Standard Operating Procedures (SOPs) for Bus Transport post COVID19 Lockdown

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german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by
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Green Urban Mobility Partnership

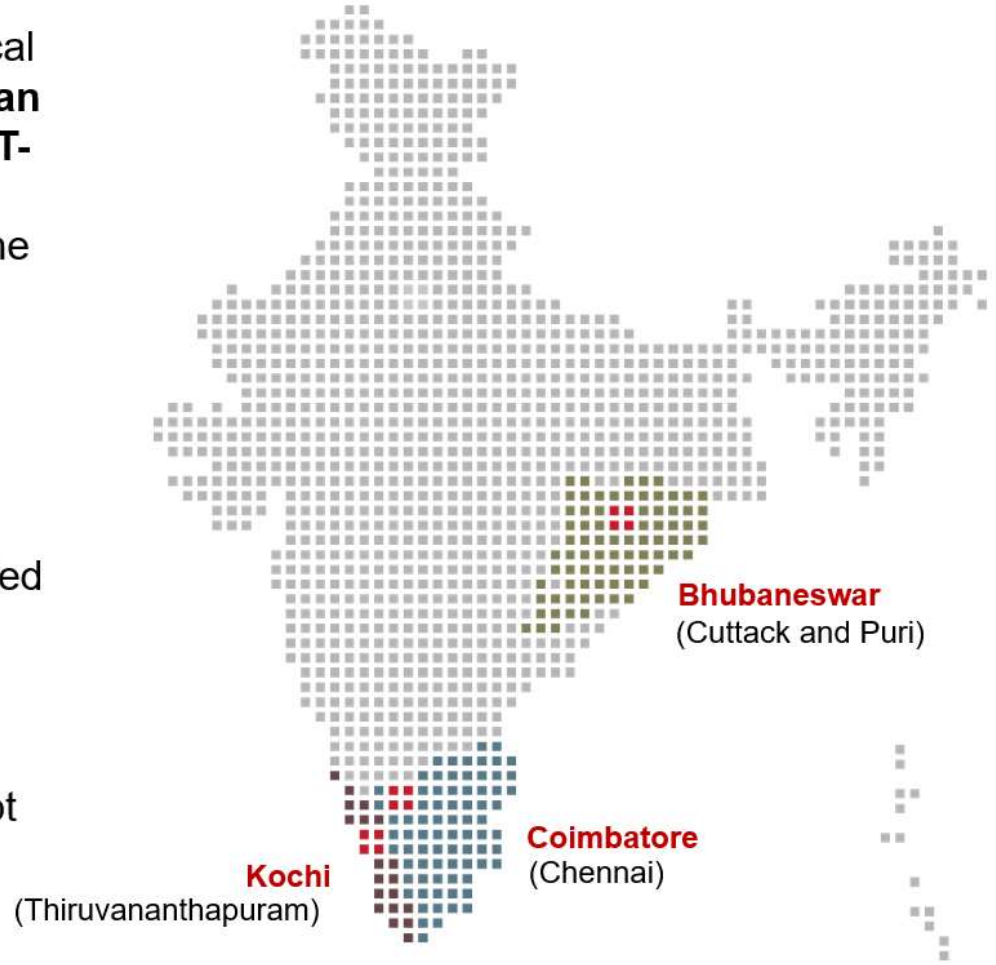
SMART-SUT PROJECT BACKGROUND

- **Project Brief:** GIZ is implementing the bilateral technical cooperation project **"Integrated and Sustainable Urban Transport Systems for Smart Cities in India (SMART-SUT)"** on behalf of the Federal German Ministry for Economic Cooperation and Development (BMZ) with the Ministry of Housing and Urban Affairs (MoHUA) as a political partner

- **Project Objective:** Improvement in planning and implementation of sustainable urban transport in selected cities

- **Project Cities:** The implementation focuses on the pilot cities of Bhubaneswar, Coimbatore, and Kochi

