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### Survey Findings from Indian Cities July 2020



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### INTRODUCTION

the series of COVID-19 **Project IMPACT and** presents the findings, of senior decision makers and subject matter

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become the new normal.

experts from India. This pandemic has already altered urban life significantly, and along with it, trade and commerce. The movement of people has dropped to remarkably low levels, unprecedented in modern times. studying, socialising, Working, banking and shopping from home have suddenly become the new normal. The fate of millions of small businesses and workers that enable urban life is yet unknown. These changes have made us think about how to plan and build cities, how resilient companies and our urban areas are and more importantly, how cities and industry respond to such large-scale lockdown events

pandemic are still to understand exactly how the leaders and global experts to seek unravelling, there is already wide changing lifestyle as a result of their views. The initial findings were consensus on one aspect: this crisis lockdown will affect the functioning then collated for dissemination as will impact urban living, businesses of cities and what new technologies a White Paper to initiate discussion opinion and thoughts and technology in a manner that will be developed to support the on the subject with various suggests such disruptions could change in the short, medium and governments and authorities. long terms. To get more insights on this subject matter, GIZ, Cities Forum, **CRDF-CEPT** and Ideal Management Consultants, undertook a research project named, Project Impact.

> The research aims to understand the likely impact of COVID-19 pandemic on our Cities and Mobilities.

Numerous expert interviews along experts based in India on likely with user perception surveys were changes that could happen in the carried out to understand the Cities and Mobility sector as a result behavioral aspects of city residents of COVID-19 pandemic. during COVID-19 crisis phase.

questionnaires Detailed were prepared and circulated amongst various experts globally to gather their opinion. The data was then analysed and synthesised into a meaningful set of insights. These

This report is second in While various ramifications of As at this stage, it is really a challenge insights were then shared with

This research is, therefore, based on understanding of experienced subject matter experts, policy makers, research scientists, practitioners, academicians and business owners.

This White Paper is the second in the series of research outputs and presents global insights from



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# WHAT IS PROJECT IMPACT ?

A joint research study undertaken by GIZ, Cities Forum, CRDF-CEPT, and Ideal Management Consultant

The objective of the research study is to understand the likely disruption of COVID-19 on Cities and Mobility Sector The study findings are collated in the form of this White Paper and presents findings from the survey undertaken amongst policy makers and subject matter experts based in india



India

**350**+ Respondents

The research is based on surveys and interviews of business leaders, policy makers, subject matter experts, researchers and academicians from India **30**+ Interviews

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### Do you feel in long term COVID-19 will change the way we generally live on the planet ?

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COVID-19 global pandemic has engulfed the entire world, adversely impacting lives and livelihoods of the citizens. It has severely stressed the urban systems including healthcare infrastructure. However, this pandemic has given us an opportunity to rethink the way we live, work, shop, study, socialise, travel or pursue any other activity. It will change our approach towards planning our cities, providing urban transport and other facilities, which are not only made sustainable but resilient to such kind of onslaught of nature. Surely, such efforts will promote ease of living to the citizens

#### D S Mishra,

Secretary, Ministry of Housing and Urban Affairs, Government of India



Majority of experts feel that **COVID-19 will change our lifestyle** and once the pandemic is over, we will have to adapt to this changing lifestyle.

5%

5% of the total respondents feel that COVID-19 will not have any significant longterm impact on our everyday life.



21% feel that it is too early to opine on this matter, and it all depends on how long the crisis will stay.



Do you think post COVID-19 related lockdown/restrictions, there would be a greater acceptance to work from home by companies ?

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There will be greater acceptance of work from home among some categories of white-collar jobs, such as consulting firms, IT companies, research organisations and NGOs. However, several categories of such jobs and most blue collar jobs will not be possible from home. A large share of employment in India is in the informal sector and these will also not be possible from home.

**Dr O P Agarwal,** *CEO, WRI India* 



Project Impact: Impact of COVID-19 on Cities and Mobility Survey Findings from Indian Cities July 2020 german cooperation CUTICHE COMMENSATION

**≑** ∎ What do you think about the following statement? Companies are likely to reduce the size of their offices with more staff working from home.

