# COVID – 19 India: Mobility Response Guidelines

Photo: Milan, March 8th, 2020. [Courtesy: Alecamera90/iStock]

Prepared by:

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25<sup>th</sup> April 2020

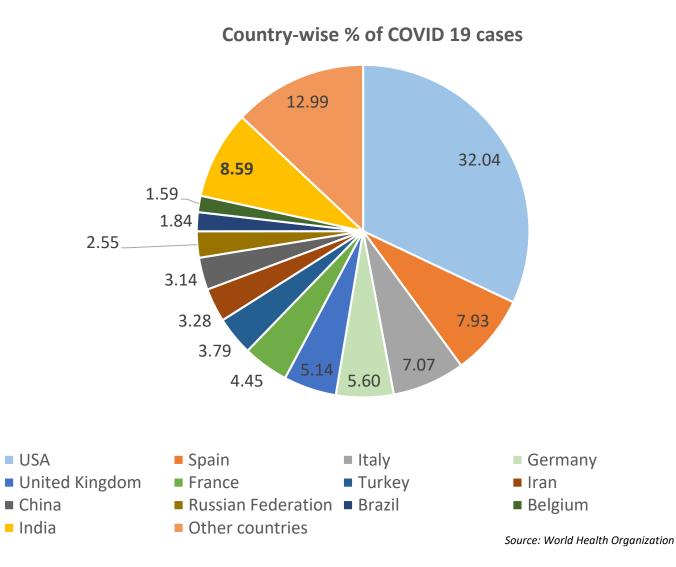
#### Please note:

UMTC has undertaken desk research to support various stakeholders associated with urban mobility in the country including national, state and city level authorities and SPVs in their day to day operations as well as formulation of COVID management and re-opening strategies. This research was complied and analyzed basis various research, studies, reports and discussions available in the public domain. With so much information disseminated, the aim of this report is to share a quick summary and overview of how international stakeholders in the transport sector are responding and use the case examples to formulate a city centric and region specific response action plan to COVID-19.