Partner States & Cities



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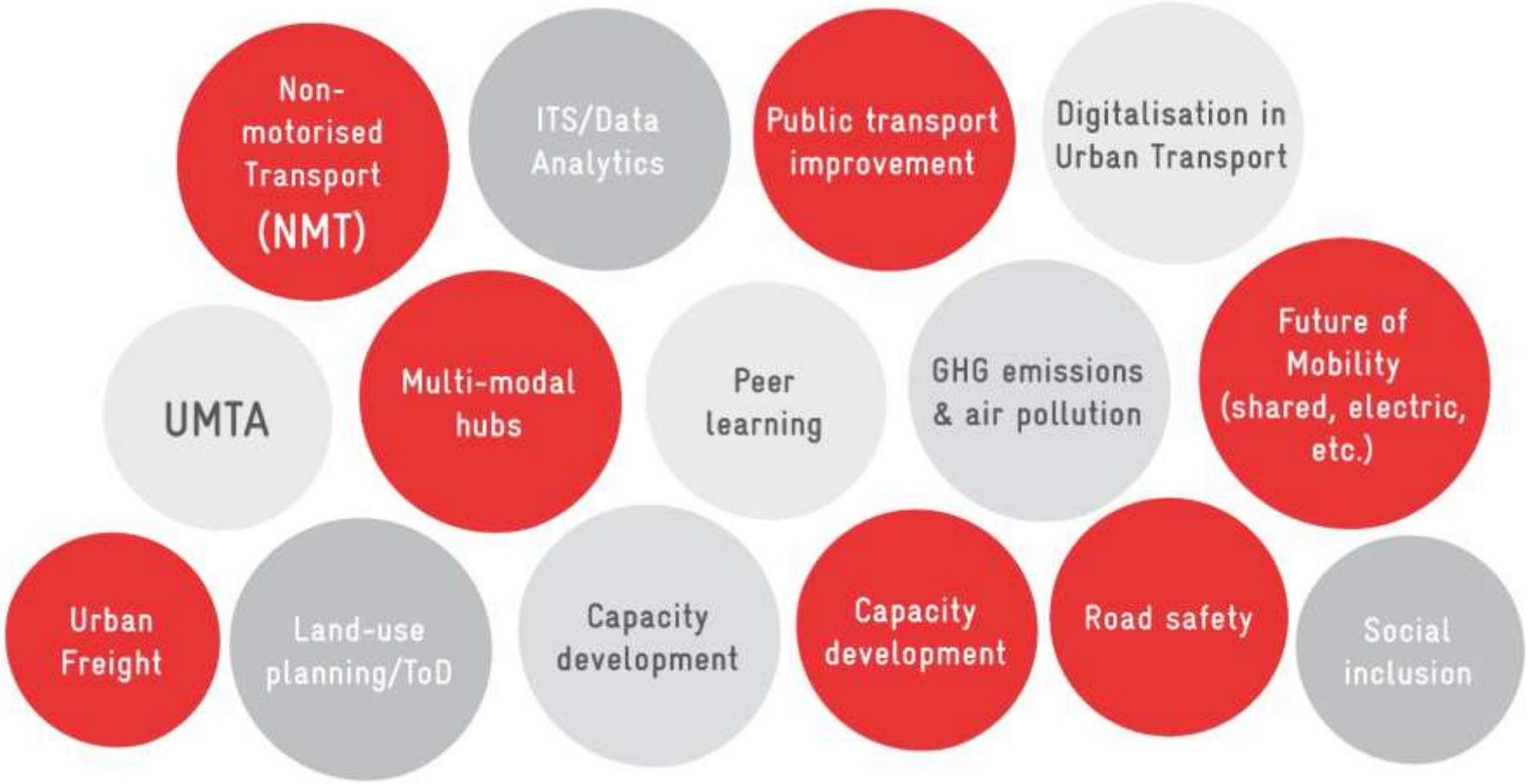
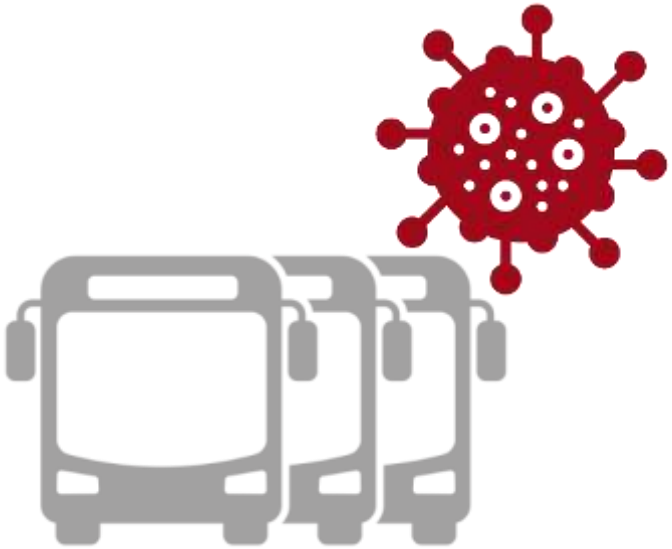
KEY SUPPORT AREAS



