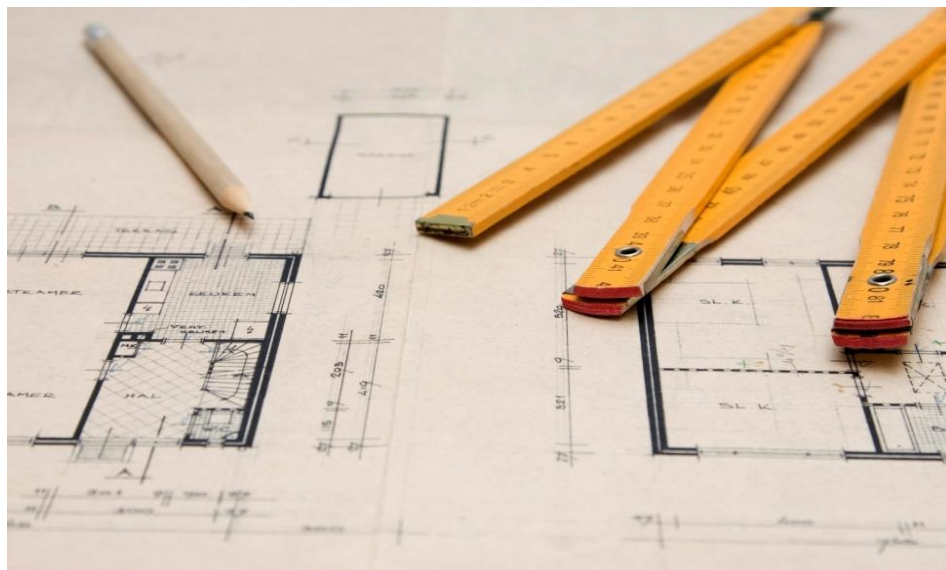
- ✓ Economy / congestion

And other things happening:

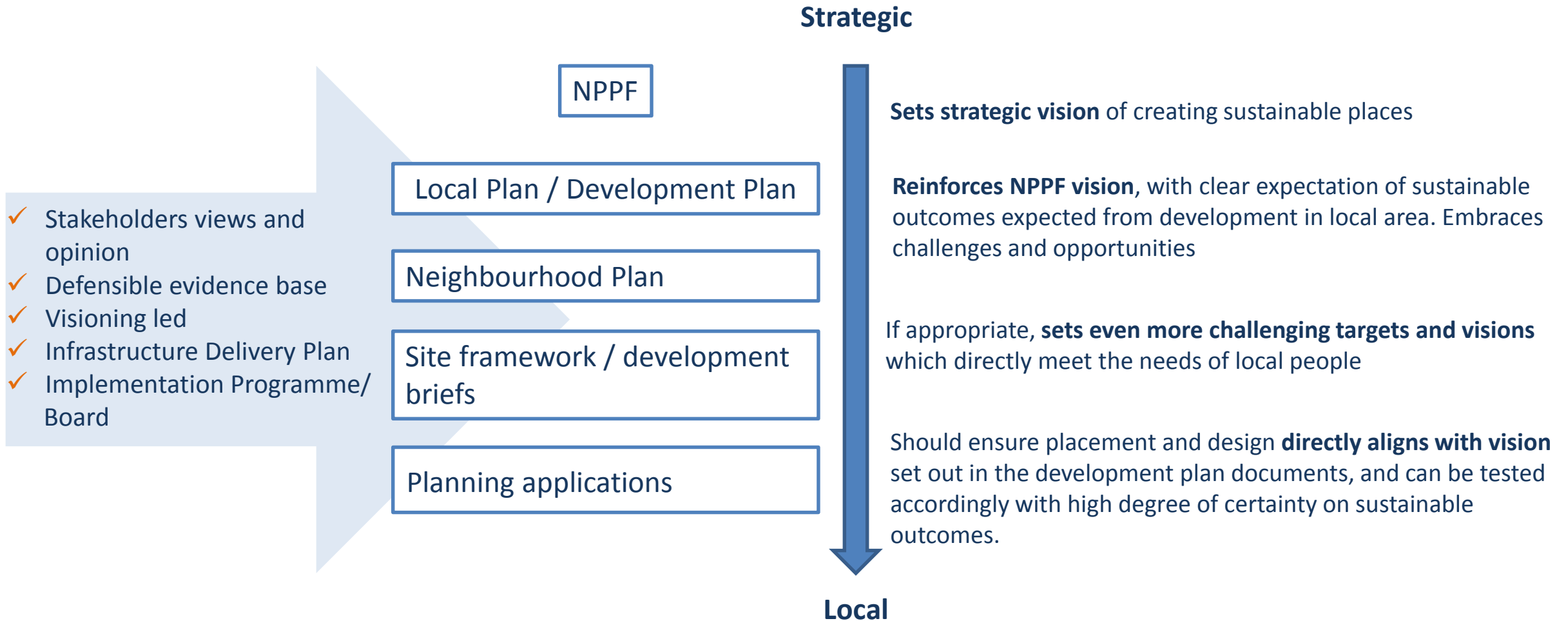
- aging population, new technology, mobility of millennials, behavioural change, increasing uncertainty about going forward

