

MOVING TOGETHER; GLOBAL SOUTH EXPERIENCES, CHALLENGES AND OPPORTUNITIES FOR MANAGING URBAN MOBILITY DURING COVID-19

OUTCOME DOCUMENT FROM EXPERT GROUP MEETING
TUESDAY 5TH MAY 2020

PART 1: SETTING THE SCENE

BACKGROUND ON TRANSPORT AND COVID-19

COVID-19 has without a doubt changed the way that we move. National lockdowns and restrictions on public transport and movement have significantly affected mobility and the lives of people living in cities and urban spaces. The virus has also revealed the vulnerabilities of cities and mobility systems. The challenges of physical distancing on public transport and the increased focus on making mobility cleaner and safer have placed an unprecedented burden on transport providers and governments. The virus has compelled us to re-think the way that public transport, especially in the informal sector, needs to function. It has also created an environment in which innovations in shared mobility and non-motorized transport infrastructure can make the difference between continued and safe connectivity and increasing isolation.

Governments, private sector and the public are responding in different ways all over the world. Despite its reduced use public transport remains an essential service. Not only because it enables the movement of health workers but also because it is a lifeline for people, especially the poor, to access their means of livelihood. In the Global South this is even more critical because large numbers of people depend on informal employment and don't have the option of working from home.

We have seen rapid and radical responses aimed at keeping people safe while still ensuring their movement. However, we cannot forget that it is not just about transport but also its connections to energy use, health and pollution. Addressing the challenges of COVID-19 and mobility requires new thinking and renewed effort to achieve the Sustainable Development Goals and the world's climate ambitions. We cannot predict clearly how COVID-19 will change our mobility behaviour in the future - but we can take steps to build back better, safer, healthier and more accessible cities and mobility systems.

"WE MUST ENSURE THAT PUBLIC TRANSPORT RETAINS THE TRUST OF PEOPLE AND DOES NOT BECOME A CASUALTY OF COVID-19"

Andre Dzikus, Chief of the Urban Basic Services Section
at UN Habitat

INTRODUCTION

The virtual Expert Working Group (EGM) meeting held on the 5th of May 2020 was convened by the World Health Organization (WHO), UN Environment Programme (UNEP) and UN-Habitat (United Nations Human Settlements Programme) in collaboration with the UK Department for International Development (DFID), High Volume Transport (HVT), the Institute for Transportation and Development Policy (ITDP), the German Government's Transformative Urban Mobility Initiative (TUMI), the Partnership on Sustainable, Low Carbon Transport (SLoCaT), the International Association of Public Transport (UITP), the Urban Pathways and SOLUTIONSplus projects, Walk21 and the Open Institute. It aimed to share responses in the transport sector in the global south and better understand the challenges and opportunities for managing urban mobility during and after COVID-19. The discussions which involved a wide array of voices from around the globe were focused on synergizing efforts, learning from one another and maximizing the impact of future measures and interventions in transport to ensure safe, fair and resilient systems and infrastructure in Africa, Latin America and Asia. A total of 767 participants joined the session, through direct connection and livestreaming.

EXECUTIVE SUMMARY OF THE SESSION/ KEY OUTCOMES

Over 4.4 million people have been infected with COVID-19 since its initial outbreak in 2019. Due to the rapid spread of the virus across the globe, there is unprecedented pressure on governments and local authorities to react rapidly and decisively in complex and uncertain environments. Cities, particularly those in the Global South, are facing the multifaceted challenges of providing safe mobility today - while ensuring the sustainable mobility of tomorrow. The Meeting titled “Moving Together: Managing Urban Mobility During COVID-19” was set up to share best practices and learn from the actions taken at national and local level in the Global South. Together with a wide array of international organizations dedicated to improving and expanding the equitable access to transport; policy makers and industry experts discussed the multilevel perspectives in COVID-19 responses and the importance of mobilizing partnerships to build back better.

ENSURING SAFETY AND ACCESSIBILITY

In the Global South, public transport is an essential service, particularly for health workers or people who live in hand-to-mouth conditions with unpredictable incomes and minimal savings. Urgent action is needed now to enable residents, particularly in informal settlements, to move safely and healthy.