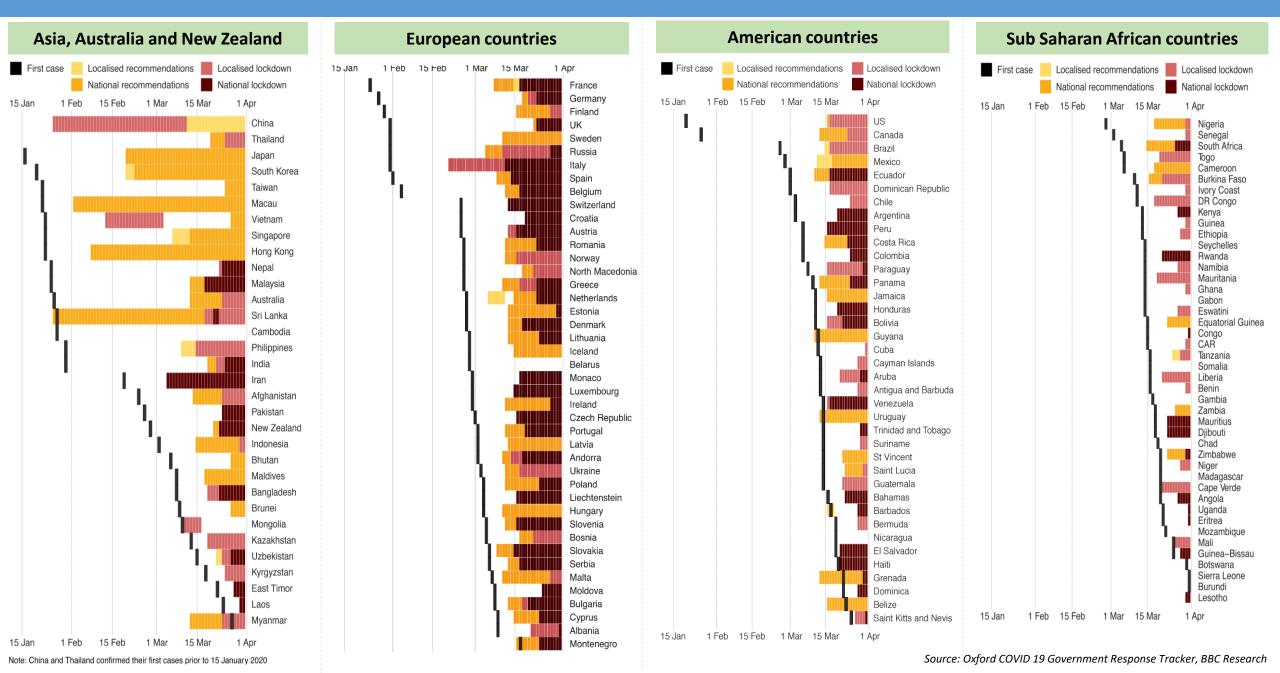
#### Introduction

- COVID-19 is the infectious disease with humanto-human spread reported for the first time in the world **in December 2019**.
- The first cases were reported at Wuhan, China.
- Total 213 countries, areas or territories have reported cases of COVID 19.
- As on April 25<sup>th</sup> 2020, globally 26,86,785 cases has and 1,84,681 deaths have been reported, out of which India accounts for ~ 8.6% cases
- As of now there is no vaccine for the infection and hence, each country is trying in its own way to manage and delay the spread.
- Two broad precautionary measures implemented are – social distancing and contact tracing.



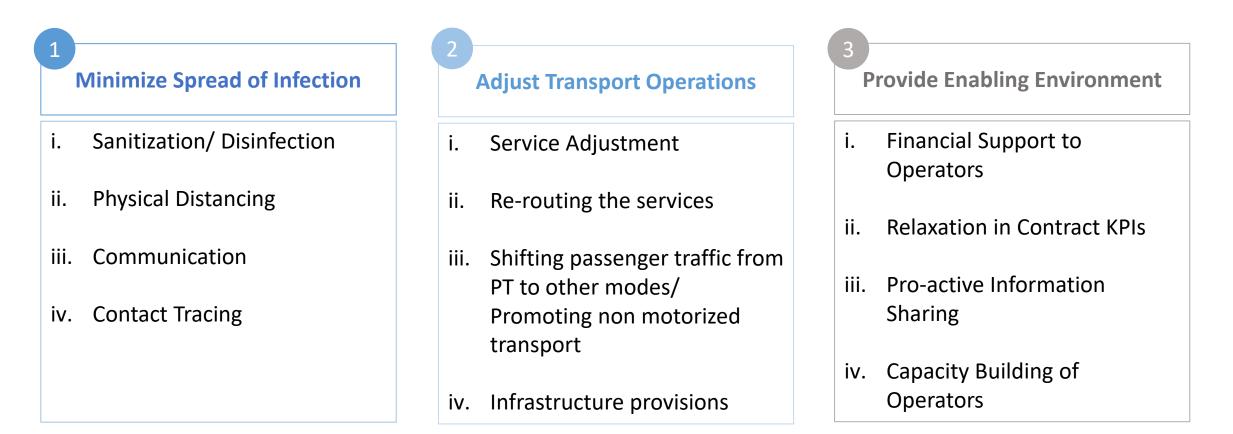


#### Week wise response to COVID across countries and level of lockdown



#### **Broad Category of Response Actions**

- Many Governments have implemented lockdown as a forced social distancing tool.
- Additional response measures and actions implemented in Urban Transportation sector during the lockdown can be categorized in 3 broad heads, as shown below:







| Head  |  |                           |                    | Response Ac              | tion                 |                     |  |                                       |  |
|---|--|---------------------------|--------------------|--------------------------|----------------------|---------------------|--|---------------------------------------|--|
|   | 1. Seats marked as unavailable in the vehicle and limiting passengers per coach/bus (eg 4 per smaller shuttle buses)                   |                           |                    |                          |                      |                     |  |                                       |  |
|   | 2. Sanitization / cleaning of rolling stock, stations and employee areas/ rooms on daily basis   |                           |                    |                          |                      |                     |  |                                       |  |
| Minimize Spread of                                    | 3. Disinfection of all   | common areas in           | morning and betw   | veen shift change        | e                    |                     |  |                                       |  |
| Infection   | 4. Closure of stations with limited operational stations and entry/exit gates within each station whereby reducing the cleaning needs. |                           |                    |                          |                      |                     |  |                                       |  |
| meetion   | 5. Providing safety g  | ear like gloves, fac      | e mask, etc along  | with sanitizer w         | ipes and bottle      | es to employees     |  |                                       |  |
|   | 6. Closing public rest   | rooms at stations         | which are under u  | utilized                 |                      |                     |  |                                       |  |
|   | 7. Suspension of cas   | h transactions for        | ticket purchasing, | only card transa         | actions are allo     | wed                 |  |                                       |  |
|   | 8. Refund of <b>unused</b>   | monthly parking           | passes             |                          |                      |                     |  |                                       |  |
|   | 1. Reduced services  | up to <b>25% less tra</b> | ins & feeder buse  | <b>s</b> or running at v | veekend/ <b>Sund</b> | lay schedule        |  |                                       |  |
| Adjust Transport                                      | 2. Limiting passenger to 25 per light rail or to 50% of carrying capacity  |                           |                    |                          |                      |                     |  |                                       |  |
| Operations  | 3. Service changes to Sunday schedule/ holiday schedule or emergency timetable   |                           |                    |                          |                      |                     |  |                                       |  |
| Operations  | 4. Change in frequency of transit - every 10 min   |                           |                    |                          |                      |                     |  |                                       |  |
|   | 5. Suspension of fare increase in calendar year 2020   |                           |                    |                          |                      |                     |  |                                       |  |
|   | 1. Distribution of ma  | isk to riders on sta      | tions and its comp | oulsory use              |                      |                     |  |                                       |  |
| Provide Enabling                                      | 2. Shifts/ rest day/ lo  | ocations being adju       | usted to ensure 10 | 00% coverage of          | revised schedu       | le and zero overtir | ne   |                                       |  |
| Environment   | 3. Suspension of fare  | e enforcement insp        | pection            |                          |                      |                     |  |                                       |  |
|   | 4. Closure of busiest  |                           | e opportunities of | close contact an         | nongst commu         | ters                |  |                                       |  |
| Indicative list of cities where t<br><b>New York,</b> | hese response actions have<br>Los Angeles,   |                           | Vashington DC,     | Pittsburgh,              | Seattle,             | Philadelphia,       | Boston,                                      | Atlanta,                              |  |
| US  | US   | US                        | US                 | US                       | US                   | US                  | US   | US                                    |  |
|   |  |                           |                    |                          |                      |                     |  |                                       |  |
|   | Buenos Aires   |                           | Berlin,            |                          | ,                    | /ienna,             |  |                                       |  |
| Urban Mass Transit<br>Company Limited                 | Argentina  | Canada                    | German             | y Spa                    | in A                 |                     | onal Association of (<br>o.org/program/covid | City Transportation Officials<br>119/ |  |

