

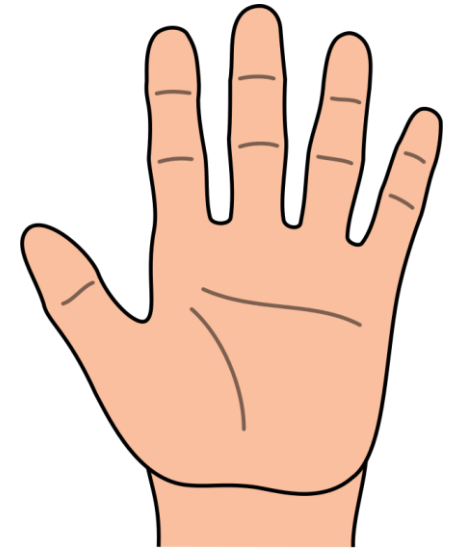
Modernizing City Bus in Future Cities



Presented by Prasanna Patwardhan

Five pillars of Smart Cities

1. Presentable
2. Efficient delivery systems
3. Effective working systems
4. Socially, Physically & Technologically Connected.
5. Financial & Environmentally Sustainable



Plan Smartly !....

Develop excellent Pedestrian and NMT Network for last mile connectivity



Execute Smartly !....

Permit Only Pedestrian, Cycles and Buses in congested areas

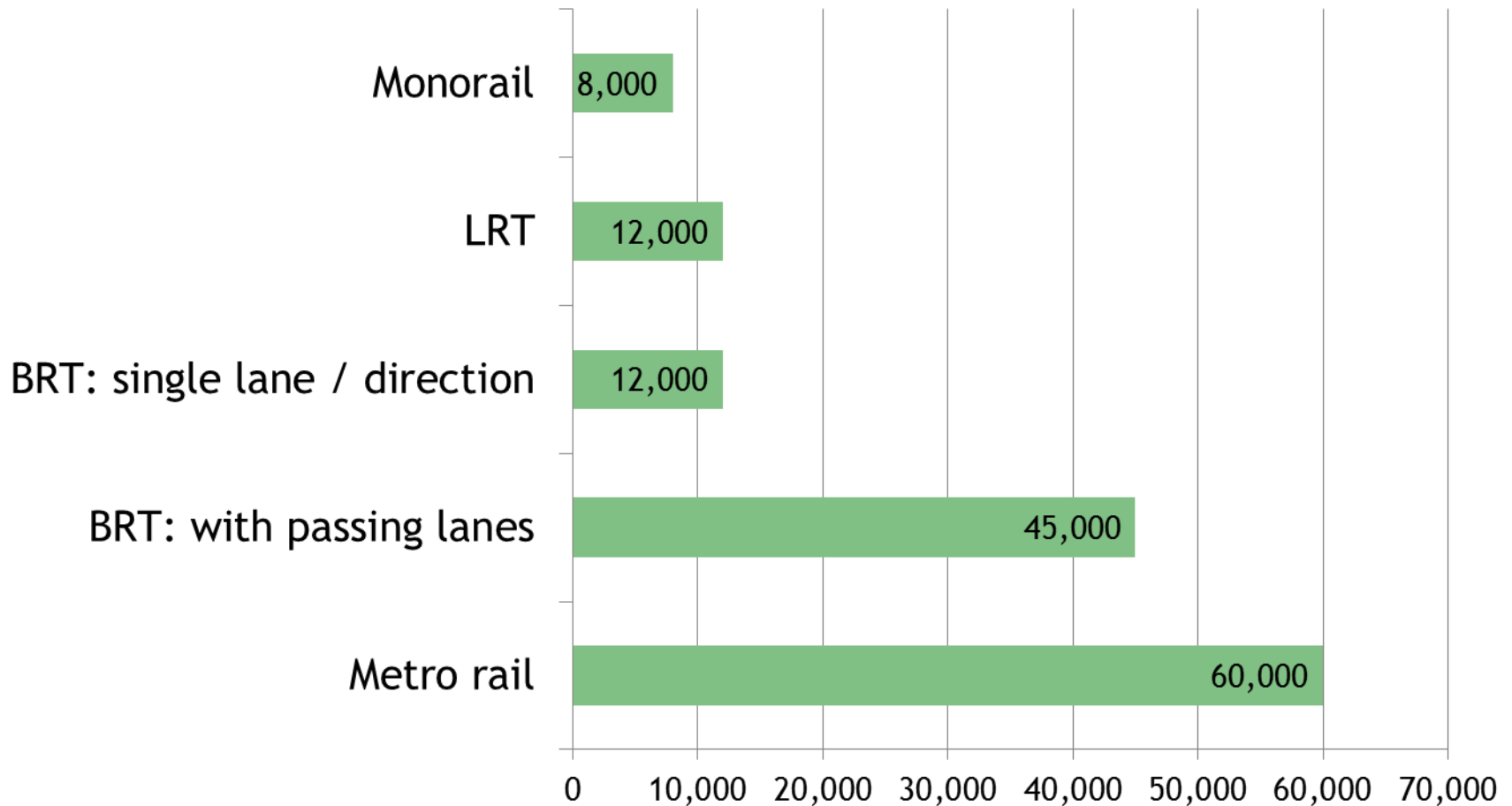


Choose Smartly !....

Plan according to traffic requirement

Capacity to carry People Per Hour Per Direction
(PPHPD)

Mode of travel



Plan to serve larger population in given budget

What can be built in 1000 Cr.



Underground metro: **2.5 km**



Elevated metro: **5.0 km**



Monorail: **6.7 km**



BRT: **67 km**

