
Presentation to CEDA

Managing Traffic and Transport in SEQ

From Aspiration to Action

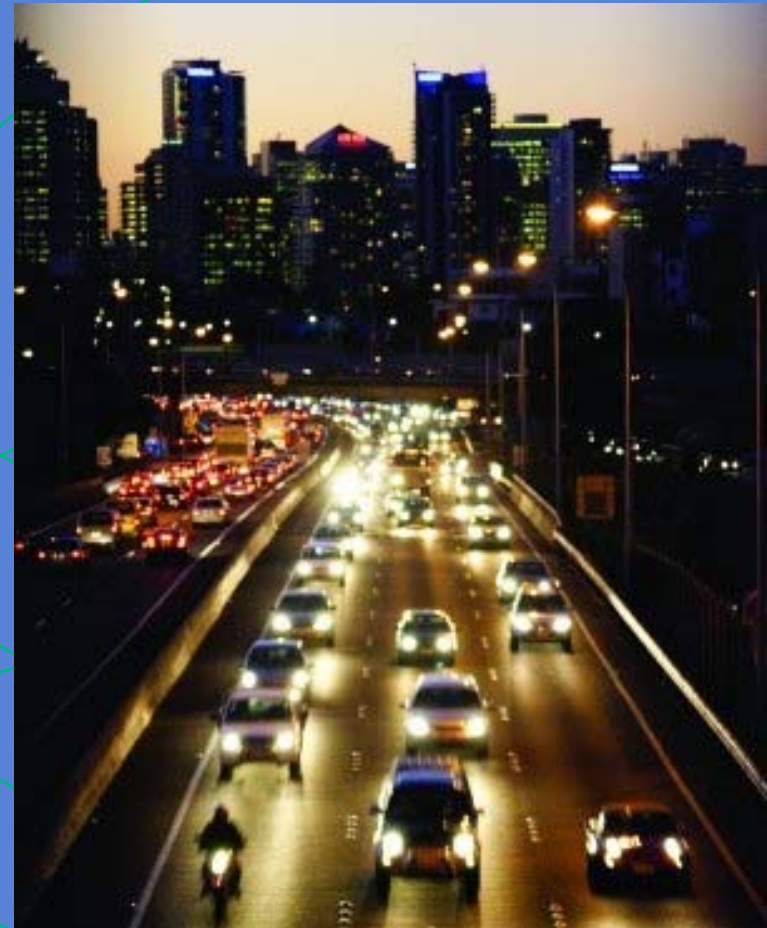
Prof George Hazel OBE

12 November 2008



Introduction

- Cities are becoming the battleground for global competitiveness
- Transportation & mobility have been identified as the Number 1 challenge by megacity politicians, business leaders and officials
- Mega trends are affecting the demands for mobility



Survey of Megacity Leaders

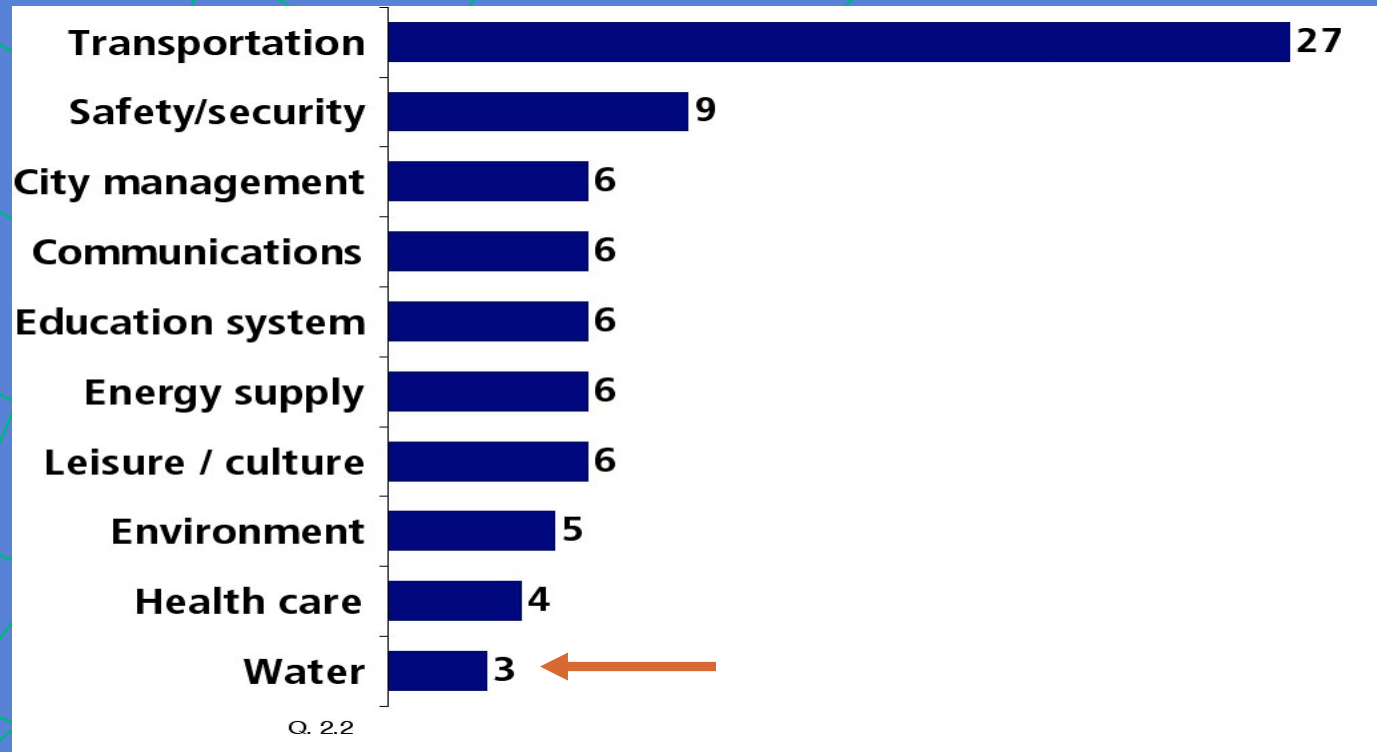
(*n*=522 across 25 cities during Oct./Nov. 2006)



