



BUSTLING THROUGH THE CITY

A BUS USER FEEDBACK SURVEY

Greenpeace India Society



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Bustling Through the city: A bus user feedback survey

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In collaboration with the 'Reclaiming The Bus' campaign, Delhi Bus Yatri Union, and Sustainable Urban Mobility Network (SUM Net) India (sumnet.in)

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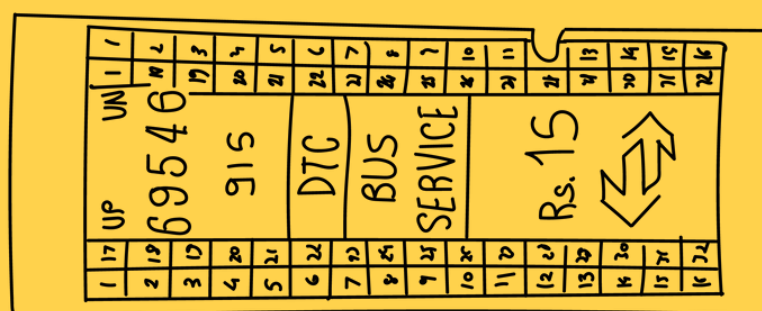
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KEY INSIGHTS

- Transport is one of the major sectors contributing to PM 2.5 and GHG emissions which cause a public health hazard and worsen the state of the climate crisis.
- An affordable and reliable public transport is an indispensable component of any plan to address the aforementioned issue.
- Buses have always been and remain the predominant and preferred mode of public transport in Delhi and contribute to reducing the social and environmental inequities.
- Greenpeace India, in association with the Reclaiming The Bus campaign, Delhi Bus Yatri Union and Sustainable Urban Mobility Network (SUM Net) India, conducted a survey of DTC bus users in August-September 2021.
- 'Bus' was reported to be the most preferred mode of transport by a heavy majority (89.1%), across the gender categories.



- 71% of surveyed bus users reported their average daily travel time to be less than 30 minutes.
- Interestingly, 10% of people reported that they switched to buses from personal vehicles after COVID-19. This can be attributed to COVID-19 lockdowns leading to deep impacts on household income and spending capacity.
- More than 85% of the surveyed commuters said COVID-19 impacted their daily commutes, while about 14% responded that there were no significant changes from COVID-19.
- More than half of the respondents called for increasing the bus fleet size and cited this as their top-most demand. Changes in bus timetable was the demand raised by 42% of bus users.



- About 15% of users reported reduction or abolition of bus fares as their priority demand.
- 54% of bus users mentioned the availability of toilets as a key feature of ideal bus stops. Most bus stops in Delhi do not have an attached or nearby toilet facility which poses difficulties for bus users.

- About 80% of respondents considered the free services for women a good initiative and beneficial for encouraging mobility of women.
- 40% of respondents welcomed the idea and categorically said that the buses should be made free for all.
- Based on the survey with bus users, we recommend that more low-floor, universally accessible buses should be procured on a priority basis and commitment must be made to achieve a target of bringing fleet size to 12000 and adding at least 1000 buses per year.



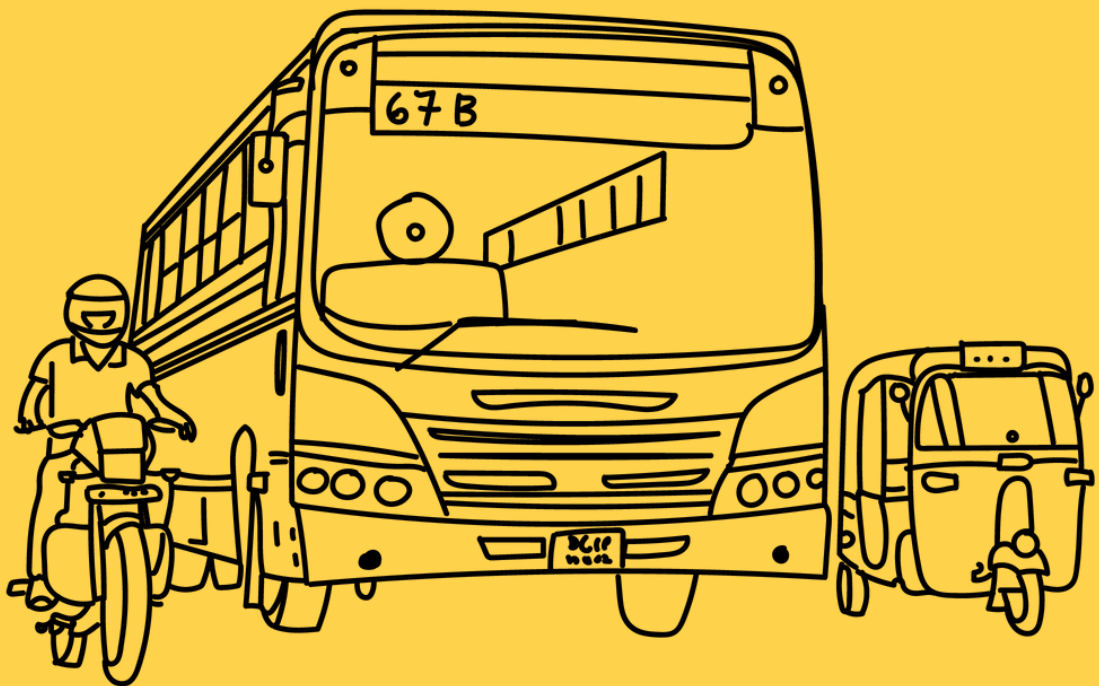
- We also recommend that the bus should be free for children, physically challenged persons, senior citizens and students, and at some point in time, free for all.

- We recommend that buses should be made safer for women and members of the LGBTQ community by taking measures such as 'request stop'. The effectiveness of marshalls and CCTV cameras should be assessed in terms of progress in making buses gender-sensitive places, not just a place of surveillance and control.



- Vibrant and visible streets should be an essential part of planning for safety on roads and public transport.
- We recommend that the government take necessary measures to bring down the waiting time on bus stops, reduce the variability in the bus schedule to less than 5 minutes, and provide separate bus lanes to increase the carrying capacity.

- The system that ties drivers' wages to the daily targets of vehicle kilometres must be put to an end. Drivers should be entitled to fair compensation for their services. All concerns of the bus workers should be resolved in a transparent and time-bound manner.
- Finally, public transport will always require subsidies and assured provision of funds to ensure reliable and affordable services. A dedicated state-level bus fund must be created to ensure this.



INTRODUCTION

The transport sector is one of the major contributors to the air pollution crisis. The increasing fossil fuel burning in the urban centres is resulting in adverse human health impacts through rising air pollution levels. A study by TERI and ARAI found that the contribution of vehicular emissions in Delhi's air could go up to 30% if secondary particles are taken into account. The poorly planned, fossil fuel-dependent private transport is already having significant economic, social and environmental costs. Air pollution from burning fossil fuels is already taking one million premature deaths in India and it costs more than 10 lakh crores of the Indian economy. The current development of 'car friendly' city infrastructure is not only impacting the environment and public health but also manifesting the increasing social and economic gap in the urban space. This clearly indicates a paradigm shift required in the present transport infrastructure. A clean, safe, inclusive, equitable and accessible public transport system, particularly the public bus, can help cities to be more productive, resilient, safer, cleaner and socially inclusive. Redeveloping the city to prioritize public bus, instead of prioritising cars will help us to create a better city for people to live in. This will mean that the citizens, commuters, students and workers will easily commute through cleaner and healthier cities.

To achieve this cities need to phase out from burning fossil fuels by limiting vehicles that run on fossil fuels, shifting to public transport, and at the same time transitioning to 100% renewable energy that can help to reduce the air pollution as well as the carbon footprint. Transport of people in Delhi and other cities will have to be reorganised almost entirely and that individual transport must be complemented or even substituted by public transport systems. Creating an efficient public transport system will dramatically reduce the impact the transportation sector has on both human health and the planet while ensuring equitable access to the city for everyone.



The efficient, cost-effective and reliable public bus system will also help us to tackle the climate crisis which is unfolding at an alarming speed. We need to limit the rise in global mean temperature to 1.5°C. To meet this crucial climate goal, we have to address one of the main root causes: fossil fuel consumption in the transport sector.

A recent joint report released by ITF and C40 revealed that ‘doubling public transport usages as part of a green recovery would, by 2030, create tens of millions of jobs in cities around the world, cut urban transport emissions by more than half, and reduce air pollution from transport by up to 45%. It would also benefit the lower-income group communities and connect people to work, education and community.