However, overcrowded public transport vehicles increase the risk of spreading COVID-19. A common practice in many countries is to reduce occupancy in public transport, sanitize vehicles, increase physical distancing and require people to use masks in public transport. However, for many informal paratransit systems, reducing the occupancy and disinfection of the vehicles is challenging, due to the limited revenues of the highly competitive and poorly regulated nature of the transport systems. Local, regional and national authorities in Low- and Middle-Income Countries have to bring forward rapid, innovative stimulus packages that can support public transport operations as well as the provision of basic services such as water supply and sanitation to the low-income population.

In Kigali, Rwanda, the banning of motorcycles (“boda bodas”) increased the demand for buses, which are operating at 50% occupancy. Government hopes to address the shortfall created by the new demand by expanding the fleet. In Kerala, India, where hygiene and safety requirements are the responsibility of the operators, the “Restrict Shift Improve” approach includes plans to hire private buses to meet the growing demand as movement restrictions are slowly lifted. These responses - when integrated with a robust set of action plans - aim at ensuring continued connectivity and mobility.

In addition, safety has to be ensured for public transport workers. Guidance on hygiene and cleanliness should be provided to operators, terminal managers and crew members.

VISION AND LEADERSHIP

Strong leadership in addressing transport and COVID-19 is fundamental. The impact of clear, reliable and consistent leadership during and after the pandemic is key to ensuring that unsustainable pathways are not replicated and that innovative mobility strategies can replace outdated practices. In Uganda for example, where limitations on public transport left people without the means to move through the city, the president’s endorsement of cycling as the safest mode of transport during the pandemic had a significant impact on popular perceptions towards cycling. The endorsement along with existing policies and pilot projects in Kampala helped to rapidly increase the modal share of cycling.

MULTI-SECTORAL AND MULTI-LEVEL PARTNERSHIPS

Cross-sectoral partnerships are vital in tackling the challenges of COVID-19 and in shaping sustainable and equitable responses in the transport sector. Some national and local governments have started creating financial support packages for formal public transport operators as well as few also for the informal public transport sector such as in South Africa. These public-private partnerships are essential to ensure continuous mobility services for urban residents. Investing time and efforts into supporting relationships between private and public institutions also has the potential to strengthen transport systems and create an environment in which innovations face less resistance. From a financial perspective, partnerships with money lending facilities or insurers could assist in cushioning the informal transport sector against the current economic challenges. In Kenya, agreements have already been forged with insurance providers to reduce premiums for transport operators to compensate for the reduced number of passengers. Discussions are also ongoing with financial institutions to reduce the cost of financing or defer loan payments.



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In addition, multi-level governance approaches are essential in the response to COVID-19. In Peru, the Ministry of Transport and Communication is supporting the efforts of the Urban Transport Authority to ensure sustainable, clean, accessible, safe and modern transport systems to all people residing in Lima. This partnership between the national and local government led to the development of a cycling network. In addition to supporting the mobility of people during the pandemic and beyond, it will also contribute towards the climate goals.

INFORMATION AND COMMUNICATION

Continuous data collection and research is essential in understanding and mitigating the impacts of COVID-19. Just as important as data collection is the meaningful communication of what that data means to the public while ensuring that the messaging reaches everybody, incl. people with disability, residents in informal settlements and those with limited access to technology.

It is particularly important to clearly and consistently communicate regulations, recommendations and timetables of public transport to the general public. LAMATA, the Lagos Metropolitan Area Transport Authority made efforts to ensure that mobility schedules were clear in the highly populated Nigerian capital when the first cases of COVID-19 were detected. It engaged the informal sector through publications, meetings with Union officials and whistle blowing channels to provide the required guidelines and information. Clear guidelines were set up and their advocacy prioritized resulting in reduced confusion and improved coordination amongst commuters and transport operators.

