



URBANIZATION
SCENARIO
&
INTELLIGENT
MOBILITY

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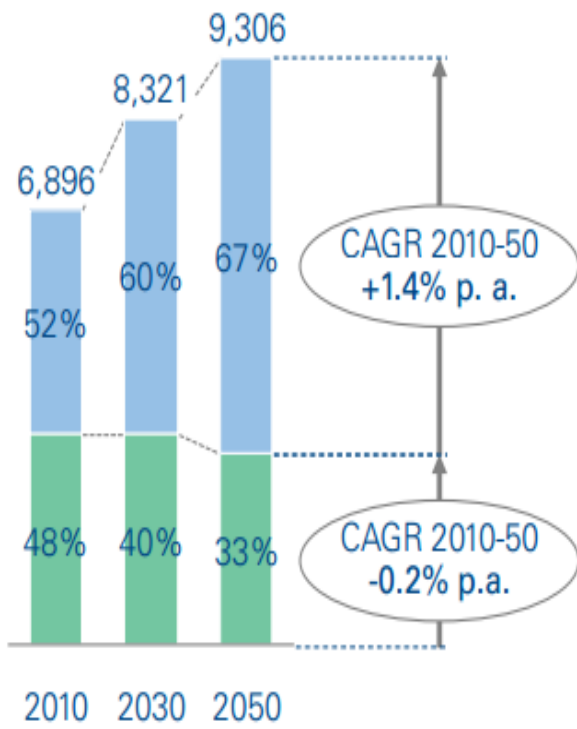
Urbanization & Challenges

The world is becoming increasingly urban

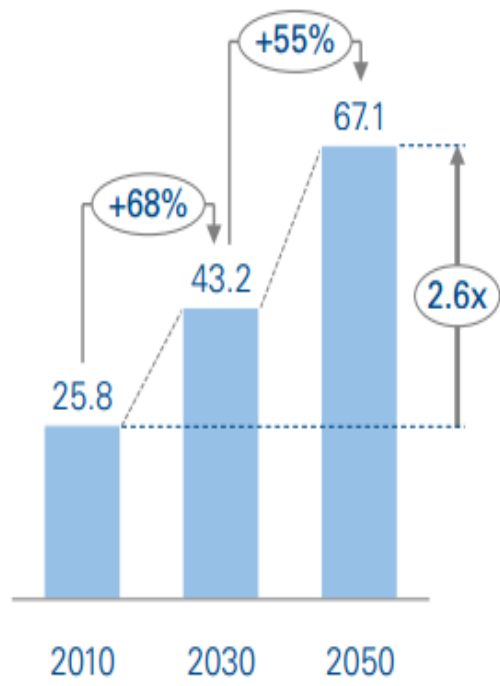
Urban mobility demand explodes

Cities are confronted with new challenges

Urban and rural population, 2010-2050 [m people; %]



Urban mobility demand, 2010-2050 [trillions pkm p.a.; %]