Transportation Seen as Major Driver of City Competitiveness

Importance for Economic Attractiveness

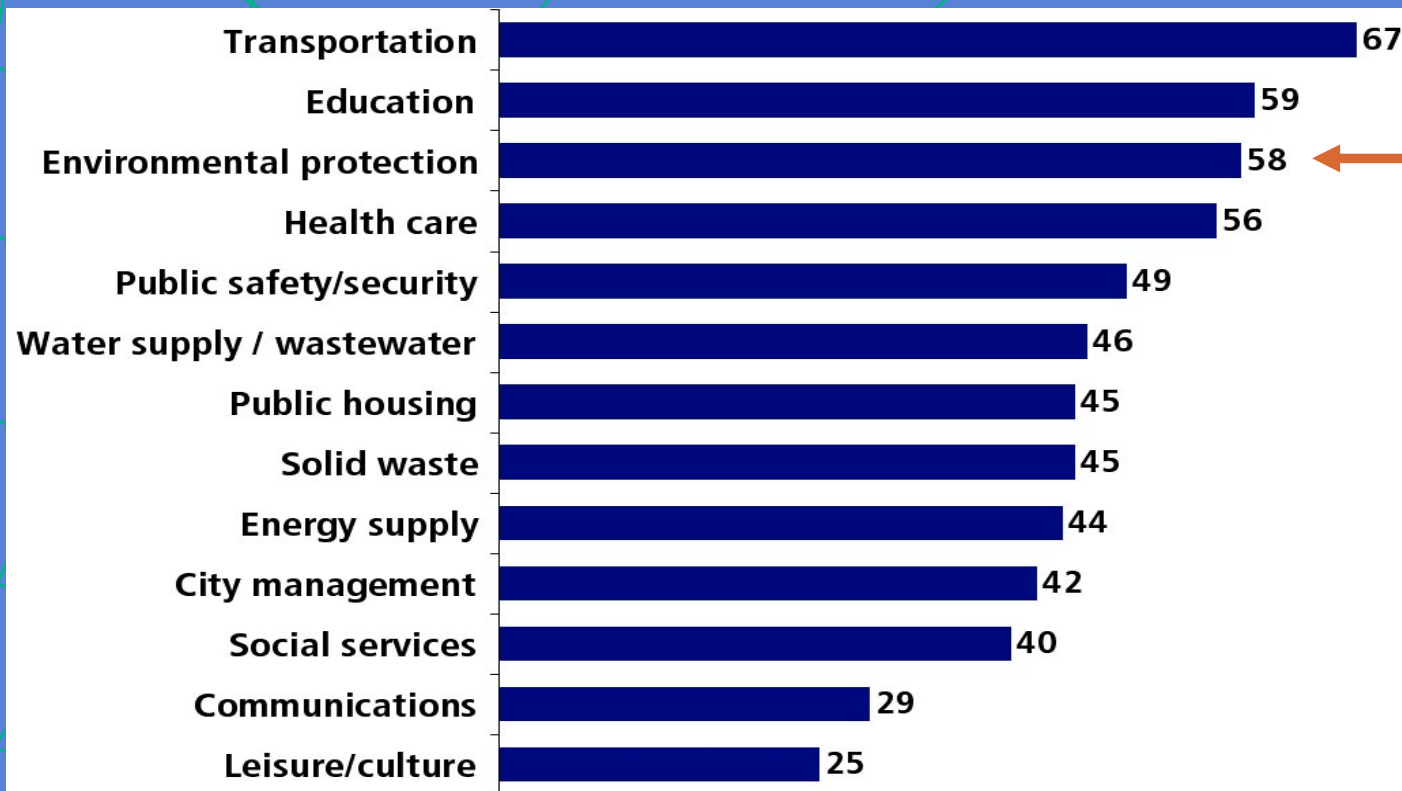
Unprompted Percentages (n=522)



Environment in Top Tier of Infrastructure Priorities

Need for Investment

Average % of “Very High” Across All Cities

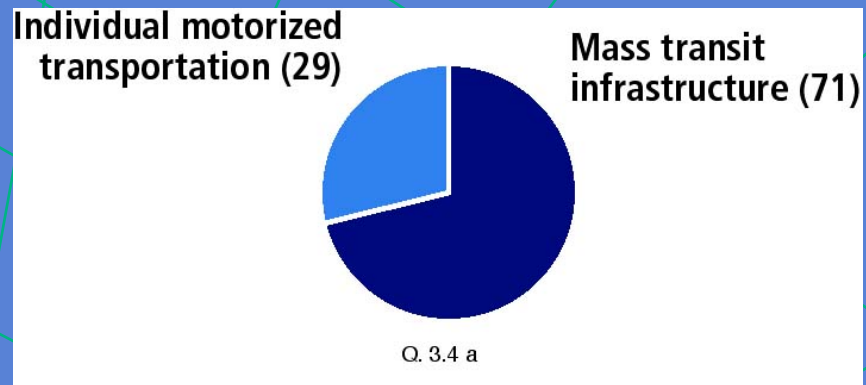


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Environment Matters . . .

