



# Travel 2020 Panel Discussion

*Urban Mobility Trends driving a new era of travel solutions*

**Martyn Briggs**  
**Frost and Sullivan**





# Three Main Trends in Urbanisation: Development of Mega Cities, Mega Regions and Mega Corridors



## MEGA CITY

City With A Minimum  
Population Of 8 Million

**EXAMPLE:** Greater  
London



## MEGA REGIONS

Cities Combining With  
Suburbs To Form Regions.  
(Population over 15 Million)

**EXAMPLE:** Johannesburg  
and Pretoria (forming  
"Jo-Toria")

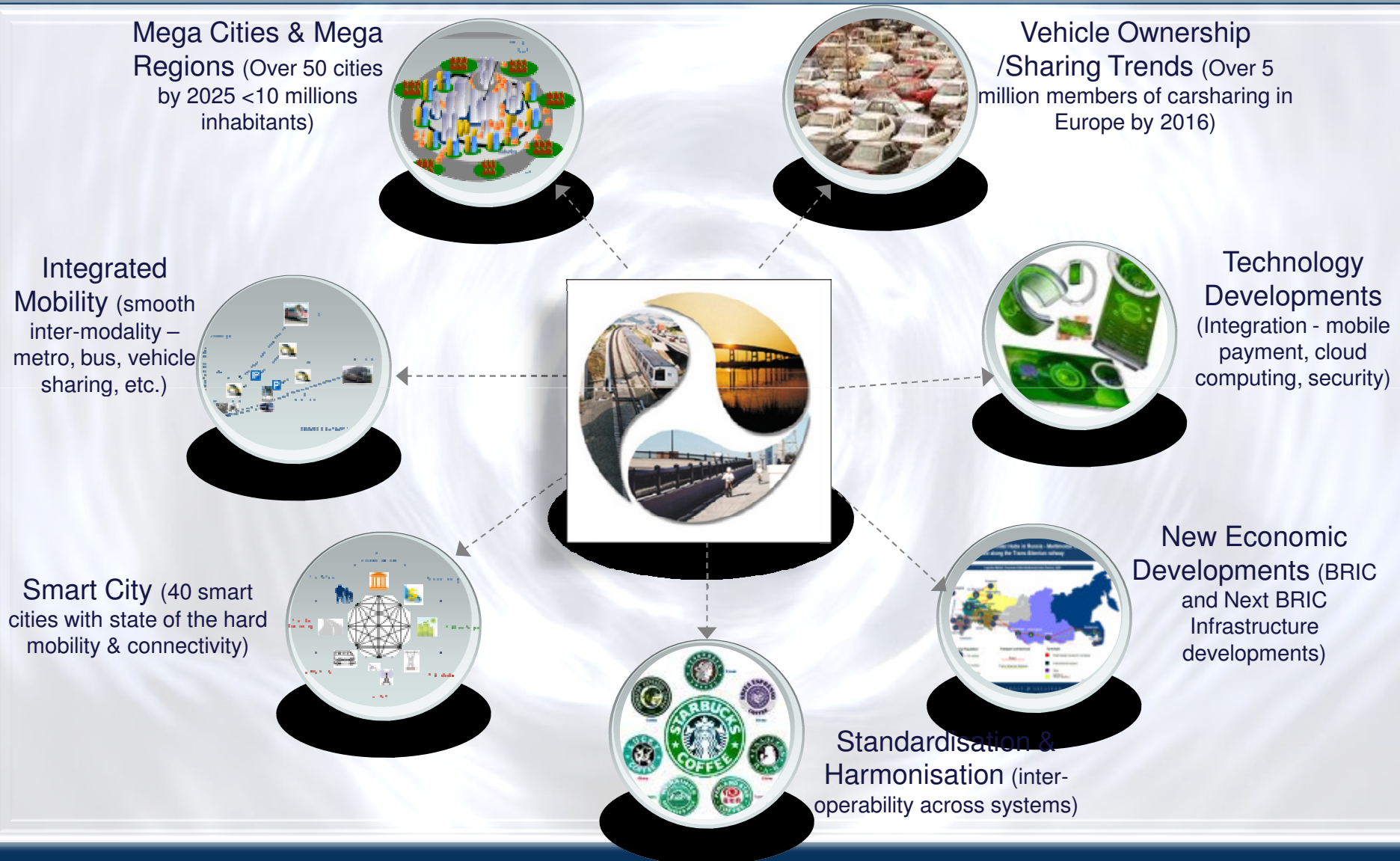


## MEGA CORRIDORS

The Corridors Connecting  
Two Major Cities or Mega  
Regions

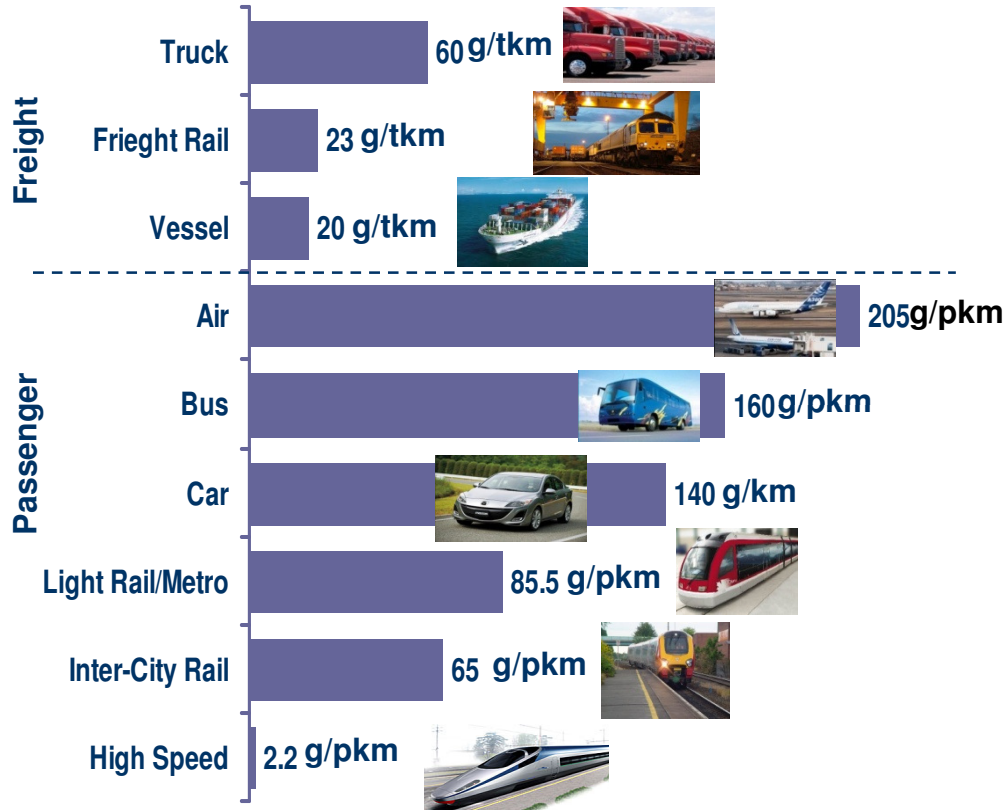
**EXAMPLE:** Hong Kong-  
Shenzhen-Guangzhou in  
China (Population 120  
Million)

# The urbanisation and mega trends that will shape tomorrow's mobility and transportation needs



# Cost to the Environment : Road Transport has the Highest CO2 of all transport modes – be it Freight or Passenger movement

