COVID-19 : THE END OF GLOBAL SUSTAINABLE CITIES?

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Abstract

The impact of COVID-19 has been felt across the globe in a wide range of countries and very different environments. The pandemic has already affected countries in every region, making this a truly global situation where every country must take steps to prepare and respond. Cities also play a central role in preparing for, mitigating and adapting to pandemics. In fact, many of the norms and rules for cities to manage infectious disease were first discussed at a global sanitary conference in 1851. Today, the preparedness of cities varies around the world. Their level of development and the socio-economic determinants of their populations play a big role. Cities with a high concentration of urban poor and deep inequalities are potentially more vulnerable than those that are better resourced, less crowded, and more inclusive. Cities that are open, transparent, collaborative and adopt comprehensive responses are better equipped to manage pandemics than those that are not. While still too early to declare a success, the early response of Taiwan and Singapore to the COVID-19 outbreak stand out. Both Taipei and Singapore applied the lessons from past pandemics and had the investigative capacities, health systems and, importantly, the right kind of leadership in place to rapidly take decisive action. They were able to flatten the pandemic curve through early detection thus keeping their health systems from becoming rapidly overwhelmed. Healthy cities also encourage better urban planning to prioritize increased access to safe transport systems, green and public spaces, and emergency responses to natural disasters, which together reduce road traffic deaths, improve air quality, promote physical activity and save lives from disasters. What we do today will change the cities of tomorrow, to make them safe and inclusive, and resilient for future crises. Looking forward, federal and states agencies are supporting many cities to develop innovative planning and expansion models that focus on compactness and connectivity, as well as decentralized local access to all basic services and infrastructure, including health, which could contribute towards slowing the spread of pandemics.

Keywords: COVID-19, socio-economy, outbreak, healthy city, sustainable city, *wellbeing, transport system, local government,*

Introduction

COVID-19 is quickly exposing countries' fragile social fabric. As individuals struggle to stay afloat, a lack of healthcare, childcare, living wages, and paid leave are worsening glaring inequalities around the world. And because governments prioritize response once a crisis hits, rather than strengthening communities beforehand, many cities lack needed resources and support. Anticipating disruptions more effectively – including outbreaks like COVID-19 or disasters such as floods, hurricanes or wildfires – requires a rethink in how we proactively prepare for crises. That's why many cities are now working to set up Resilience Hubs, to better build community resilience. Today, roughly 4 billion people live in cities, more than half of the world's population. According to some analysts, around 600 cities

generate two thirds of global GDP. Precisely because they are hubs for transnational commerce and mobility, densely populated and hyper-connected cities can amplify pandemic risk.

It is not just 'global cities' that are a risk of SARS, H1N1 or COVID-19, but also secondary cities and other urban hubs as well. Scholars have found that pandemics often emerge from the edge of cities. Viral outbreaks are frequently incubated and transmitted via peri-urban communities and transportation corridors at the outskirts of cities before they spread into the downtown core. It is not just cities, but also their local and global supply chains, travel networks, airports and specific neighbourhoods that are sources of contagion.

A healthy cities approach views better housing and sanitation, reduced overcrowding and upgraded slums as public health priorities. Substandard housing and sanitation increases the risk of Tuberculosis (TB) and other airborne illnesses, allowing malaria, yellow fever and Zika to flourish, especially where there is stagnant water. Keywords: sustainable development goals, multilateral organizations outbreak, vulnerable citizens,

Role of Global Urban Manager on COVID-19

It is clear that the pandemic will hit the world's most vulnerable people the hardest—many of them living in informal settlements and slums in cities. These areas are densely populated, with overcrowded public transport systems, little or no waste management, an absence of basic services and poor housing. Recommended measures to prevent COVID-19 transmission such as hand washing and social distancing are often impossible in these areas, and health facilities are minimal.

Governors and mayors play a major role in urban areas stopping the pandemic spreading while keeping their cities functioning in terms of food supplies, support to the most vulnerable and access to health care. They need to work with urban health experts, government agencies at all levels, sanitation experts, social scientists, innovators and urban planners. It is essential that the coordination of the international response is decentralized to the major urban areas, tailoring the response to the urban context and working closely with local governments.

