

Urban Mobility post COVID-19



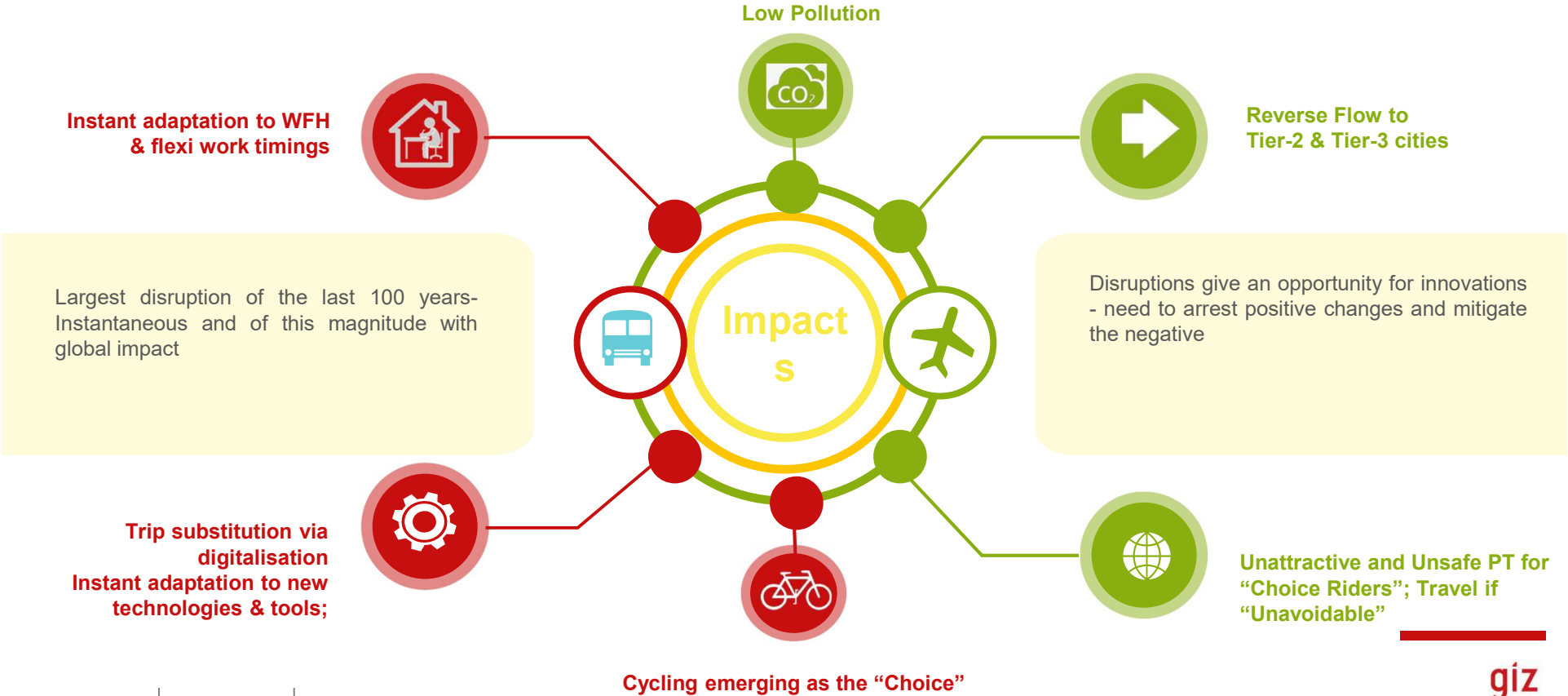
Implemented by



Laghu Parashar
Deputy Project Director, SMART-SUT
GIZ, India

Covid 19 “Disruption”

Low Pollution



Impact

1

Economic Disruption

The economic disruption caused GDP contraction and hence closure of business, unemployment and reverse migration

Safety Perception

Increased sensitivity towards safety causing avoidance to crowded locations and being contactless