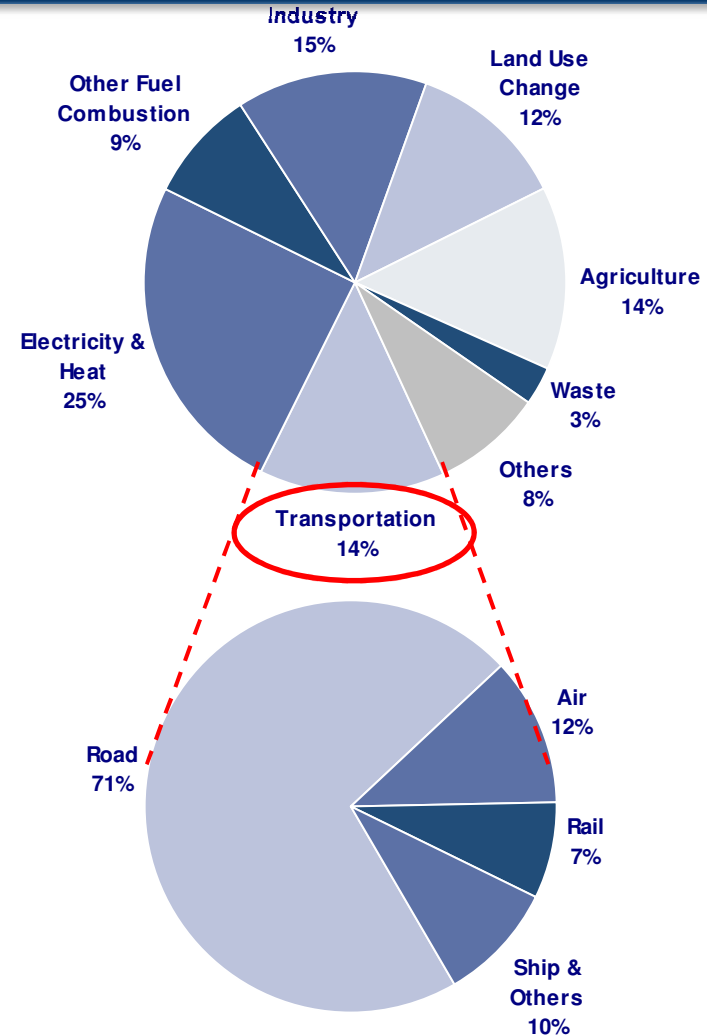
CO2 Emission by Transport Mode



Source: Alstom Transport, EcoTransIT, carbonneutralcalculator

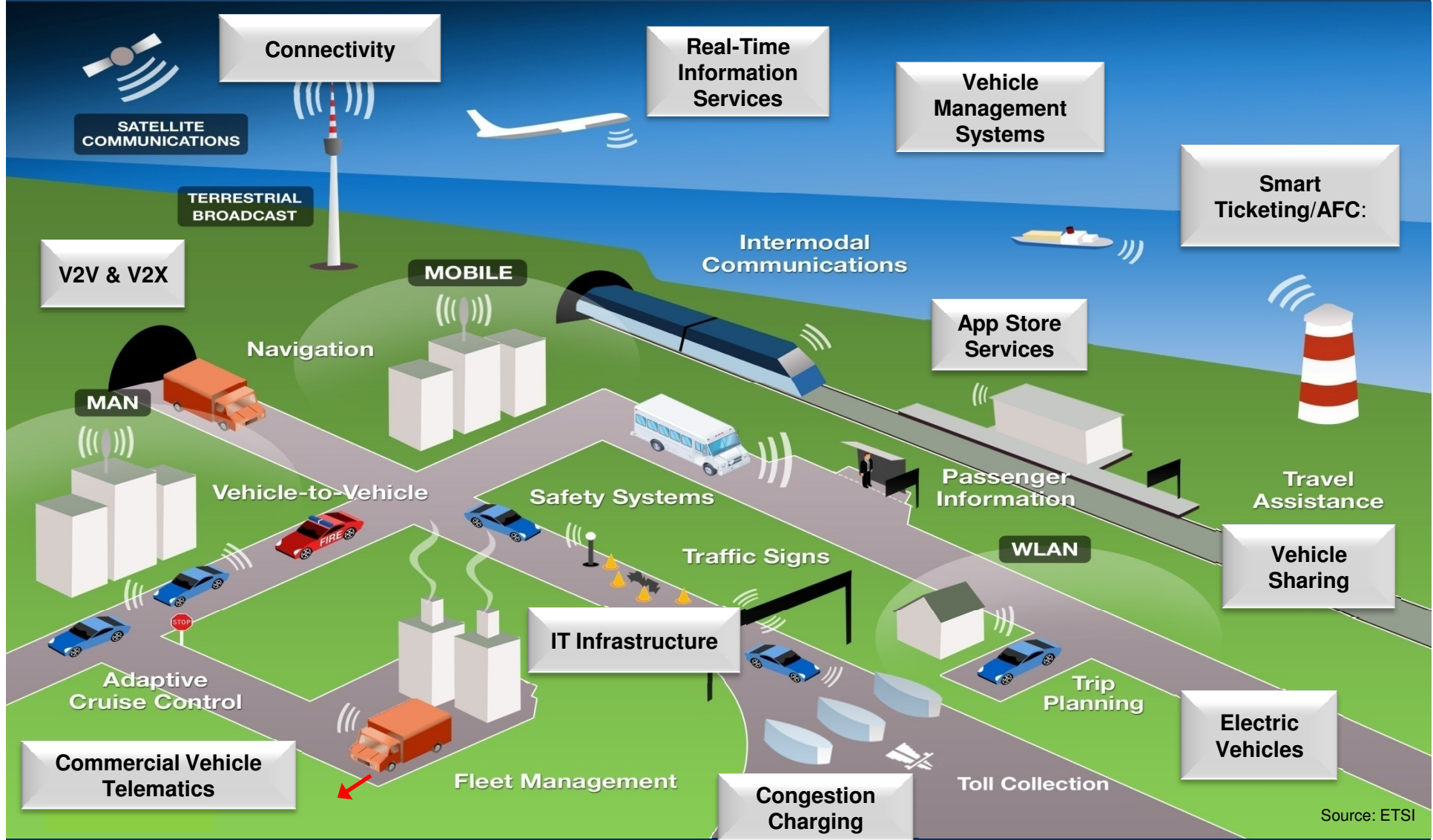
g/pkm – grams per passenger kilometer  
g/tkm- grams per ton kilometer