Key features of high quality transit

	BRT	Metro	LRT	monorail
Dedicated ROW	✓	✓	✓	✓
Safe, easy step less boarding	✓	✓	✓	✓
Electronic fare payment	✓	✓	✓	✓
Real-time passenger information	✓	✓	✓	✓
High quality service can attract users from personal vehicles	✓	✓	✓	✓

Key features of high quality transit

BRT does some things that others don't & at much lesser cost

	BRT	Metro	LRT	monorail
Quick & easy access to stations	✓	✗	✓ / ✗	✗
Capacity over > 20,000 pphpd	✓	✓	✗	✗
Multiple services per corridor	✓	✗	✗	✗
Express services	✓	✗	✗	✗
Affordability for customers & the city	✓	✗	✗	✗

Next Generation Buses!....

Double Articulated city Bus



Next Generation Buses!....

Articulated Tourist Double Decker Bus



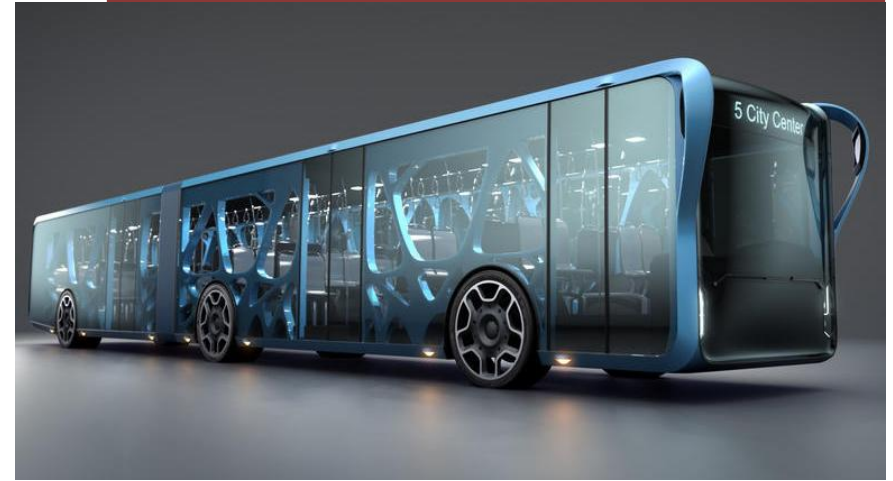
Next Generation Buses!....

Hop on Hop Off Double Decker Bus



Next Generation Buses!....

Hybrid and Electric Buses



Next Generation Buses!....