PUBLIC BUS TRANSPORT & ITS ROLE DURING COVID-19 LOCKDOWN



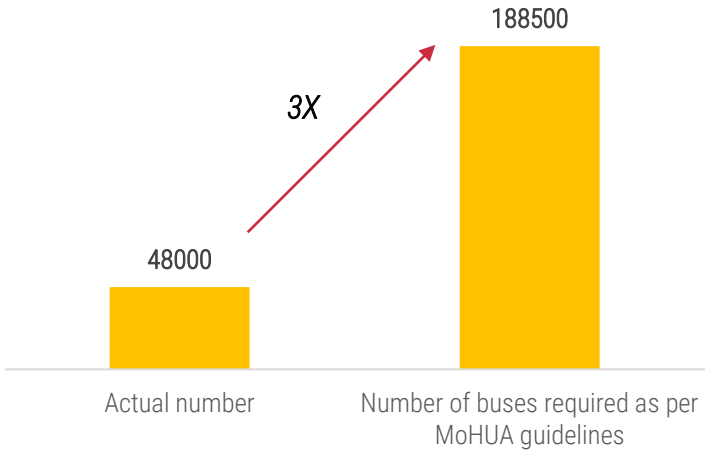
BUS TRANSPORT IN INDIA

Close to 75% of public transport trips in the country are by bus+

149,000
Public Buses

Served by **52** Govt. owned state transport undertakings and special purpose companies

Number of buses in Urban areas



Source: Road Transport Yearbook, MoRTH; Performance of STUs, CIRT; Efficient and sustainable city bus services, SUTP

25 Billion
Passengers served in 2016-17

587 Billion
Passenger kms served in 2016-17

Bus transport in India is already deficit in supply to meet the demand and is incurring financial losses continuously

Data from 41 reporting STUs for the year 2016-17
+ Shakti Foundation

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ROLE PLAYED BY BUS TRANSPORT DURING COVID-19 LOCKDOWN

Limited public transport for essential services* | Acting as Guardians of Mobility[1] during pandemic scenario

Buses operated during COVID-19 lockdown

BEST Mumbai
1500 buses

MSRTC Maharashtra
350 buses

BMTC Bangalore
200 buses

DTC Delhi
25% of the actual operations

MTC Chennai
150 buses

UPSRTC Uttar Pradesh
250 buses

WBTC West Bengal
15 buses

Sources: Compiled from various sources including personnel interview, news articles

Multiple Roles adopted by bus transport agencies amid COVID-19 lock down

Passenger transport provider →

Goods delivery

Sanitation vans

Dedicated services for stranded migrants and students

Dedicated medical service buses

** As notified by Government of India*
1 Term coined by International Association of Public Transport (UITP)

ROLE PLAYED BY BUS TRANSPORT DURING COVID-19 LOCKDOWN

Grocery on Wheels, MoBUS, Bhubaneswar

Vegetables were sold at bus stops, MoBUS, Bhubaneswar

The Capital Region Urban Transport (CRUT) had won the Award of Excellence for Innovations in Urban Transport during COVID-19 at 13th UMI Conference 2020 organised by the Ministry of Housing and Urban Affairs

- Social responsibility during the pandemic and initiative to shift to digital payment was also acknowledged

Image Courtesy: CRUT

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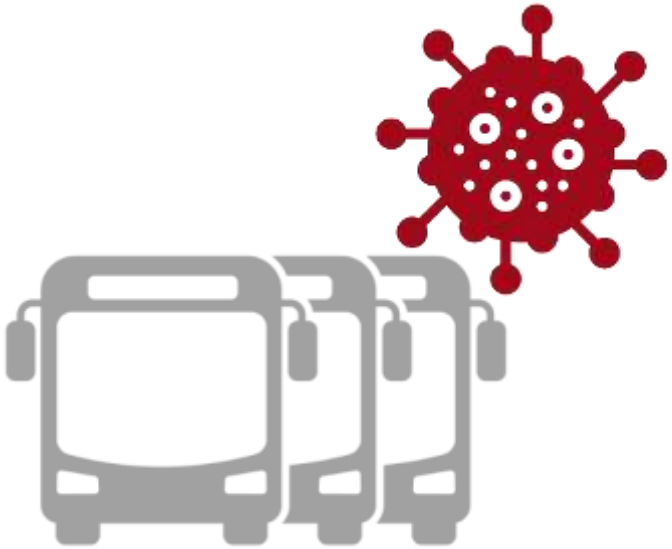
BUS TRANSPORT DURING COVID-19 LOCKDOWN