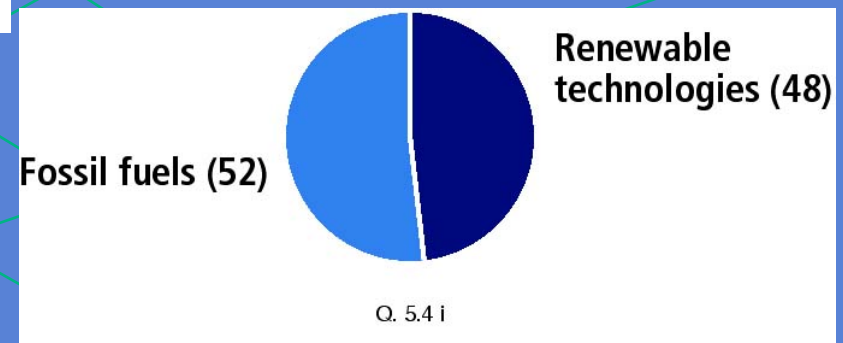
Mass Transit is the Priority

Predicted by Transport Experts

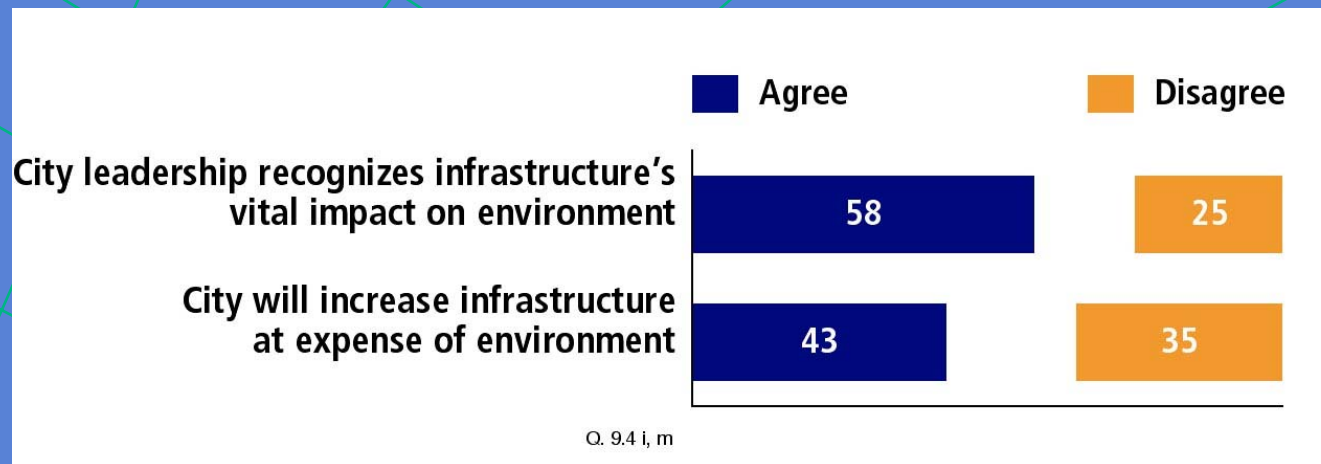


Strong Role for Renewables

Predicted by Electricity Experts



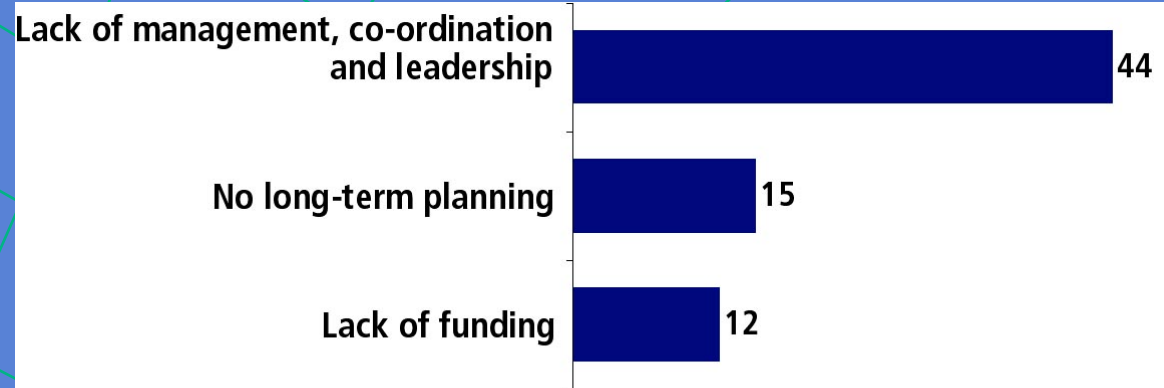
... but May be Sacrificed for Growth



It's Not All About Money, it's About Management

Reasons for Problems City Managers Have to Face

Unprompted Mentions of Knowledgeable Stakeholders (%)



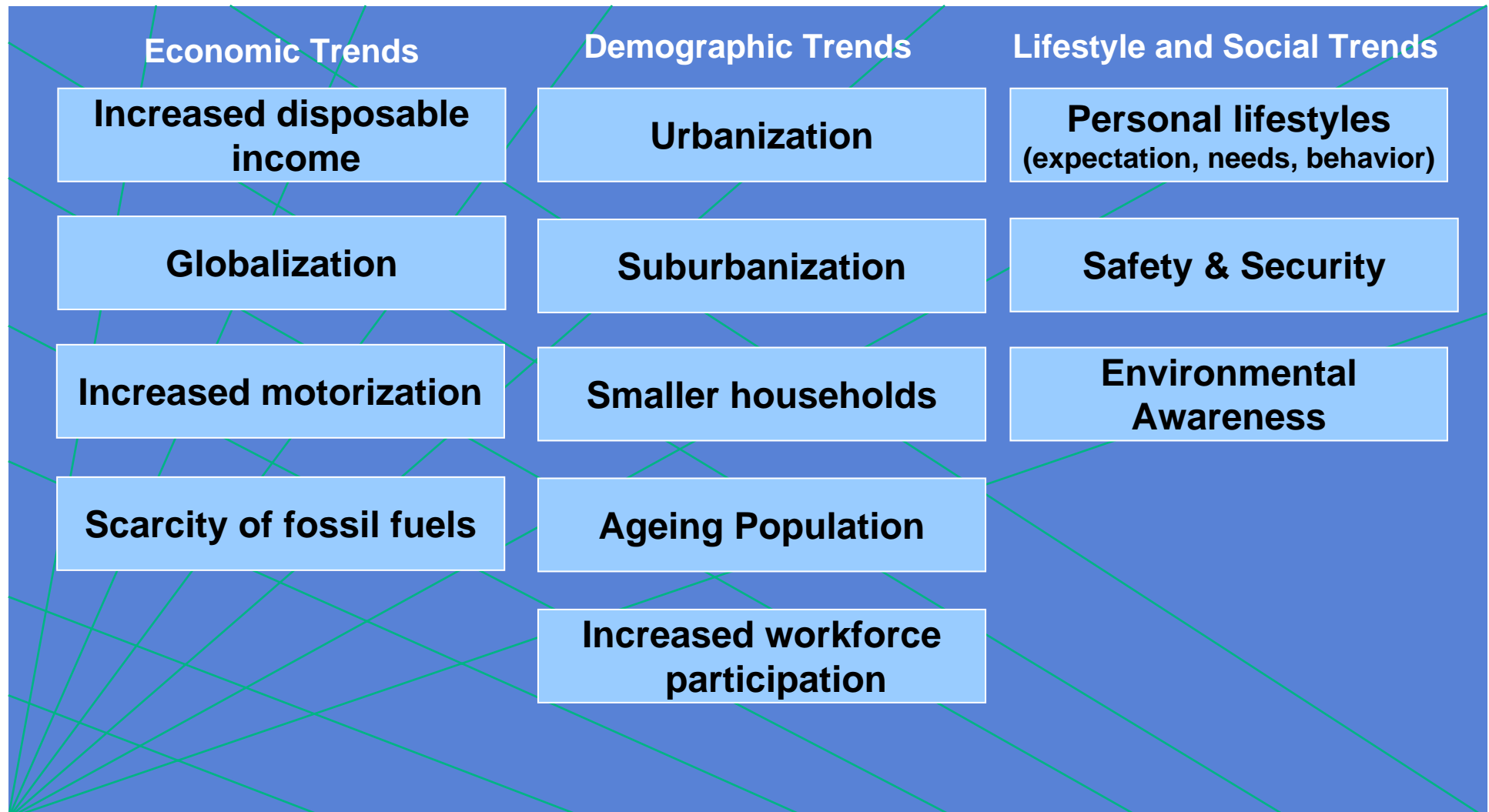
Q. 8.2

- Political boundaries and silo-based thinking get in the way of integrated solutions to infrastructure challenges in metro areas