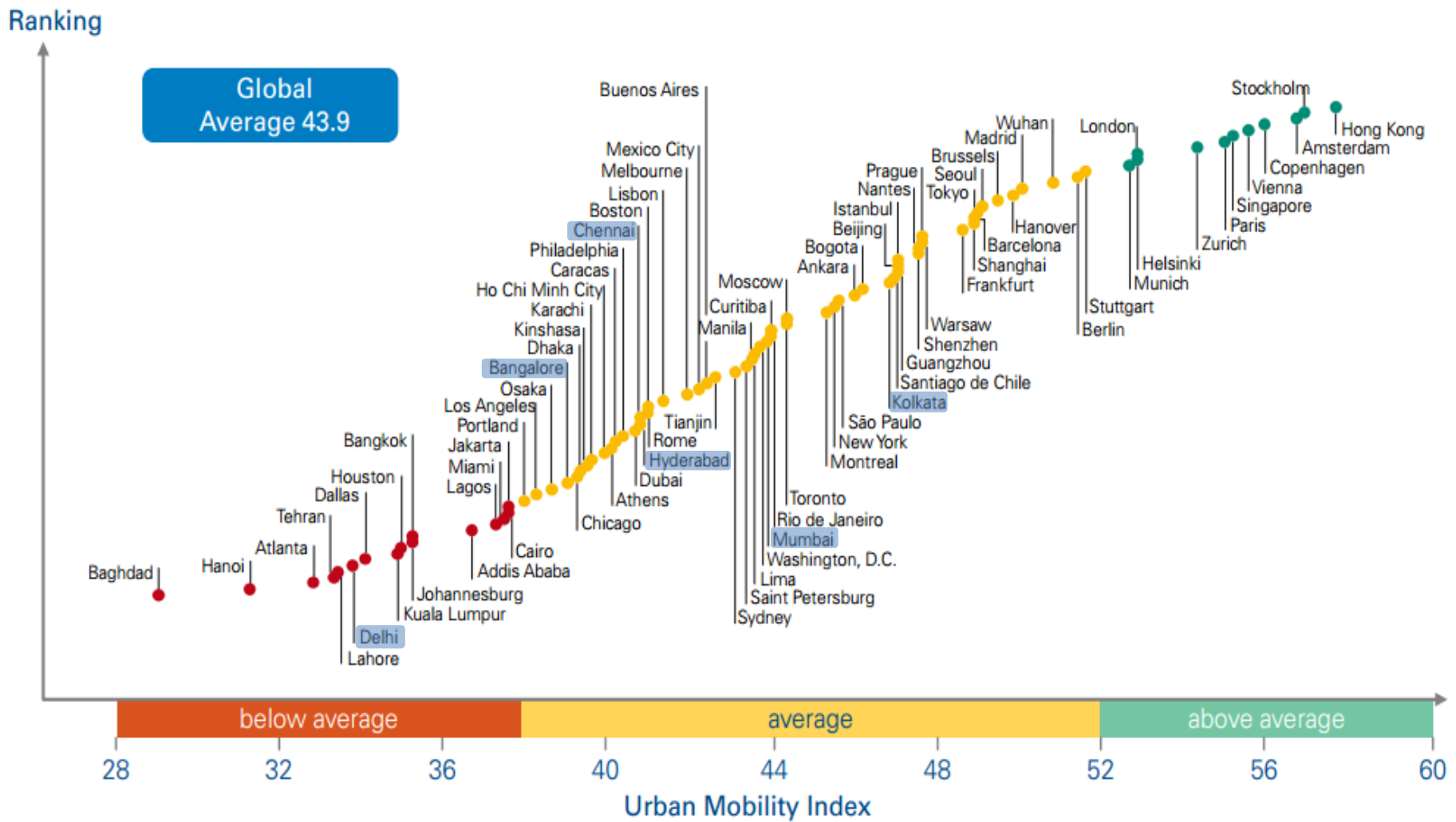
| | |
|---------------|---|
| Planet | <ul style="list-style-type: none"> Air pollution CO₂ emissions Noise Increasing ecological footprint |
| People | <ul style="list-style-type: none"> Traffic chaos/ jams Traffic accidents Poor quality of life Low productivity |
| Profit | <ul style="list-style-type: none"> Poor business growth Not attractive to investment |

Urban Rural

Source: UN Population Division, Schäfer/Victor 2000, Cosgrove/Cargett 2007, Arthur D. Little