Buses for emergency services, MoBUS, Bhubaneswar
Image Courtesy: CRUT

KSRTC's sanitizer bus, KSRTC, Karnataka
Image Courtesy: THE HINDU

IMPACTS OF COVID-19 ON BUS TRANSPORT



IMPACT OF COVID-19 LOCKDOWN ON BUS TRANSPORT

Components	Lockdown Phase	Recovery Phase	Normal Phase
Duration	March – May*	Up to 1 year post lockdown	> 1 year post lockdown
Personnel/ Staff Cost	✔	✔	✔
Material Cost	✘	✔	✔
Taxes	✔	✔	✔
Interest	✔	✔	✔
Miscellaneous	✔	✔	✔
Payment to hired buses	✔	✔	✔
Depreciation	✔	✔	✔
Traffic Revenue	✘ 0% demand: 0 Traffic Revenue	⬇ Gradual increase	✔ Expected to achieve normalcy

Bus transport will incur almost equivalent costs during lock down and recovery phase.

However, the revenue is expected to be way below the normal

** As per MHA,GoI*

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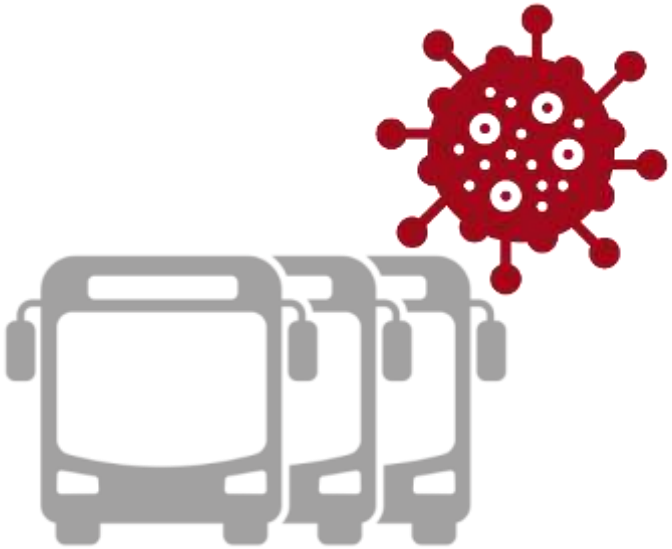
Standard Operating Procedures (SOPs) for Bus Transport Post COVID-19 Lockdown



KEY CHALLENGES

Meeting staff expenses and debt repayments

Reduction in demand and carrying capacity of buses

Service planning for uncertain demand

Crowd Management inside and outside buses

Availability of fleet

Procuring equipment for safety of crew and sanitation material

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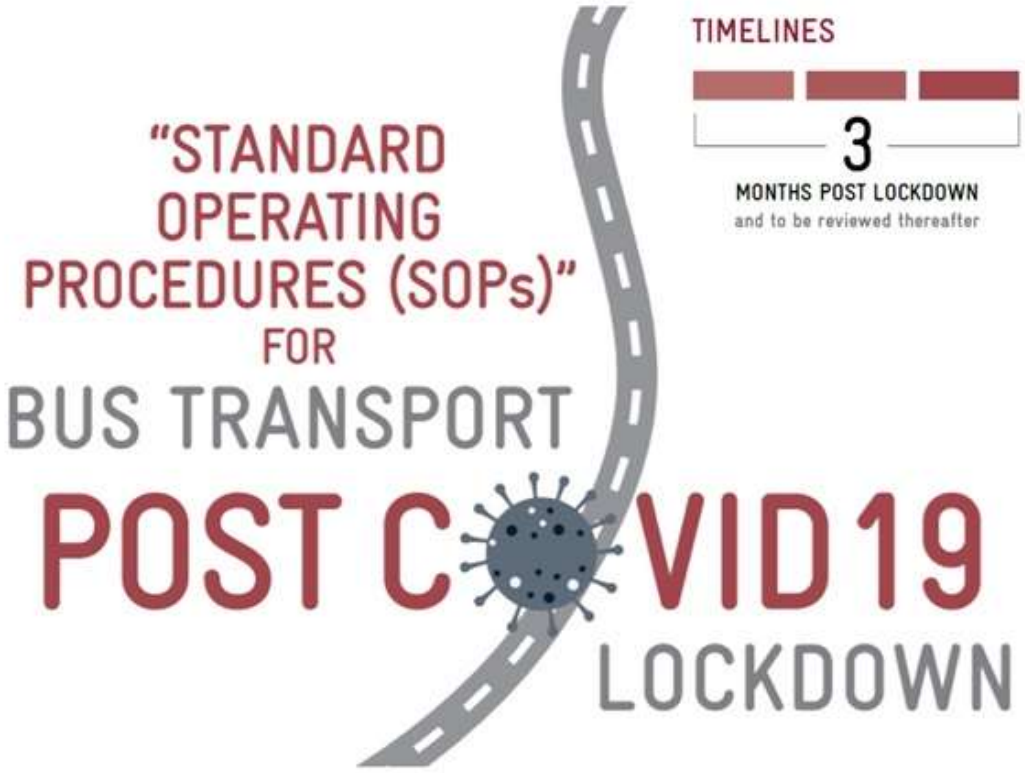
GOVERNMENT OF INDIA GUIDELINES