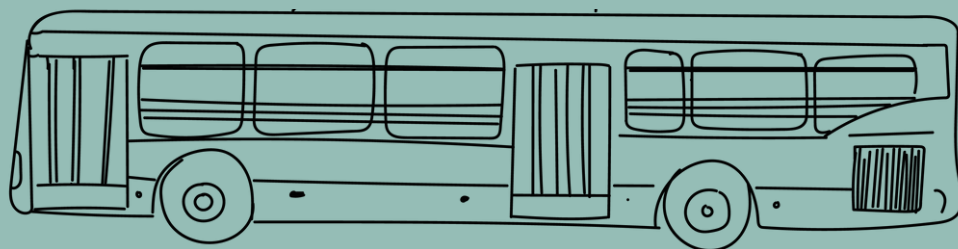
This survey report brings together the key insights from the public bus users in Delhi- about the experiences and challenges they are facing while commuting in the city. The insights indicate that the public bus in Delhi is already supporting the working class to make their commute cost-effective but also highlight the challenges we need to overcome to make it more efficient and accessible. The report provides important insights from ground zero and highlights the actions that need to be taken by the state government to make the public bus system more reliable and affordable.



ABOUT THE SURVEY

The Survey of Bus Users in Delhi was planned as part of a collaborative campaign to seek feedback from the commuters for the improvement of bus services in the NCT of Delhi. Before COVID-19, buses used to carry more than 5 million passengers in Delhi every day. Even during peak COVID-19, the public buses remained the lifeline for many to serve their mobility needs. Contrary to the common belief, the bus remains THE MAIN public transport and a popular (if not the most preferred) mode across the age, gender and income categories. This is after 25 years of prioritising investments in metro rail transit.

The idea of conducting this survey was inspired by the ongoing campaign 'Reclaiming The Bus' and the subsequent formation of the Delhi Bus Yatri Union last year. Reclaiming The Bus campaign is a citizen-led initiative that seeks free, safe and reliable bus-based public transport in Delhi. Delhi Bus Yatri Union is a democratic association of existing and potential bus users of Delhi who adopt a common vision for better, people-friendly and universally inclusive bus services in Delhi.



METHODOLOGY

In September 2021, a joint group of members of Greenpeace India, Delhi Bus Yatri Union and Reclaiming The Bus campaign worked out the survey format and conducted a pilot survey at Nehru Place terminal. According to the feedback received in the pilot survey, the draft format was modified and improved to suit the on-ground experience. Please refer to Appendix A for the final survey form.

This survey was conducted at 16 bus stops and 3 bus depots in Delhi during the month of October 2021. Members of the survey team randomly recruited informants on these locations according to the availability and consent of the bus users interviewed. Care was taken to maintain the diversity of gender, age and physical ability while recruiting respondents. Respondents included daily wage workers, young adults, college students, senior citizens, working women, members of the transgender community, bus drivers, conductors and civil marshals, and so on. The survey team followed all the COVID-19-related protocols keeping in view the public health concerns.



CHARACTERISTICS OF SURVEY RESPONDENTS

AGE

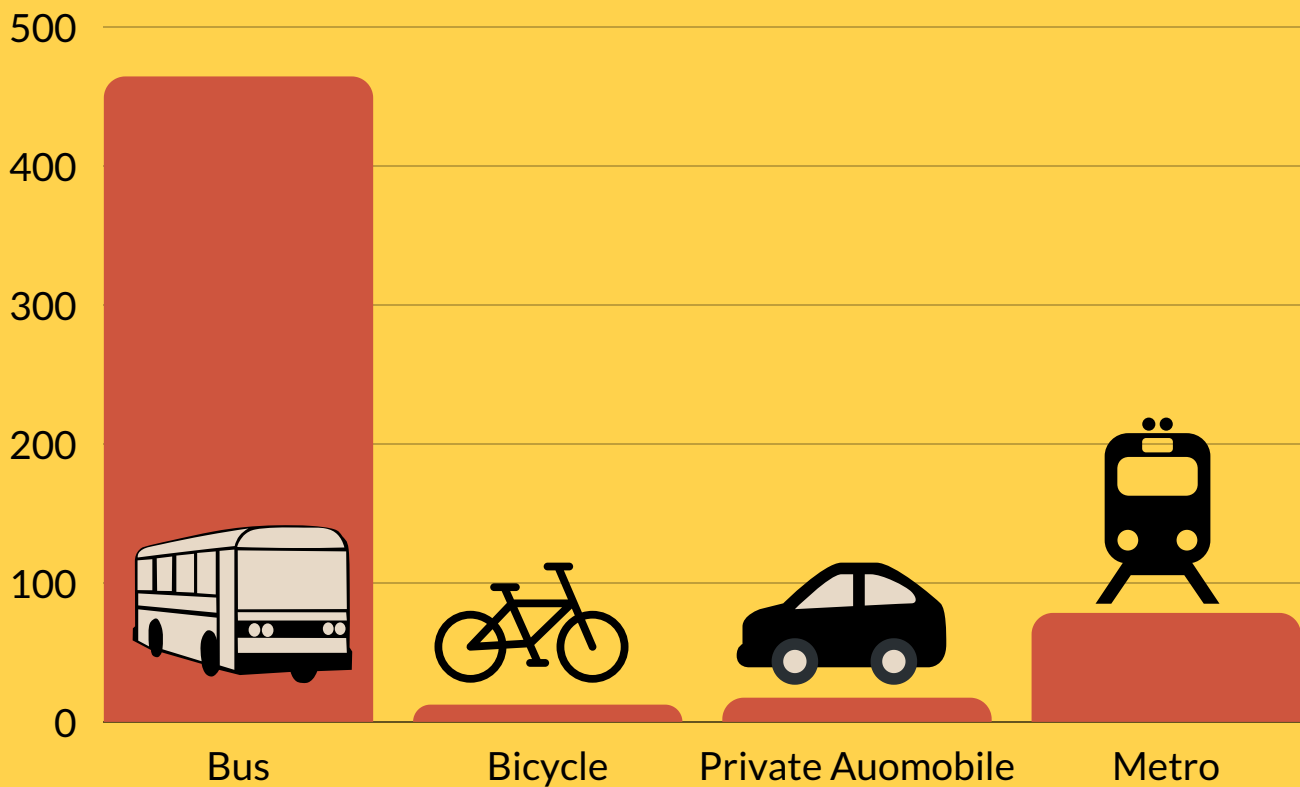
The majority of our respondents were aged between 18 and 35. 170 women, 240 men and 2 transgender persons participated in the survey while 93 respondents did not share their gender.

AGE GROUP	UPTO 18	19-25	26-35	36-50	51-65	65+
Women	28	68	39	30	5	0
Men	23	78	66	57	15	1
Transgender/Prefer Not to say/Other	-	1	1	-	-	-
Declined to answer	2	31	24	26	8	2
Number of respondents	53	178	130	113	28	3
% of respondents	10.5	35.2	25.7	22.3	5.5	0.6

PREFERRED MODE

Quite predictably, 'Bus' was reported the most preferred mode of transport by a heavy majority of bus users, across the gender categories. Cost-effectiveness was cited as the main reason for preferring bus while convenience and safety were the main reasons cited by those who preferred the metro over the bus.