Bio CNG Buses



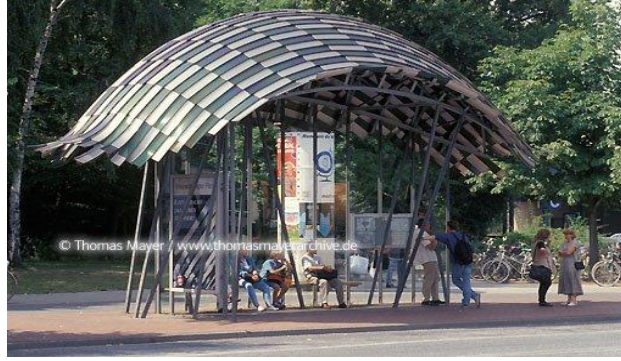
Food for thought:- Win – Win situation
Combine “Swaccha Bharat Abhiyan” to City bus Service

Next Generation Buses!....

Future Concepts



Next Generation Bus Stops!....



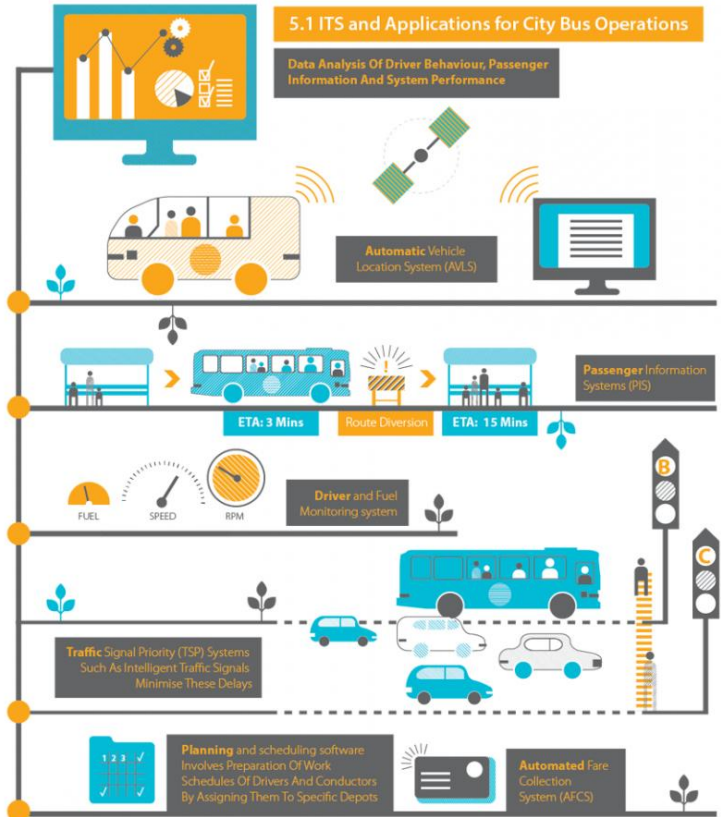
Next Generation Bus Ports!....

Bus Port , Baroda



Technology - Intelligent Transport Systems!