Urban Mobility Index



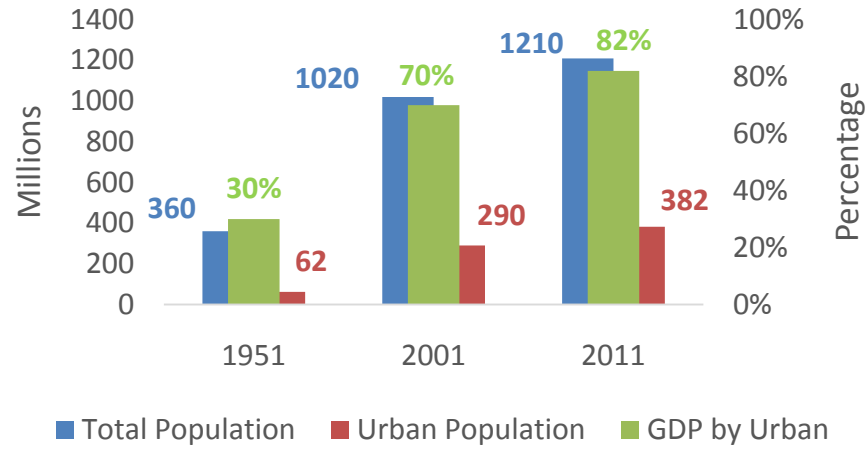
Source: Arthur D. Little Urban Mobility Index 2.0; UITP is independent of this index, which does not necessarily reflect its opinion; 100 index points for city that would achieve best performance on each criteria.

January, 2014

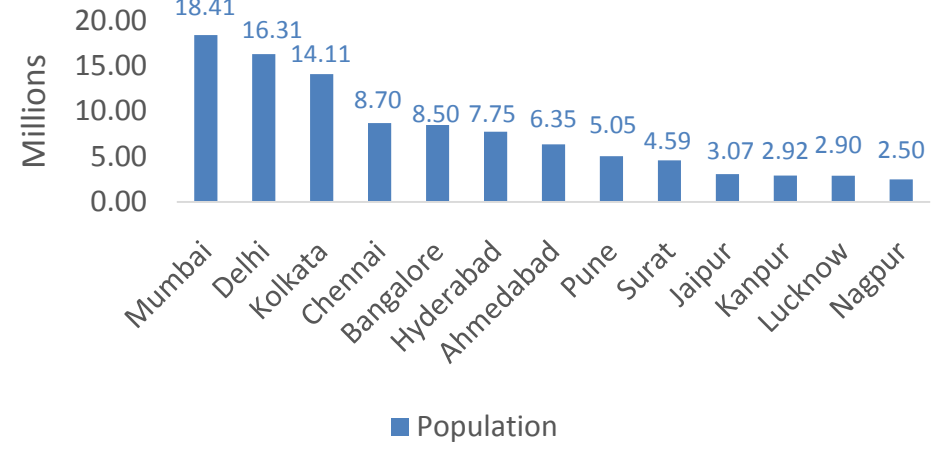


India- Urbanization Trend

Urbanisation- India

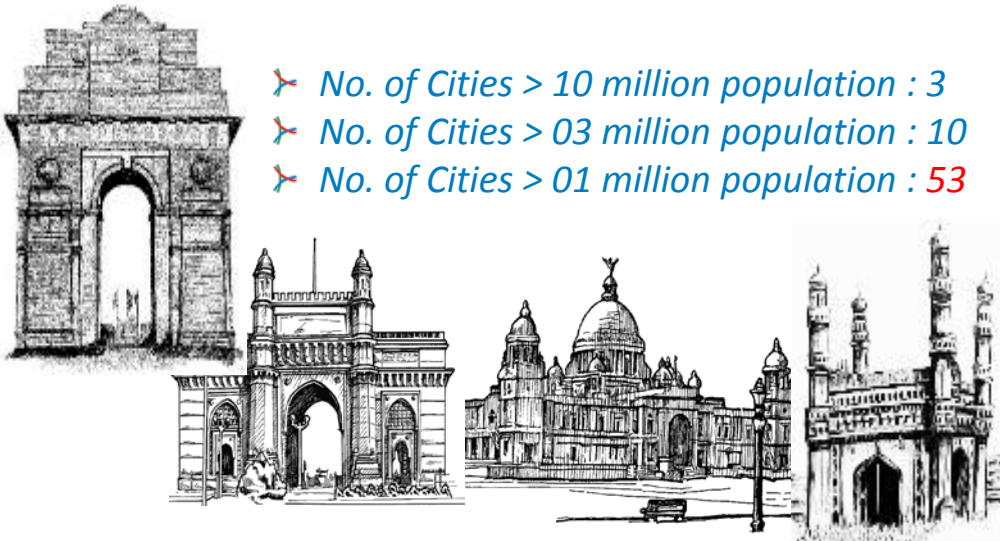
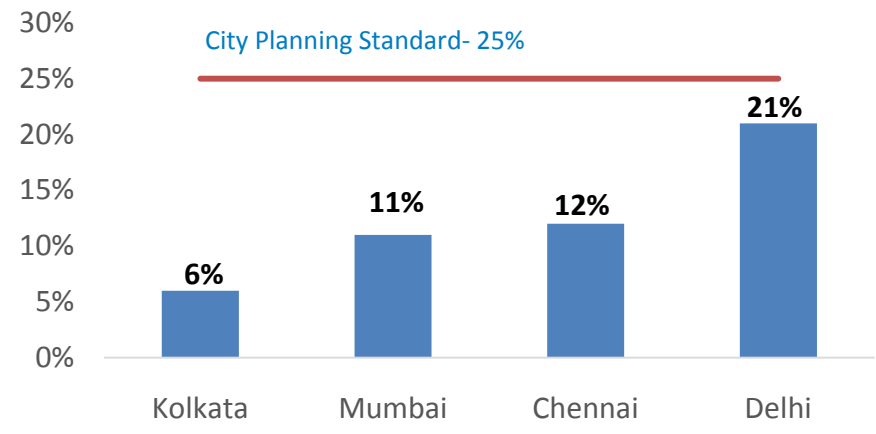