Government of India in its last notification on 02 June, 2020 recommends to reduce services in places with high COVID incidences

- Rearrange the seating capacity keeping in mind the social distancing
- Markings to be made for queuing of the passengers at all relevant places
- Clear and frequent communication to commuters on do's and don't
- Implement preparedness plans dynamically
- Increase PT capacity to reduce crowdedness
- Encourage e-ticketing
- Re-organize the routes and services
- Relief packages to support operators and scale-up efficient supply

Source: Advisory on COVID19, MoHUA, GoI & CRRI

BUS TRANSPORT ADAPTATION FOR POST COVID-19 LOCKDOWN



Measures listed out in the document should be implemented after assessing the aftereffects of COVID19 in the state. These measures are suggestive and should be used in combination with various instructions issued by Government time to time

SOPs for

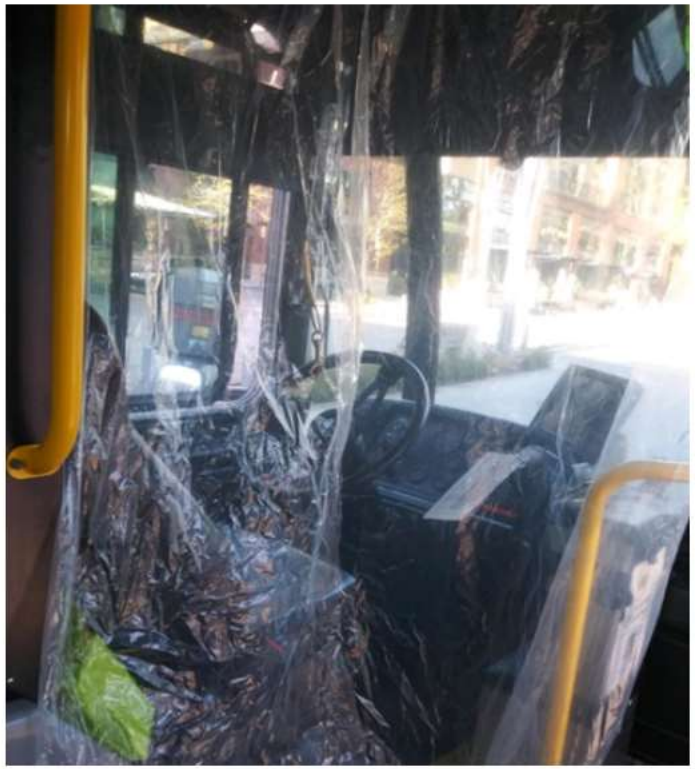
1. **Offices/markets/work zones/employers**
   Work from home, staggered working hours
2. **Buses and transport authority/operator**
   Increase supply of buses, occupancy < 1/3rd, disinfecting buses, CCTV cameras for monitoring & No AC
3. **Passengers**
   Mandatory masks, unidirectional passenger movement, rear door boarding and front door alighting
4. **Driver and conductor**
   Temperature checks, separating driver area by screens and Mandatory use of mask and gloves, cash box, digital ticketing
5. **Bus shelters**
   Maintain distance in queue, frequent sanitization
6. **Bus stops/terminals/depots/interchanges**
   Floor marking for social distancing, regular sanitization
7. **Pedestrian and cyclist infrastructure**
   Reclaiming streets for crowd management, min footpath width of 2.5 m and dedicated cycling lanes

SOPs for BUS STOPS & BUS DRIVER

SOPs FOR BUS SHELTERS

A typical CRUT bus shelter with social distancing message, one passenger seated per seat and with floor markings for passengers to wait at a bus shelter (Source: GIZ/ CRUT)

SOPs FOR BUSES



Transparent curtain separating driver's area (Source: TriMet, Oregon)

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ORGANISING PASSENGER OCCUPANCY IN PLACES WITH HIGH COVID INCIDENCES

Typical layout of 12m (standard) and 8-9m (midi) bus, marking passenger location, unidirectional movement, seating of conductor and location of cash drop box