# Vision is required because....

- Change is driven by **strategic policies & local plan**
- Need to work **collaboratively** to agree how to respond to issues
- A **clear vision** for 15-20 years will establish:
  - What do we want this place to be like?
  - Set out measures to achieve it
- But base vision on **clear evidence base**
- Ensure **sustainable transport** is integrated from the outset and throughout
- Must be **iterative process**









# The way we plan for transport affects the form of place



- Road building
- Car parking
- Lower density
- Decentralisation



- Public transport
- Cycle networks
- Roadspace reallocation



- Public realm
- Street activities
- Traffic restraint
- ToD/mixed use developments

From work by Prof.  
Peter Jones - CREATE

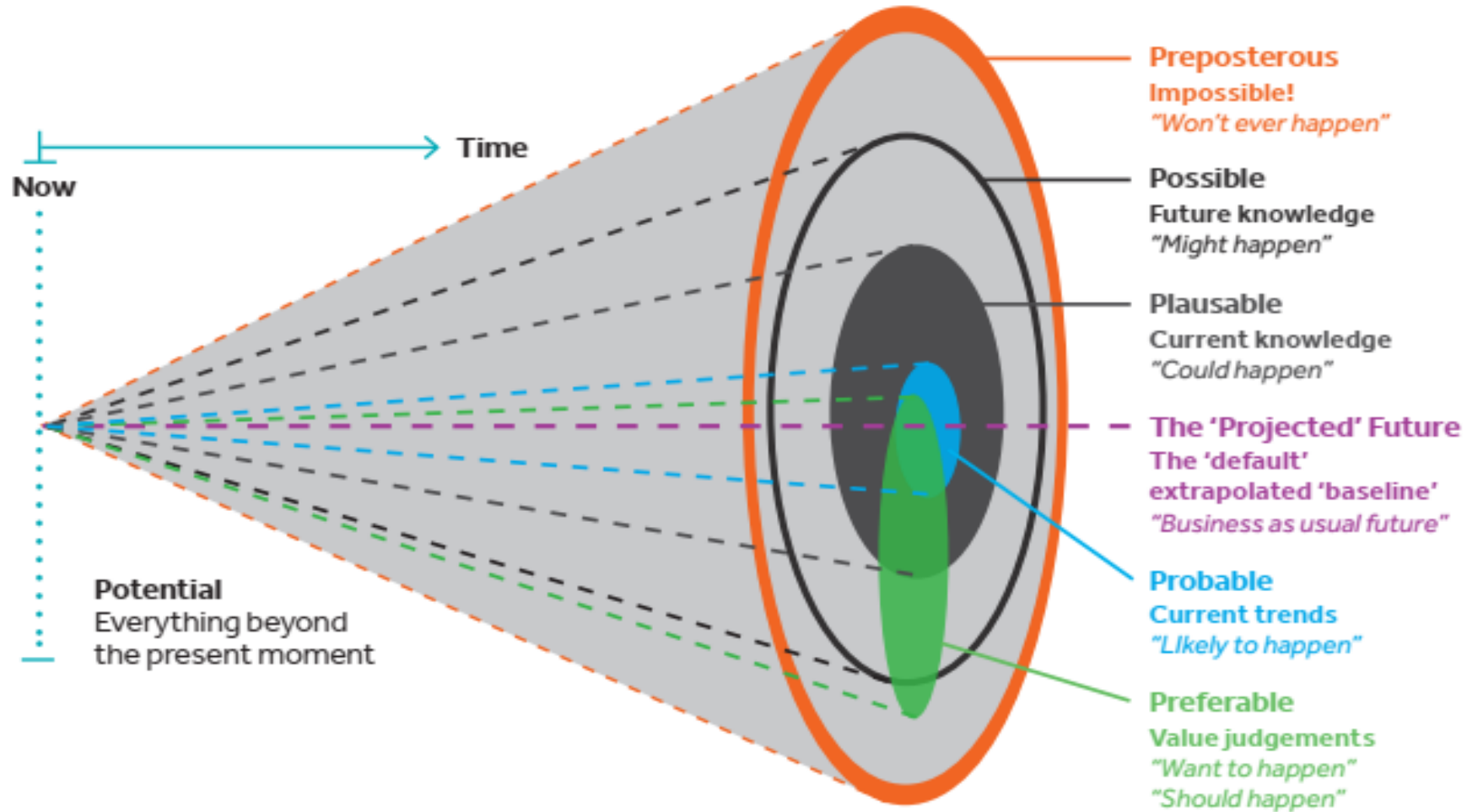
C: car-based
<ul style="list-style-type: none"><li>● Average network speeds</li><li>● Day-to-day variability</li><li>● Vehicle congestion</li><li>● Car parking availability</li><li>● Road traffic accidents</li><li>● Noise</li><li>● Air pollution</li></ul>