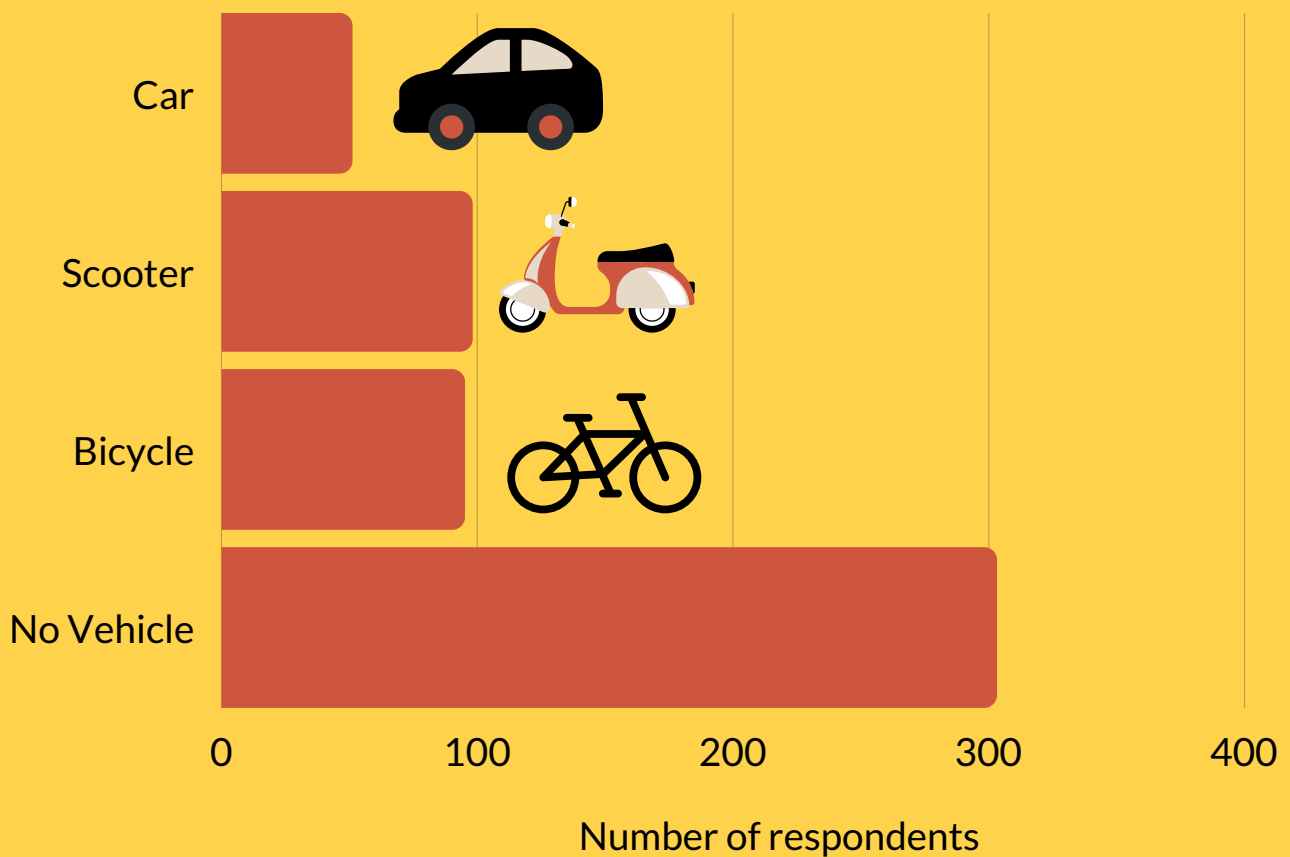
Preferred Mode of Transport Among Respondents



VEHICLE OWNERSHIP

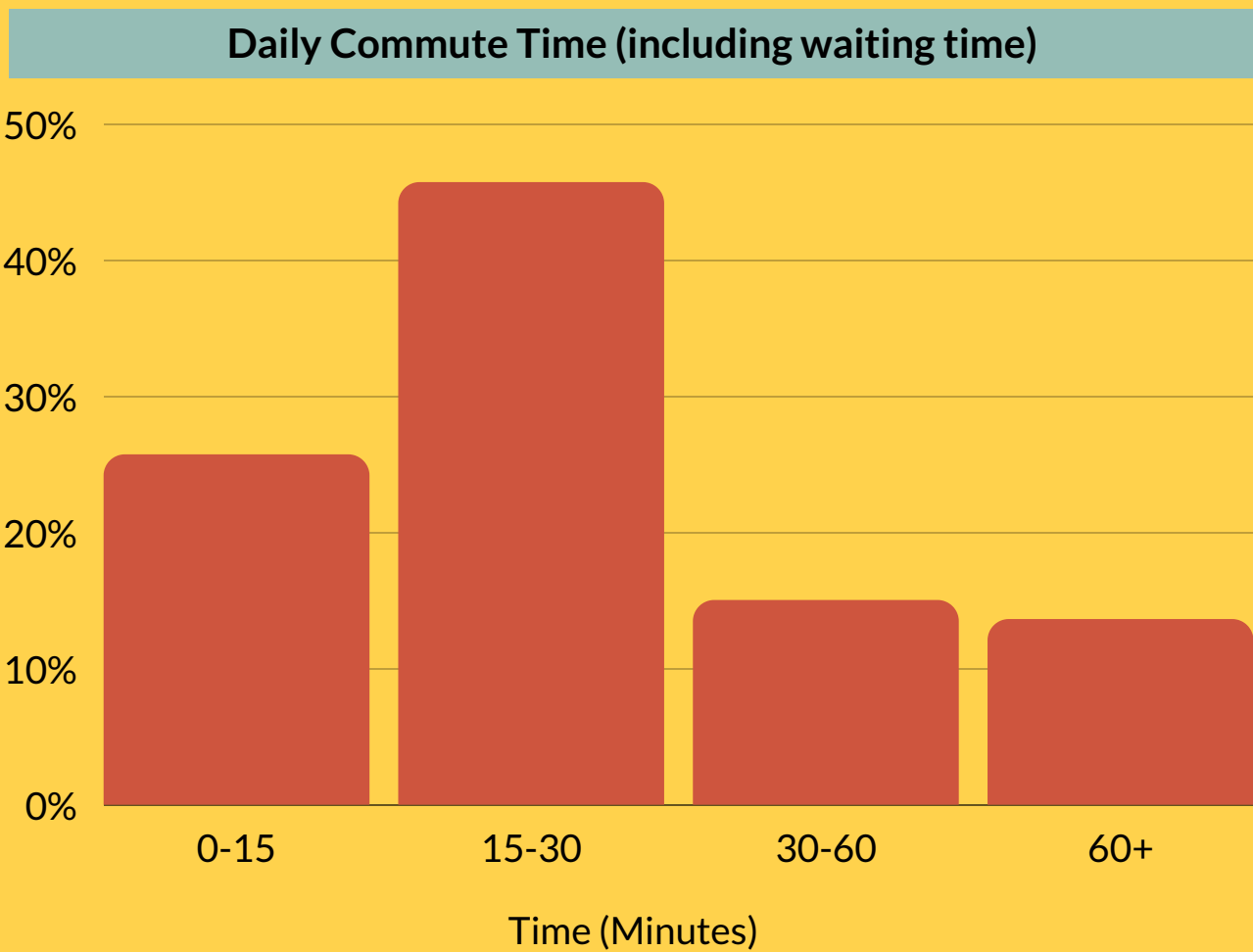
Among the bus users, 18% of people own a bicycle, 19% of people own a motorised two-wheeler and 10% of people reported owning a car or four-wheeler.

Ownership of Vehicles Among Respondents



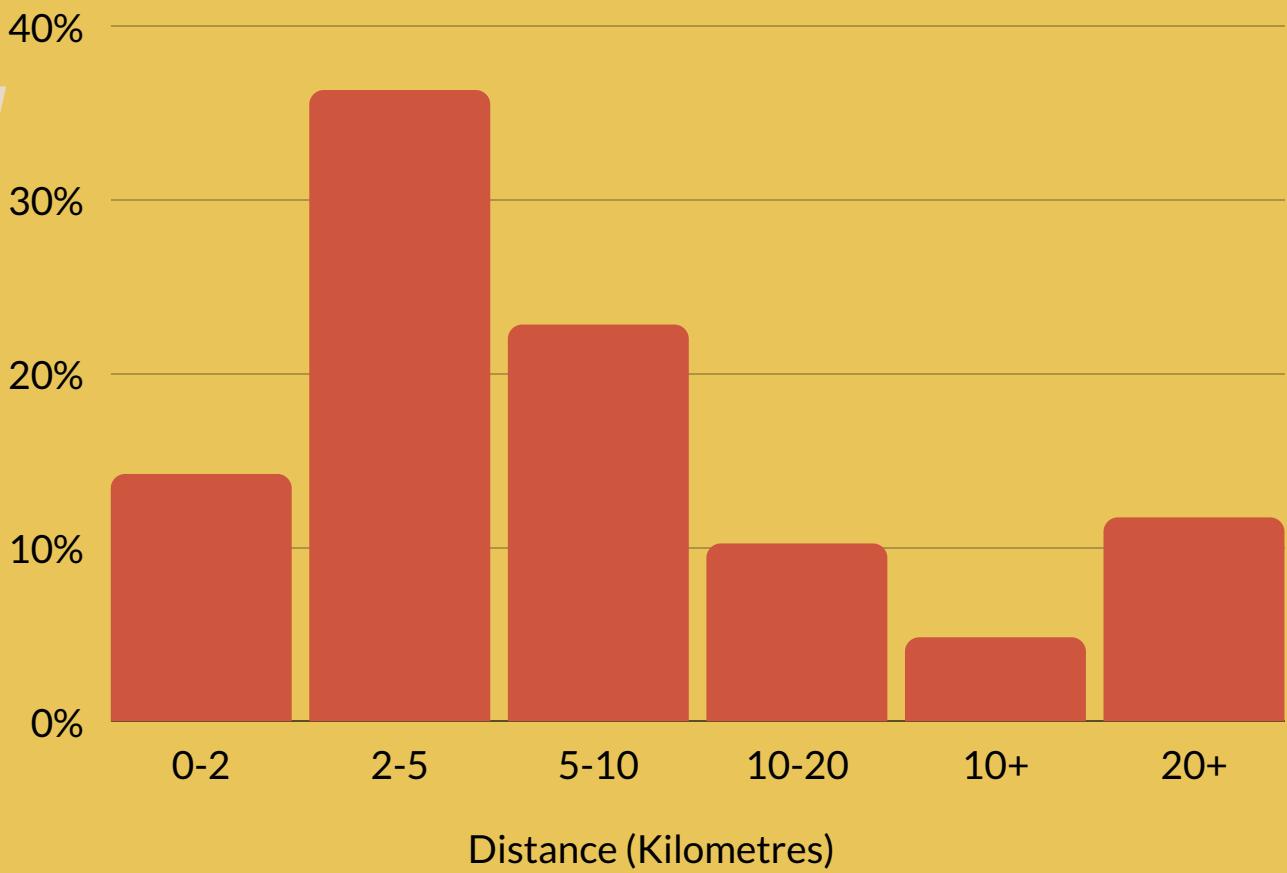
TRAVEL TIME AND DISTANCE

The majority of the surveyed bus users (71%) reported their average daily travel time to be less than 30 minutes. However, 13% of users reported having to travel for more than an hour on a regular basis.