Global Co2 Emissions By Industry Sectors



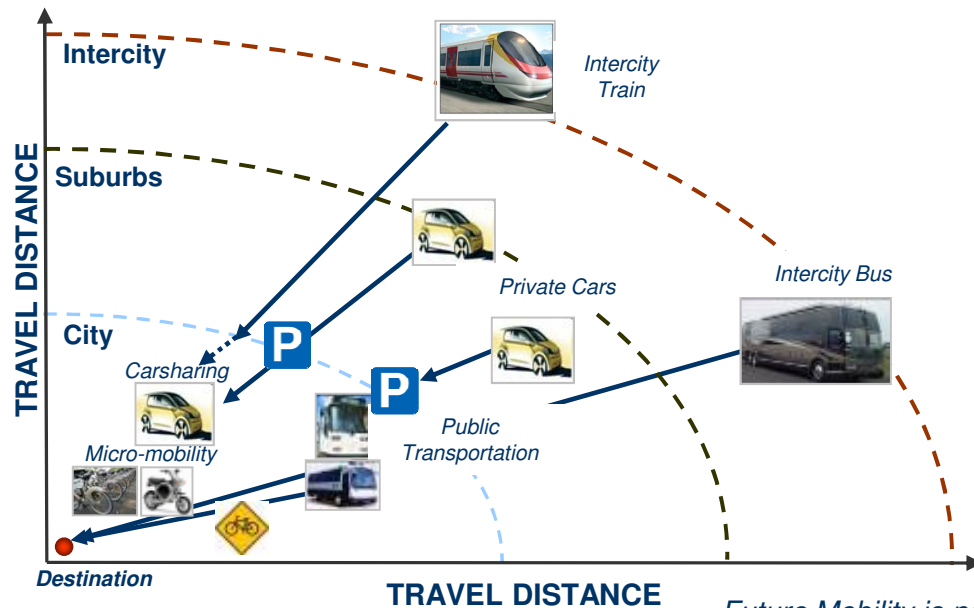
Source: Frost & Sullivan, World Resources Institute

# The Future of Mobility is for 'Green', 'Integrated' and 'Interoperable' Transport Infrastructure - SMART



# Future Mobility Concepts: The Concept of a Dynamic Transport Solution Integrating Different Modes Under a Single Entity to make Personal Transportation Easy and Simple

MultiModality Paving way to Mobility Integrators – One Stop Shop Mobility Solutions provider



Future Mobility is not just about vehicles, it is a convergence of different industry sectors that is interacting seamlessly

Mobility Integrators (MI) to offer various types of mobility solutions to complement commuters inter-modality and multi-modality travel split.



# Urban Planning : Snapshot of a SMART Mega City Plan in 2020

**SMART Buildings:** At least 50% of buildings will be **Green and Intelligent** built with **BIPV**. 20% of the buildings will be **Net Zero Buildings**.



