Institute for Transport Studies

FACULTY OF EARTH AND ENVIRONMENT



'Update on International Activities' Presentation to ADD40

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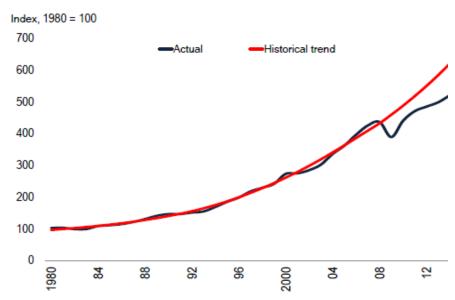
Opening Remarks

- Sustainability of Transportation continues to grow in importance as a topic
- Better decisions are being made BUT
- Not on a sustainable pathway
- Some of the limits to growth are being reached
- Challenging governance environment

Economic Growth

FIGURE 4.8 World trade: Actual and trend

World trade growth has been significantly subdued in recent years.

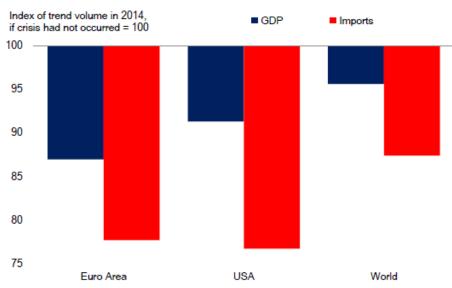


Source: World Bank.

Note: World trade refers to total world imports. The historical trend is compute 1970-2014 period, smoothed using a Hodrick-Prescott filter.

FIGURE 4.9 GDP and imports

Global demand remains well below trend levels.



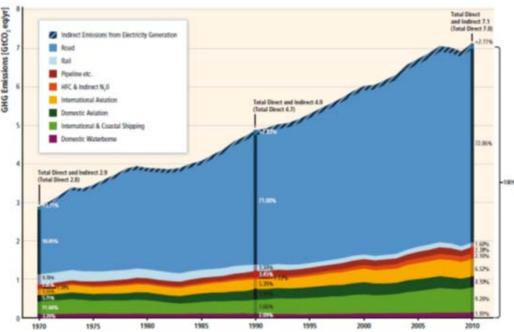
Source: World Bank.

Note: The post-crisis trend growth is assumed to be equivalent to the average growth rate during 1980-2008. Using this, the trend level for 2014 is rebased to 100. The 100 mark reflects where GDP and imports would have been in 2014 if pre-crisis trends continued into the post-crisis period. Hence, bars below 100 show deviations from trends in 2014



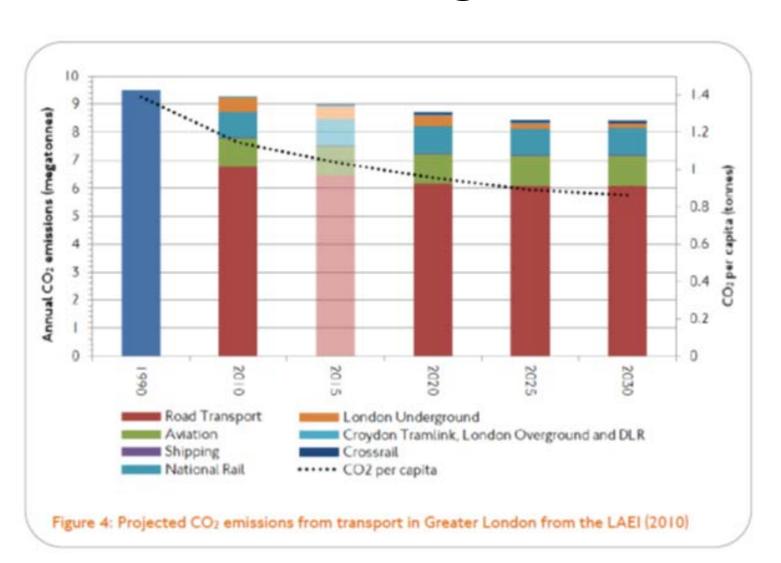
Climate Policy





	Lima Limps	Status Quo	Lima Leaps
1. Pre-2020 Ambition		x	
2. INDCs	x		
3. NAMAs	x		
4. Technology	x		
5. Climate Finance	x		
6. Adaptation		x	

Climate Mitigation



Climate Adaptation

- Damage costs significant
- Transport costs?
- Wider economic impacts?





Urban Air Pollution



Social Sustainability?

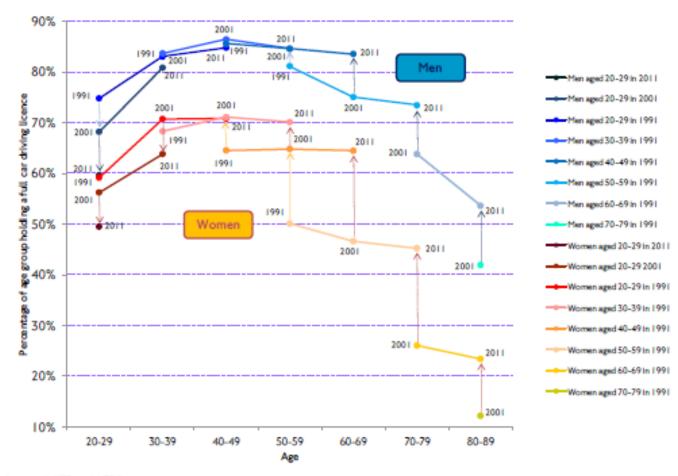


Accessibility assessments and spatial/population distribution impacts ++

But that is not the same as social development...

Is there a broader change happening?

Figure 42: Car driver licence holding by age-cohort groups (1991, 2001 and 2011)



Source: LATS and LTDS

Figure 8: Apparent divergences from theory that have been observed in London

Traditional conventional thinking	Observations in London	
Volume of car traffic increases as a city grows	Car travel in London decreased by 12 per cent between 2001 and 2011 while the population grew by one million	
Car ownership and use increased while it was becoming 'normal' in society through the second half of the 20th century before reaching a plateau, after which it should remain constant	Car use grew to 1999, since when it has been in decline. Car ownership rates decreased between 2001 and 2011. Driver licence holding rates also peaked before falling	
Car ownership rate increases as incomes rise	Inner London has seen the greatest income growth in the UK and car ownership has fallen	
People switch to 'more desirable' modes as their incomes increase, typically from bus to rail modes and from rail modes to car	Since 2000 bus use has grown by more than use of rail modes, and use of rail modes has grown by more than car use (which has fallen)	
Demand decreases when fares increase	Rail travel in London has grown by 50 per cent in spite of fares rising 15 to 20 per cent	
People travel more as incomes rise	People with higher household incomes travel more than those with lower incomes, but the distance travelled per person has not increased over a number of decades	

Governance

- Shrinking of the state is a threat
 - Capacity;
 - Least-cost not best value;
 - We do what we can fund not what we should do
- Limits to ambitions to manage demand
 - EU White Paper 'curbing mobility is not an option'
- Trends to outsourcing, PPPs
 - Important lever for choosing contracts
 - Doing it well and avoiding lock-in difficult
- Corporate Social Responsibility
 - Sustainability credentials as a market differentiator

Some thoughts

- Good progress in making existing approaches more sustainable
- Need to do more than this if existing approaches are not and cannot be made 'sustainable' (ref London)
- Need to identify pathways which are consistent with economic development <u>and</u> social development as well as respecting our environmental limits
- Where are these visions and what needs to change to have those conversations?