59% of bus users reported travelling for 2-10 km in their daily commute. However, more than 10% of bus users also travel distances longer than 20 km in their daily journeys to work, school or other destinations.

Daily Commute Distances

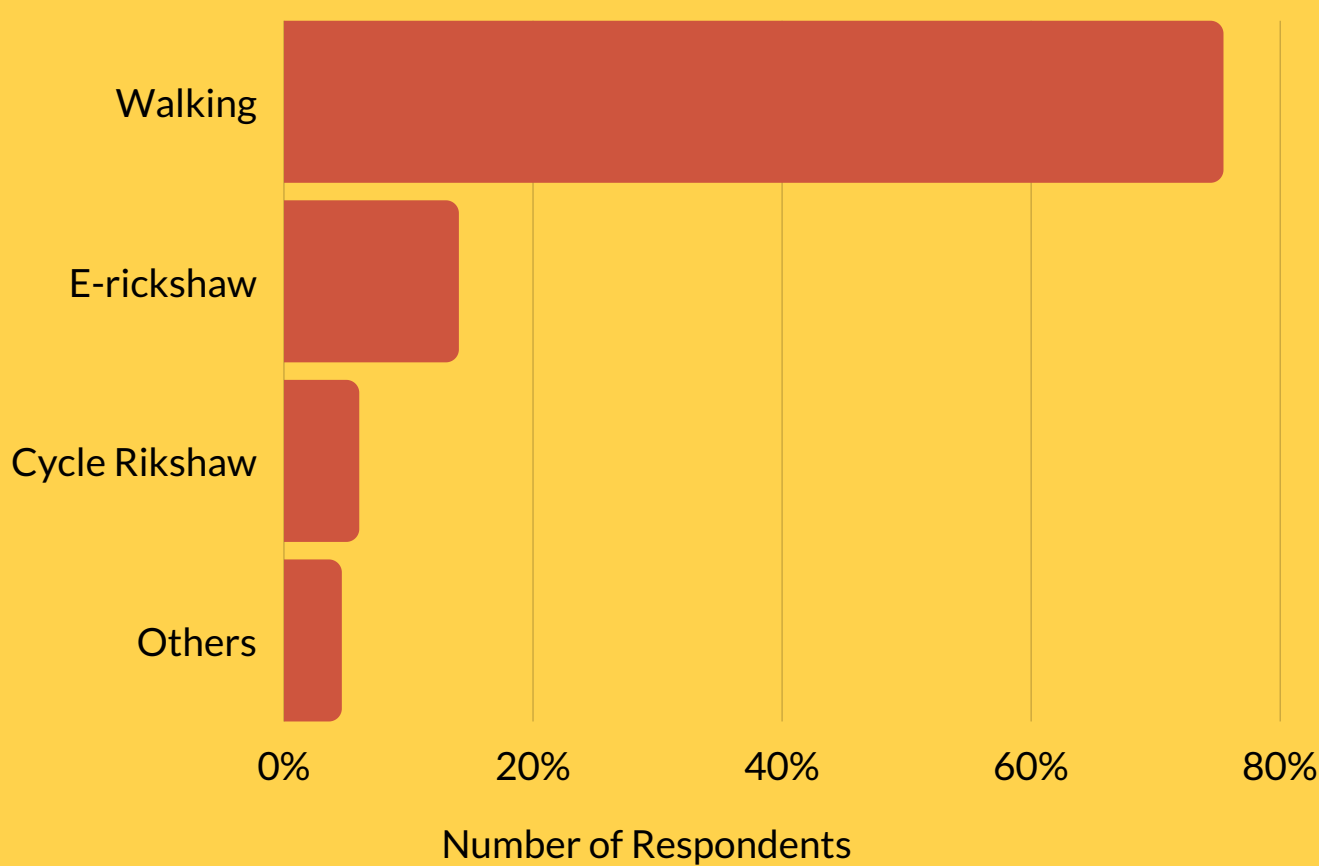


59% of bus users reported travelling for 2-10 km in their daily commute. However, more than 10% of bus users also travel distances longer than 20 km in their daily journeys to work, school or other destinations.

MODE OF ACCESS TO BUS STOP

Consistent with previous studies in Delhi, this survey finds that three fourth of the bus users walk to reach the bus stop while 20% of bus users reported electric rickshaw as the 'most regularly used' mode to reach the bus stops. This suggests that bus stops are within the accessible distances for existing bus users.

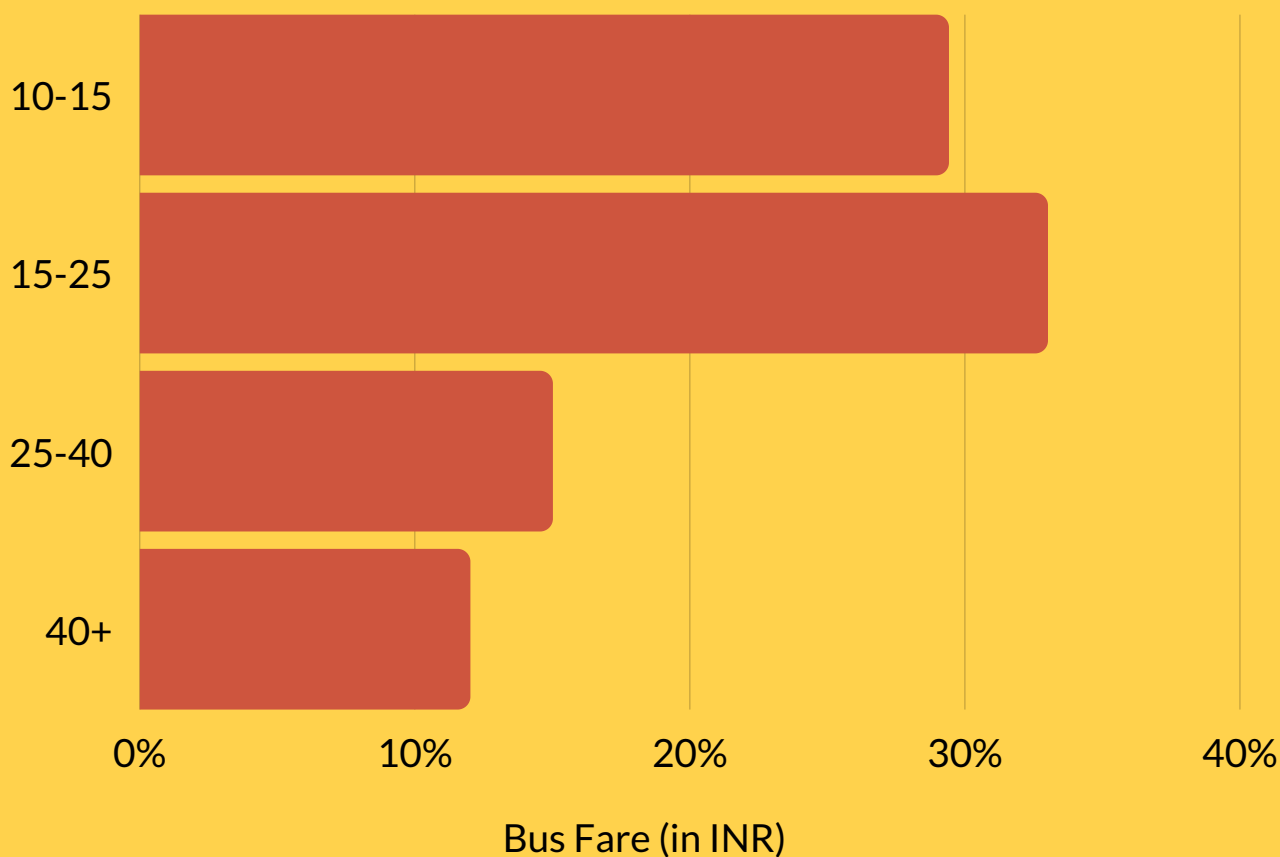
How Do You Reach the Nearest Bus Stop?