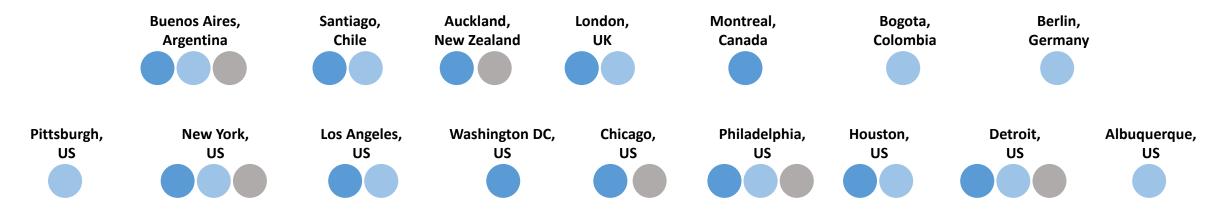


| Head                            | Response Action  |
|---------------------------------|--|
| Minimize Spread of<br>Infection | <ol> <li>Operation at lower capacity ranging from 30% to 50%</li> <li>Limiting passenger to 10 – 20 per bus (35 ft. long), 15 - 20 per bus (40 ft. long), 25 per bus (above 40 ft. length), 25 per trolley (or 60 ft. articulated bus) and alternate seats marked as "not available".</li> <li>Riders to board/ alight from rear doors</li> <li>Fare suspension or pay for ride at the On-street payment boxes to minimize interactions for fare collection</li> <li>Sanitizing of rolling stock and stations on daily basis and Bus operators to clean bus during the trips</li> <li>Provision of face mask, hand sanitizers at stations and in buses for both commuters and operators</li> <li>Transparent protective barriers placed on buses to protect both passengers and bus operators</li> </ol>   |
| Adjust Transport<br>Operations  | <ul> <li>8. Yellow line on the bus floor and at bus stops marking a six-feet distance between the driver and riders</li> <li>1. Additional buses on routes with high ridership or reduction in frequency depending upon the type of route. Eg: In Houston, three types of frequency are there: <ul> <li>Red and Blue routes will be reduced to service every 30 minutes</li> <li>Green routes will follow their normal Saturday schedule</li> <li>Community connector routes on regular schedule</li> </ul> </li> <li>2. Suspension of fixed routes or limiting stations to operate</li> <li>3. Reduced services with 25% less fleet in operation or Sunday / weekend schedule / summer level with expanded hours on core routes</li> <li>4. Suspension of service on Sunday</li> <li>5. Provision of on demand services. Rides only available for people moving for essential services</li> <li>6. Higher usage of new buses with middle doors for boarding and alighting or buses with plastic seats in operation</li> <li>7. Information sharing on bus ETA via VMS on bus stop/ buses or mobile app giving real time data on the number of people on board in the upcoming vehicle.</li> </ul> |
| Urban Mass Transit              | COVID – 19 India: Mobility Response Guidelines Source: National Association of City Transportation Offic   |

### Bus based Transit (2/2)

| Head             | Response Action  |
|------------------|--|
|                  | 1. Closure of busiest stations to reduce opportunities of close contact amongst commuters  |
|                  | 2. Suspension of operator fee or contingency compensation to operators on grounds of changes to service plan change eg running     |
| Provide Enabling | hours/ routes/ schedule/ reduced seats etc   |
| Environment      | 3. Exceptional financial regime for transport contracts, with payment for offered operation rather than for transported passengers |
|                  | 4. Support to operators in terms of no-penalty and other KPIs.   |
|                  | 5. Digital approval of documents from transport authority  |

Indicative list of cities where these response actions have been implemented





#### Pedestrianization

| Head                            | Response Action   |
|---------------------------------|---|
| Minimize Spread of<br>Infection | <ol> <li>Automation/ inactivation of pedestrian push buttons to automated signals for walking on road crossings</li> <li>Shorter traffic signal cycles at intersections by 40 sec for ease and reduced wait time for pedestrians/ cyclist to cross</li> <li>Promoting walking as alternative to public transportation and thus creation of new walking only zones</li> <li>Outdoor exercise more than one day a week, made illegal</li> </ol> |
| Adjust Transport<br>Operations  | <ol> <li>Closure of street for vehicles allowing pedestrian and cycle movement only</li> <li>Closure of vehicle entry in parks and only pedestrian/ cyclists movement allowed</li> <li>Removal of loading bays and parking space to provide additional space for pedestrians</li> <li>Walking within certain km radius of residential area permitted</li> </ol>   |
| Provide Enabling<br>Environment | 1. Change in Construction/ maintenance works schedule of road/street projects - from night to day due to less traffic in day time.  |