Megacity Challenges

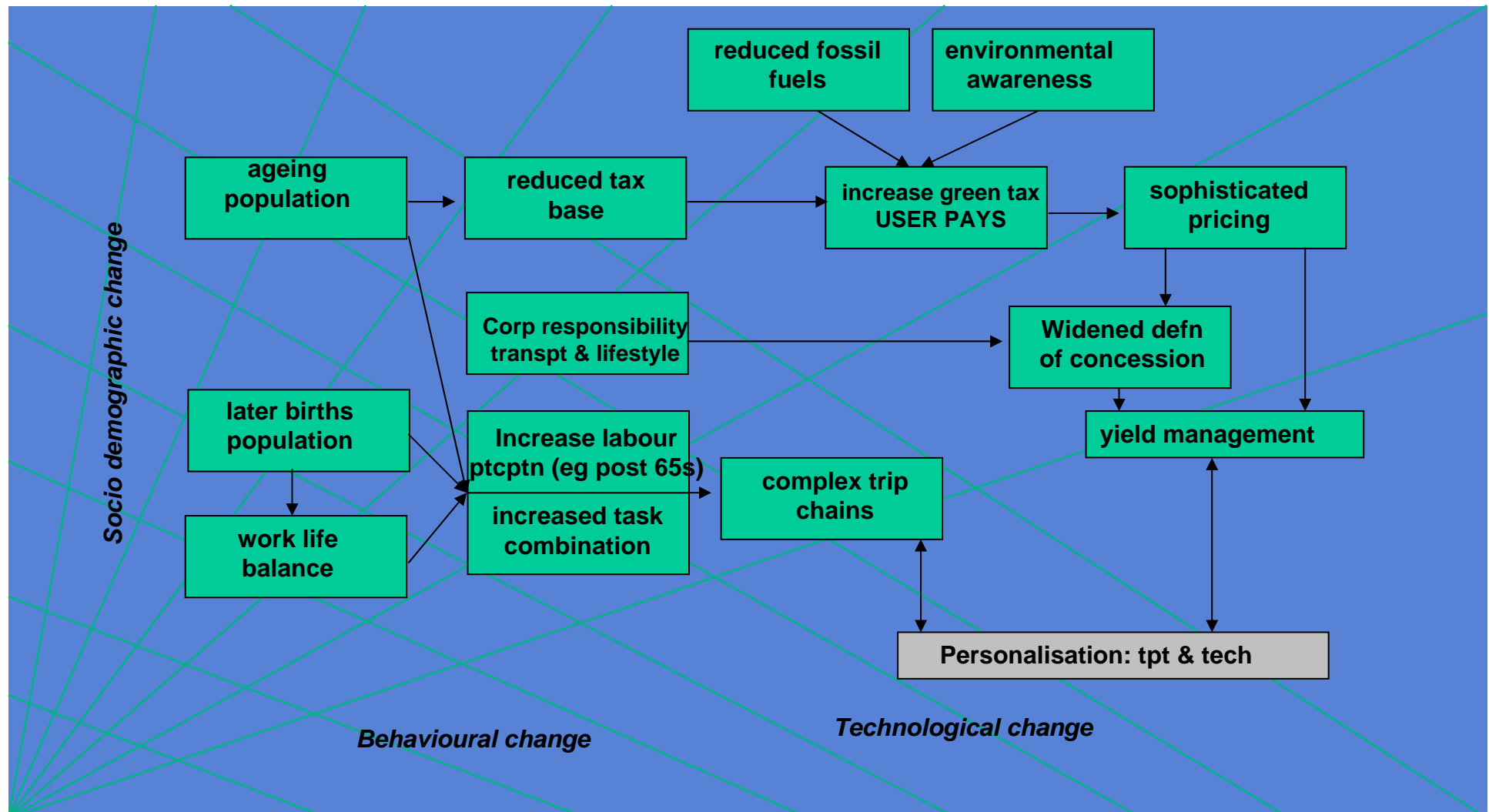
1. Environment needs to be seen as a contributor to economic competitiveness
2. Governance needs to move from passive administration of infrastructure to active management of services (focus on effectiveness, integration and demand management)
3. Evolve new models for public / private partnerships on infrastructure – public sector leadership and ownership, with efficient public or private delivery of services
4. Technology is key to sustainable development

Megatrends



Example of Dependencies Impacting Mobility

Economic and Environmental change



Components of Complete Mobility

1 End User-Focused

It is integrated with modern lifestyles and evolving demands and expectations for **personalized mobility options** for people and goods.

It allows for **informed decisions**, is **simple**, and **mode neutral**.

Information and communication is the key interface between the user and transport service as well as for **personal connectivity**.

2 Seamless

Seamless transportation is the **physical and virtual integration** of modes to ensure **coordinated transfer** between modes.

It is the creation of a “**zero-wait state**” where delay to the user, before, during and after their journey is minimized.