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Before the pandemic, the conventional thought had been that offices were critical to productivity and the companies competed intensely for prime office space in major urban centers around the world. During the pandemic, with videoconferencing and digital collaboration global economy has rapidly transitioned into a world of remote work. However it does not mean the traditional office space is set to become a thing of the past. It is expected that a decentralised small office model with hybrid work environment will emerge where a proportion of work time is spent in office while rest elsewhere including home. This transformational approach to reinvent offices with decentralised operations may not set work from home (WFH) as the new normal but rather work from anywhere (WFA) model could be the more likely scenario emerging on the horizon.

#### **Dr Sanjay Gupta,** Head of Urban Planning – School of Planning & Architecture Delhi









### How do you consider demand for commercial real estate and office space (inner city and CBD) being impacted ?

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Commercial real estate has been a reliable mainstay of the Indian real estate sector, however with the COVID-19 pandemic companies are discovering the viability of working from home (WFH) as an alternative to occupying costly office spaces. Going by the trends it is almost likely that commercial space requirements are in for a major upheaval, as the country will not hit a 'business as usual' for quite a long time. However WFH will not replace the importance and need of high guality and modern workplaces which over the years has proved to be imperative for attracting and retaining talent. In the post COVID-19 era, the demand for office space could rise from emerging sectors as well as new geographies such as small cities and new product such as subscription-based option for workspaces would be launched.

#### **Dr Sanjay Gupta,** Head of Urban Planning – School of Planning & Architecture Delhi





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How do you consider demand for commercial real estate and office space (outside the inner city) being impacted?

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The impact of COVID-19 on commercial real estate (outside the inner city) would be largely effected for a short period, may be 6-12 months or until a vaccine is found. The workspaces of MNCs, consultancies and service centres located outside the core cities would continue to operate with lower staff strength by adopting all necessary process to maintain basic hygiene. Any compromise on their workspace would mostly require deeper analysis based on how they perform financially over the next few guarters. Considering the dual effect of economic recession and the ongoing pandemic, business expansion will definitely take a back seat

#### Gulam Zia

Executive Director - Valuation & Advisory Retail Hospitality, Knight Frank



respondents are of the

opinion that COVID-19

impact on the demand

will not have any

commercial real estate and office space outside inner city will increase post lockdown.

on Cities and Mobility Indian Cities July 2020 Project Impact: Impact of COVID-19 Survey Findings from

How do you consider demand for large size residential apartments being impacted (with onset of work from home) ?

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In the real estate sector, we can see that the pandemic has changed some trends. The current trend for the densification work and living space is being reconsidered. This, and the combined effect of global recession, has left the Indian real estate sector amid huge uncertainty. Considering the impact, the investors are forced to re-evaluate their investment strategy

#### Ernst Doering,

GIZ India Cluster Co-Ordinator – Sustainable Urban and Industrial Development







Do you think that with gradual

expansion of remote working and provision of adequate infrastructure people would prefer living in smaller cities rather than large cities?

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With remote working becoming an option, one can definitely expect a positive change in people's outlook towards smaller cities. Apart from digital connectivity however, physical connectivity enhancement would play an important role in ensuring that employees are able to undertake short trips intermittently to the main office. Having said that, several sectors like manufacturing, essential services and informal sector would not be affected by this and mobility is expected to revert to pre-COVID levels, once situation improves.

#### **Prof. Shivanand Swamy,** *Executive Director, CoE-UT CEPT Research and Development Foundation*

of the respondents are of the view that there would be a strong likelihood for people preferring to live in smaller cities rather than large cities with the expansion of remote working. Whereas, 13% don't have any opinion on this matter and 8% feels that it is unlikely that COVID-19 will not have any impact on people's decision to live.



79%



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### How do you feel in long run COVID-19 will impact the size of cities?

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The pandemic has challenged the way we plan, design and live in cities globally. Whether that's city transport systems, where people live and work, how much space people have on streets, quality of and access to healthcare systems, access to open and green space and more. It provides us with opportunities to review and improve how we build more resilient cities; all areas of urban development needs to respond to create more liveable, sustainable and healthy cities.