2

3

Government Commitment

Rise in dependency on government for maintaining essential services

Impact

Reduction in travel demand

Preferences to personal travel choices

Revenue gap and Fiscal support for public transport systems

Behavioural Shifts

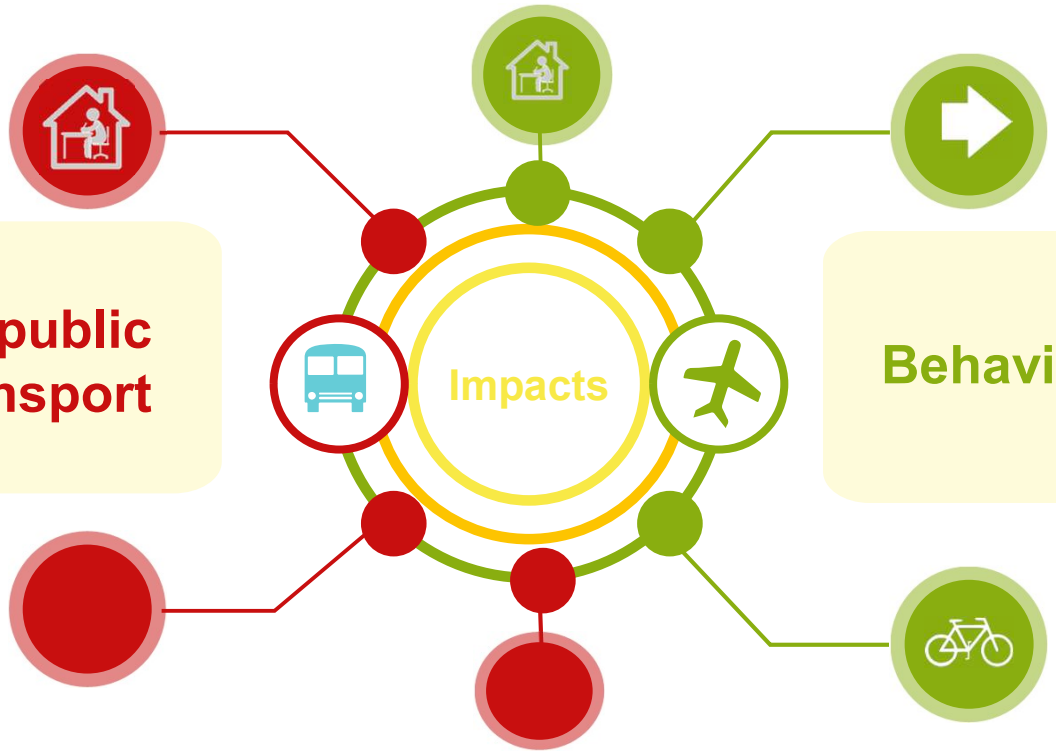
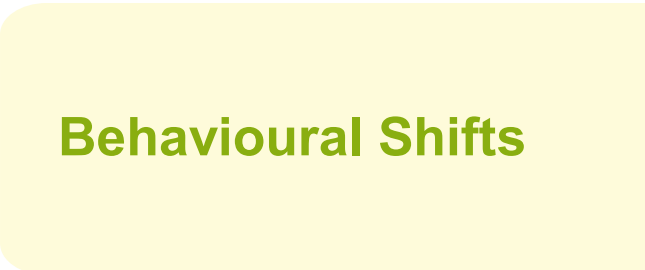
Impact on public transport