3 Valued

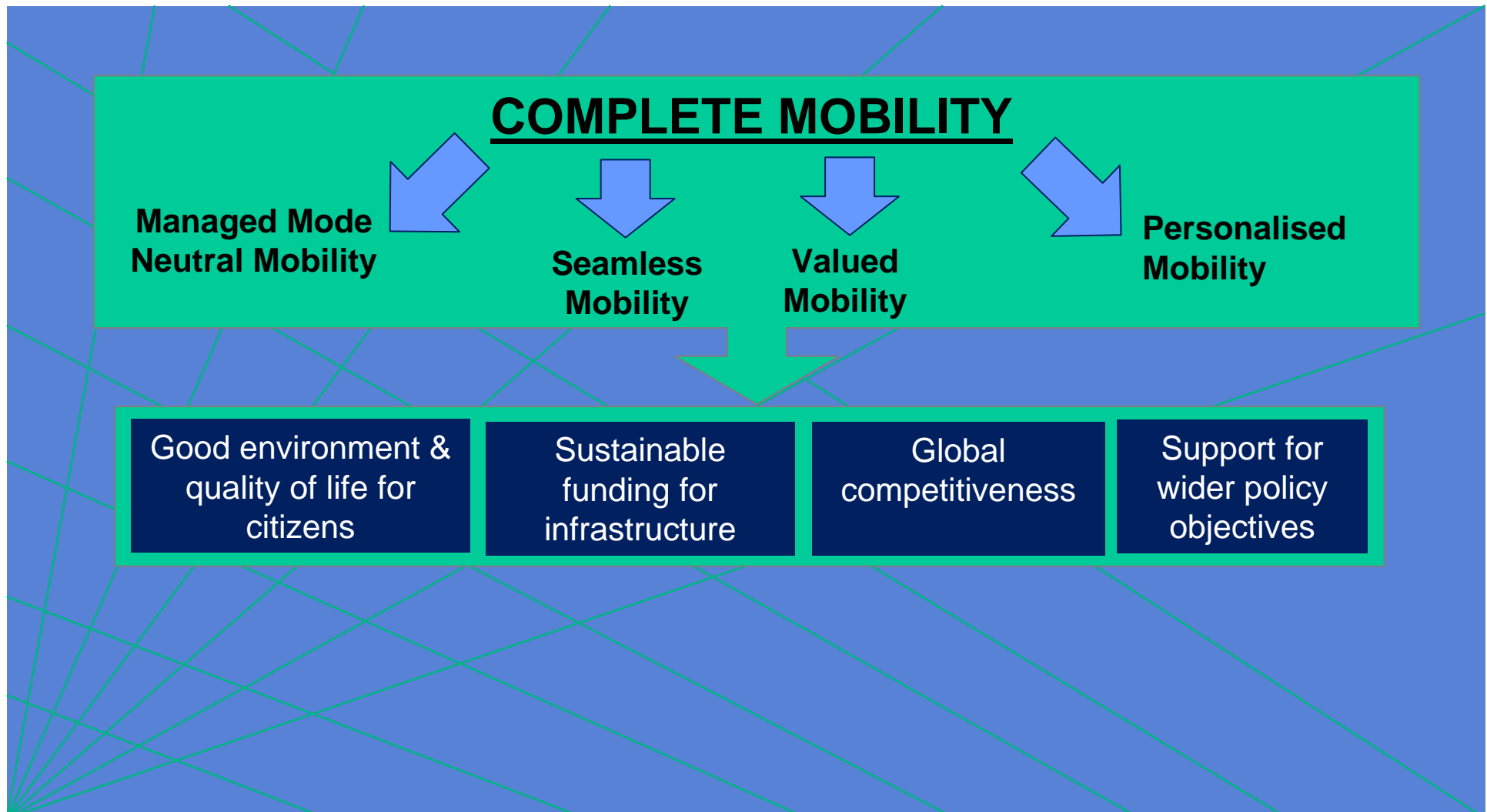
It delivers **trusted services** that have **perceived value**, allowing informed decisions that will **make a difference**.

There is a **transparent value proposition** and simple and flexible **payment mechanism**.

It provides an **attractive mobility package** built on priorities (eg safety, comfort, environmental cost).

The link to Toward Q2:

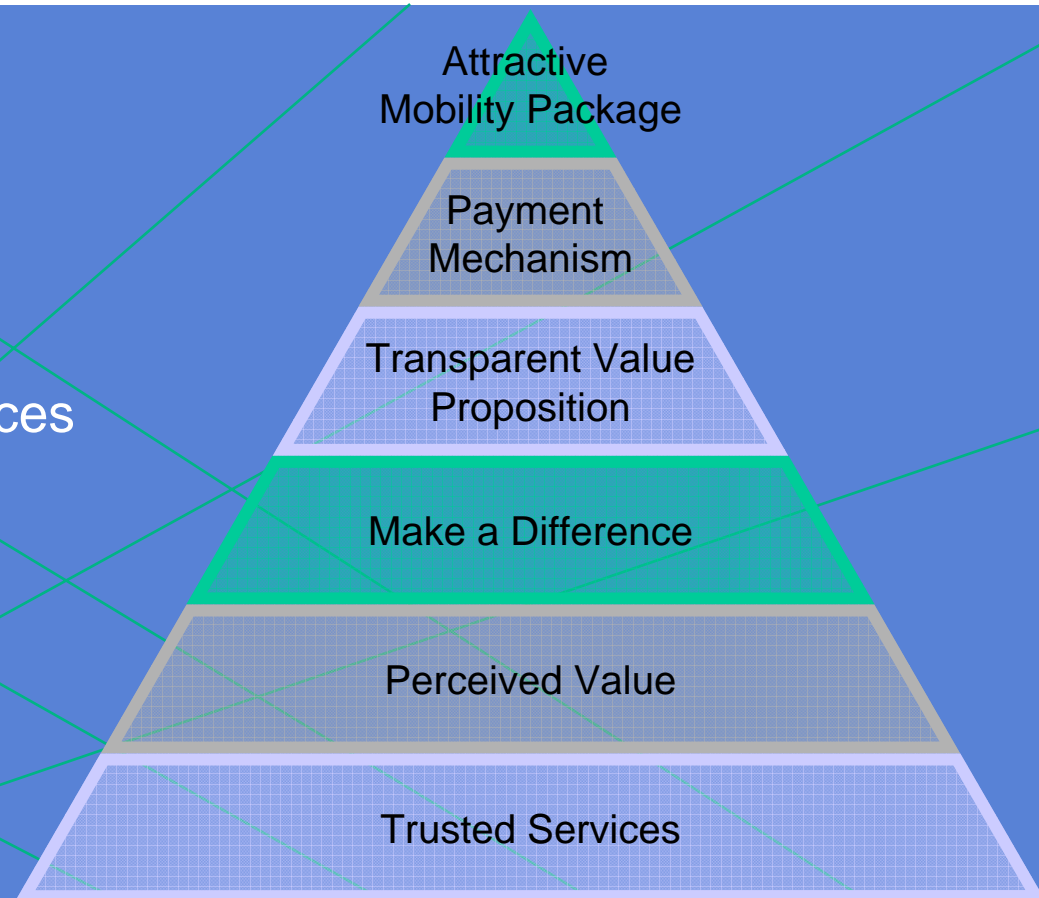
Complete Mobility & Mobility Index



Complete Mobility is Valued

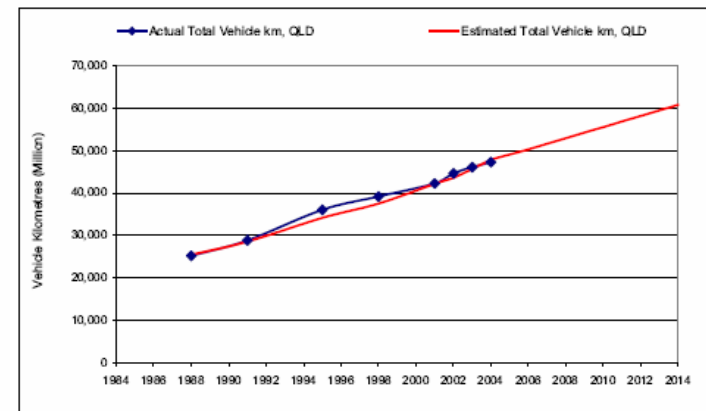
This means:

- This means that the user perceives value from engaging with the system
- The system presents choices which allow tradeoffs, and gives feedback on the performance of these choices. It thus demonstrates value



How do SEQ and Brisbane compare?