Indicative list of cities where these response actions have been implemented

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| Dublin, | Brussels, | Los Angeles, | Austin, | Baltimore, | Boston, | Boise, | Perth,    | Sydney,   | Vancouver, |
|---------|-----------|--------------|---------|------------|---------|--------|-----------|-----------|------------|
| Ireland | Belgium   | US           | US      | US         | US      | US     | Australia | Australia | Canada     |
|         |           |              |         |            |         |        |           |           |            |
|         |           |              |         |            |         |        |           |           |            |



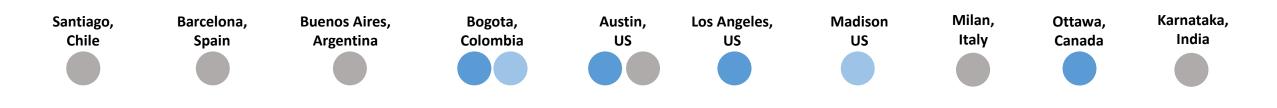
## Bi-cycling/ Biking

| Head                                  | Response Action   |                     |                 |                      |                 |                      |   |                      |
|---------------------------------------|---|---------------------|-----------------|----------------------|-----------------|----------------------|---|----------------------|
| Minimize Spread<br>of Infection       | <ol> <li>Allowing only walking/ cycling as permissible modes of movement within a certain radius of</li> <li>Increased frequency of cleaning of cycles and docking stations</li> <li>Staff members to use protective measures such as hand sanitizers, gloves, masks, workspace disinfecting, etc.</li> <li>Online registration for using PBS and rental services, limiting personnel interactions to use the system</li> <li>Bike sharing system will be closed from 10 pm to 6 am to allow additional cleaning</li> </ol>   |                     |                 |                      |                 |                      |   |                      |
| Adjust Transport<br>Operations        | <ol> <li>Bike sharing system will be closed from 10 pin to 6 and to allow additional cleaning</li> <li>Provision of temporary cycle lane (eg Barcelona 200km, Bogota 76 km and Milan 35 km) by using yellow line markings and pictograms of cycling/ barricading</li> <li>Closure of existing streets for motorized vehicle to facilitate cyclist</li> <li>Monthly pass or free renewal for using public bike sharing for commuters and various discounts for healthcare workers like - discount for hospital employees on 30 day pass for 45 min free bike ride/ free 30 min rides for hospital employees / Discount of 50% for hospital employees on membership/ Free one month membership for first responder, transit workers, delivery service workers, and health care workers</li> <li>Cycle sale and repair shops to remain open as part of essential services</li> <li>Provision of new docking stations at hospitals</li> </ol> |                     |                 |                      |                 |                      |   |                      |
| Provide Enabling<br>Environment       | Not applicable  |                     |                 |                      |                 |                      |   |                      |
| Indicative list of cities wh          | •   |                     |                 |                      | Milen           | Lan                  | dan Chiasa  |                      |
| Stuttgart,<br>Germany                 | Berlin,<br>Germany  | Bogota,<br>Colombia | New York,<br>US | Washington DC,<br>US | Milan,<br>Italy |                      | don, Chicago<br>IK US   | o, Moscow,<br>Russia |
| Urban Mass Transit<br>Company Limited |   | Bramp<br>Cana       | -               | • 1.                 | blin,<br>land   | Budapest,<br>Hungary | Source: National Association oj<br>Officials & other reports availa |                      |

