



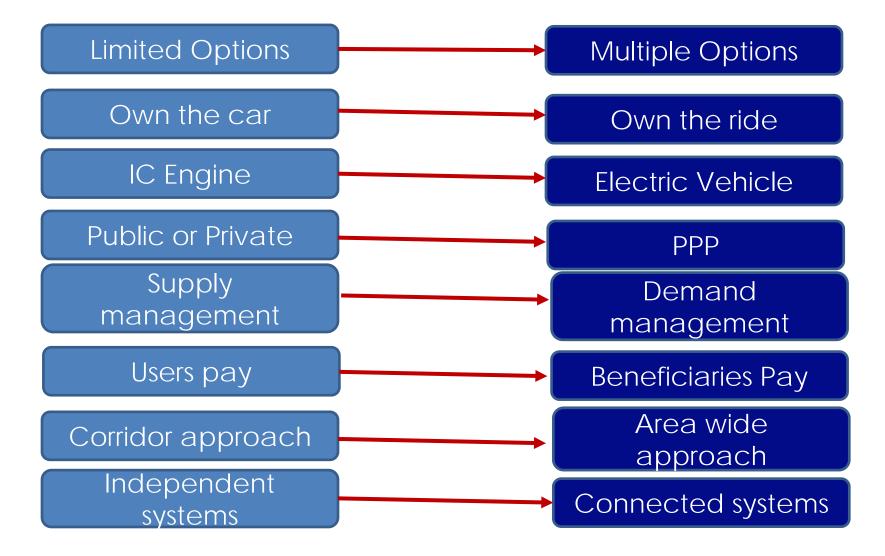
#### **CODATU 2017**

## The Future of Urban Mobility

#### O.P. Agarwal CEO, WRI India



#### **Emerging trends**



### Limited to Multiple options

- Personal motor vehicle
- Taxi
- Autorickshaw
- Bus

#### People have a much wider variety of choices

- Personal Motor Vehicle
- Uber / Ola premium
- Uber / Ola Pool
- Radio Taxi
- Aggregated shuttle buses
- Taxi
- Autorickshaw
- Metro
- BRT
- Bus

#### Own the "Car" to Own the "Ride"

- Growth of the sharing economy
- Avoid hassles of repairs, parking, etc.
- Avoid hassles of driving Uber/Ola
- Same car can serve multiple rides

#### • Reduces:

- Idle time for a car
- Need for parking facilities
- Fuel consumed
- Emissions
- Congestion





## IC Engine to Electric Vehicle

- Strong push towards electric vehicles
  - Plan to register only EV from 2030
- Primary drivers:
  - Air pollution
  - Burgeoning oil import bill
  - Excess electricity
  - Rapidly growing emphasis on renewable energy
- Technology still maturing
- Entire eco-system still needs to emerge





### Public/Private to PPP

- Management of public transport systems was either a public monopoly or a highly competitive private market
- Emerging trend is a PPP model
  - Public planning and management
  - Private operations on structured contracts





## Supply management to demand management

- Focus shifting from road widening and increasing capacity of public transport to reducing demand for transport:
  - Mixed use planning
  - TOD
  - High parking fees
  - Congestion charging
  - Shared rides
  - Integrated public transport systems





### Users pay to beneficiaries pay

- Users are not the only beneficiaries of public transport – there are others as well
  - Land Value capture
  - Increased fuel taxes
  - Increased parking fees





# Corridor approach to area wide approach

- From building metro's on one or two corridors to multi-modal and integrated systems:
  - Feeder buses
  - Public bike sharing
  - Parking facilities
  - Walkways

Focus on Origin to Destination Planning





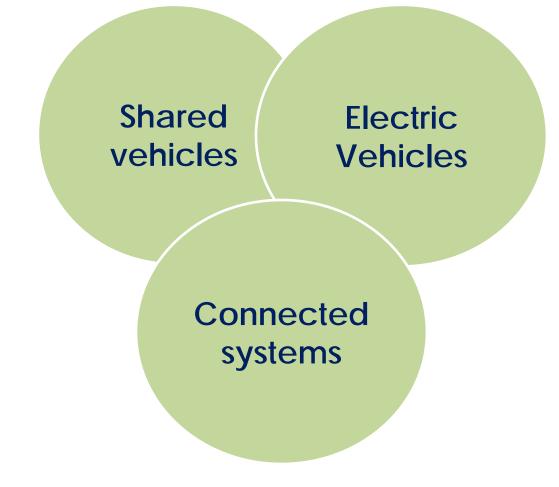
## Independent systems to connected systems

- From each mode on its own to multi modalism through inter-connections:
  - Passenger Information systems
  - Fare collection systems
  - Interchange facilities
  - Signage
  - Ownership and management
  - Governance





#### What seems to be the future



Helsinki plans to make private car ownership obsolete by 2025

## **Thank You**