Local governments must be supported to work with these communities as a priority. Critical measures can involve the relocation of mobile health care clinics closer to affected communities, and mapping health facilities for improved access to testing and treatment. Local authorities should aim to work with community associations to improve hygiene and sanitation. Global expertise in water and sanitation, transport, other basic services and slum upgrading along with its wide networks can support such measures.

The economic consequences for those in informal settlements will be long-lasting. As cities suspend daily activities and restrict movement, day labourers and those in informal employment will lose

their income. This can result in people being forced to leave their homes due to their inability to pay the rent. Without any social benefits, they will be unable to care for their families. Various organisations round the world work on housing rights, security of tenure and combatting forced evictions can help to develop effective policy measures and collaborative solutions in this respect. Communities need to be trained and supported to recognize signs of illness, facilitate home care and self-quarantining, engage in community tracing and prevent the further spread of the disease as well as to carry out data collection. This work can complement the work of local and national authorities and should be developed within national frameworks for action.

Local governments work with a wide range of networks to collaborate with and support national and local authorities in working in informal settlements, which can be mobilized for capacity building, information distribution and exchange, assessment of community health and social facilities and community-led initiatives. What we do today will change the cities of tomorrow, to make them safe and inclusive, and resilient for future crises. Looking forward, federal and states agencies are supporting many cities to develop innovative planning and expansion models that focus on compactness and connectivity, as well as decentralized local access to all basic services and infrastructure, including health, which could contribute towards slowing the spread of pandemics**.**

Local governments : Frontline of Coronavirus Response

How we respond to the COVID-19 crisis, and what we learn from that response, will be critical to building the cities and communities of the future. Local governments are the front line in preparing and responding to the COVID-19 global pandemic. Along with health authorities and communities, it is the local governments who will ensure that public services in cities and countries around the world continue to function properly throughout the response. The impact of COVID-19 has, so far, been geographically and socially diverse. This pandemic is affecting territories all over the world, not recognizing nationalities or borders. There seems still to be a window of opportunity for some of those countries and cities in the southern hemisphere. They can learn from tested responses from cities and regions that have been ahead of the curve.

Local governments are on the frontline, dealing with the health emergency, mitigating social and economic real-time impact on the poorest. They must keep basic services going and guarantee food supplies. Regional governments will need to deal with population changes when urban jobs are disrupted and people seek subsistence elsewhere. They also play a critical role in fostering the solidarity of communities and making it possible for civil society to come together and contribute to the resilience of our communities.

Preventing and managing COVID-19 outbreaks is most challenging in cities with several informal settlements. People

in slums often depend on informal health facilities, and use overcrowded or poorly maintained public transport systems to commute long distances between home and work. They suffer from the absence of waste management, poor housing, lack of basic services and social facilities. There is a higher risk of fast contagion for any infectious disease in such environments where preventative measures such as staying indoors and self-isolating are very challenging

As the economies of many cities and countries struggle to withstand the shock of COVID-19, community resilience must go beyond the response to disasters, and be built up through improved, innovative social safety nets. Cities and regions play a key role in preventing the rise of inequality, poverty and the stigmatization of population of those without a secure income or social benefits by working together for sustainable communities.

Local governments need to prevent eviction resulting from the loss of livelihood and inability of many formal and informal sector workers to pay their rent. UN-Habitat's extensive work on housing rights, security of tenure and prevention of forced evictions can help develop such innovative, partnership-based solutions. UCLG calls on its members to make additional efforts and to work with organized slum dwellers to support the most vulnerable.

The COVID-19 pandemic is advancing at different speeds in different parts of the world. It is critical to ensure active learning and fast sharing from country to country, and city to city as they move from preparedness to containment to response to recovery. Local governments, mayors and communities must be engaged and should share their challenges and successes with each other, and with regional and national authorities. There needs to be new forms of collaboration between urban health experts, government agencies at all levels, sanitation experts, social scientists, innovators and urban planners.

UCLG, Metropolis and UN-Habitat and partners are reaching out to cities and partners globally to harness the solidarity and political will of those local and regional governments that are on the frontline, pushing more than ever to be the drivers of change, carrying out equitable service delivery, ensuring the preservation of common resources, and promoting human rights in the midst of this crisis. We are escalating active learning and city-to-city communication and will encourage new forms of city-to-city cooperation, on prevention, coping and recovery.