ENCOURAGING INNOVATIONS

It is difficult to speak of successes in times of such great uncertainty and loss but it is important to recognize that there are multiple innovations led by local governments or private sector actors that can support the responses in the transport sector in the Global South. One of the greatest and simplest of innovations has been the increased value placed on walking and cycling. Some cities, including Lima, are already putting in place new dedicated bike lanes, with the aim of allowing a degree of mobility while maintaining physical distance guidelines. We need to ensure that such temporary bike lanes become a standard feature in our cities. In Jakarta for example, the lessons learnt from the 2018 Lombok earthquake have been swiftly adopted into transport responses resulting in government actively working to make facilities better for cyclists. Maintaining higher levels of walking and cycling in cities, as we emerge from the crisis will have a positive long-term impact on climate, air pollution, health and road safety.

In South Africa, innovative actions like social media campaigns and custom financial packages are supporting informal mini-bus taxis, encouraging local markets and addressing the needs of people living with disabilities. There are other innovations taking place for example in Kenya, where public transport operators have introduced cashless payment systems to slow down the spread of the virus. There is also an increased focus on electric mobility, such as in Kigali. What is important is that these innovations are maintained - even after the pandemic and that they genuinely move cities and communities closer to being more sustainable, equitable and resilient.

**“DESPITE THE CHALLENGES WE ARE
ALL GOING THROUGH,
WE STILL NEED TO KEEP OUR
PEOPLE SAFE.”**

Abimbola Akinajo, Newly appointed managing
director of the Lagos Metropolitan Area Transport Authority

THE WAY FORWARD

Cities and mobility systems will have to continue to react and adapt to the current pandemic and its impacts. But there is a window of opportunity to learn from this pandemic and to build back better by making our mobility systems more resilient and responsive to crises. Whether innovations in facing the crisis include enhanced working-from-home regulations, that

would decrease the need for travel and commuting, or building extensive bicycle lanes, each response must be responsive to the needs of the community it serves and the over-arching climate and sustainable development goals. By focusing on high levels of accessibility and safety, ensuring strong leadership and partnerships that are founded on reliable information and clear communication with citizens, cities can pave the way for innovations that solve current challenges and prepare us better for others in the future.



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PART 2: LISTENING TO CITIES

KOCHI, KERALA STATE, INDIA

- ▶ City mobility action plan is divided into three scenarios – 1. Restrict 2. Shift 3. Improve;
- ▶ Ensuring physical distancing in public transport during the outbreak is essential; only essential commuters (during restricted time periods for public transport) and health care workers can travel;
- ▶ Supervision and enforcement are being done by authorities (police) whereas social distancing measures are being enforced by government agencies;
- ▶ Data collection is important in order to understand the transport demand. Transport operators should aim to promote QR code ticketing or smart cards (remove the need for cash);
- ▶ It is critical for public transport authorities to create a demand-based system that is informed by what commuters need.

LIMA AND CALLAO, PERU

- ▶ Public transport capacity has been reduced to 50% due to the need for social distancing; only essential workers are allowed to travel during quarantine;
- ▶ To facilitate social distancing during the pandemic, parts of the existing streets have been converted to temporary cycling lanes;
- ▶ There is commitment to increase the cycle lanes of both Lima and Callao to cater for those travelling by bicycles. Additional networks of cycle lanes to be provided to the existing network from at least 145 km to 301 km;
- ▶ There is need for a coordinated response by the Ministry of Transport and Communications and the Ministry of Economy and Finance in coordinating subsidies for the purchase of bicycles;
- ▶ The Peruvian Government is in the process of designing appropriate responses and measures to compensate low income communities in the transport sector;
- ▶ There is need to address the danger of people wanting to use individual cars; the strategy for bicycles is the key that may solve that risk.