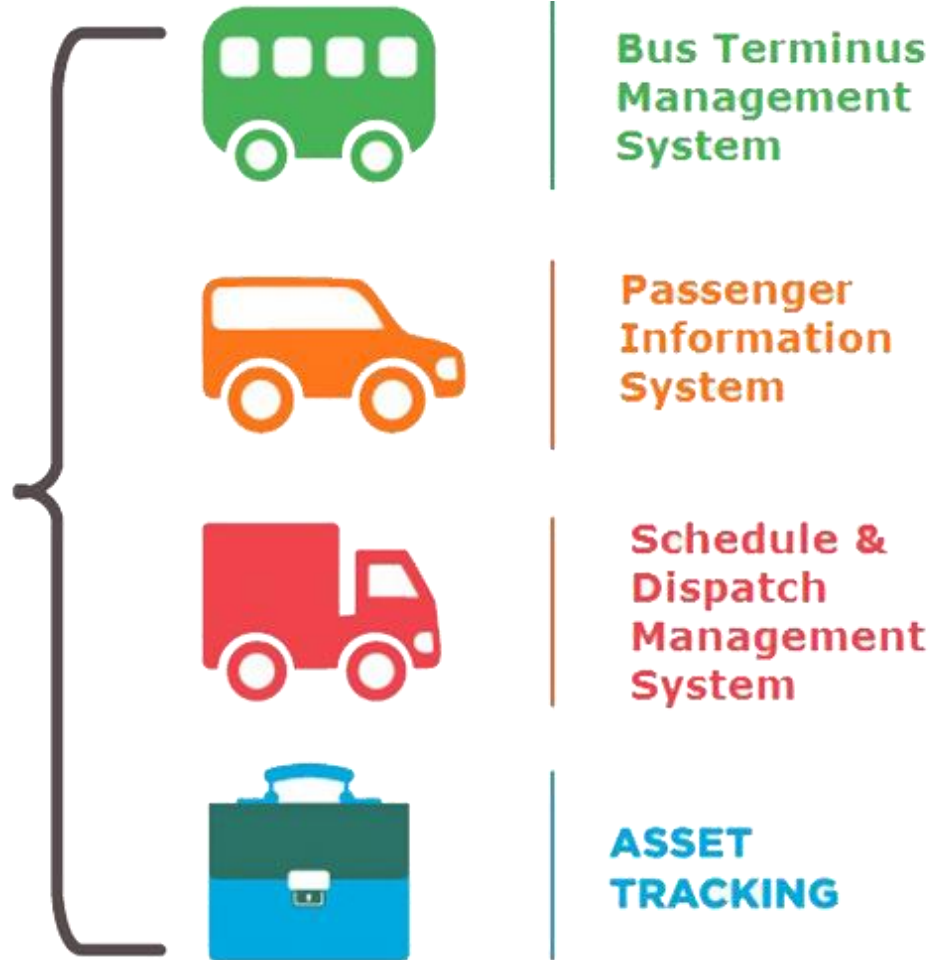
5 INTELLIGENT TRANSPORTATION SYSTEMS IN CITY BUS SERVICES



5.2 Challenges in ITS Implementation

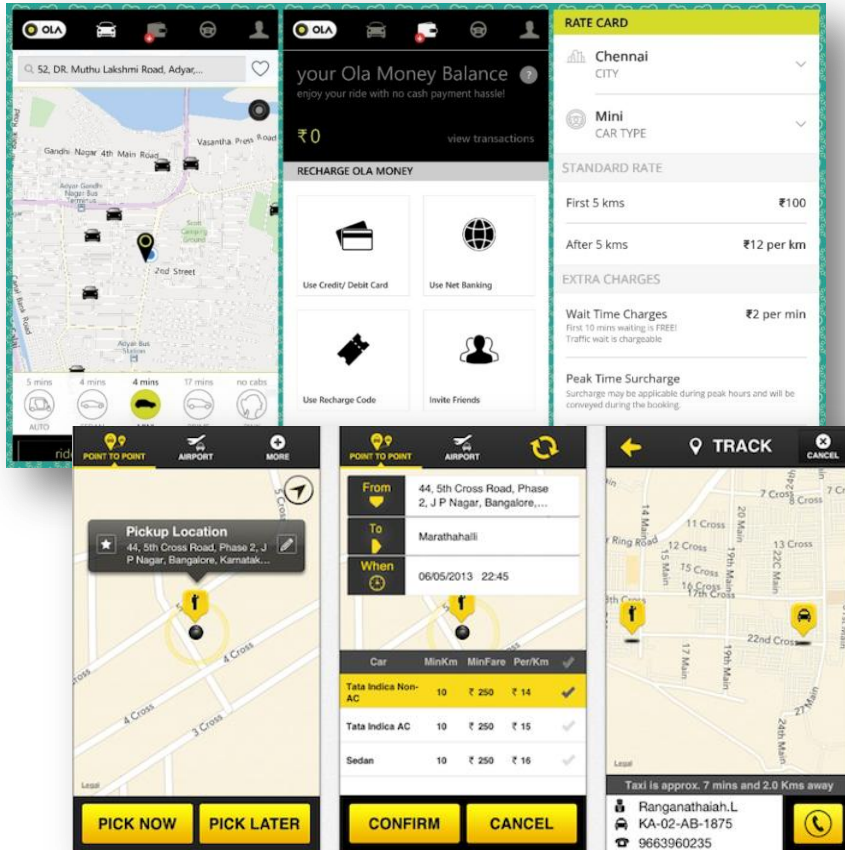


5.3 Way Forward for ITS in India



Technology – Disruptive Business Models!