We also need to empower communities to unlock the potential of self-organization and self-help to meet the scale of the current urgency. New technologies, shaped and put to the use of our communities, can provide remote health care and enable remote learning, communication and remote connections when mobility and interactions need to be limited, which is particularly important for the most vulnerable such as the elderly. It is only through working to build a broad citizenship, that local and regional governments will manage to turn this situation around. Our response

today will directly affect the future of our towns and cities tomorrow.

How Cities are Working to Combat the Spread of Coronavirus?

The COVID-19 pandemic is laying bare two unavoidable facts about our new reality: we are more interconnected than ever, and cities are at the front lines of this crisis and will be at the front lines of any similarly globalized crisis in the future. Since it emerged in Wuhan, China, the novel coronavirus and the disease it causes, COVID-19, has killed thousands of people, many in large urban centres worldwide. The map of infections in the United States tracks closely with its biggest, most globally connected cities.

However cities are not only at the forefront of response to the pandemic, they are also likely to see lasting changes from it, from their physical form to economic and community structure. Urban planning has been shaped by infectious disease for thousands of years. As governments, doctors and communities work to "flatten the curve," it's likely that some policies and behaviour changes will affect the way we live in cities for years to come. Here are four ways cities are working to combat the spread of the disease now.

a. **Restricting Access**
   Travel restrictions, both local and international, are the most obvious change to how cities are functioning around the world. After the Chinese government cut off transport in and out of Wuhan and only allowed residents to leave their homes for closely monitored grocery or medical trips, other cities across the country

adopted residential lockdowns that ultimately extended to hundreds of millions of citizens, in addition to mandated self-quarantines and other travel limitations. The city-state of Singapore has enforced strict travel restrictions and hospital and home quarantine orders, with severe penalties for those who break the rules. France, Italy and Spain have now enacted similar lockdown measures.

In the United Sates, state and city governments are reacting individually, with some – including California, Ohio, Illinois, Massachusetts, Washington, New York City and the District of Columbia – banning gatherings over certain sizes and closing restaurants and bars. Others are simply urging self-imposed social isolation. The shutdowns are making ghost towns of previously buzzing urban spaces and many businesses face an uncertain future.

Travel restrictions have had wide-ranging impacts on productivity, air pollution and carbon emissions. In China, the pandemic has caused a 15-40% reduction in key industrial outputs, leading to a roughly 25% drop in carbon emissions. Satellite data captured a stark change in air pollution levels across China and Italy as restrictions took effect. Given the connection between urban air pollution and early death, some initial calculations even suggest the change in air quality might have far-reaching positive effects on the health of the

very young and very old. However past experience shows that emissions reductions caused by an economic downturn are likely to be temporary. As factory production begins to restart in some areas of China, for example, the government has signalled it may relax environmental rules that would otherwise help control emissions.

b. **Fortifying Public Transit Systems**
Istanbul has deployed a hygiene fleet of 40 vehicles and hundreds of personnel to sanitize and re-sanitize public and municipal facilities. The fleet is responsible for cleaning municipally owned public spaces too, like libraries, co-working spaces, cultural centers, facilities for disabled people and places of worship. Istanbul has also heightened routine cleaning protocols in its sprawling public transit system, which serves more than 5 million people a day. Disinfectants have been installed at more than 40 bus rapid transit stations. Other major metro systems from Hong Kong to Washington, DC, are also stepping up cleaning.

After a study of in Hubei showed how COVID-19 spread from one person to nine over the course of a single long-distance bus journey, bus operations – where they are still running – are being adjusted to help prevent the spread of the virus. Kigali, Rwanda, has installed portable hand-washing stations across the city at bus stops, taxi queues and car parks. The German-led Transformative Urban Mobility Initiative has a run-down of

many adjustments by municipal bus fleets in Germany, Poland, Switzerland and China, as well as an ongoing Twitter thread cataloging new efforts in public transit globally.

In order reduce contact with drivers, many operators are now prohibiting passengers from boarding through the front door and have stopped selling tickets onboard. In Switzerland, some buses have separated drivers from passengers with temporary barricades. In both Europe and China, bus operators have started using floor markings to indicate safe distances between riders. Ulaanbaatar, the capital of Mongolia, has reduced bus operations by 50% to discourage travel, and Shenzhen, China, has reduced maximum occupancy for buses and other public transit vehicles to half their normal limit to reduce the chance of spreading infection.

c. **Creating Alternatives to Public Transit**
As people avoid crowds and movement is restricted, cities are reporting public transit ridership has taken a sharp downturn. Istanbul revealed a nearly 50% decrease in public transit ridership – more than 2 million riders – over the first three weeks of March. San Francisco's BART system asked for an emergency infusion of funds, revealing $5 million in weekly losses, due in part to the pandemic keeping riders away. In China, some cities like as Wuhan and

Huanggang suspended public transport entirely to contain the virus.