**“THERE IS A HUGE OPPORTUNITY
TO MAKE BIG CHANGES TO
IMPROVE THE QUALITY OF LIFE FOR
OTHER CITIZENS”**

María Esperanza Jara, Peru Minister of Transportation
and Communications

JAKARTA, INDONESIA

- ▶ In Jakarta, public transport and NMT are the backbone of essential workers’ mobility;
- ▶ Due to COVID-19, the Ministry of Transportation banned all movement, including the annual homecoming Muslim tradition, where people move from big cities to their hometowns;
- ▶ Government is working to make facilities better for cyclists, post COVID-19;
- ▶ System integration with bus stops and sidewalks is a priority, with Jakarta having both highly developed sidewalks and ones that require attention to make it safer to walk in the city;
- ▶ There has been a road closure in Salatiga City to accommodate physical distancing for a traditional morning market; other cities are joining the initiative.



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KIGALI, RWANDA

- ▶ The local government is working with the Ministry of Infrastructure to jointly exercise the response to the transport related COVID-19 challenges;
- ▶ The restrictions of the motorcycle use have put a strain on the buses, which currently only have a carrying capacity of 50%; hence, the available buses do not meet the demand and there is need to increase the number of buses and routes;
- ▶ The topography in Kigali makes it difficult to cycle, hence the need for diversified transport modes - "We are working on introducing electric motorcycles to address air pollution concerns."



LAGOS, NIGERIA

- ▶ Physical distancing has been encouraged on buses by working closely with the operators to ensure this is maintained; the carrying capacity of the 'Danfos' (the minibuses) has now been reduced from 18 to 8 passengers in order to minimize physical contact;
- ▶ Sanitization measures are applied on queuing points at bus stops;
- ▶ LAMATA and the Lagos Ministry of Transport has engaged the informal sector through publications, through meetings with Union officials, and whistle blowing channels in order to provide the required guidelines;
- ▶ Advocacy and communications of these guidelines are shared with the public through leaflets and other forms of publications.

SOUTH AFRICA

- ▶ For South Africa, it is necessary to put a risk adjusted approach to the state of disaster, which also includes travel;
- ▶ Transport operating capacity has been reduced to between 50-70% depending on the mode used;
- ▶ Working from home is highly encouraged and this in turn reduces the demand for transport;
- ▶ Funding is being made available to operate in these systems, e.g. the mini-bus taxis and more organized integrated public transport systems;
- ▶ There are specific measures being taken for people living with disabilities and advocacy is done through social media; organizations of government official set up and by providing packages that specifically meet their needs;
- ▶ Importance of Information Technology is key as it enables people working from home and minimizes movement; people do not have to move unless they want to; this in turn opens up more options for transport choice.