- Congestion is not as bad as in many other world cities but....
- Public transport patronage has increased by 30% in the last 3 years
- Increased population – 2.2% growth double rest of Australia
- 1500 new people each week to Queensland
- Additional difficulties due to:
 - Increasing amounts of low-density housing,
 - segregation of land use,
 - emergence of suburban shopping
 - Increasing total VKT and car ownership



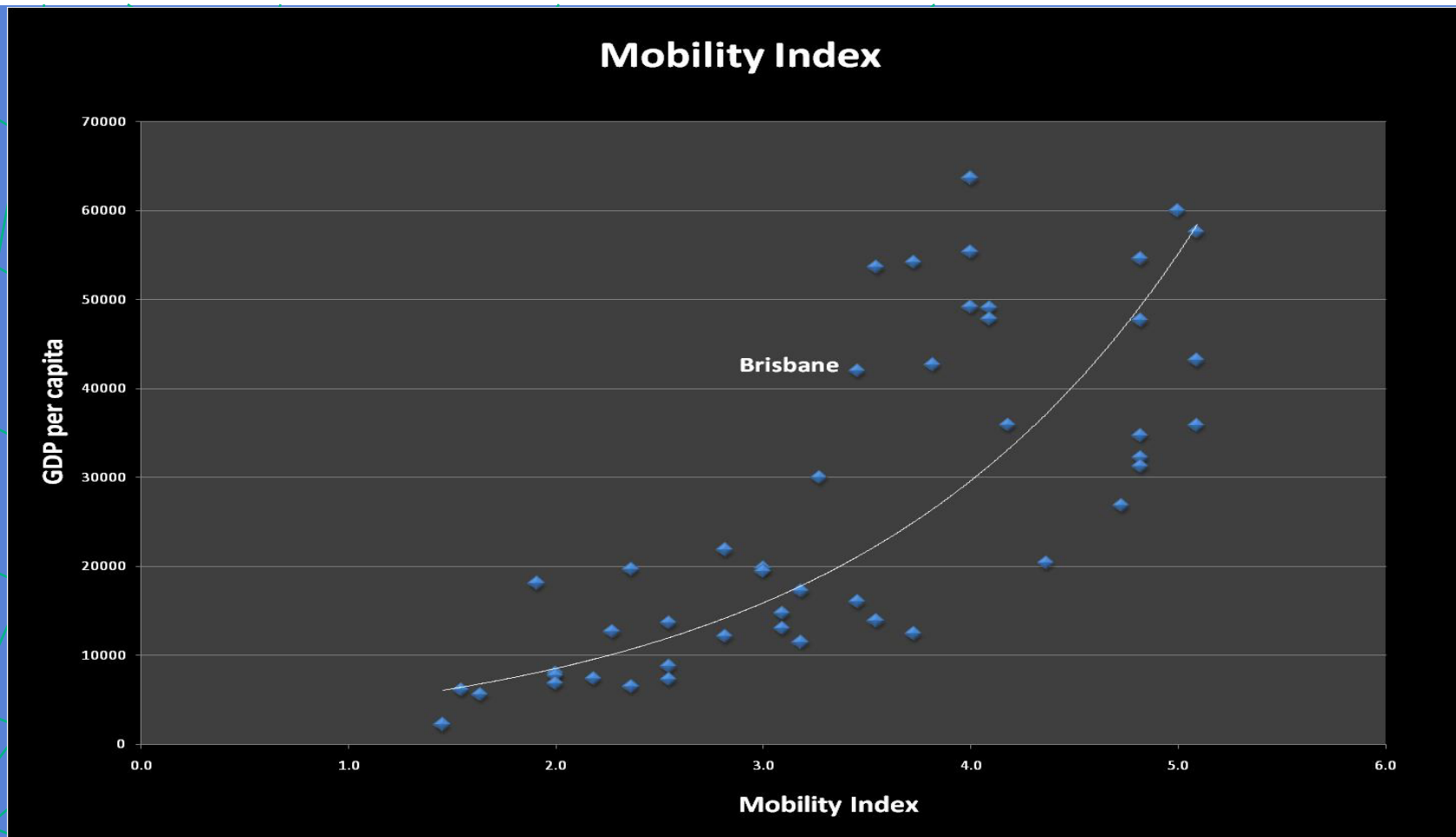
Source:
Apelbaum Consulting Group.