#### Hitesh Vaidya,

Director of National Institute of Urban Affairs India (NIUA)



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Do you think demand for work space / living space would move towards areas where more open space / greenery is available ?

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In post-covid world, working away from traditional office space will become the norm rather than an exception. This would include a large percentage of work force working from the safety of their home precluding the need to either travel large distances or to stay close to work-place. This might also lead to decongested city centres with shift of population density towards the peripheral areas as people would prefer staying in housing that is cheaper and offers more space including dedicated workspace at home. However the physical office space is here to stay, and we may see fast forwarding of development of smart office spaces that use technology extensively to safeguard workforce health. "

Rahul Gupta, Business Head - Mahindra Lifespace Developers

With a greater emphasis on social distancing and larger spaces, 90% of the respondents believe **people will** prefer working and living in areas with more greenery and open space. Whereas, 7% feels that they are unable to anticipate any change in preference. A small number, about 3% feels that people's preference is unlikely to change





What do you think about the likely changes with regards to planning of cities?

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The idea of a green city with living and working close together is already known since a century, but there hasn't been the political will to implement. Mobility and transport should always look at moving people and moving goods. We need also space for delivery trucks as well as for waste and sewage disposal. This sets limits for giving back streets to people. People want to get back their freedom to decide what, when and how to live their life. City planning should reflect this and provide the framework for this way of living.

Juergen Baumann, SMART-SUT Program Director – GIZ India





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### Does your city have a Disaster Management Plan ?

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To control the spread of COVID-19, Kerala has established a smooth coordination system from the state level to the village panchayat level, and have used technology and data for contact tracing and surveillance. For contact tracing of people testing positive, the authorities not only interview the patient, but also uses their mobile GPS to track them and circulate the flow chart of all the places they have travelled on social media, asking people to dial the hotline in case of contact with the patient.

**K R Jyothilal,** *Principal Secretary, Department of Transport, Kerala*  **51% of respondents** reported that their city had a disaster management plan. 26% of the respondents were unaware of its availability and 23% reported that disaster management plan is not available at the City level.



51%

26%

No

Don't know



Has COVID-19 been declared as emergency event in your city / state / country ?

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Kerala has implemented a strong response mechanism to COVID-19 pandemic. People entering the state via flights, trains, roads are being examined, guarantined, monitored and assisted with the help of the collectorate, police, local department, health workers and volunteers. All commercial vehicles registered in Kerala are GPS tracked, so that in case of any person testing positive, the authorities know of the places for contact tracing. We are also in the process of making the travel on public transport and autos contactless and traceable by making vehicle tracking system compulsory for all.

K R Jyothilal, Principal Secretary, Department of Transport, Kerala







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Dealing effectively with pandemics will require both short-term and long-term strategies. Most cities, it seems, did not have in place plans in case of a pandemic but cities that responded quickly clearly managed better. These responses included closing schools and other public spaces, setting and enforcing social distancing rules, and communicating them effectively through various media. Obviously, the general preparedness of health care services and facilities was important. In places where hospitals and health care systems are privatised and fragmented, coordination turned out to be much more difficult.

**Juha llari Uitto,** *Director of Global Environment Facility* 



Do you think the supply of skilled/unskilled workers in the city will be affected after COVID-19?

### "

The reverse migration of skilled and unskilled workers due to COVID-19 pandemic was very detrimental, for the construction industry and the economic growth. Though lockdowns are being lifted progressively, people will still be on a "wait and watch" mode as the disease is still prevalent. Once a vaccine is found and majority of the population is inoculated, only then unrestricted movement of people will start... and supply will resume but at a higher cost. The contractors will adopt more to mechanised construction to fill the gap in workmen.

**D K Sen, Director,** Larsen and Toubro



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In short term (up-to six months), Please rate how you consider the travel demand of each of the following mode will be impacted post COVID-19?

