



Improving the efficiency of public transport- post lockdown

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ABSTRACT

The whole world is under the influence of corona virus. This ongoing pandemic has created such a terrifying situation that people are not ready to come out from their houses. Corona virus across the world has imposed severe travel restrictions. Travel behaviour of the passengers is totally changed as government has imposed so many rules and regulations to follow while travelling so as to minimize the risk of getting in contact with each other. Various measures have been taken for the travellers travelling in different mode of transport all over the world. The pandemic has even led many countries to switch towards modernisation by pay using electronic mode rather than paying physically. This will help passengers to maintain social distancing while travelling. Public transport operators has face an excess breakdown during the lockdown but post lockdown there is again a ray of hope is rising as the demand for public transport is incredibly increasing day-by-day. This paper represents what measures government should take to increase the demand of public transport during this pandemic situation.

Keywords: Post lockdown, Social distancing, Shortage of public transport, Switching towards modernization

1. INTRODUCTION

Public transport is the backbone for the middle and lower class citizens for whom commuting with their private vehicle on a daily basis is nearly impossible. In cities like Delhi and Mumbai, around 20% of the daily commuters depend on public transport. In Delhi 41.90 lakh people prefer using bus whereas in Mumbai 28 lakh passengers travel by bus everyday. Delhi metro carry 1.8 million passengers per day on the other hand Mumbai local train commutes 7 million people everyday.

During the time of COVID-19, passengers need to maintain social distancing and for this they need around 650,000 buses for 25 million daily commuters and more metros and local trains. But this seems to be very difficult as our country does not have the required number of public transport. Indian government has ordered to cut down the strength of vehicle to 50% of the total seats to maintain social distancing this has doubled the burden upon the public transport sector as they don't have enough vehicles to fulfil the demands of the daily commuters. Citizens are facing problem and hence opting towards private vehicles and paying double fare along with the

increasing risk of getting infected by the disease as they don't maintain social distancing. Government is taking strict measures such as imposing fine on the people who don't wear mask and avoid social distancing.

This is the best time for India to make its public transports cash free by introducing informal transit services such as bus cards should be introduced like metro cards so that there is no need to buy ticket manually and hence social distancing is maintained. Entry and exit of the passengers should allowed only from the back door so that the driver comes in least contact with the commuters. Different transparent chamber should be made for the drivers. So many people are working from home since they have a fear of getting infected which already has decreased the demand of public transport. If our government take a step further in modernizing public transport people will feel safe and there will be an increase in the demand of public transport which as a result will increase our country's economy and help public transport sector to fulfil its losses due to lockdown.

Since we don't know how much time vaccine will take to get ready these new ways of maintaining social distancing will be very helpful. This will also decrease over crowding on the roads. In September, 2020 UITP India has initiated a project with the World Bank Group (World Bank + International Finance Commission) on electric mobility as a part of its industrial and sustainable strategy. This will increase the demand of public transport. States that are interested in this project are Tamil Nadu, Madhya Pradesh, Maharashtra and Kerala. Indian government has provided a financial assistance of Rs. 56.32 crore to states to sanitize all public vehicles as well as stations to ensure safety among the operators and commuters.

To overcome the present situation of pandemic a systematic method is required to be adopted to move ahead. It is always been difficult for the government to meet the demand and supply of public transports to commuters but now government has to implement such ideas that can fulfil the demand of the passengers along with following social distancing norms and covering the face by mask so that they are at least risk of getting affected by COVID-19 and not prefer travelling more via personalized vehicles.



Fig. 1: Passengers following social distancing and wearing masks in public bus



Fig. 2: Bus operator wearing protective gear while driving



Fig. 3: Electronic buses – UITP India initiated a project with World Bank

2. LITERATURE REVIEW

This section discusses the previous studies carried on the changes that public transport sector should make to meet the demands of daily commuters post lockdown. Nonetheless, the COVID-19 crisis has made people switch to personalised transports, public transport sector is making efforts to overcome this situation by adopting various rules and regulations so that citizens again head towards public transport and feel safe while travelling in them.