Impacts

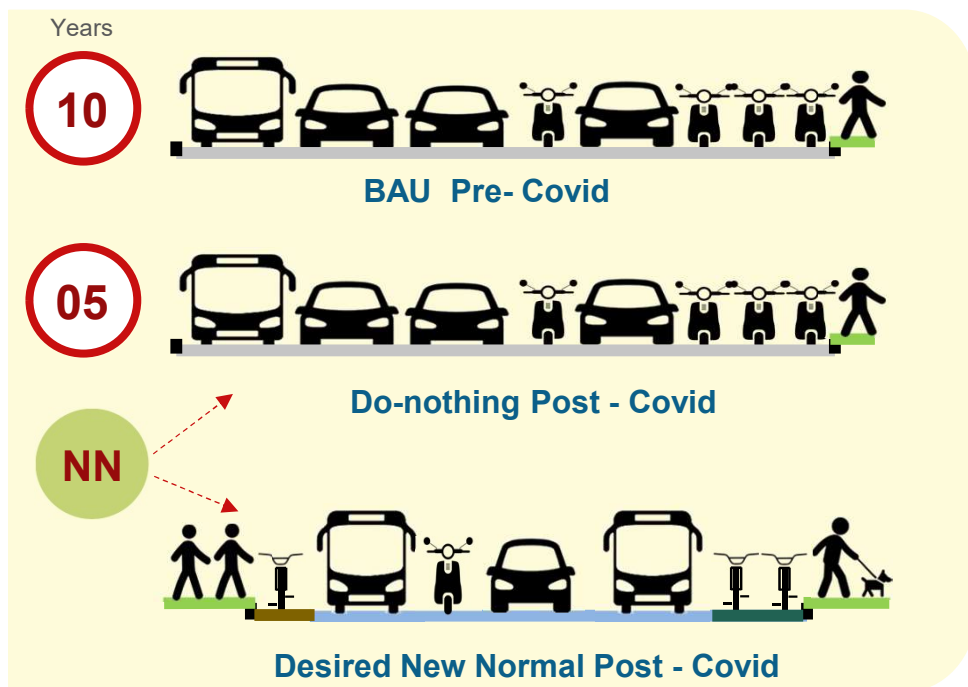
Emergence of cycling as a choice

Digitalization of public transport systems

Avoidance towards public transport



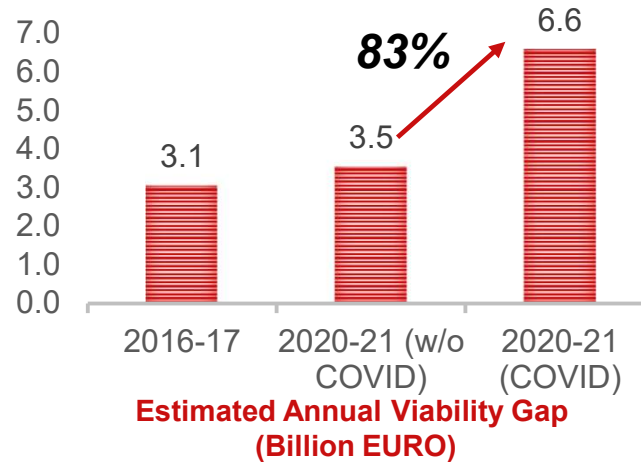
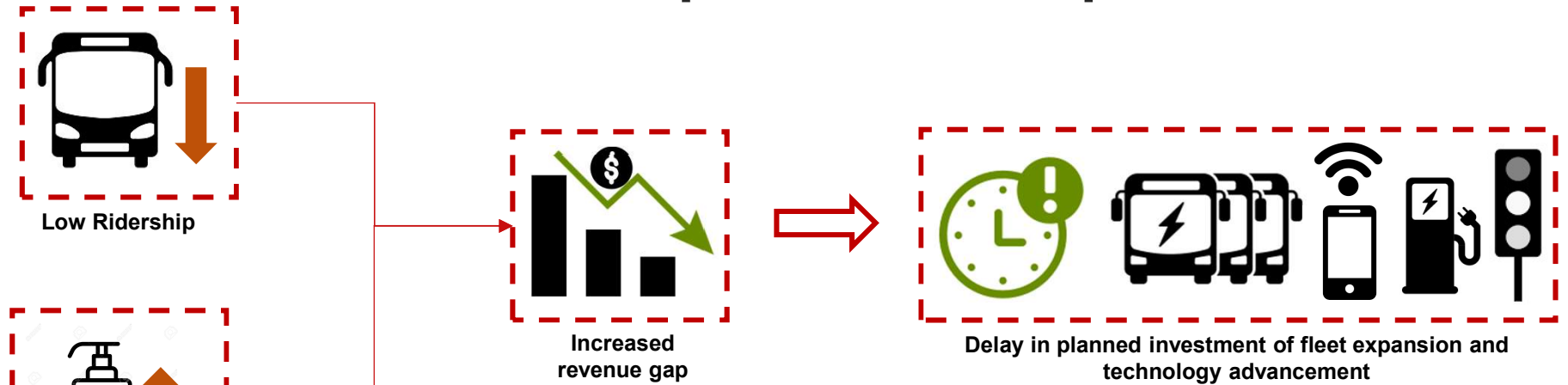
Reconfiguring Mobility Landscape