### Road Safety

| Head                            | Response Action  |
|---------------------------------|--|
| Minimize Spread<br>of Infection | <ol> <li>Social distancing tips issued for movement while walking and cycling in public interest</li> <li>Men allowed to do essential journey on days ending with odd numbers and women will be allowed on days ending with even number,<br/>whereby deploying same gender police force to extend support and counsel commuters</li> </ol> |
| Adjust Transport<br>Operations  | <ol> <li>Speed limit set to 30 kmph or lower within city limits</li> <li>Reduction in signal timings (by 40 sec) or changed to night time schedule along major corridors to facilitating people making essential trips, pedestrian movement or reduce speeding</li> </ol>  |
| Provide Enabling<br>Environment | <ol> <li>License fee for commercial establishment at bus stations, road side stalls, advertisement on buses, PIS boards, etc. is waived off</li> <li>Suspension of toll payments whereby increasing travel time for essential item freight trips</li> </ol>  |

Indicative list of cities where these response actions have been implemented





Source: National Association of City Transportation Officials & other reports available in public domain

### Ride Hailing Services/ Taxi

| Head                           | Response Action  |
|--------------------------------|--|
|                                | 1. Passengers to travel only in back seat – restricted to sit in front seat  |
| Minimize Spread of             | 2. Only passengers commuting for essential services are allowed  |
| Infection                      | 3. Free rides for ferrying health workers and other essential services   |
|                                | 4. Sanitization regime for cabs specified with face masks compulsory for users   |
| Adjust Transport<br>Operations | <ol> <li>Limiting services to 1 passenger or household group</li> <li>Introduction of Taxi Access Program for commuters where riders could avail flat fare taxi rides</li> </ol> |
|                                | 1. Provision of subsidy for taxi drivers and owners  |
| Ducuido Fuchling               | 2. Delay in collection of the ground transportation tax imposed on taxis   |
| Provide Enabling               | 3. Extension of deadline for debt checks for cabbies   |
| Environment                    | 4. Deferring collection of the accessibility fee for taxis   |
|                                | 5. Deferring vehicle inspections and license renewals  |

Indicative list of cities where these response actions have been implemented

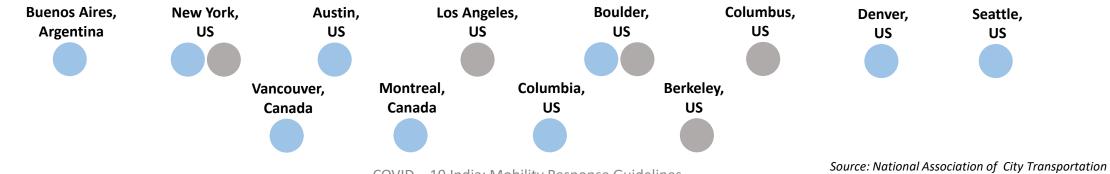






| Head                            | Response Action  |
|---------------------------------|--|
| Minimize Spread                 | 1. Closure of parking lots in city and near parks  |
| of Infection                    | 2. Limiting on street parking to only 20 min for general public with free on street parking for health care workers & delivery services.   |
| Adjust Transport<br>Operations  | <ol> <li>Creation of access for essential services like ambulance, fire lanes, loading areas, etc.</li> <li>Suspension of new parking permits - no new permits are issued or digital permit issuance with print at home permits for residents within a preferential parking district</li> <li>Suspension of on- street parking charges</li> <li>Suspension 72 hrs. parking rule (Columbus, US)</li> </ol>  |
| Provide Enabling<br>Environment | <ol> <li>Suspension of all scheduled parking ticket hearings</li> <li>Suspension of parking enforcement rules - parking meters, time limited parking, school zones and residential permit parking not to be<br/>enforced</li> <li>Relaxation on parking enforcement - no fine for abandoned vehicles and overnight parking/ expired registration on a vehicle/ expired<br/>permits</li> <li>No increase in parking fines and/ or extension of deadlines of payment for previous fines</li> </ol> |