Detrimental impact of COVID-19 on economy to affect transport Infra : ICRA. According to the ratings agency, transportation infrastructure has a strong correlation with the health of the economy and thereby with the movement in GDP. PTI, 10 April, 2020. Steps to restart public transit after

lockdown ends. It is necessary to get prioritise what should access to road first. We need to examine how public transport is vital to keep the city running and how it enables the neediest to access the city's services. Amruta Ponskhe, 7 May, 2020. How can India reopen public transport post lockdown? An expert explains. Commuters with masks, passes instead of daily tickets and plenty of disinfection. Akshita Jain, 16 May, 2020. Life after lockdown: Six precautions you can take while using public transport to reduce the risk of contracting or spreading COVID-19. While travelling through public transport, knowing bus timings and routes, location of containment zones, and using online payment and passes rather than cash can reduce the chances of contracting COVID-19. Myupchar, 9 June, 2020. To resume public transport, experts suggest staggered timings, bus lanes, tech systems. The challenge is to resume public transport systems without undoing the benefits of the lockdown that enforced social distancing. Chaitanya Mallapur, Indiaspend, June 9, 2020. Public transport in an age of social distancing. New levels of workplace flexibility, as well as more walking and cycling, will be required if public transport is to meet the requirements of social distancing in big cities. Stuart Croucher, eTechnical Principal, Urban Design. Making public transport safe during COVID-19. Several safety measures could prevent mass transmission of the virus and a shift to private modes of transport. Ashish Verma, R Jayakrishnan, S Velmurugan. 15 June, 2020. Back to business : Enabling public bus systems post COVID -19. To improve bus services, the government should implement dedicated infrastructure in cities, such as bus priority lanes. Shilpa Kharwal, Alope Mukherjee, 17 June, 2020. Unlock-4 How Delhi metro plans to get back on track post corona virus lockdown. From new smart cards with auto top-up facility to stickers on social distancing norms pasted on seats and platform floors, Delhi Metro is all set to handle commuters in adherence to COVID-19 safety guidelines. ET Online, 30 August, 2020. COVID-19: Demands for local trains, metro in Mumbai gets louder amid lockdown. The demand for transportation has grown especially after the state allowed private offices to operate at 30% capacity from September 2. Tanushree Venkatraman, Hindustan Times Mumbai, 10 September, 2020.

3. COMPARATIVE ANALYSIS OF DIFFERENT COUNTRIES OF THE WORLD

WHO declared the corona virus disease a public health emergency of international concern on 30 January, 2020. Here is the comparative analysis on how much demand of the public transportation got affected due to the fear of getting infected by COVID-19.

- **China:** On January 23, 2020, the Chinese government implemented complete lockdown in Wuhan. All public transport in Wuhan, national air travel and railway were shut down to stop the corona virus from spreading. In Beijing, on 29 March, 2020 – Beijing transport Institute estimated that public transport were at 30% of the normal value. For the safety purpose people were opting towards private cars and bicycles.
- **Turkey:** On 24 March, 2020 Public transport was allowed to fill up only 50% seat at a time which resulted in financial losses of the country.
- **United States of America:** An average of 75 – 80% demand for transit service was down in mid April. Washington Metro ridership was 95% down in late April.
- **Canada:** Public transport in Canada dropped by 83% in March compared to previous years. By April 13, it dropped by 80- 90%. 80% dropped ridership in metro.

- **California:** On an average 90 % public transport reduced service hours, longer trains were cut short to maintain social distancing.
- **United Kingdom:** Use of public transport has declined up to 90% in London since the lockdown was implemented. From 20 April, 2020 bus travel was made free.
- **BUDAPEST :** Use of public transport in Hungary dropped by 90%. They are creating cycle lanes to commute as the safest option during pandemic.
- **India:** The impact of corona virus has badly affected the country. The World Bank estimated that financial losses due to pandemic could amount up to Rs1.5 lakh crore for the public bus sector. Due to lockdown, Indian economy has suffered 23.9% contraction which is the biggest contraction on record since three decades. More than 70 million people travel by public buses everyday which was dropped by 95%.

4. CONCLUSION

As we all know, country's public transport cannot meet the demand if social distancing norm is followed so Public Transport Sector has introduced some measures post lockdown along with that we have to follow some rules and regulations while travelling in public transport.

- Mask should be mandatory while travelling. No one should be allowed without face cover in any of the vehicles. Wearing mask doesn't eliminate the risk of getting affected by the virus but it is a crucial method of reducing the transmission of virus from the infected person to the person who is not infected.
- Using public transportation increases the risk of developing a respiratory infection as we come in contact with different people who might be suffering from respiratory disease or containing corona virus so social distancing is a must because many individuals who does not show any symptoms of COVID-19 i.e., dry cough, fever, shortness of breath can carry the disease. Therefore it is mandatory to maintain social distancing while communicating from one place to another.
- The Transport Department has directed the operators of public transport to clean and disinfectant the vehicle and to

sanitize the handrails, doormats, seats and bars everytime they reach their destination to avoid the spreading of virus.

- Ministry of Road Transport and Highways has also advised to stick posters regarding the masks, social distancing and sanitization inside and outside the public transports to make people aware.
- Seats should be marked where the passenger has to sit so as to maintain social distancing.
- Proper transparent driver-cabin separator should be propped to maintain driver and passengers safety.
- Contactless payment method should be introduced to minimize interaction.

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