Taxi Aggregators



Works on MOBILE App

Aggregation of Cabs | Doesn't own a Vehicle

Taxi on Demand - Real-time

100% GPS based Operation

Competing with Local Auto



Technology –Optimum Utilization of resources!



Owners can subsidize their cost by allowing people to ride along with them

Travelers can find suitable Car ride at cheaper cost

Optimum Utilization of resources

It is a green initiative supported by Government

Traveler can view profile of rider before using services

Find a ride

From

To

Find

Share city-to-city car journeys with a trusted community of 20 million verified members



★ Rating left for **K Subramaniyan**
"An excellent co-traveller. We chatted on various topics, on time, no hassles!"
Urmil Bhatt



★ Rating left for **Vikas Bajaj**
"A perfect gentleman! Kind of person I will be in touch. Highly recommended!"
Aditya Gour



★ Rating left for **Som Banerjee**
"An excellent company. Couldn't have asked for a better co-traveller!"
Preetham L

As seen on TV



Best Travel Prices

BENGALURU
CHENNAI

prices from
800

Trust, Safety & Insurance



Technology – On Demand Transport!

Mobile app based Shuttle bus services

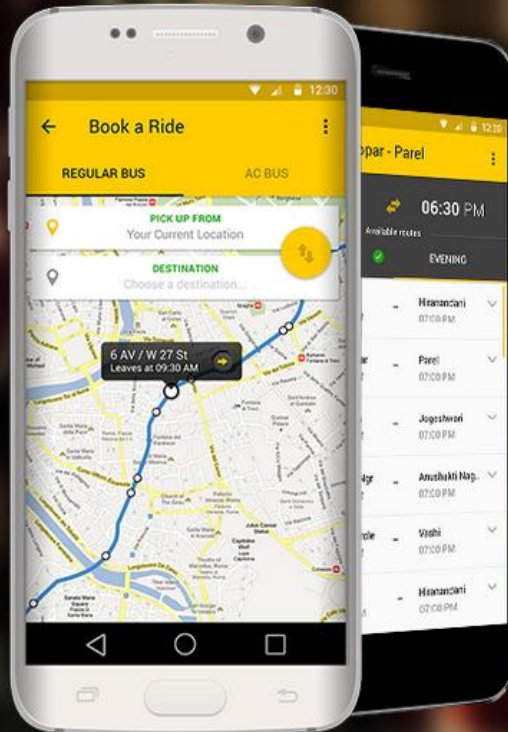
Very convenient to book seats

Real time information on bus location, seat availability

Option to fill in gaps of Public Transport

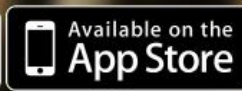
Routes on demand as per traveler convenience

cityflo | How it works | Current Routes | Suggest Route | FAQ | Contact Us



An all new way to travel to work

Point to point bus service for your daily commute to office



Mobile Number

Get App!

Technology – Smart Employee Transport!