SEQ and Brisbane

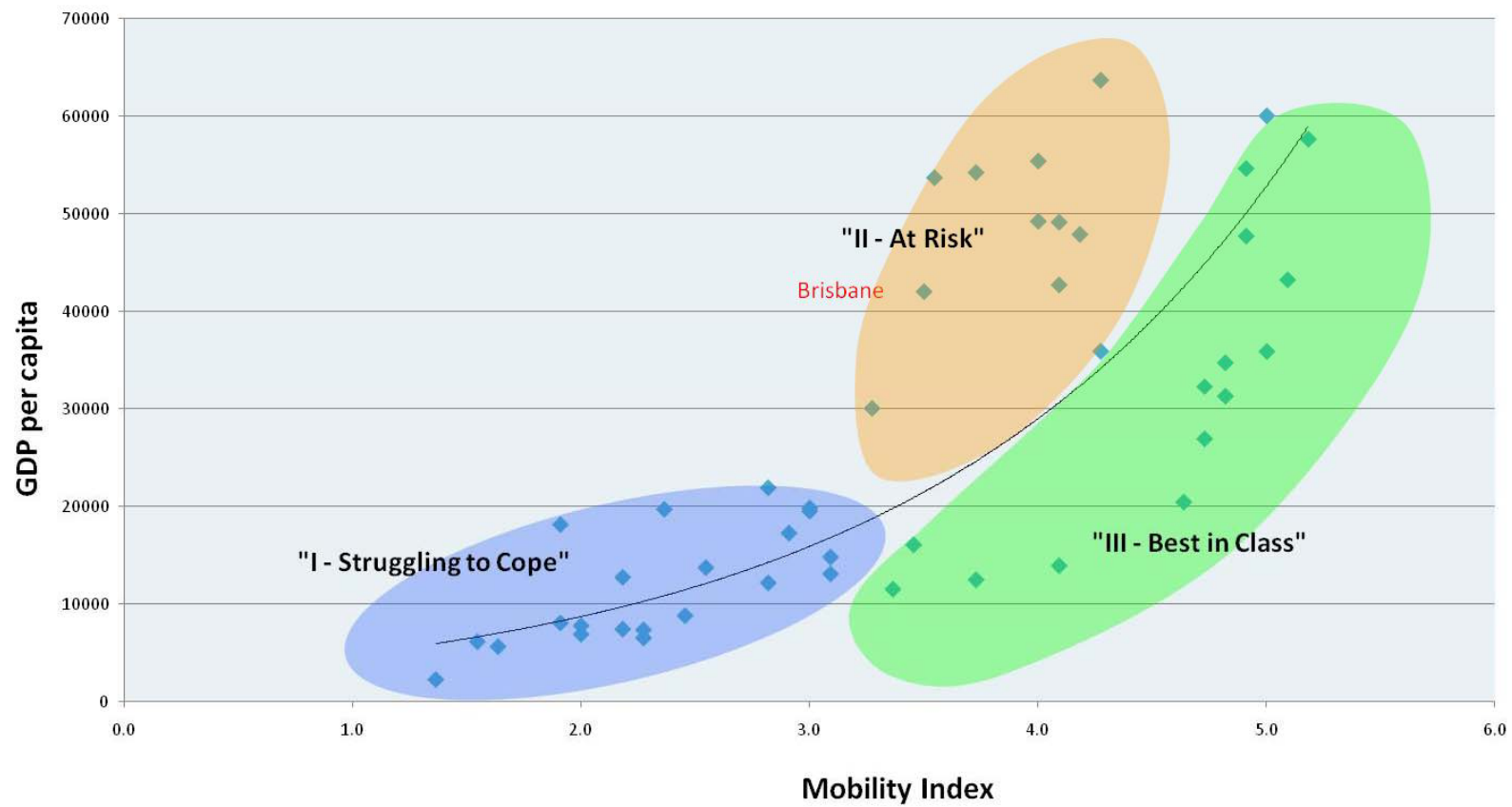
- Congestion currently contained to a small number of highly utilised corridors but....
- Congestion forecasted to increase from 8 million VKT for congested traffic in 2006 to 21 million VKT in 2026.
- Cost of congestion is growing, rising to 150% above 2005 levels by 2020 to \$3 billion pa.
- **This expected rise demonstrates SEQ's need to manage increasing congestion and unreliability**



Mobility scores in relation to GDP



Mobility Index



Congestion Management in SEQ

- Queensland has outlined five action areas through which congestion is to be managed:
 - Land use and planning
 - Pricing and Travel Demand Management
 - Travel Options
 - Efficiency
 - Capacity
- In keeping with current best practice around the world and are a sound basis for the strategy
- Needs to be linked into a framework to allow a strong strategy to be developed

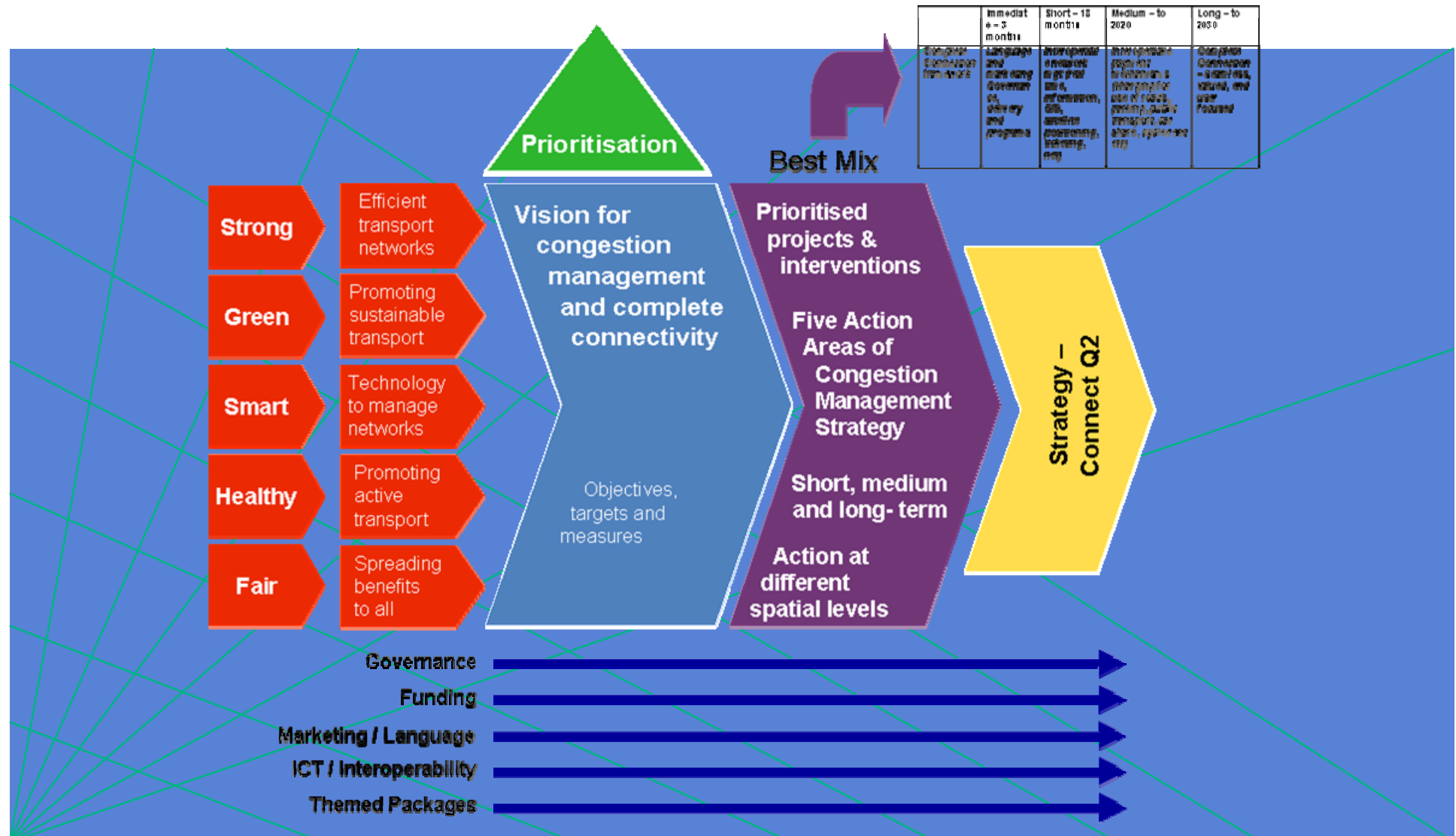
“Toward Q2” applicable to mobility

Towards Q2 Ambitions	Connectivity requirements
Strong	Create strong transport networks to support a diverse economy
Green	Promote green/sustainable transport options
Smart	Use smart technology (ICT) to manage transport networks and allow travellers informed choices
Healthy	Promote healthy and active transport
Fair	Enable fair access to services, jobs and destinations