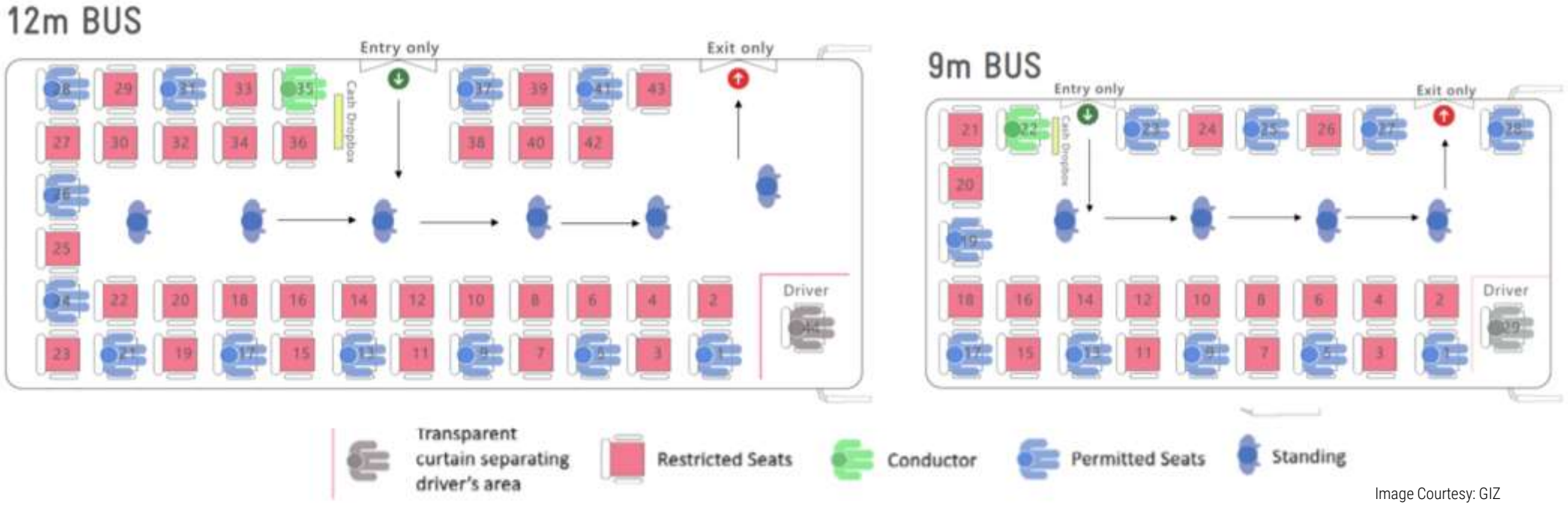

Image Courtesy: GIZ

Key actions:

- Increase supply of buses/frequency on high demand routes by hiring private buses, school and college buses
- Fare collection through digital payment modes for cashless ticketing
- Marking seats for seating inside the buses, at bus stops and at terminals

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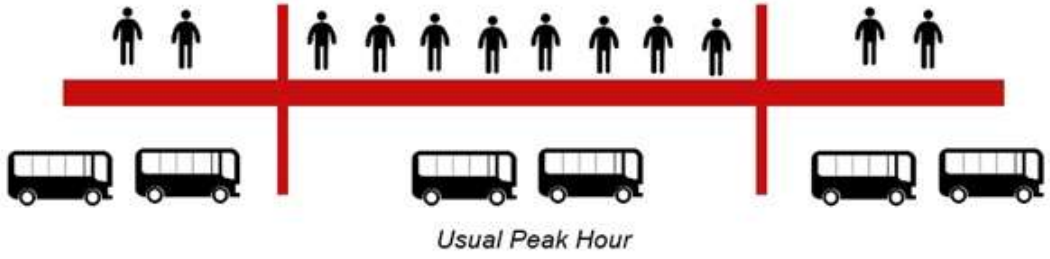
STAGGERING WORKING HOURS TO REDUCE PEAK DEMAND