BUS FARE

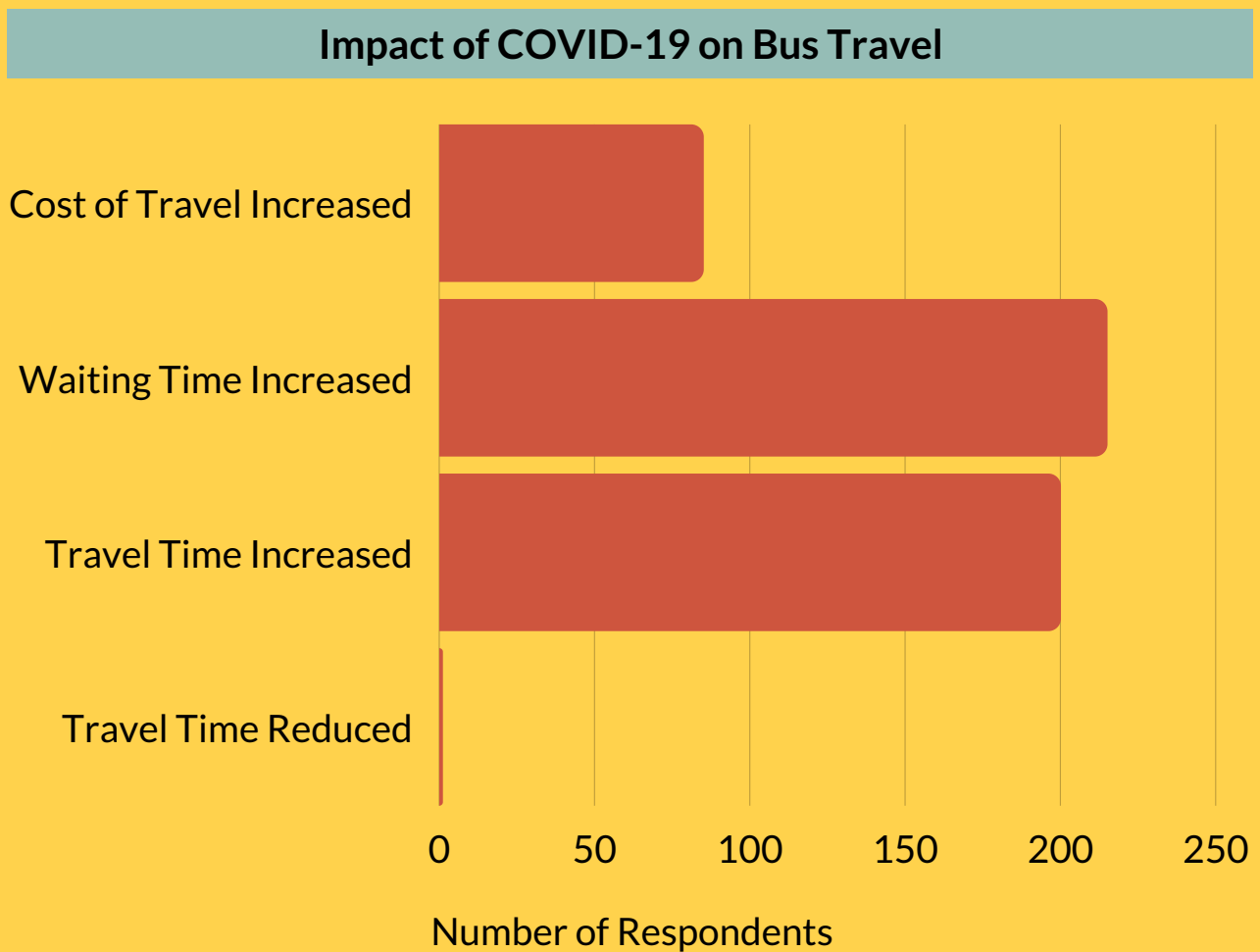
Most bus users spend somewhere between 10 to 25 rupees per day on bus fares. We also worked out a conservative estimate of average monthly expenditure on bus fares using the survey data and it stood at about 700 rupees. It must be noted that buses in Delhi are already fare-free for women while there is a facility of subsidised bus passes for senior citizens and students.

Daily Bus Fare Expenses



IMPACT OF COVID-19

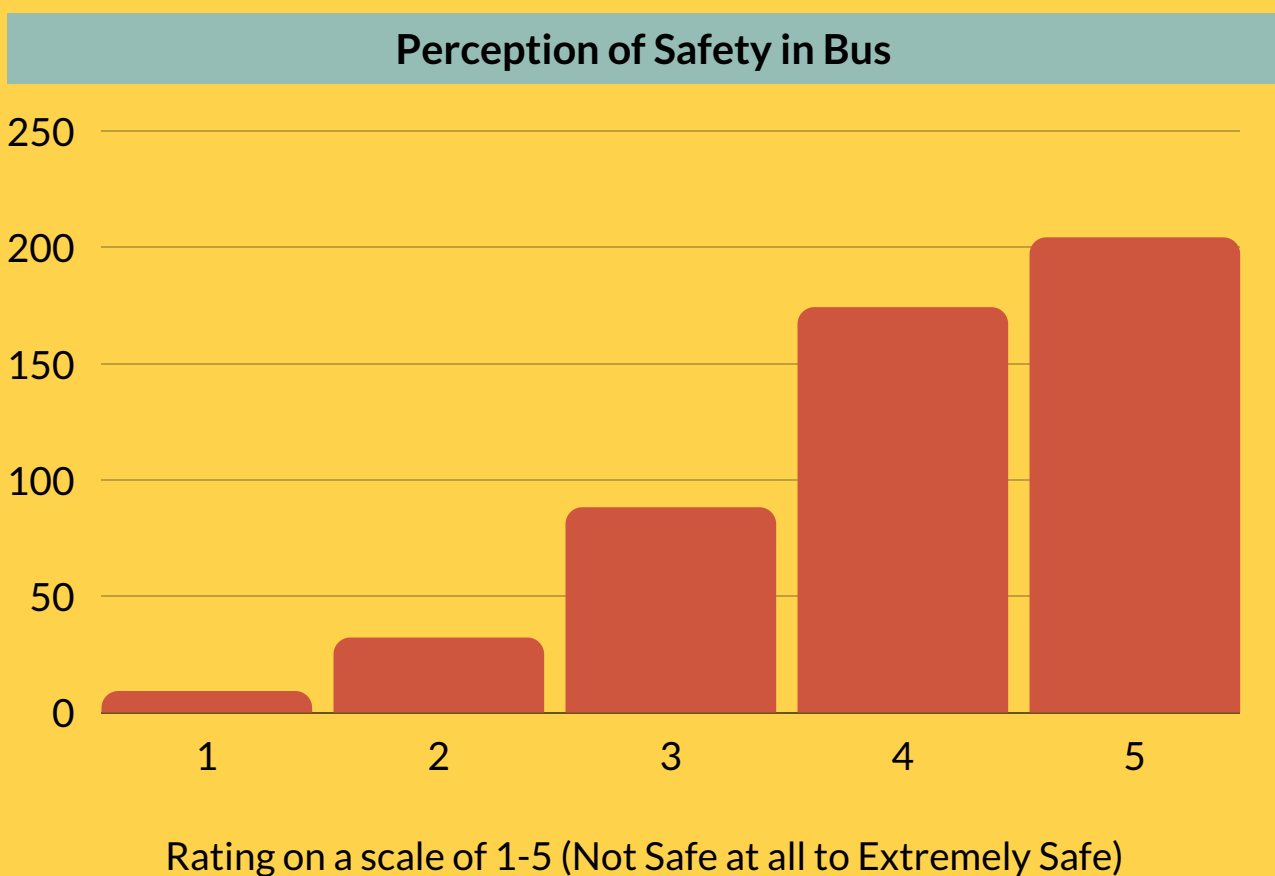
COVID-19 posed serious public health and economic challenges for so many people in so many ways. More than 85% of the surveyed commuters said COVID-19 impacted their daily commutes, while about 14% responded that there were no significant changes from COVID-19. Its impact was seen in terms of the increased cost of daily travel, increase in waiting time on bus stops because of the stringent limit on the onboard capacity of buses, and increase in total travel time in bus journeys.



The survey also asked the bus users about the mode they used to opt for travelling in the pre-COVID-19 times. Nearly 70% of respondents reported using primarily the public transportation modes, including bus, metro rail and suburban rail, before COVID-19. Interestingly, 10% of people reported that they switched to buses from personal vehicles after COVID-19. This can be attributed to COVID-19 lockdowns leading to deep impacts on household income and spending capacity.

PERCEPTION OF SAFETY IN BUS

The majority of the surveyed commuters consider the DTC buses safe to travel. About 40% of passengers rated 5 and another 35% rated 4.