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Fighting all the odds CRUT managed to recover steadily from the impacts of cyclone "Fani", the passenger ridership of CRUT had gone down significantly to 33,000 per day during the month of May 2019. In spite of the hardship and struggle, CRUT managed to achieve 100,000 ridership before mid-November 2019 by implementing effective customer centred service planning. Taking these efforts forward, we are very confident and have been working tirelessly to recover from the impact of COVID-19. During COVID-19 lockdown, CRUT has played a key role for distributing essential goods to the citizens of Bhubaneswar and provided services for all frontline workers. As we continue to fight COVID-19 and its impact, CRUT is confident and will follow its Mantra i.e. "Customer Centric Services".

Arun Bothra (IPS), MD-CRUT and CMD - OSRTC Respondent data shows that travel demand for personal vehicles, online delivery vehicles along with walking and cycling is likely to be increased substantially

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whereas public transport trips would be reduced drastically in short term.







In medium term (from six months up-to two years), please rate how you consider the travel demand of each of the following mode will be impacted post COVID-19?

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With COVID-19 there would be serious repercussions on public transport demand given the social distancing protocols and the fear psychosis of the Pandemic. However, the situation may differ in third world countries like India where the survival takes precedence. Poor people who have no access to private vehicles to own or hire may continue to travel by local trains and Buses. Certainly in the short and medium time frame there would be drastic reduction in demand for public transport. In the long term after five years the demand for public transport would become to Pre COVID-19 levels

The experts feel that personalised vehicle trips along with Walking and Cycling trips are likely to be increased



whereas public transport trips would still be much less than pre COVID-19 levels in the medium term







### "

This crisis is an opportunity to set the terms for 'new normal'. Our perception survey of middle and highincome groups in Delhi and NCR reflects changing public mood and commuting choices. Despite lack of confidence in public transport during the pandemic and worries around increased use of personal vehicles in the short run, we have noticed a strong positive preference for high quality public transport, contact-free walking and cycling and lifestyle adjustment to reduce unnecessary travel trips in the longer term. This is an opportunity for a green recovery agenda to respond to this intent and stimulate the dormant demand for sustainable modes. We cannot miss the bus now

### Anumita Roy Chowdhuri, Executive Director - Center for Science and Environment

The experts feel that increased **personal vehicles trips, walking and cycling trips would be the new normal and** 

#### public transport trips would increase to reach Pre COVID-19 levels or even higher.



What do you think about the following statement? Cities need to invest more in developing cycling and walking infrastructure.

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Walking and cycling account for over 50 percent of all trips in Indian cities and investment in these modes can benefit a large section of the population and have much higher returns than investments supporting private motor vehicle use. As cities look to reopen and restart their economies, a green recovery for the transport sector must focus on accelerating the shift from polluting and inequitable modes of transport to active, sustainable, efficient, and inclusive modes like walking and

cycling.









What elements of public transport do you think need to change to to adapt to post-lockdown cities?

### "

COVID-19 has changed people's attitude towards using public transport. The highest priority for public transport during the recovery stage would be to maintain the safety of drivers, the frontline workforce and passengers. Onboard arrangements require minimising the number of touch points by adopting cashless fare collection through digital payment and increased disinfection, will continue to play an important role for some time. Staff and travellers are encouraged to practice hand hygiene, social distancing and wear masks. In addition, service planning based on changing demand, fleet size augmentation, crowd management, data driven response approach, real time information to passengers should also be adopted for a sustainable and safe future



In addition to dynamic routing and frequency, public health interventions e.g. safe spacing of passengers, enforcement of mask wearing, public health messaging etc. are the major requirements, experts feel that public transport agencies have to focus in order to pull the travel demand back on public transits.



#### Jaideep,

Officer on Special Duty (UT) & ex-officio Joint Secretary, MOHUA, Government of India





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The answer would depend on the size of cities and distribution of densities, so we have to be cautious about broad based generalisation. Cities should develop a mobility plan responding to their population needs, characteristics and funding capacity. Globally we see cities are growingly prioritising walking and cycling, public transport and IPT before supporting personal travel modes. This is a major reversal of past trends, but also reflects an asset base in place. Larger metropolitan areas with long distances to travel and high density will need investment in mass transit within the PT categories in high capacity corridors. **55** 

**Gerald Ollivier,** *Lead Transport Specialist, World Bank* 



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 In short term (up-to six months of opening air space), Please rate how you consider the air travel demand will be impacted post COVID-19?