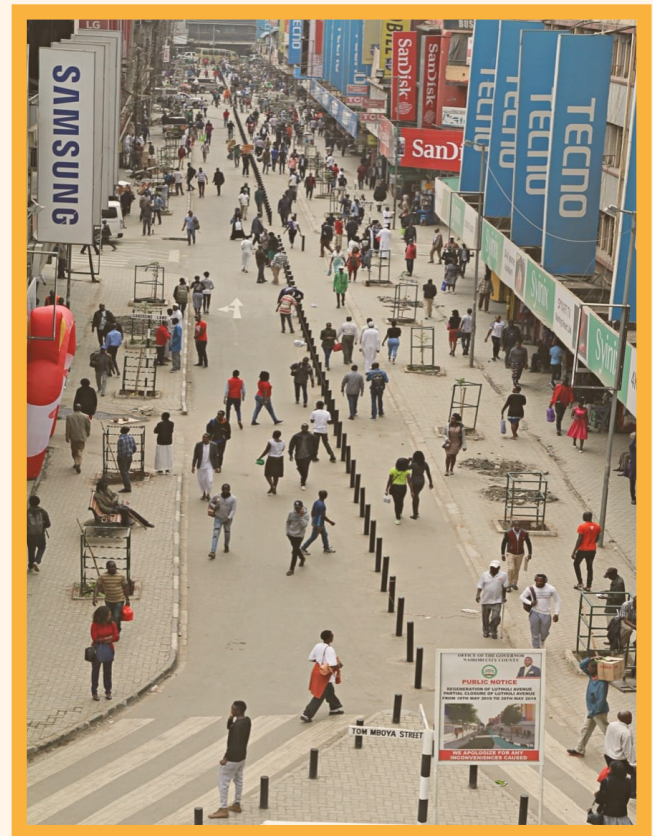


KAMPALA, UGANDA

- ▶ In Uganda, COVID-19 has seen the ban on private car transport, except for essential workers;
- ▶ Motorcycle passenger transport has also been banned and only restricted to ferrying cargo;
- ▶ Cycling has been hailed by the President of Uganda as the safest mode of transport during this pandemic;
- ▶ The requirement for social distancing has increased the need to use the bicycle despite the challenges of terrain, perceptions and even cost of bikes; currently there is an increase of bicycle costs by at least double the amount;
- ▶ Some employers have also worked towards having their employees stay in hotels near their workplaces, raising the issue of compact and mixed land use development;
- ▶ Lessons to be learned:
 - There are currently so many cyclists in the country. Local governments should take immediate initiatives to seal potholes and make cycling safer for all; there should be urgent investments towards re-carpeting of roads and lanes to ensure cycling is safe;
 - On-street parking can now be converted to cycle lanes or walkways because there are currently no cars allowed;
 - There can also be a temporary mapping network for cyclists in the city that people can use;
 - Working from home should also be encouraged and continued post COVID-19 where possible to minimise the movement of people; people should move because they want to not because they must;
 - There will be minimal resistance towards future cycling plans.

NAIROBI, KENYA

- ▶ Kenya's public transport is largely informal and constitutes a para-transit system:
 - Public transport in urban areas - there is control because the government is able to enforce physical distancing, vehicles need to be sanitized, ensuring each vehicle has a sanitizer, and people are required to wash their hands before entering a vehicle;
 - Public transport in sub-urban areas were locked out from transacting and accessing the big cities;
 - Intercity public transport experiences challenges of moving goods and people between partially locked down cities and the other towns;
 - Public transport in the rural areas has continued as usual because of lack of enforcement.
- ▶ To address worker protection, the transport operators together with the Ministry of Health developed schedules and protocols to ensure health and safety guidelines are followed at the depots; in some cases with the support of the county government, sanitization of some of the public transport vehicles and some areas in the informal settlements has been done;
- ▶ Partnerships with insurance companies have been formed to reduce premiums for the transport operators since the vehicles are carrying half the passengers; discussions are also ongoing with financial institutions to reduce the cost of financing or defer loans payments, and with the Kenya Revenue Authority to have some waivers for 2-3 months for the transport operators;
- ▶ Transport operators are scheduling workers and vehicles to ensure each member of staff is partially occupied and therefore paid on a regular basis.



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PART 3: MULTI-PERSPECTIVES - INCLUDING THE ROLE OF NATIONAL GOVERNMENT AND IMPACT OF MEASURES ON PUBLIC TRANSPORT OPERATORS AND WORKERS, AS WELL AS CITIZENS

THIS SESSION DISCUSSED THE IMPACT OF COVID-19 MEASURES ON THE TRANSPORT SECTOR FROM DIFFERENT PERSPECTIVES, INCLUDING NATIONAL GOVERNMENT, TRANSPORT OPERATORS AND WORKERS AS WELL AS CITIZENS. THE FOLLOWING LIST OF RECOMMENDATIONS WERE DERIVED FROM THE DISCUSSION THAT GOVERNMENTS CAN CONSIDER AND ADAPT TO THE LOCATION SITUATION.