**SMART
Employee
Transport**

**Automated
Intelligent
Routing**

**Real time
information
to users**

**Proactive
Vehicle
Delay Risk
Management**

**Safety Mgt.,
Vendor Mgt.
&
Billing**

**Reports,
Compliances
&
Analytics**



Safe, Efficient and Reliable Community Transport Provider

SERVICES ▾

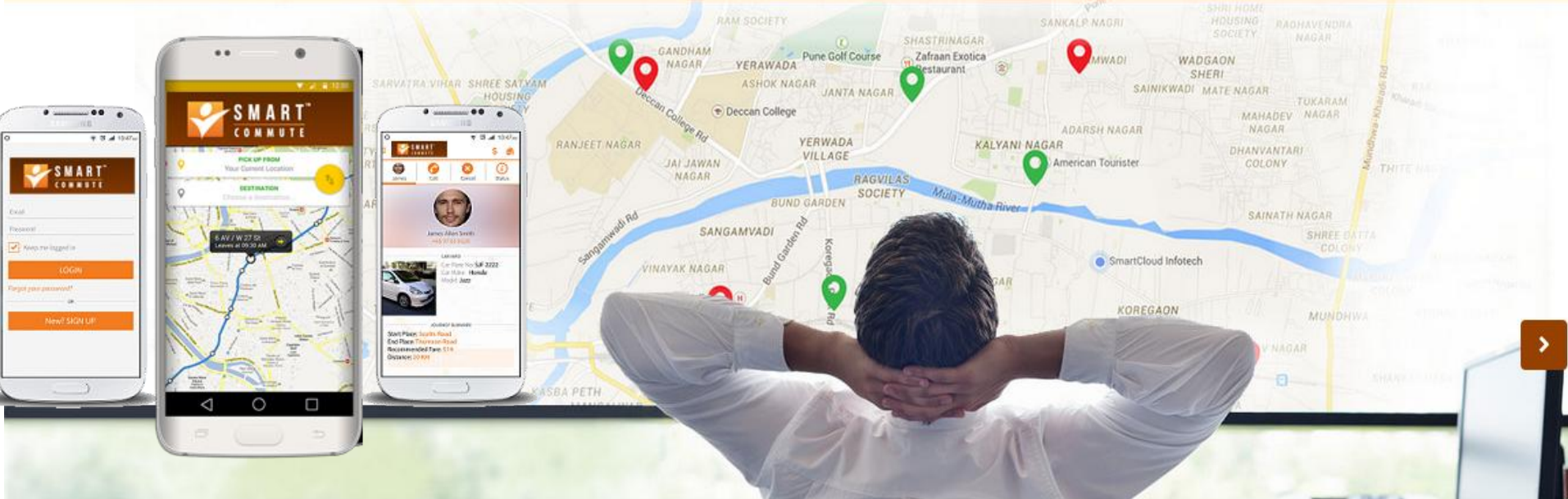
KEY FEATURES

ABOUT US ▾

GALLERY

REQUEST FOR DEMO

CONTACT US

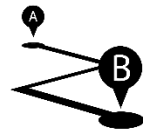


**Bring in Reliability, Safety & Efficiency
to your employee transport operations**

Commuter services
ordered and paid for by employees
directly



Simple one touch booking



Convenient Routes and
Frequency



Choice of Door To Door



Know exact location / ETA



Attractive Pricing
Hassle free ticket less transactions



High Reliability



Safety

Technology – New Business Models!

Intercity Bus Aggregators

The image shows two screenshots of bus aggregator websites. The top screenshot is from RedBus, displaying search results for Pune to Nagpur on 15-Dec-2015. It lists options from MSRTC (4 buses, 132 seats, starting at 01:00 PM) and VRL Travels (Volvo A/C Multi Axle Semi Sleeper, 40 seats, starting at 06:00 PM, Rs 700). The bottom screenshot is from Traveleyaari.com, showing a list of bus operators for the same route. The table below summarizes the data from the Traveleyaari screenshot.

Bus Operator	Departure	Duration	Arrival	mTicket	Seats	Fare
Kanker Roadways - KANKER ROYAL S... Multi-Axle Volvo, A/C, Semi Sleeper, 2 + 2 (51)	2:30 PM Pickups	14h Arrive next day	4:30 AM Dropoffs		51	₹ 800
Maharashtra Travels (Pune) - MAH... A/C, Sleeper, 2 + 1 (32)	3:00 PM Pickups	13h Arrive next day	4:00 AM Dropoffs		24	₹ 899
Royal Travels (Nagpur) A/C, Sleeper, 2 + 1 (30)	3:30 PM Pickups	15h 30m Arrive next day	7:00 AM Dropoffs		27	₹ 800
Raj Tour And Travel A/C, Sleeper, 2 + 1 (30)	3:30 PM Pickups	14h 20m Arrive next day	5:50 AM Dropoffs		23	₹ 749
Pooja Travels (Nagpur) - SUYOG T... A/C, Sleeper, 2 + 1 (30)	3:30 PM Pickups	15h 30m Arrive next day	7:00 AM Dropoffs		26	₹ 700

Aggregation of Bus Inventory

Works on 10% Commissions Model

SALES CHANNEL

Website | MOBILE | Agent GDS

67000 ROUTES

1800 BUS OPERATORS



Leaders those are changing the world !....