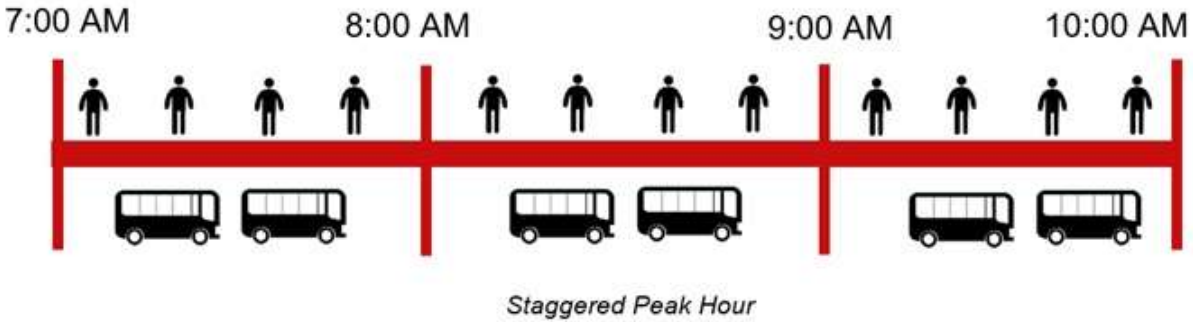
Staggered working hours to reduce the demand and hence to maintain desirable social distancing

Normal operations



Post COVID-19 lockdown scenario

Maintain safe social distancing



Peak Passenger demand needs to be reduced by **adopting staggered working hours** for offices/markets/work places

Demand *Bus Supply*

Cities such as Mumbai, Kolkata and few others implemented staggered work timings to avoid crowding

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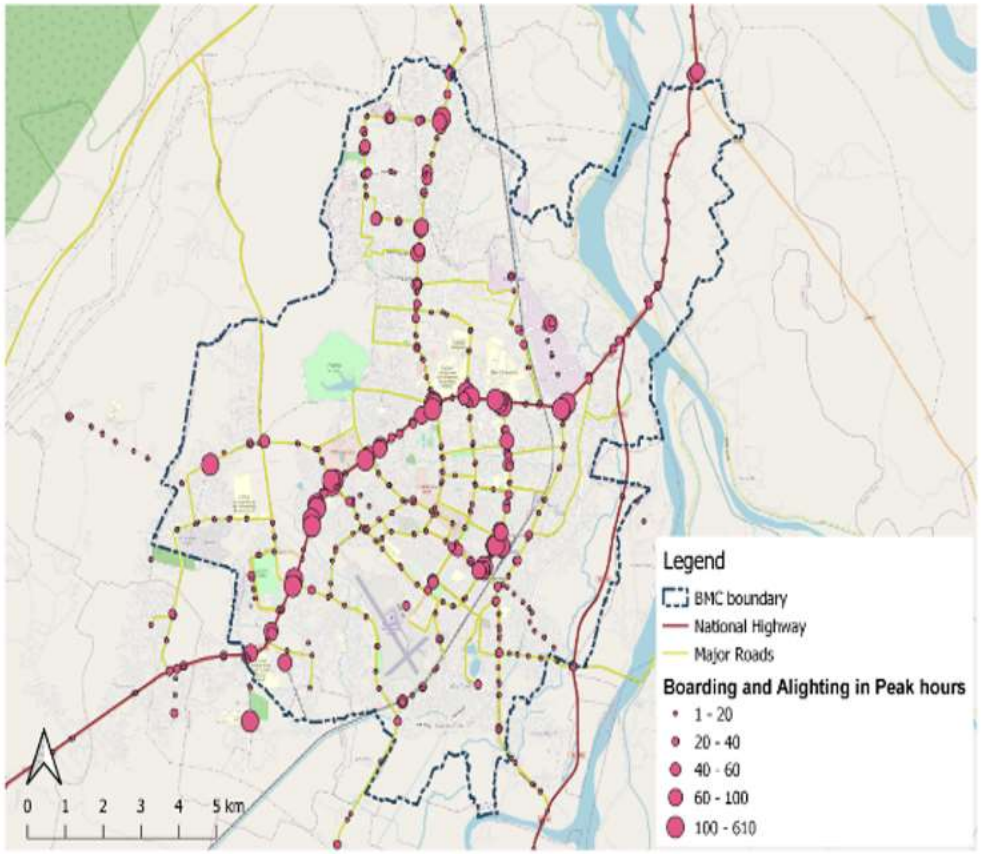
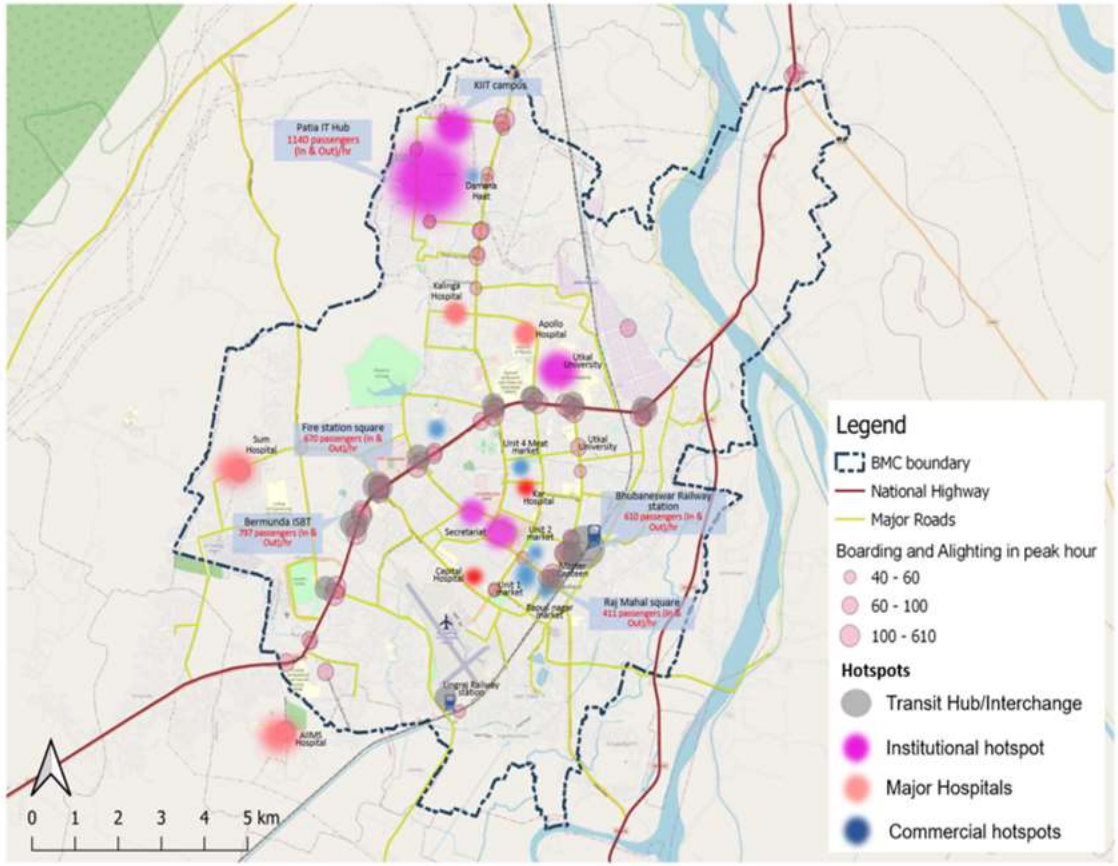
DEMONSTRATION OF STAGGERED DEMAND (BHUBANESWAR CASE)