City wise Population



- ✂ No. of Cities > 10 million population : 3
- ✂ No. of Cities > 03 million population : 10
- ✂ No. of Cities > 01 million population : 53

Indian Cities- Roads as % of Area



Multimodal Integration- Need of the Hour



 *Integration levels:*

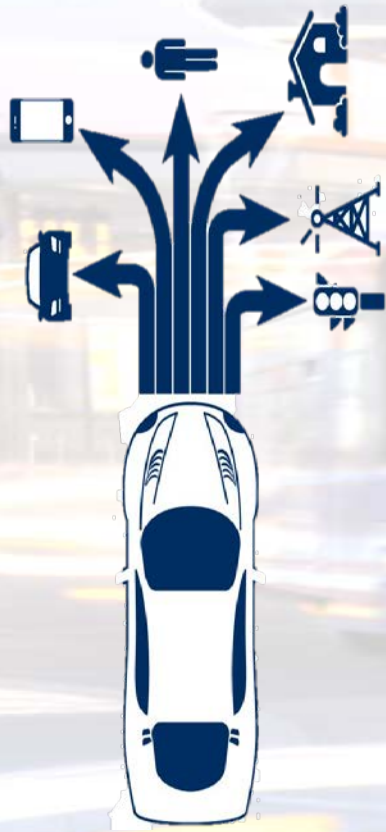
 *Physical*

 *Operational*

 *Fare*

 *Information*

Informational Integration -> Intelligent Mobility



*In vehicle
Intelligence*

*Vehicle to Vehicle
Intelligence*

*Vehicle to Infrastructure
Intelligence*

Intelligent Mobility

Intelligent Mobility has customer centricity at its core



Intelligent Mobility

BY 2020

50 Billion Connected Things

31 Billion IoT devices

4 Billion Connected People

25 Billion Intelligent Systems

250 Million Connected Vehicles

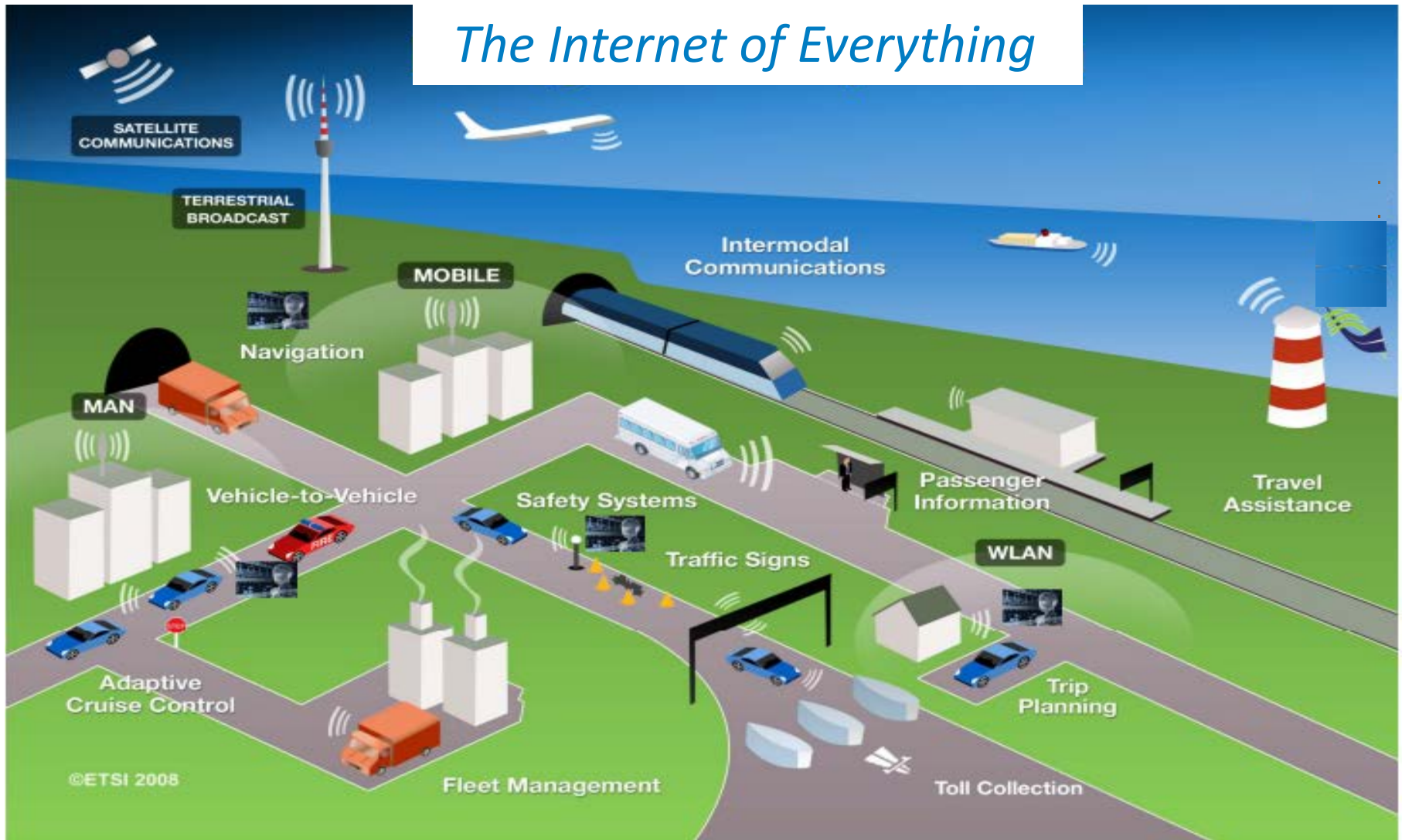
Aimed Offerings

- *Connected services*
- *Seamless multimodal Journey*
- *Interoperability*
- *Management of a shared network for data exchange*
- *Journey Planning & Ease of Transaction*
- *End-to-end user-centric experience*
- *Integration of management systems and dynamic management of boundaries*
- *Integration of methods of payment and identification*
- *Personalised Service*



Intelligent Mobility

The Internet of Everything



Conclusion

| <i>Strategy</i> | <i>Demand Management</i> | <i>Supply</i> | <i>Financing</i> |
|---|---|--|--------------------------------------|
| Build a transparent & sustainable vision | Creating Awareness | Establish a core public transport | Fare Revenue |
| Create a more demand oriented transport ecosystem with customer at the core | Influencing the behavior of individuals | Enhance quality of public transport offering | Non-fare/ Additional Revenue streams |
| Integration of Urban Policies | Influencing the behavior of businesses | Value added services | Public Funding |
| Promote competition between business models | | Integration with multi-modal packages | Public Funding |



Thank You