- ▶ Governments should partner with the public transport sector to address the pandemic, by ensuring the enforcement of physical distancing in public transit vehicles through reducing occupancy or indicating appropriate distances in buses, disinfecting public transport, hand washing facilities at stations, temperature check, provision of hand sanitizers, sanitization of informal settlements, etc;
- ▶ Governments should develop stimulus packages for public transport operators (particularly the informal sector) to help cover the cost of sanitization measures and to ensure affordability of passenger fares in light of coronavirus-related occupancy limits. Planned investments in car-centric infrastructure such as flyovers and elevated highways should be redirected to strengthen public transport operations and protect the health of users.
- ▶ Governments can develop partnerships with insurance companies, financial institutions and the revenue authorities to cushion the informal transport sector against the current economic challenges. A potential example could be that financial institutions can reduce the cost of financing or defer some form of payments on loans taken. The revenue authorities being the agents of the national governments on collection of levies could also provide some form of waivers for a given period. The insurance companies can reduce premiums for the transport operators since the vehicles are carrying half the passengers;
- ▶ Governments should launch electronic fare collection systems on public transport to reduce the need for the exchange of physical currency. Fare collection should be run by an independent service provider that is answerable to the government.
- ▶ Governments should accelerate the formalization of informal public transport operators to help provide a framework for more effective management of the COVID-19 response. Government can help existing atomized operators form companies that operate under contract with the government and hire workers on a salaried basis with workplace benefits.
- ▶ To address worker protection, the transport operators together with the Ministry of Health should develop schedules and protocols to ensure health and safety guidelines are followed at the depots and during operations;
- ▶ Government should work with the transport cooperatives to encourage transport operators to schedule workers and vehicles by distributing work to ensure that each member of staff is occupied in order to guarantee the much-needed payment on a daily basis;
- ▶ Governments should work closely in partnerships with the public transport sector and NGOs as the pandemic provides an opportunity for walking and cycling to support the transport network; walking and cycling can decongest the public transport by offering more travel options;
- ▶ Governments should commit to improving and increasing walking and cycling lanes to expand access to affordable mobility, improve safety, and facilitate physical distancing. Improvements

“WE ARE IN AN UNPRECEDENTED GLOBAL DEVELOPMENT IN THE TRANSPORT POINT OF VIEW. THE WORLD IS NOW EXPERIENCING VERY CLEAN AIR. THE LEVELS OF POLLUTIONS HAVE DROPPED, BECAUSE OF REDUCED TRANSPORT EMISSIONS.”

Rob de Jong, Head of the Air Quality and Mobility Unit at UNEP



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PART 4: MOBILIZING PARTNERSHIPS FOR THE FUTURE TO BUILD BACK BETTER, MORE RESILIENT AND INCLUSIVE MOBILITY SYSTEMS

THE IMPORTANCE OF MULTI-STAKEHOLDER PARTNERSHIP AND PEER TO PEER EXCHANGE

The discussion has revealed that partnerships between transport operators and governing authorities are essential to address the impact of COVID-19 in the short, medium and long term. In the short term, transport operators are learning from each other on how to manage the crisis. UITP is facilitating these peer learnings and networks by collecting information from its members in Asia on the most effective solutions around adaptation of services, cleaning and disinfection of vehicles and stations and sharing these with their members in other regions. In the medium term, transport operators need to be in close communication with authorities to understand how mobility restrictions will be relaxed as the COVID-19 pandemic eases based on lessons from their peers in experienced countries.

ENSURE REGULAR AND CLEAR COMMUNICATION

A very important aspect of managing the current pandemic but also post COVID-19 time for transport operators is internal and external communication among stakeholders. Internally, since transport workers are exposed to a higher risk by interacting with members of the public daily, some public transport operators are developing campaigns to motivate staff by showcasing them as heroes as they work during the pandemic. Externally public transport operators need to develop public communication to deal with the stigmatization of public transport and rebuild the trust in public transport as a safe mode.

SUSTAINING GOOD EFFORTS ON SUSTAINABLE MOBILITY IN A POST-PANDEMIC WORLD

To sustain good efforts on walking and cycling post-COVID-19, governments, especially in the global south, should work to localize the projects. In the global south active and public transport are the main modes of transportation. Governments should seek to maintain and even increase the modal share of these sustainable modes by ensuring safe and accessible facilities and infrastructure. Sidewalks should be built around priority services areas such as public transport stops. Governments working in partnership with public transport operators will ensure the viability of walking around these areas by providing first and last mile connectivity.

Success stories: In South Africa, informal food markets were localized which has reduced the distance people have to travel to reach shops. Consequently, people can choose to walk to those local markets. In the global north, they have come to the realization that working from home results in people stepping out into their local communities and enhance vibrancy of the neighborhood.