Indicative list of cities where these response actions have been implemented



COVID - 19 India: Mobility Response Guidelines

Source: National Association of City Transportation Officials & other reports available in public domain

#### City-wise Modes and Response Guideline

| Santiago, Chile              | 🚇   🖨   奇   肇   ҟ                         |  |
|------------------------------|---|--|
| Buenos Aires, Argentina      | ፼   ፼   ₽   ₽   ₽   ₽                     |  |
| Bogota, Colombia             | ፼   ፼   क़   ☆   寒   ҟ                    |  |
| New York, United States      | 🛱   🛱   🐔   🚝   🕸   🕅                     |  |
| Los Angeles, United States   | 🖳   🛱   毎   1 🕸   🕅                       |  |
| Washington DC, United States | 🚆   🛱   🐔   🕅                             |  |
| Austin, United States        | 🚆   🚝   🦉   🕅                             |  |
| Vancouver, Canada            | 🚆   🚝   🏍   🕅                             |  |
| Berlin, Germany              | 🖳   🛱   🐔   🕅                             |  |
| Milan, Italy                 | 🛱   🐔   🕸   🕅                             |  |
| Montreal, Canada             | <b>⊊</b>   <b>∛</b>   <b>∛</b>   <b>∛</b> |  |
| Singapore, Singapore         | 🖳   🛱   ♂₀   🕸   Ҟ                        |  |
| Barcelona, Spain             | 🛱   ॐ   署   Ҟ                             |  |
| Seoul, South Korea           | │ 🖳 │ 🛱 │ 🏍 │ 🕸 │ İҞ                      |  |
| Tokyo, Japan                 | ┃ 🚆   🛱   ॐ₀      ҟ                       |  |
| Paris, France                | │ 🖳 │ 🛱 │ 🐔 │ 🕸 │ İҞ                      |  |
| Dublin, Ireland              | <b>॔</b>   肇   ☆                          |  |
| Vienna, Austria              | <u>∽</u>   ≇   <u>×</u>                   |  |
| Sydney, Australia            | <i>Ś</i> °   ∰   Ķ                        |  |

Most common response action is promoting cycling and walking as dominant mode of transportation in the city and thus making necessary changes to the urban transport infrastructure



Indicative list of cities where these response actions have been implemented

The decision to re-opening cities and national economy rests with Government organizations, some of the key aspects to be kept in mind, while doing so, are summarized below. These would have to be spread over short, medium and long term initiatives post opening of lockdown.

- 1. When economy opens, there would be a need to provide urban transportation facilities to labourers/ factory workers/ etc.
- 2. Provision of UT services, in the order of preference should be walking, cycles, company provided cabs for workers, auto/ cabs, buses with physical distancing of seats (no standee), 2W/ 4W personal vehicles, metro and sub-urban rails.
- 3. Demand to PPE is expected to spike for both the UT service providers, security staff as well as workers in non-healthcare related sectors. "Everything that opens will required PPE until the vaccine is found."
- 4. Prepare guidelines for sanitization, protective gear usage, no.of passenger, hours of operations, etc for the service providers like auto, cabs, buses (inter and intra-city), metro, and personal vehicles.
- 5. Ensure temporary modifications to maintain social distancing amongst passengers and passenger & driver in the vehicles are undertaken before allowing them to ply on road.
- 6. Build temporary bi-cycle lanes and footpath in cities, specially between residential area and neighbourhood markets, schools, etc
- 7. Route rationalization to connect more residential areas to hospitals and workplaces.
- 8. Re-negotiate contract terms for changed service hours/ routes and other terms.
- 9. Instead of penalizing, support private sector eg for GCC contracts support staff salaries, etc.
- 10. Support the informal transport operators like rickshaw/ auto operators as they may face 100% revenue loss
- 11. Undertake capacity building for service providers (esp informal sector) in terms of safety precautions, customer behaviour, response mechanism, etc





# Thank you

For further queries/ information please write to: Jaishree.jindel@umtc.in