M: SUM-based
<ul style="list-style-type: none"><li>● PT frequency and reliability</li><li>● Access to bus stops and stations</li><li>● Safety and security</li><li>● Seamless travel</li><li>● PT modal split</li><li>● Walking/cycling modal shares</li><li>● Door-to-door travel times by mode</li></ul>

P: place-based
<ul style="list-style-type: none"><li>● Time use in transport modes</li><li>● Intensity of street activities</li><li>● Time spent in local area</li><li>● Value of high quality public space</li><li>● Health of the population</li><li>● Social Interaction</li><li>● Social equity and inclusion</li><li>● Community severance</li></ul>

KEY: There are not yet well established means for measuring and valuing these benefits

# Uncertainty Ahead



From CIHT Futures by Professor Glenn Lyons

# New Advice just published

- Collaborative approach to
- Works within NPPF
- Based on review of current blockages
- Key conclusion was need for vision
- To be followed by more detailed toolkit

***VISION IS AT  
ITS CORE***



# A response to current concerns

- Assembled multi-disciplinary team to:
  - Scrutinise process and find exemplars
  - Work with stakeholders to dissect planning and transport process
  - Develop new advice to improve delivery

Advocates a new way....

**‘Plan for people and you get people, plan for cars and you get cars’**



# Fundamentals of Advice

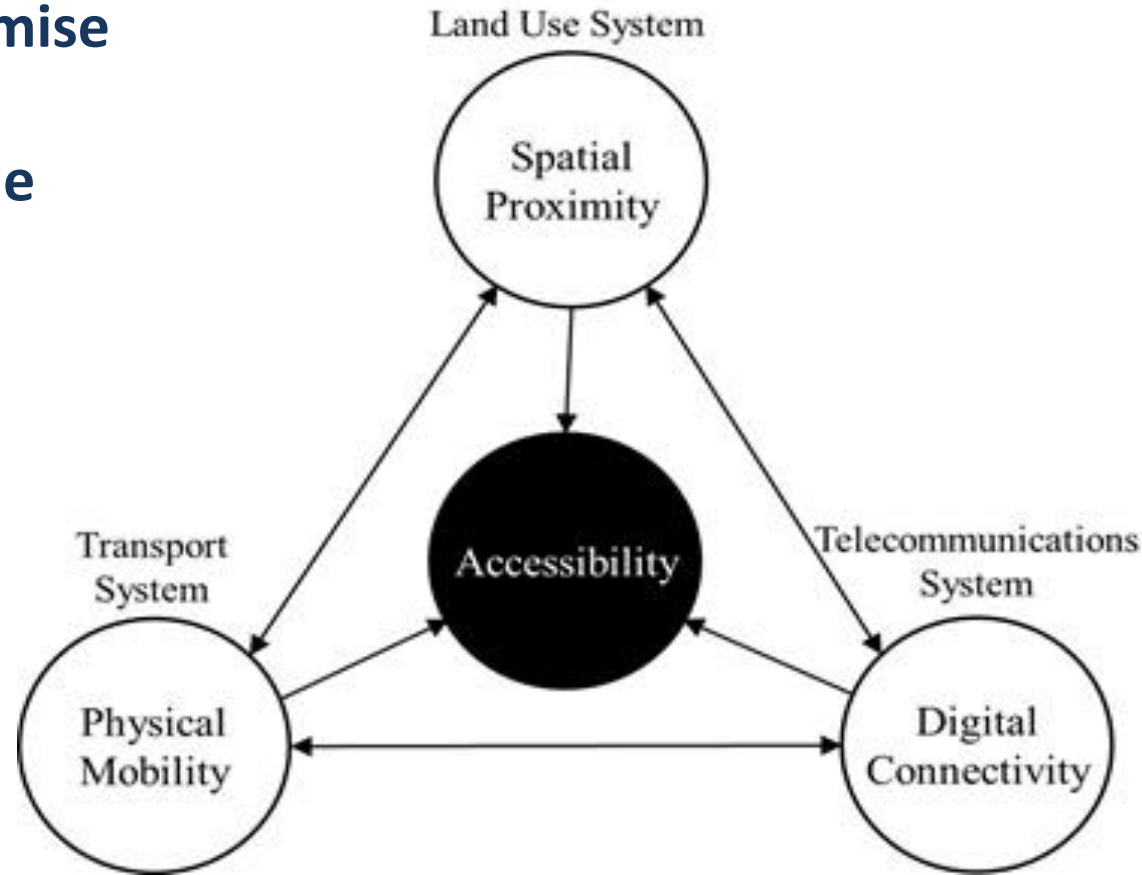
- Set within current NPPF & regulation
- Produced through collaboration:
  - Professional bodies – CIHT, RTPI, TPS
  - Local Government representatives
  - Private sector – consultancies, developers, transport operators
  - Academic representatives
- Drafted to help all relevant professionals and interested parties including local communities

# Vision drives Local Plan

- Relates plan to the **geography**
- Makes it **spatial**
- Aligns local planning policy & **local investment strategies**
- **Integrates transport strategy** into the local plan from outset
- Evidence base & indicators include: **health, environment, demographics**, as well as **all transport modes**