### "

This pandemic will not be over until there is a vaccine available worldwide. Until then, the trade-off between security and freedom and that applies to us all. But for us as an airline group, one thing is clear: We were the first industry to be affected by this global crisis and aviation will be one of the last to leave it. We are not expected to get back to pre-crisis demand until 2023.

**Carsten Spohr,** *CEO Lufthansa*  Due to public health concerns associated with air travel, most of the respondents are of the view that **air travel would substantially reduce in the short term** 



In me
six m
years
space

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In medium term (from six months up-to two years of opening air space), Please rate how you consider the air travel demand will be impacted post COVID-19?

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on Cities and Mobility Indian Cities July 2020

Project Impact: Impact of COVID-19 Survey Findings from I Air transport has high prospects. Low cost air services will likely dominate the market. People would prefer to travel for business and return home the same day. There will be many airports providing high connectivity amongst urban centres. Domestic tourism travel will take a long time to revive. International air travel will be highly restricted and low.

#### Prof N Ranganathan,

Senior Urban Transport Advisor and former Head of Transport Planning, School of Planning and Architecture Delhi The experts feel that in the medium term, the air travel demand for both domestic and international travel would still be less than pre COVID-19 level, however the decline will not be of the same level as in the immediate term. Also, domestic travel demand would likely pick up at a faster rate compare to international air travel demand.



 In long term (two years onwards of opening air space), Please rate how you consider the air travel demand will be impacted post COVID-19?

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Today we are assuming that at some point in 2023 we will have a complete flight plan again, but also because of the recession we will certainly hit a market that does not have the same demand dynamics as in recent years.

**Carsten Spohr,** CEO Lufthansa



Back to pre COVID level

Increase

Reduce

Project Impact: Impact of COVID-19 on Cities and Mobility Survey Findings from Indian Cities July 2020

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Do you anticipate seeing an impact on digital connectivity (broadband internet) in the city as a result of increasing work from home and e-commerce?

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I anticipate that new normal will impact digital connectivity both from demand and supply sides as a result of increased work from home, especially in IT and services, e-learning, e-commerce and popularity of online media streaming platform. Demand for high speed broadband connections is likely to increase because on changing habits even after COVID-19.

**Dr Ashwani Luthra,** *Professor, GRD School of Planning, Amritsar* 





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Do you think your city needs to strengthen digital infrastructure to meet the requirement of potential increases in data ?

### "

The demand for high speed broadband connections is likely to increase because educational institutions are going to continue e-learning even after COVID-19. Also, e-commerce and streaming for recreation trends have picked up further to meet the demand of the households and office establishments as well. It is high time when the digital connectivity sector will have to supply state-of-the-art technology to meet the aspirations of the people.

**Dr Ashwani Luthra,** *Professor, GRD School of Planning, Amritsar* 



**95% of the respondents** agree to the fact that there is a need to strengthen digital infrastructure with the increase in operations being carried out online across various sectors





In the future do you think it will be more important for cities and governments to invest in transport connectivity or digital connectivity?

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The answer is that it is not an either or. Both are highly needed. Digital connectivity can easily be provided through private investment if the business environment is created right, and accordingly given limitations in public funding, this is likely a lower priority for scarce government resources. Similarly there are many opportunities to crowd in private capital in public transport (e.g. buses/terminals) while focusing public resources on viability gap funding under contract with clear KPI enhancing accountability.

**Gerald Ollivier,** *Lead Transport Specialist, World Bank*  The survey shows that both digital connectivity and transport connectivity are equally important therefor there's a need to focus on both the sectors.







What technological changes do you think might happen in the management of cities and mobility?