BUILDING BACK BETTER AND MORE INNOVATIVE MOBILITY SYSTEMS

In order to build back better and ensure the future resilience of mobility systems, cities and transport authorities should take this crisis as an opportunity to develop stable institutional and funding networks. To support its members UITP is discussing with transport authorities and multilateral banks on the definition of response and recovery plans for post COVID-19 roadmaps.

This crisis presents to transport authorities and local governments a good opportunity to recover the city for the people by prioritizing public transport and creating more urban space for walking and cycling. To make the infrastructure and behavioral changes permanent towards walking and cycling, governments should take a tactical urbanism approach, where they put the changes quickly but make sure they are effective and last in the long-term.

In order to reduce physical contact within the public transport sector, COVID 19 has presented an opportunity for governments and transport authorities in the global south to consider cashless or contact less payments. In Kenya, public transport operators have been more receptive to ICT innovations like mobile payments that address the health concerns of using physical notes and coins for payment. This has strengthened the discussions on implementing cashless payment systems in public transport in the long-term.



SENDING THE RIGHT INVESTMENT SIGNALS – GREEN RECOVERY PACKAGES

In addition to the transport sector, it will be essential that financial institutions and donor agencies send the right investment signals towards sustainable mobility aligned with climate, health, and road safety goals. Cities need to withstand the temptations of short-term solutions in response to the present crisis that risk locking us in unsustainable urban patterns for decades to come.

We should take this opportunity to call on global alliances and partnerships of governments, international organisations, businesses, NGOs, and others to advocate for green recovery packages that help cities to accelerate the transition towards climate neutral, resilient, safe and inclusive transport systems. Let's work together, share knowledge and experience - and create synergies between our work to jointly advocate for green investment decisions that the world urgently needs at this moment.

WHAT NEXT?

Over the last few weeks, many discussions, webinars and online fora were organized to disseminate experience on measures to limited the spread of COVID-19 through transport - and most governments have taken action in their countries. It is now time to move from discussions and exchange towards action-oriented commitments that will pave the way to recover from the pandemic in a sustainable pathway. There is urgency to develop green recovery packages to provide adequate resources that help governments to enable action on the ground and accelerate the transition towards climate neutral, resilient, safe and inclusive transport. More regional approaches might be needed that take into consideration regional and local conditions, political frameworks and financial capabilities of governments.

RELATED EVENTS

26 May 2020: TUMI Live TV to fight Covid-19 in Mobility
<https://www.transformative-mobility.org/news/tumi-live-tv-conference-2020>

FURTHER RESOURCES

Link to session recording: <https://www.youtube.com/watch?v=F2k3UzqbfwE>

A Call for Collective Action for International Transport Stakeholders to Respond to the COVID-19 Pandemic by Holger Dalkmann, Bernard Obika, Lorenza Geronimo (<https://transport-links.com/wp-content/uploads/2020/04/-COVID-19-transport-overview-report.pdf>)

Coronavirus disease (COVID-19) advice for the public, compiled by WHO (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>)

The COVID-19 outbreak and implications to sustainable mobility – some observations by TUMI – Sebastian Ibold/GIZ China, Nikola Medimorec/SLOCAT, Armin Wagner/GIZ
(<https://www.transformative-mobility.org/news/the-covid-19-outbreak-and-implications-to-public-transport-some-observations>)

COVID-19 Urban transport response – Opportunities for policymaking in Africa by Holger Dalkmann and Jeff Turner (<http://transport-links.com/news/covid-19-urban-transport-response-opportunities-for-policymaking-in-africa/>)

Urban Transport and COVID-19, key messages developed by UN-Habitat (https://unhabitat.org/sites/default/files/2020/05/13_may_2020-key_messages_urban_transport_and_covid-19.pdf)

COVID-19 and the sustainable transport community by SLoCaT:
<https://slocat.net/covid-19-and-the-sustainable-transport-community/>

John Hopkins COVID-19 Dashboard by the Center for Systems Science and Engineering (updated 05/15/2020) <https://coronavirus.jhu.edu/map.html>