Step-1: Identification of **high demand bus stops**

High passenger demand bus stops in Bhubaneswar



Step-2: Activities locations around **influence zone of 1 km**

Major locations with high passenger demand bus stops in Bhubaneswar

Image Courtesy: GIZ

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STEPS TAKEN TO MANAGE COVID-19 FINANCIAL REQUIREMENTS

- MTC & TNSTC (Tamil Nadu) applied for loan from Government Banks to manage the salaries & other fixed cost

Taxes and surcharges:

- Nagaland imposed a COVID-19 cess of Rs 5 per litre on diesel and Rs 6 per litre on petrol and other motor spirits through a notification
- Assam government increased taxes on petrol by Rs 6 and on diesel by Rs 5
- Meghalaya government imposed 2% sales tax surcharge on both petrol and diesel

- In Delhi, Petrol price hiked by Rs 1.67 per litre while diesel price hiked by Rs 7.10 per litre
- Punjab extended 100 % Motor Vehicle Tax waiver till December 31 to bail out transporters from COVID crises (for all stage carriage, mini and school buses etc.)
- Kerala exempted Road Tax for three months for private buses (from July 2020)
- Gujarat had waived off road taxes for passenger vehicles till September 2020

RECOMMENDATIONS: ENABLING PUBLIC BUS TRANSPORT

Identify alternate sources for revenue generation methods (currently dependent on ticket and pass sales)

Digitization and use transit data to identify emerging travel patterns and rationalize existing routes/services for efficiency improvement

Plan for dynamic changes in demand and supply (travel need and staggered travel plan)

Stagger work hours to reduce peak demand

Use social media and other digital platforms to communicate passenger information, public service, citizen engagement, etc.

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RECOMMENDATIONS: ENABLING PUBLIC BUS TRANSPORT

Introduce temporary tax waivers, reschedule debt and extend the validity (insurance, permits, fitness)

Dedicated bus lanes

Develop digital payment options

Support from the central government and states: fund for stabilization and revitalization

Involve private sector to increase fleet capacity (procurement + underutilized private buses)

Capacity building and trainings for staff upskilling on soft skills and technical skills

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