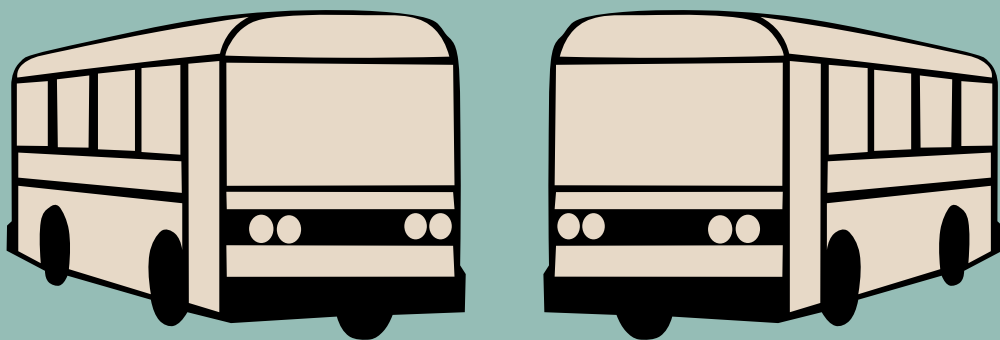


USER DEMAND CHANGES

We asked the bus users also about their thoughts on how to make the bus system better for them. The suggestions ranged from increasing the bus fleet to improving the route connectivity, service quality and safety.

More than half of the respondents called for increasing the bus fleet size and cited this as their top-most demand. Changes in bus timetable was the demand raised by 42% of bus users. Separate bus lanes and better first and last-mile connectivity were the two other major demands raised by 27% and 22% of users respectively. About 15% of users reported reduction or abolition of bus fares as their priority demand.

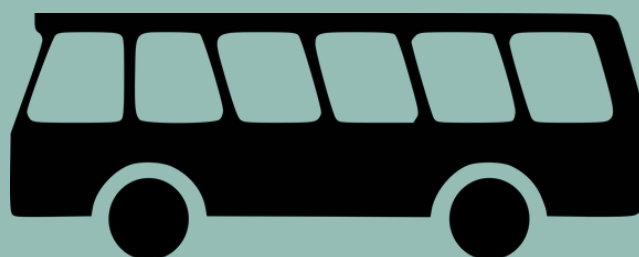
Some of the other demands raised by bus users were better training of bus drivers, more time for boarding and deboarding to ensure safety and convenience and better design of bus stops.



SUGGESTIONS FOR IMPROVING BUS STOPS

We further asked the bus users which facilities they thought should be available at bus stops. Toilets ranked highest with 54% of bus users mentioning the availability of toilets as key features of ideal bus stops. Most bus stops in Delhi do not have an attached or nearby toilet facility which poses difficulties for bus users.

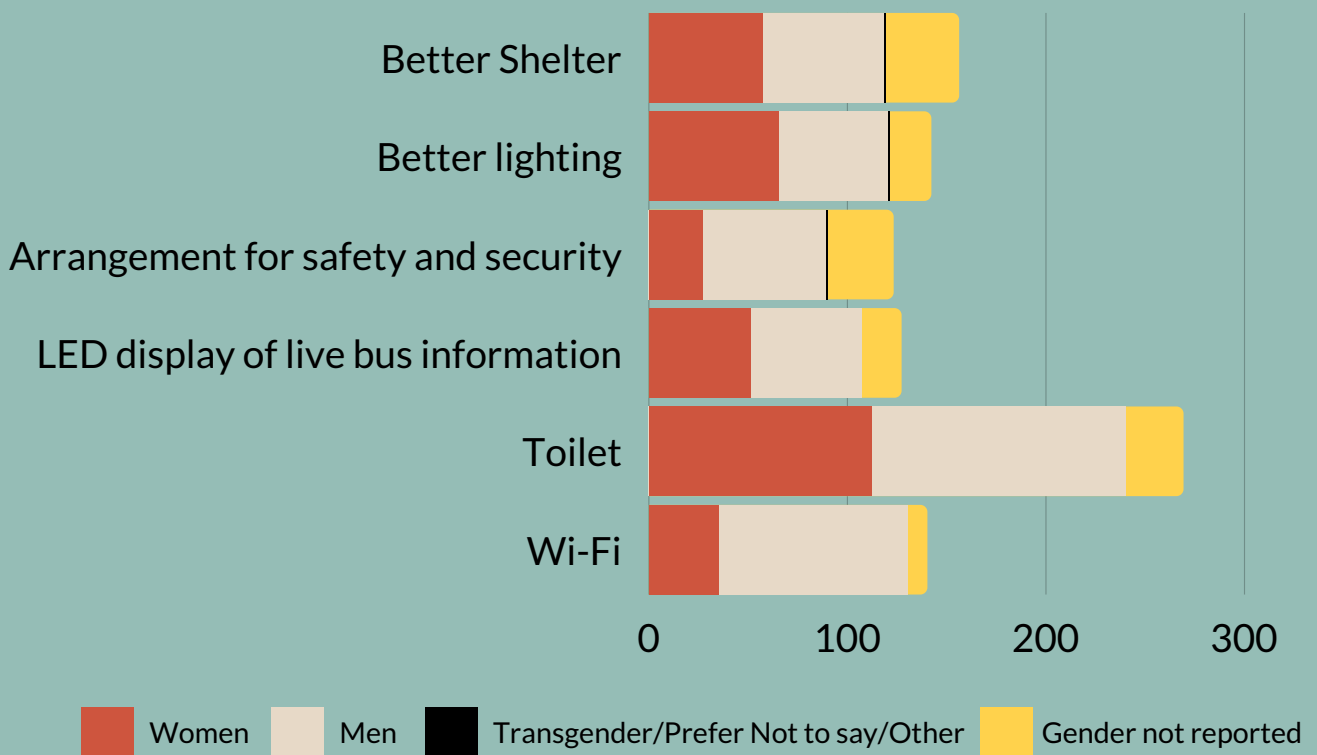
Seating arrangements, shelter to avoid rain and heat, and better lighting were the second and third most popular needs reported by bus users of all genders. Interestingly, there is a gender divide in the demand for Wi-Fi which is mainly a demand by male bus passengers (more than 20% male passengers, as compared to less than 10% women, suggested provision of Wi-Fi service on bus stops). Similarly, most women (more than 92%) did not raise the demand for safety on bus stops as a key concern while this was still mentioned by more men (about 15% of men suggested making arrangements on bus stops to ensure safety and security).



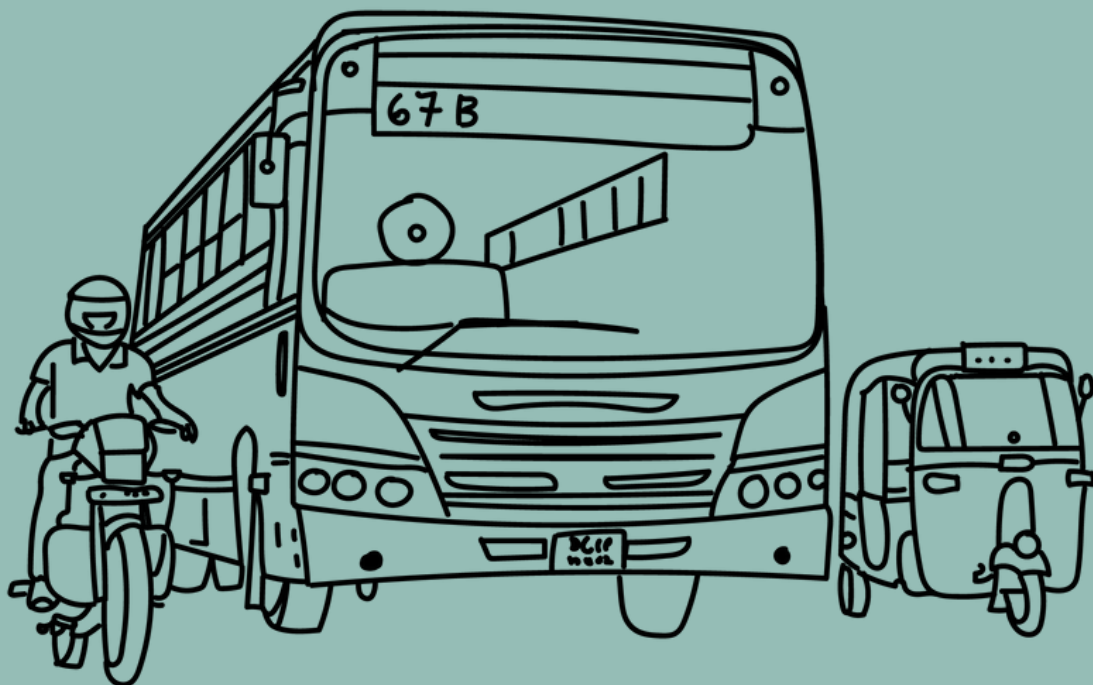
PERSPECTIVES ON REMOVING BUS FARES

We asked what the respondents thought about the government providing free bus services to specific groups, especially women. About 80 per cent of respondents considered the free services for women a good initiative and beneficial for encouraging mobility of women. Other 20% of opined that a fare-free bus system is not beneficial (or other related thoughts such as ‘it creates discrimination’ and ‘too much unnecessary expenditure’). More than two-thirds of respondents from the latter group were men. Only 5% of women found fare-free services for women to be a bad idea.