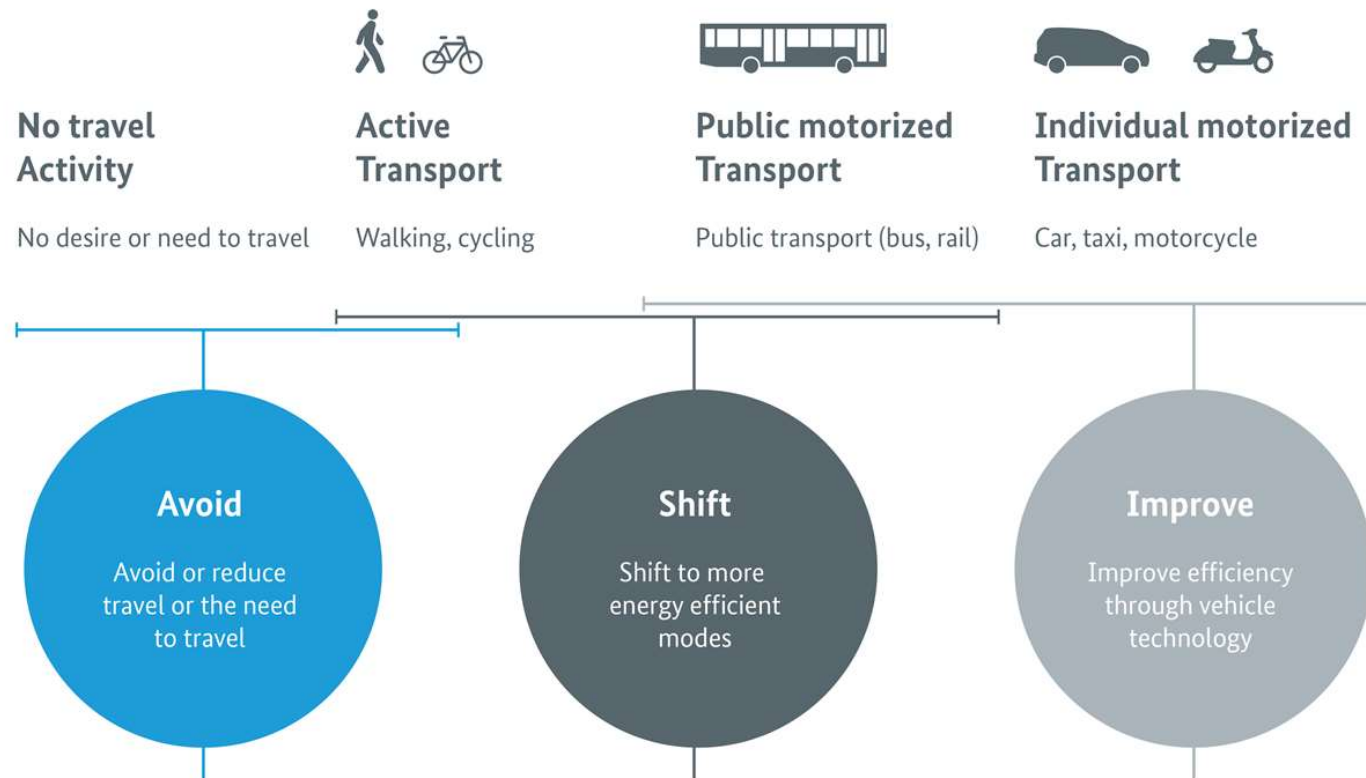
Guiding Principles for “New Normal”