**SMART Infrastructure:** Multimodal Transport Hubs Providing Excellent Air, Rail, Road Connectivity to Other Mega Cities.



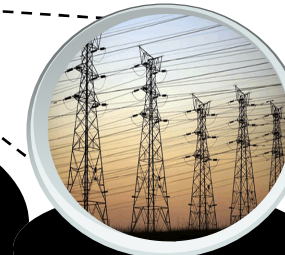
**SMART Energy:** 20% of Energy Produced in the City will be **Renewable** (Wind, Solar etc)



**SMART Technology:** Intelligent Communication Systems Connecting Home, Office, iPhone and Car on a **Single Wireless IT Platform**.



**SMART GRID:** Infrastructure to Enable Real time monitoring of power flow and **Provide Energy Surplus** Back to the Grid



**Satellite Towns:** Main City Centre will Merge with Several Satellite Towns to form **ONE BIG MEGA CITY**



**SMART Cars:** At least 10% of Cars will be **Electric Vehicles**. Free Fast Charging Stations at every half mile.



*Source: Google Images*

# Paradigm Shift from Vehicle Ownership to Vehicle Usage



## Transport = Private Vehicle

Freedom  
 Convenience  
 Status  
 Progress  
 No Real Alternative  
 Etc



## Transport = Door-to-door Mobility

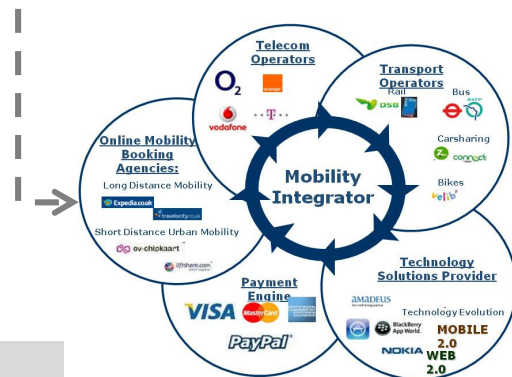
**New Vehicles :** BRT, Electric vehicles, High speed Rail

**New Business Models:** Vehicle sharing, Car pooling,

**Inter-connectivity:** Inter-modality

**Urban Planning :** Integrating Transportation

**Integrated Mobility :** Mu, Multicity



*“People will always change for a better alternative”*

# “Bring the Village Back into the City” Boris Johnson – Key Transportation Initiatives and Policies toward Integrated Mobility

- Contactless SmartCard & (NFC) Integrated Ticketing
- Smooth multimodality
- Real time passenger information



## Public Transport

- Expansion of the National Rail (Overground) Network
- Crossrail (East-West link) £16bn by 2018
- Tube Upgrade to increase capacity by 30%
- Improved Connectivity – DLR, International, High Speed



## Emission Management

- CO2 reduction of 60% by 2025
- Emission zone (*Euro 4 from Jan 2012 for LCV and HCV*)
- Buses 40% more fuel efficient
- All new taxis to be zero emission by 2020



## Transport Integration

## New Mobility



- Evs - Incentive (up to £5K) + Infrastructure
- Bicycle Sharing (Barclays) – First year 4m journeys
- New Cable Car (2m people) – Sponsored by Emirates
- Car Sharing (Club) Schemes (£480k funding)

## Congestion Management



- Congestion Charging Zone
- 20% reduction in traffic density
- Exemption for low emission

# Conclusion: Mobility Trends Research by Frost & Sullivan That Will Provide Opportunities to 2020



**Urbanization  
Impacting Mobility**



**E-Mobility**



**Mega and Smart Cities**



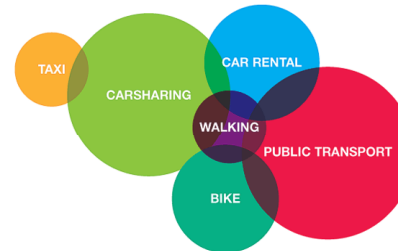
**Microcars**



**Car Sharing**



**Sustainable Public  
Transportation**



**Integrated Payment  
& Mobility Solutions**



**New Urban Mobility  
Business Models**



**High Speed Rail**



**Geo-Socialization**



**IT based Solutions**



**Social Media  
Strategy**

## Contact Details

# THANK YOU

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