



# COVID-19 in India: Securing 'Public Transport' during the pandemic and after

**A view on 'Public Transport'  
during pandemics, recovery  
stage and future-proofing  
against crises**

April 2020

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## Situation analysis

More than two hundred countries around the world are currently affected by the spread of the COVID-19 virus, which has brought life almost to a halt. The Government of India took a preemptive step to halt the spread of the virus across the country by announcing a nation-wide lockdown for 21 days on 24 March 2020. The lockdown now has been extended till 3 May 2020. Public transport, a basic necessity for Indian citizens, has been impacted by the anti-outbreak measures in the country.

## Role of public transport

Effective handling of public transport now will play a key role in bringing us back to normalcy. Furthermore, we may utilise learnings from the current situation to develop resilience to effectively future-proof public transport against crises.

Public transport in such a lockdown situation serves three broad roles.

- Core role: transport of essential staff/ services
- Emergency role: transport patients, suspects, medical staff and supplies and provide interim facilities
- Preparedness: for resumption of services.

**The role of public transport during pandemics is crucial and a phase-wise structured approach is necessary to overcome the unprecedented situation.**

## Vision for future ready public transport

Enabling seamless transition out of the pandemic for public transport systems of the country and developing resilience to effectively deal with future emergencies.



The action plans should be specific to locations and the phase of emergency. The fragmented transport ecosystem, however, poses a challenge.

## Brief on phases

### Phase I: during lockdown

- Lockdown: focus on essential and emergency services, minimising pandemic spread, preparedness for service resumption
- Extended lockdown: for enhanced severity, Interim medical and quarantine facilities, and storage of medical equipment and supplies.

### Phase II: just after lockdown

- Step-wise resumption of services
- Ensuring protection from pandemic relapse
- Managing one-time issues – traffic surge, refund needs, etc.

### Phase III: bringing public transport services back to normal

- Expand services to reach normal levels
- Ensuring protection from pandemic relapse
- Establish protocols and enforcement measures.

### Long-term plan for building resilience: future-proofing against crises.



# Phase I:

## Public transport during lockdown



The objectives and interventions during the lockdown period are as below.

### 1. Essential and emergency services enablement

- a. Enable transit of
  - i. Essential services staff, including transport staff
  - ii. Patients/suspects/healthcare staff
  - iii. Citizens needing emergency services
- b. Ensure public carriage availability for emergency need-based responses
- c. Private sector involvement – e.g. free emergency cab service with standardised procedures
- d. Transit of essential goods, staff to quarantine/isolation centres.

### 2. Minimise infection spread

- a. Sanitisation of public carriages at regular intervals
- b. Health protection of transport staff
  - i. Regular health check-up
  - ii. Rotational duty
  - iii. PPE, consumables supply
  - iv. Passenger distancing – use of rear door for passengers in case of public transport carriages such as metros, buses.
- c. Health protection of commuters
  - i. Broadcast hygiene messages
  - ii. Restricting ridership
  - iii. Making the use of masks mandatory
  - iv. Availability of sanitisers
  - v. Mobile screening units

- d. Management of depots, terminal facilities, stoppage
- e. Monitoring during emergencies – geo tagging of vehicles.

### 3. Interim arrangements – enhanced severity

- a. Use of buses, train coaches as interim facilities
  - i. Quick conversion – retrofits medical/non-medical, medical/essential supplies, health staff, standard operating procedures (SOPs)
  - ii. Separate facilities – quarantine, isolation and treatment
- b. Awareness building, publicity is critical
- c. Transport of medical supplies/waste and for mortuary services.

### 4. Preparedness for service resumption

- a. Maintenance/retrofits
  - i. Health protection of staff – yard, transit
  - ii. Supplies – spares, consumables, PPEs, sanitisers, retrofit parts
- b. Developing screening/testing facilities at terminal infrastructure
  - i. Infra – portable booths and screening facilities, temporary isolation facilities, equipment and consumables
  - ii. SOPs, guidelines, health and enforcement staff availability.

## Phase 2:

### Resumption of services just after lockdown



#### The objectives and interventions are as below.

##### 1. Resumption of services

- a. Step-wise resumption of services – restricted operations to start with, gradual expansion in operations. Prioritisation required
  - i. Routes/frequency - to start with, safer (e.g. safe distance from hotspots/sealed areas) and high-demand corridors in urban limits
  - ii. Categories - urban transport initially
  - iii. Modes – those facilitating urban transport initially. With further sub phases
  - iv. Public and private sector services – as per defined protocol
- b. Public broadcast messages – critical.

##### 2. Protection from pandemic relapse

- a. Demand management
  - i. Crowd check at terminals

- ii. Staggering of school and office timings
- b. Hygiene and social-distancing measures to continue
- c. Optimum use of retrofits – e.g. sanitiser dispensers, ventilators
- d. Private sector service providers to address health protocols, enforcement including surprise audits
- e. Use of screening/testing facilities at terminal infrastructure.

##### 3. One-time issues

- a. Ticket refunds and booking cancellations management
- b. Managing a sudden surge of travel demand
- c. Fresh bookings to align with step-wise opening up of services across modes.