Demand for facilities on Bus Stops (Gender-wise)



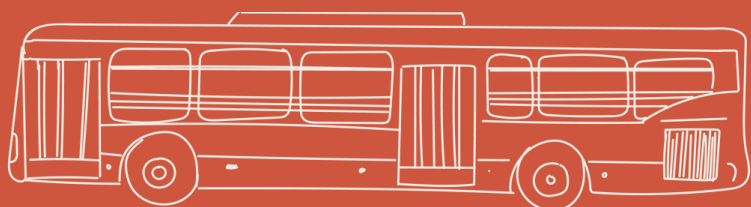
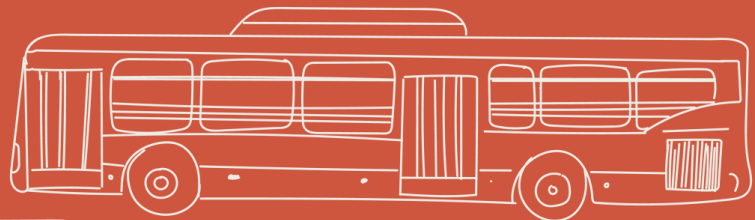
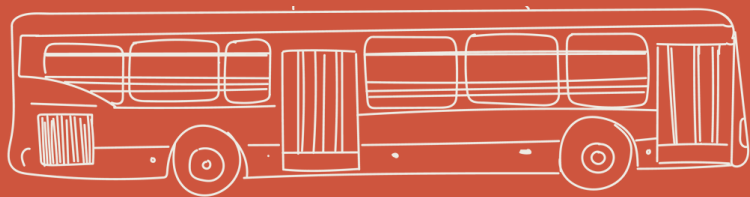
We further asked their opinion on making buses free for all. 40% of respondents welcomed the idea and categorically said that the buses should be made free for all. Interestingly, a greater fraction of women (45% of) than men (33% of) supported the idea. This makes it clear that a greater proportion of men passengers are against making buses fare-free while women are by and large enjoying the free services and want this to be extended to other needy groups and even universally for all bus users.



RECOMMENDATIONS

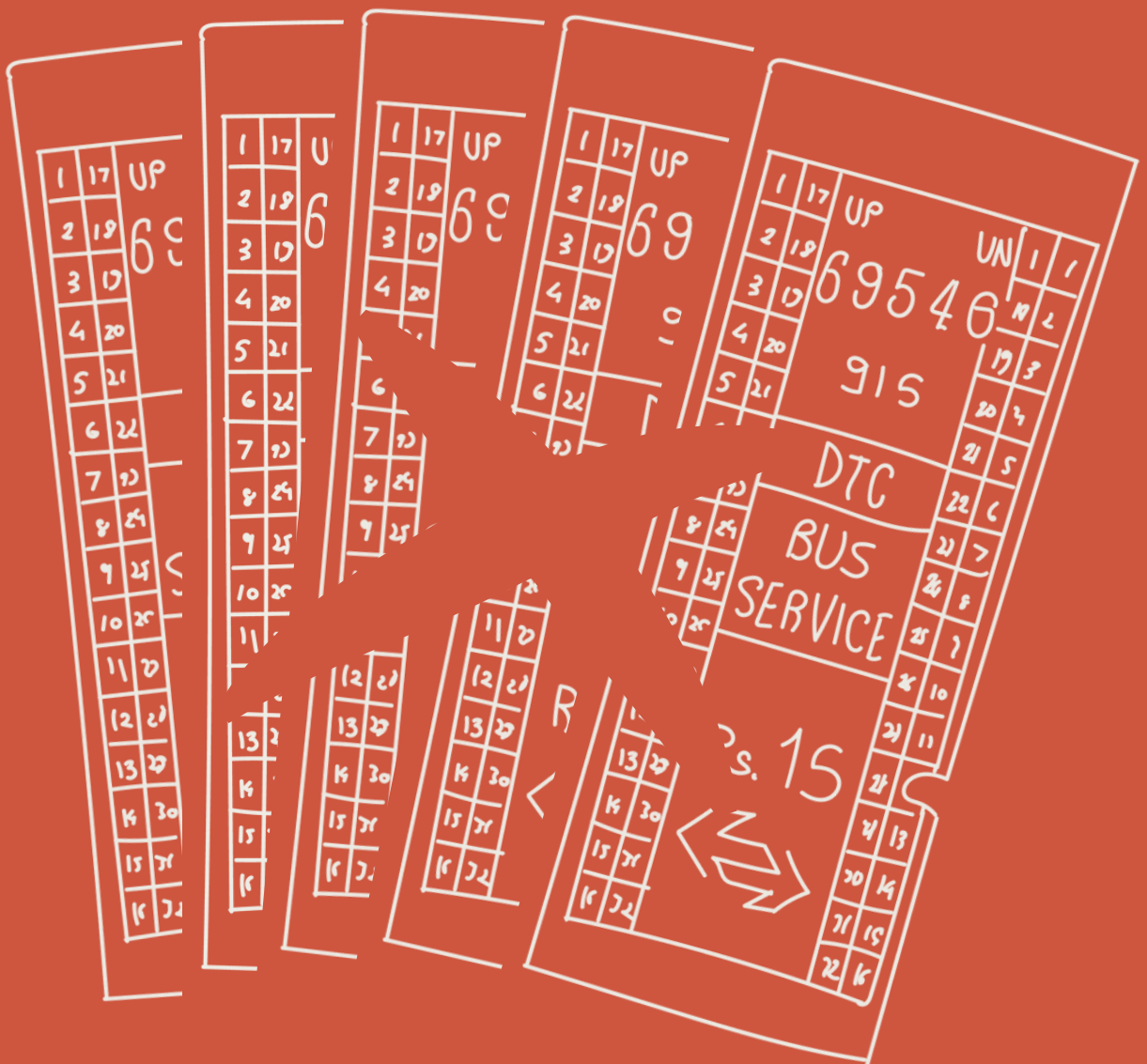
Bring more buses

Delhi currently has 25 buses per lakh people, which is less than half of what is required to provide basic bus services for a population of more than 20 million. More buses should be procured on a priority basis and commitment must be made to achieve a target of adding at least 1000 buses per year. Electric buses powered by renewable energy should be prioritised while augmenting the bus fleet size.



Abolish Fares

Travel in buses is already fare-free for all women in Delhi. In the first round of revisions, the scheme should be extended to cover all children, physically challenged persons, senior citizens and students, or on certain days in a week. After implementing the first round, the fares should be abolished for all. Fare-free public transport exists in more than 100 cities, though many of them are smaller cities and fares are only partially abolished. Delhi is the only megacity where public bus transport is free for all women.

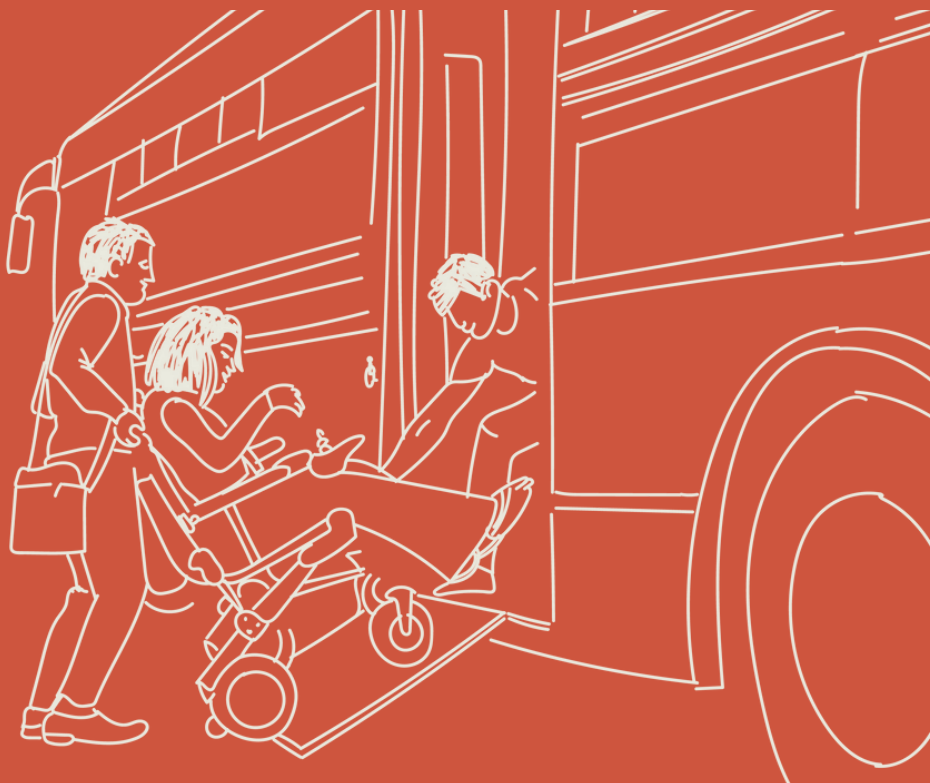


Accessible, Low-floor buses

All buses must be low-floor buses. Currently, buses operated by DIMTS under cluster scheme are semi-low-floor buses that pose difficulty in boarding and deboarding for children, physically challenged and the elderly.