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I am not surprised that majority respondents see a larger use of cloud-based technology, big data and advanced data analytics in managing cities and mobility. The general push towards public transportation that we have had globally, especially in the context of sustainability, will take a hit. The demand will shift towards private transportation. However, this may not lead to a chaos, since the overall demand will come down due to 'work from home' and reduction of not so essential trips. Of course, to enable this mobility in a more organised manner AI based information technology will play a significant role.

### A majority of experts feel that cities now need to shift to advanced technologies like big data, data analytics and science to manage cities, mobility and public health.

Popularity of Autonomous Vehicles	25%
Popularity in using cloud based technology	56%
•	
Use of big data and advanced data analytics in	
managing cities and mobility	75%
Increasing use of big data and technology to	
assist with public health	75%
Advancement in remote working technologies	
including 3-D virtual workspace technologies	57%

#### Prof G Raghuram,

Director IIM Bangalore and Expert in Infrastructure and Transportation



How can cities improve their public health responses to be better prepared for future public health emergencies?

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The role of mayors and local authorities as guardians and promoters of good health and well-being is crucial in COVID-19 pandemic and to build back green, healthy and prosperous urban societies of the future.

**Dr Tedros Adhanom Ghebreyesus,** Director General, World Health Organisation







# EXPERT STATEMENTS

"New Economic, social and cross country relation will emerge out. Dynamics of tourism and health care industry will significantly change. Increased stress and depression related issues could raise due to different ways of living needs"

"Digital infrastructures should get priority with less movement between cities. Decentralised Small Smart Cities with strong digital interconnectivity should be the agent of change in urban development and attract investment."

"We need to promote the growth of small and medium towns with better educational, transportation, healthcare and waste management facilities. This will reduce the migration rate and help develop multiple growth centre."

"Reclaiming footpaths, construction of cycle paths, integration of **NMT network** should be prioritised to ensure last mile connectivity and to enhance the attractiveness of the Public transport modes." "Contactless ticketing, limiting number of passengers, redesigning public transport interior and proper sanitisation after every trip is key to recover public transport usage."

"The city needs to redefine the approach towards urban planning and development so that commuting of the citizens is reduced in the wake of increased work from home culture that is a new normal now." "Lot of work is needed in **waste disposal** to keep our cities safe, clean, healthy and insulated from a threat of communicable diseases. Cities which make early investments in such infrastructure will lead the way for healthy lives for citizens and thus being the bedrock for progress."

"Public healthcare infrastructure and disaster management system must take centre stage in planning of cities. Further resilience planning in public transport system should be focussed than ever before."

"Safe and Healthy Environments are likely to be the priority needs. Connecting people, services and vehicles with technology interface seems to be the key to recovery."







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The India Cycles 4 Change Challenge is an initiative of the Smart Cities Mission, Smart Cities Mission MoHUA, to inspire and support Indian cities to quickly implement cycling-friendly initiatives in response to COVID-19.



GIZ-Supported Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT) has published Standard Operating Procedures (SOPs) for the bus transport sector lockdowns. This publication is prepared as a handy tool for bus operators, authorities and passengers.



GIZ-Supported SMART-SUT project ran a social media campaign to promote safe use of public transport in Kerala.

GIZ-Supported SMART-SUT project supported Capital Region Urban Transport (CRUT) on staggering of demand and crowd management post-COVID-19 lockdown.



Project Impact Global Report, the first in a series of research outputs, presents global insights on likely changes that could take place in the Cities and Mobility sector as a result of the COVID-19 pandemic.

Download Link: bit.ly/2Z9MBtZ



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#### **DISCLAIMER:**

The situation surrounding COVID-19 pandemic is dynamic and rapidly evolving, on a daily basis. Although we have taken great care prior to producing this report, it represents thoughts and opinion at a particular point in time. The results insights shown in the White Paper represent the views of surveyed respondents only. Further the views & opinions expressed in this document are those of the authors and other contributors and do not necessarily reflect the positions of the institutions or governments. While every effort has been made to verify the data and information contained in this report, any mistakes and omissions are attributed solely to the authors and not to the organisation they represent. In order to understand GIZ, Cities Forum, CRDF-CEPT or Ideal Management Consultants point of view, please contact them directly.