## Phase 3:

### Bringing public transport services back to normal



Objectives and key interventions are as below.

#### 1. Expansion of services to normal levels

- a. Expansion of services – prioritised approach
  - i. Full-fledged operation at urban levels
  - ii. Resumption of inter-state transport – bus/ rail, air travel in phases
  - iii. Multi-modal perspective – step-wise synchronisation required for modes
- b. Ensuring availability of carriages, terminal infrastructure and operating staff across modes.

#### 2. Protection from pandemic relapse

- a. Hygiene and social-distancing measures as mentioned for phase II to continue with gradual moderation
- b. Decision and implementation of measures to continue in the long run – e.g.
  - i. Gradual reduction of occupancy restriction
  - ii. Thermal screening for passengers at terminal infrastructure facilities – unmoderated.

#### 3. Establish protocol and enforcement measures

- a. Ticket refunds and booking cancellations management
- b. Managing a sudden surge in travel demand
- c. Fresh bookings to align with step-wise opening up of services across modes.

#### Long-term plan for building resilience: future-proofing against crises

The key areas that will be required to be addressed to ensure better preparedness of public transport services in future during crises are as follows.

1. Policy intervention/incentives for upkeep and maintenance of transport systems - rolling stock/terminal infrastructure
2. Awareness creation for public transport etiquettes including healthy practices
3. Provision of quick development of effective task force
4. Operational aspects: adequate phasing plans, inventory management, optimum utilisation of staff and rolling stock under protected environment.



## Immediate considerations



### A. Essential and emergency services enablement

The following are the key aspects for essential and emergency services enablement.

1. Core transportation role: transport of government officials and police personnel, labourers/workers and staff of factories; transport staff; support staff for essential services
2. Healthcare services: exclusive vehicles for
  - a. Mobility monitoring and managing through technology applications
  - b. Dedicated set of carriages for 24X7 transit for patients, suspects, medical staff
  - c. Transit of medical supplies, medical waste and mortuary services
3. Emergency travel requirement for people: auto/taxi for
  - a. Medical and other emergencies
  - b. Free emergency cab services – private sector operators – standardised procedure
  - c. Unless emergency, only a maximum of two passengers may be allowed
4. Essential and non-essential services delivery
  - a. City mapping: identification of critical zones and routes
  - b. Allocation of carriers along critical routes
  - c. Daily sanitisation of vehicles

**Standard Operating Procedure (SOP): the system shall work strictly according to the SOP notified by the special taskforce.**

**Transport services to be provided with 100 per cent hygiene ensuring safe travel and disinfection of vehicles needs to be ensured daily.**

### B. Hygiene measures and social distancing

As part of maintaining hygiene and social-distancing measures during the pandemic, the key aspects include the following.

1. Cleanliness of infrastructure: sanitisation of shared surfaces on a daily basis
  - a. Handrails, seats, door knobs
  - b. Luggage tray, window panes etc

Station master/depot manager responsible for the sanitisation regularly at designated areas

Possible temporary involvement of daily labourers with swift skilling.
2. Personal hygiene of staff and passengers
  - a. Use of masks mandatory
  - b. Sanitising kit to be provided
  - c. Awareness messages on personal hygiene to be displayed in vehicle
  - d. Thermal checking before boarding.

Station master/depot manager shall ensure the health/thermal check of the staff before trip.
3. Restrictions for use - to reduce contact
  - a. Floor markings in public carriages
  - b. Limit maximum allowable occupancy
  - c. Restricting ridership through ID cards
  - d. Rear-door boarding and alighting
  - e. Implement ticketless travel/use of contactless card for travel.

Strict and periodic supervision by staff needed.

**SOPs to be recommended according to the level and criticality of pandemic spread.**

Note: It is recommended to continue the hygiene protocol of public transport vehicles even after the lockdown/pandemic period. Necessary policy developments to be done for facilitating the same. This will enhance the quality of the system.

### C. Interim arrangements

**Status as in Mid-April**

- Number of corona positive cases increasing
- Possibility of community spread
- No flattening of curve

**Extension of lockdown-declared on 14.04.20 - till 03.05.20**

In view of the extension and the developing situation, the following interim arrangements become a critical need.

1. Testing centres: for enabling rapid testing, there is a need for a high number of safe testing centres.
2. Quarantine/isolation facilities: a huge number of isolation/quarantine facilities needed for positive/suspect cases.

3. Mobile testing/clinics: enables door-to-door testing/medical services.

Transport infrastructure (coaches/terminals) may be converted into interim arrangements to augment the healthcare systems and combat COVID-19.

- Train coaches/terminals into quarantine/ isolation facilities
- Buses into mobile-testing/medical units.