Connect Q2 - framework



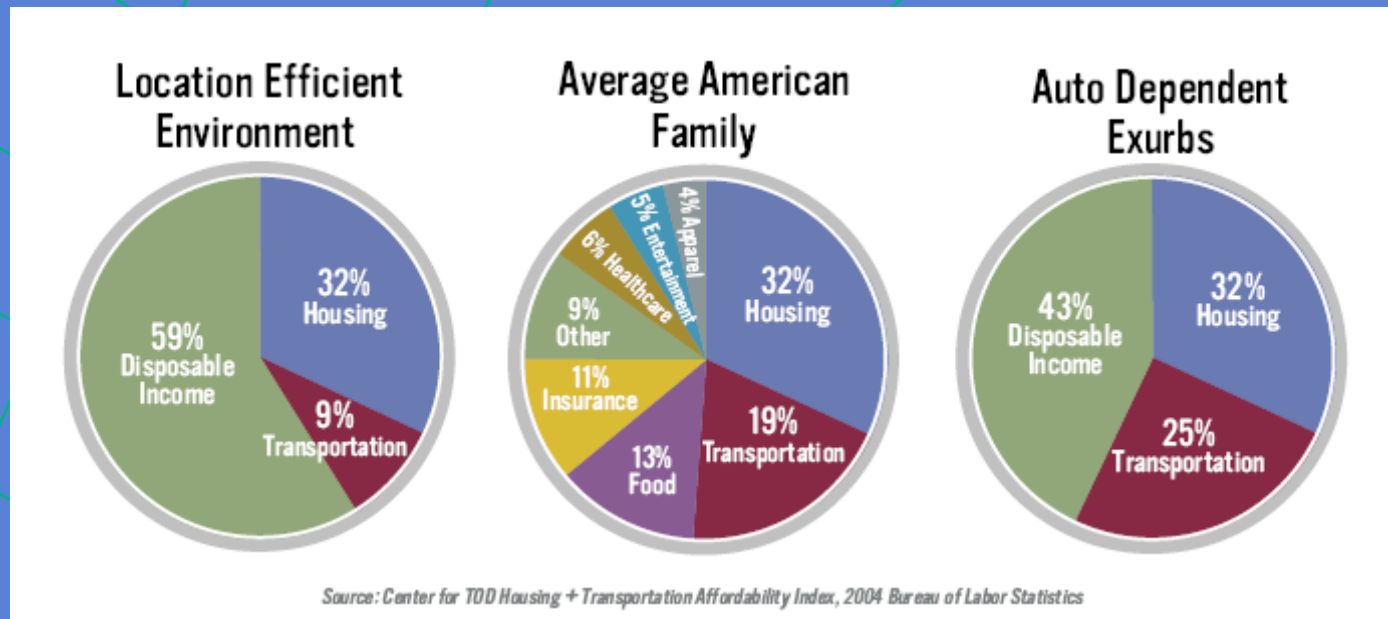
Framework Development



Best Mix Programmes

- Consider the best mix of interventions for groups such as:
 - Business community
 - Urban community
 - Rural Community
- Develop packages of interventions with a route map to delivery over time

Reducing expenditure by living in location efficient environments



By living in location efficient environments the individual can reduce their expenditure on transport by an average of 10%.

Travel Options

- SEQ should consider the advantages of developing the GO-Card further as demonstrated by London's Oyster card and Hong Kong's Octopus card



Capacity

- SEQ has shown recognition that provision of additional capacity alone will not be sufficient to tackle congestion issues in SEQ
- Any new infrastructure should benefit the agreed region-wide strategy and transport investment plan
- New infrastructure must be seen in the context of supporting the whole transport system and the congestion management strategy
- Understanding that where investment in capacity is made locking-in its benefits is vital












































































































































































































An International Comparison

Ideas from Los Angeles

- LA congestion more severe than South East Queensland but similar issues :
 - Land-use patterns make it hard for effective transit;
 - Cheap and abundant parking;
 - Significant freight needs
- Commissioned a study into short-term (5 years and less) actions which will improve congestion

Background

- LA – most severe congestion in US
- Expected to continue and worsen
- Key problems: land-use patterns make it hard for effective transit; high population density; cheap and abundant parking; significant freight
- Recognise economic and social effects of congestion
- Study to make recommendations to produce short-term improvements
- Focus on 5 years and less
- Aim: marked reductions in peak-hour traffic delays within a period of approximately five years with specific attention to strategies that would prove helpful in dense urban areas
- Constrained the focus to policy options applicable to passenger traffic

Strategy	Public-Sector Cost/Revenue Implications	Short-Term Congestion Reduction	Long-Term Congestion Reduction	Other Transportation Goals	Other Social Goals	Implementation Obstacles	Current Implementation In Los Angeles
	 High cost High revenue	 Negligible High	 Negligible High	 Very bad Very good	 Very bad Very good	 High Low	 None Advanced
TSM strategies							
Freeway ramp metering							
Signal timing and control							
HOV lane strategies							
Park-and-ride facilities							
Officers at Intersections							
Left-turn signals							
Curb-parking restrictions							
One-way streets							
Rush-hour construction bans							
Incident management							
Voluntary TDM							
Ride-sharing							
Telecommuting							
Flexible work hours							
Car-sharing							
Traveler Information systems							
Regulatory TDM							
Mandatory TDM programs							
Driving restrictions							
Pricing							
HOT lanes							
Cordon congestion tolls							
Variable curb-parking rates							
Parking cash-out							
Local fuel taxes							
Public transit							
Variable transit fares							
Deep-discount transit passes							
BRT							
Bus route reconfiguration							
Nonmotorized Travel							
Pedestrian strategies							
Bicycle strategies							

The Way Forward?

- Begin to provide a transport system that is user focussed, seamless and has value added built on user choice and incentives
- Build a framework that links the five action areas of congestion management to the five action areas of Towards Q2
- Prioritise all policies and actions with respect to this framework
- Develop an investment strategy and themed packages for the immediate, short medium and long term periods based on these policies and actions
- Develop the three cross-cutting themes of effective governance, funding and ICT interoperability