- Ensure that **gain** due to change in travel behaviour sustains
- **Reset priorities, standards and focus on quality** (with quantity)
- Ensure **robust digital infrastructure**, especially in T-2 & T-3 cities
- **Bring cities closer** - High-speed/semi-high speed rail connectivity for region, buses within city
- **Raise and prioritise funds**- “who should pay” to create affordable infrastructure
- **Build capacity** of the cities/states

Public Transport Disruptions



Pillars of Recovery



1. Investment in NMT Infrastructure



BAU



Desired



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2. Investment in Bus Priority



BAU



Desired



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3. Investment in Digitalization



BAU



Desired



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4. More buses, better buses and Integrated Metro rails



BAU



Desired

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KEY CHALLENGES

Financial management challenges

- **Working capital to pay staff salaries**
- Financial needs for fuel expenses, maintenance expenses
- Capital for payment to operators

Operational and service delivery challenges

- **Service planning for uncertain demand**
- **Crowd management inside and outside buses**
- Difficulty in flexible scheduling

Crew management challenges

- **Training of staff on physical distancing**
- **Lack of equipment to ensure safety of crew**
- **Unavailability of crew**

Fleet management challenges

- **Availability of sanitization material**
- **Availability of fleet infrastructure post lockdown**

*WB & UITP

4. But where are the funds?

Inconsistent funding at National level

Poor bankability of STUs

Limited revenue sources with ULBs

Significant share of budget goes towards road infrastructure

Reforms based national funding program – 10 years

Divert the state/ULBs budget to PT and NMT from road infrastructure

Identify new revenue sources

Towards Behavioural Shifts



Pop-up Bicycle Lanes and Dedicated Bicycle Lanes

Pop-up Bicycle lanes: Bangalore, Berlin, Milan, London etc

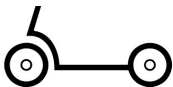
Dedicated Bicycle Lanes: Cycles4change Challenge-India; Bogota- 35 Kms, Paris- 50 kms, Medellin- Increase by 50%, Milan- 22 Miles



Development of Vehicle Free Zones

Stay Healthy Streets- Seattle

Paris- 30 streets as pedestrian only



Stimulus for shared/micro mobility

Medellin: 50000 electric bikes | Rome- Guidelines for shared electric scooters | Middlesbrough- legislation for rented e-scooters



Promoting Green Mobility

Incentive schemes for 10 cities in China | Guangzhou announced a subsidy of 10000 RMB for New Energy Vehicles



Acceleration of Mobility as a Service

Israel launched a MaaS pilot project for a tailored commuting system to revamp its rigid transport network

Towards Public Transport Systems



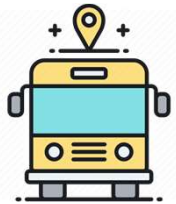
Long-term financial support

Netherlands adopted a €160 million scheme | Germany implemented a €6 billion scheme | Italy announced scheme to reimburse all the expenses



Green recovery of public transport

European Commission has been urged to set up a multi-billion euro grant scheme for zero-emission buses
Federal Transit Administration (FTA) (US) announced approximately \$130 million in grant selections through the Low- or No-Emission (Low-No) Grant program



Digitalization of public transport

Shanghai and Nanjing, for example, have put QR codes on buses and metro trains
In Auckland, an app to inform passengers whether an approaching bus or train for physical distancing
Washington Metropolitan Area Transport Authority (WMATA) roll out contactless payments in an integrated manner
Digital India initiative



Interaction with Private Players

European Union has urged that flexibility from on-demand and new mobility services can complement the public transport service

Funding for Resilient PT Systems



Well developed PT System



Wide and efficient NMT Infrastructure

Beneficiaries



Public Transport users



Non Public Transport users



People benefitted from transit corridors by better service access



Wider society which benefit from lower pollution, accident risk and increased employment

**Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH**

Registered offices
Bonn and Eschborn

Friedrich-Ebert-Allee 36 + 40
53113 Bonn, Germany
T +49 228 44 60 - 0
F +49 228 44 60 - 17 66

Dag-Hammarskjöld-Weg 1 - 5
65760 Eschborn, Germany
T +49 61 96 79 - 0
F +49 61 96 79 - 11 15

E info@giz.de
I www.giz.de