### Illustrative examples – potential solutions

|  |  |   |  |
|--|--|---|--|
| <p><b>Crowd management</b></p> <p><b>Restricting Ridership</b></p> <p>Carrying ID cards is mandatory</p> <p>On-boarding through rear door only</p> <hr/> <p><b>Sanitisation of Public Carriages</b></p> <p>Clean seats, arm-rest, support rods, handles, ticketing machines, AC air filters, steering wheel, dash board etc.</p> | <p><b>Hygiene management</b></p> <p><b>Staggering Travel time</b></p> <p>Morning shift<br/>Evening shift</p> <p>Avoid congestion!</p> <hr/> <p><b>Sanitiser dispensers in public carriages</b></p> <p>Retrofits may be undertaken inside public carriages in the period provided, funding, supply of dispensers and sanitisers may be arranged</p> | <p><b>Health management</b></p> <p><b>Messages on Public Health</b></p> <p>Continuous messages on public hygiene</p> <p>Everyone should use Masks!</p> <hr/> <p><b>Messages on Public Health</b></p> <p>Contactless ticketing</p> <p>OR</p> | <p><b>Emergency response</b></p> <p><b>Health check for staff on daily basis!</b></p> <p>Reduce spread of contagion</p> <p>Enable uninterrupted transport services</p> <hr/> <p><b>Floor markings for social distancing</b></p> <p>Retro fit for more ventilation in carriages</p> |
|--|--|---|--|

# How can we help?

**KPMG in India's transport sector advisory can assist central/state government bodies/institutions on an immediate basis to make informed decisions and effectively use public transport infrastructure during and after the lockdown.**

**1**

**Establish and support emergency transport response groups:** hand holding to reduce damage and turnaround time to support the response to the epidemic/pandemic.



**2**

**Operationalise public transport services:** design strategy and roll out operations of public transport in a phased and secure manner.



**3**

**Facilitate digital interventions during lockdown and post lockdown period** - shuttle services as alternatives to public transport, monitoring mobility etc.



**4**

**Public transport operation improvement:** route planning and optimisation during lockdown, phasing out and normal operations period.



**5**

**Revamping public transport infrastructure:** advise on digitisation of public transport journeys through development and implementation tools such as automated fare-collection systems, secure wayfinding and protocol app within terminal, scanning systems of suspect passengers at terminals/public carriages etc.



**6**

**Transport policy recommendations:** study COVID-19 impact and provide recommendations on augmenting policies to consider critical aspects such as setting up protocols during emergencies, hygiene rating systems for public transport services, modification of driving tests for commercial/public transport/intermediate public transport drivers etc.

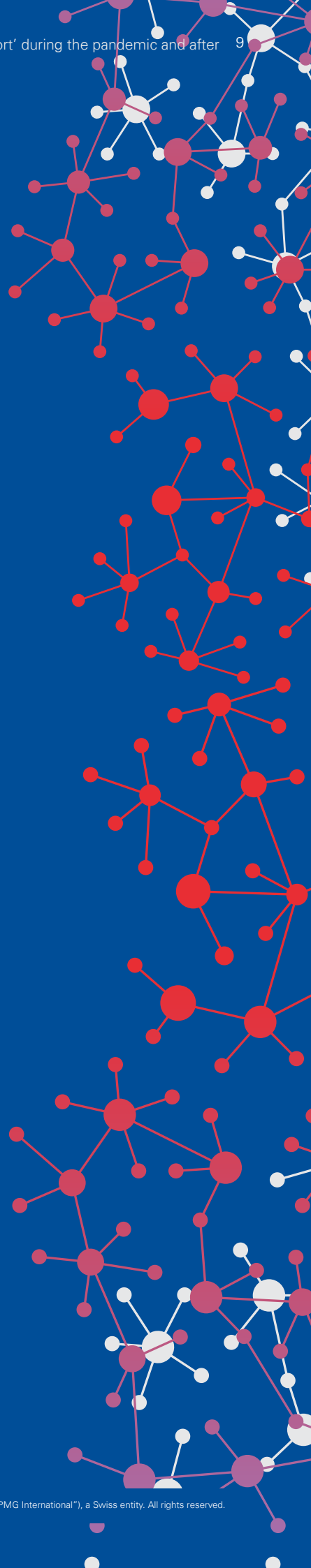


Our strong network of experienced professionals in India has access to the leading practices across the world through our network of firms. Our team has extensive experience of working on government assignments and has managed several implementations.



# Acknowledgement

Akhil Sehgal  
Anu k Soman  
Dhaval Raut  
Nikhil Harikumar  
Nisha Fernandes  
Rahil Uppal  
Sagar Kurle  
Satyam Nagwekar



# KPMG in India contacts:

## **Elias George**

### **Partner and National Head**

Infrastructure, Government and Healthcare

**E:** [eliasgeorge@kpmg.com](mailto:eliasgeorge@kpmg.com)

## **Anish De**

### **Partner and Head**

Strategy & Transformation,

Infrastructure Government and Healthcare

**E:** [anishde@kpmg.com](mailto:anishde@kpmg.com)

## **Sameer Bhatnagar**

### **Partner and Sector Lead**

Transport,

Infrastructure Government and Healthcare

**E:** [sameerbhatnagar@kpmg.com](mailto:sameerbhatnagar@kpmg.com)

## **Abhishek Mukherjee**

### **Technical Director**

Public Transport,

Infrastructure, Government and Healthcare

**E:** [abhishekmukherjee@kpmg.com](mailto:abhishekmukherjee@kpmg.com)

[home.kpmg/in](http://home.kpmg/in)

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