Safe access for women and transgender persons

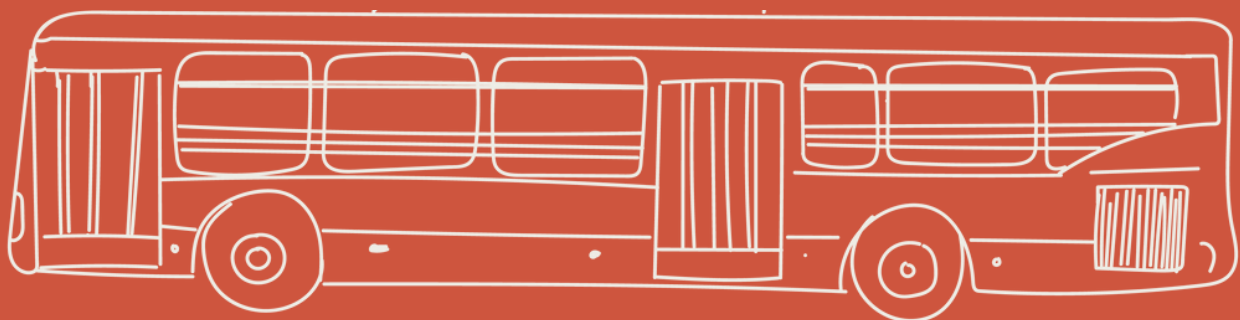
‘Request stop’ should be considered for implementation to allow women and transgender people to request deboarding at any place of convenience and not just bus stops. Installation of CCTV cameras does not improve safety and the government should redirect the funds to more effective solutions which improve visibility and vibrance on streets.



Improve operations

Urgent measures should be taken to bring down the waiting time and reduce the variability in the schedule to less than 5 minutes, to minimize the breakdowns, to provide separate bus lanes to increase the carrying capacity in terms of persons per hour per direction (PPHPD), and to set up official channels for communicating with bus users as equal stakeholders in planning and running of buses.

The number of bus routes of DTC has fallen from 556 in 2009-10 to 437 in 2018-19. The number of bus routes operated by DTC should be brought back to the 2009-10 levels as more buses are inducted into the fleet. All buses should be installed with a public announcement system to inform the passengers about the upcoming bus stop while travelling.



Employee welfare

Only permanent, well-trained and well-paid workers working in a safe and relaxed environment can be expected to contribute fully towards achieving a good bus service for Delhi. Drivers should be entitled to fair compensation for their services. The system that ties wages to vehicle kilometres must be put to an end. With a transition to a fare-free public bus system, the role of conductors can be redefined as caretakers rather than fare collectors. Timekeeping workers have an important role in ensuring the punctuality of bus services and they should be given due weightage in new hirings and employee benefits.

Dedicated Bus Fund

Public transport will always require subsidies and assured provision of funds to ensure reliable and affordable services. A dedicated state-level bus fund must be created to ensure this.



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Click on the icons to view the links

Appendix A

Survey Form

- Name
- Age
- Gender
- Occupation
- Contact number/Email id or Both

What's your preferred mode of transport?

- Bus
- Metro
- Cycle
- Private Transport (Please Mention)

Why do you prefer this type of transport?

- Cost Effective
- Convenient
- Safe
- Fast
- Other

Do you own any of these? Yes/No

- Car
- Motorcycle/Scooter
- Bicycle
- No

How long is your daily commute time including the waiting time at bus stops?

- 0-15 min
- 15-30 min
- 30-60 min
- More than 60 min

How far do you travel in your daily commute?

- 0-2 km
- 2-5 km
- 5-10 km
- 10-20 km
- More than 20 km

Do you have a bus pass?

- Yes
- No

How do you reach the nearest bus stop?

- Walking
- E-rickshaw
- Cycle Rickshaw
- Others

How has COVID-19 impacted your daily commute?

- Traveling time has increased
- Bus waiting time has increased
- Cost of daily travel has increased
- All of the above
- None of the above
- Other

Which mode did you use for commuting before COVID-19?

- Public Transportation (Bus/Metro/Rail)
- Cycle/Walk
- Auto/Rikshaw
- Private Vehicles

How much did you spend on transportation on a daily basis?

- Extremely nominal (10-15 INR)
- Nominal (15-25 INR)
- Moderately Expensive (25-40 INR)
- Expensive (40 INR and above)
- Other

How safe do you feel in using public bus transport? Did you feel the same before COVID-19?

Not safe at all 1 2 3 4 5 Extremely Safe

What is the one thing that can be done to make our Bus transport system better?

- Increase the number of buses
- A separate lane for bus service
- Improvement in time-table
- First and last mile connectivity
- Bus should be free for all
- Other

Which facilities do you think should be made available at bus stops?

- Better Lighting
- Ensure safety and security
- LED display for information of bus time-table
- Toilet
- WiFi
- A better bus shelter
- Other

What do you think about free services for specific groups such as women and students?

- It is a good initiative
- It is not beneficial
- Other

What do you think about public transport being free for all users?

- Yes. But should be free for all.
- No. It is not needed.

- One interesting bus story if you would like to share.
- Would you like to be a member of Delhi Bus Yatri Union?
(If yes, please provide phone/WhatsApp number/Email ID

Appendix B

Resolution of Delhi Bus Yatri Union

Delhi Bus Yatri Union along with 'Reclaiming the Bus: Campaign for free, safe and reliable bus transport in Delhi' organised public meetings at several places in Delhi over the months of July and August 2021. Hundreds of regular bus users participated in these meetings and shared their views. After these meetings, a resolution letter was adopted with the cooperation of the Delhi Bus Yatri Union and bus users, in which the following demands were accepted as a resolution. The members of Delhi Bus Yatri Union resolve that -

- We consider public bus transport as our right and will support every effort to make public bus travel free for all in Delhi, as is the case in more than 100 cities in the world.
- We will ensure that not only does the bus travel remain free for women, but the responsibility of their safety is also ensured by the government. The policy of security should be least dependent on surveillance, and efforts need to be made to ensure regular examination of the effectiveness of cameras, marshals and other such measures.
- We will make people aware that not only the journey inside the bus, but waiting at the bus stop, getting on the bus and getting off the bus can also be completely safe for all people, especially children, elderly persons and women, and will ensure necessary steps in this regard.

- We will increase communication with the Delhi Government and the Municipal Corporation of Delhi to ensure the construction and maintenance of safe footpaths. At the same time, we will press for the construction of bus shelters at the earliest and will put efforts to ensure free drinking water and toilet facilities at every bus stop.
- We will make requests and efforts at our level to ensure that new colonies and remote urban villages get adequate public bus services so that it becomes easy for all people to travel anywhere in Delhi for work and other reasons.
- We will support efforts to ensure the participation or representation of the Delhi Bus Yatri Union in the operation and planning of buses.
- We will ensure that timetable according to bus route is made available at every bus stop (not just through an app for smartphone users) so that commuters do not have to wait unnecessarily at bus stops. We will strengthen the demand for an in-bus announcement of information about the upcoming bus stand so that passengers can conveniently deboard at their destination.
- We will make our efforts to get the number of buses in Delhi increased at regular intervals and to regularly assess the need to create new bus routes.

- We will extend full support to the demand of workers' unions for the implementation of welfare schemes for public bus transport workers (including conductors and drivers) and push for a suitable compensation policy to help their family members and dependents in case of accidents.
- We will make our public representatives aware of all the above points of Resolution for bus reform and will get support by discussing these issues in every public forum we are part of.

Delhi Bus Yatri Union can be reached at: busyatri@yahoo.com.

Greenpeace India is an independent campaigning organization that acts to change attitudes and behaviour, to protect and conserve the environment and to promote peace.

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