- Establishes **accessibility & mode share requirements & targets** in Plan
- Maps and plans networks for all modes in PLAN

**All part of steps to achieve the vision**

We need to understand the relationships to maximise accessibility & health benefits to achieve the Vision



*From work by Prof. Glen Lyons - Transportation Research Part A: Policy and Practice, 88, 104-116.*

# Evidence is critical

- Shift away from “predict & provide” methodologies > OBJECTIVE LED – VISION BASED
- Authority drives choice of development sites based on **clear criteria** incl. accessibility
- Tests local plan vision & objectives through **scenario-based, multi-criteria assessment**
- Need for **flexibility** - uncertainty should be recognised



# ***Impact assessment is against VISION***

- Strategic & local plans establish an **evidence-based definition of “significant” & “severe”** in local context
- CIL & section 106 linked to Plan’s sustainable transport strategy with the Local Plan
- Make the link between development & accessibility explicit ensuring delivery
- Monitor strategic policies, vision & plan through clear multi-criteria indicators
- Implement the Plan collaboratively - project manage delivery through accountable body

# In summary

- Advice seeks to improve sustainable outcomes & deliver a collective VISION
- Part of a process that requires all to think and act differently - **collaboratively** throughout
- First stage is recognising current system is failing
- Solution lies in visioning the future we want
- And developing places and schemes that meet that vision
- Sustainable transport is then the enabler....
- The solution not the problem!

**Not rocket science.....**  
**... *common sense***



**Where there is a will  
there is a way!**

***It can be done.***  
***We have the tools!***

## Workshop Two

---

**Creating transformational visions  
at different scales**

**#tpn2019**



# What have we learnt?

.....

Stephen Bennett

Chair of the Transport Planning Society  
and Director at Arup

#tpn2019

**Thank you for coming!**

---

**#tpn2019**