“Advance City is NOT a Place
Where the Poor Moves in a Car,
Rather it is where the *Rich use Public Transport*”

Enrique Penalosa, Former Mayor Bogota.



Leaders those are changing the world !....

New York: Times Square is for People not for Cars



Mr. Bloomberg
Mayor of New York
"If you give me
Times Square, I
want to give it
back to the
people".

Leaders those are changing the world !....

South Korea: Seoul is for People and not cars”.

1970

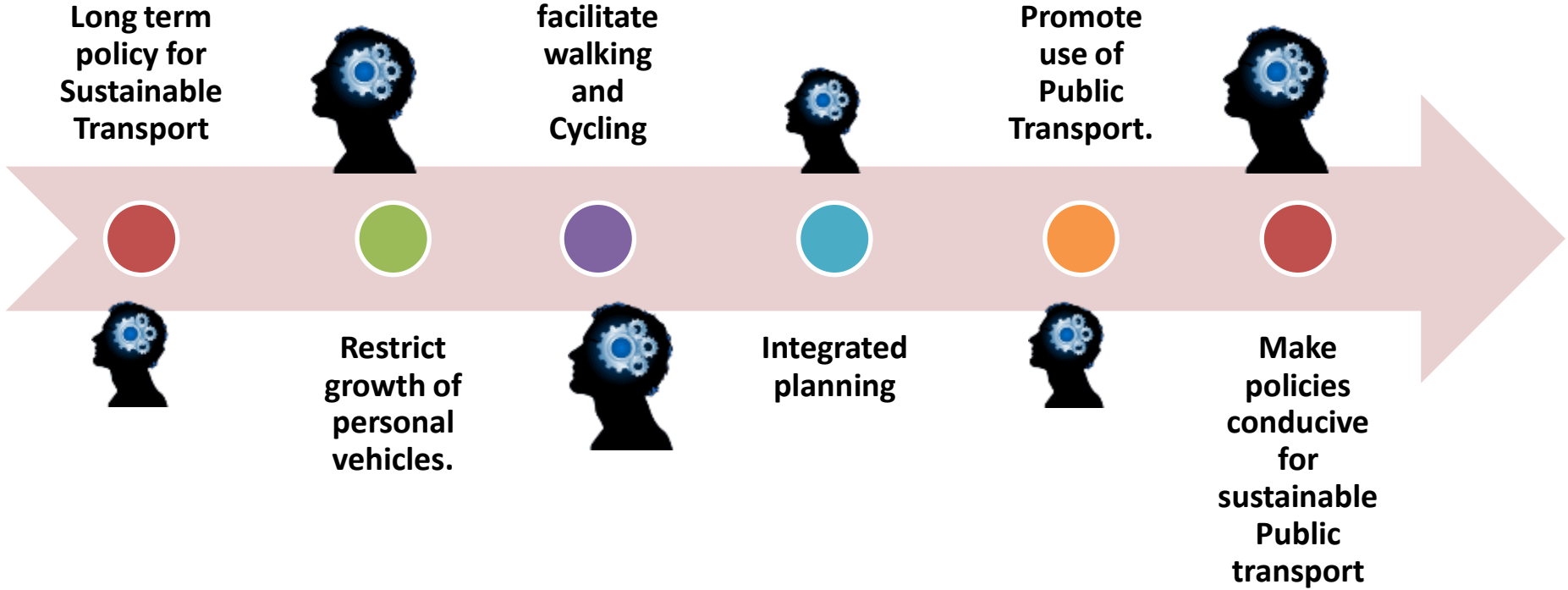


2005



Lee Myung-bak
Mayor Of Seoul
Latter on became
President of S. Korea
“I will serve the
people in a very
humble way”.

65 additional flyovers are slated for removal



Let us build Cities for People

- Where People have more respect than Automobiles.
- Where Mobility is a pleasure and not a torture
- Where technology is used for betterment of Peoples life
- Where children can freely go to school, cycling or walking
- Where people have many opportunities to make friends.
- With lot of greenery & public places to keep citizens happy & healthy.
- Which is Smart, efficient, effective & Sustainable