In Colombia, Bogotá is pursuing a creative alternative to trains and buses. Mayor Claudia Lopez announced that the city's open streets day route, the world-famous Ciclovía, normally held only on Sundays, will be closed to cars and opened to cyclists and pedestrians during weekdays too. More than 76 kilometers (47 miles) of street closures will now take effect each weekday to give people alternatives to commuting through the public transit system. The temporary new cycling routes add to the city's 500 kilometers (310 miles) of permanent bike lanes.

Foot traffic appears to be down overall in the most heavily affected cities, especially from tourists, but cycling has reportedly seen a surge in New York, Philadelphia and several cities in China. The increase in traffic may test the safety of bicycling infrastructure in many cities. In response to New York City Mayor Bill de Blasio's encouragement to "bike or walk to work if you can," a petition demanding emergency bike lanes and other infrastructure changes has been started by Transportation Alternatives. Some governments have gone the other direction on cycling. In Spain, where new cases have jumped sharply, police are reportedly fining bikers for taking non-essential trips after people were ordered to stay at home except to go to work, the hospital or to buy food or medicine.

d. Providing Radical Data Transparency

When infections in South Korea soared in the city of Daegu, the country enacted a strategy of open data and public participation. This has provoked some criticism but also led to a novel response. South Korea has asked people in home quarantine to use self-diagnostic apps that connect them with medical staff and launched a series of apps and websites that share detailed information on the spread of the disease. An interactive map created by a college student but populated with government data shows locations infected people have visited as well as their demographic characteristics. A popular privately developed mobile app references the same data to send alerts to users when they get within 100 meters (328 feet) of these locations.

Another way South Korea is asking for public participation is in testing. The city of Goyang has led an innovative contact-free, drive-through testing method. The city opened a facility in a parking lot where people can simply roll down their windows and get swabbed by medical personnel in protective gear. Other cities, including Seoul, have followed Goyang's example and opened similar facilities. In the 3,300-person town of Vò, Italy, researchers pursued a fully comprehensive testing strategy that involves testing and retesting

every single resident. Half the individuals who tested positive had no symptoms. Since they were identified early, they could be quarantined along with anyone they came in contact with. Health authorities now believe they have essentially stopped the spread of the illness in this small community.

The immediate focus for cities should be on stopping the spread of COVID-19, but the current social distancing threatens to disrupt what makes cities work: the human urge to congregate. When life returns to normal – whatever that new normalcy may be – planners will need to reckon with this disruption, paying particular attention to the urban poor, who were already being left behind in many cities and will likely suffer more during the pandemic without careful thought.

As governments reassess priorities and consider stimulus packages, the imperative for more resilient, equitable, low-carbon cities remains unchanged. For instance, while the current crisis demands a re-think of many different types of travel, including air travel, public transit systems are still essential for city dwellers and should not be allowed to be crippled financially. Cities must work better for everyone, as the fragility of today's economies has made clear. As the world adjusts to this new reality, we are committed to helping cities learn from one another quickly and finding solutions that create resilient, thriving cities for all.

Cities are Part of the Solution

Cities also play a central role in preparing for, mitigating and adapting to pandemics. In fact, many of the norms and rules for cities to manage infectious disease were first discussed at a global sanitary conference in 1851. Today, the preparedness of cities varies around the world. Their level of development and the socio-economic determinants of their populations play a big role. Cities with a high concentration of urban poor and deep inequalities are potentially more vulnerable than those that are better resourced, less crowded, and more inclusive. This is something that the Bill and Melinda Gates Foundation, Wellcome Trust and Skoll Foundation have all recognized and working to address.

Cities that are open, transparent, collaborative and adopt comprehensive responses are better equipped to manage pandemics than those that are not. While still too early to declare a success, the early response of Taiwan and Singapore to the COVID-19 outbreak stand out. Both Taipei and Singapore applied the lessons from past pandemics and had the investigative capacities, health systems and, importantly, the right kind of leadership in place to rapidly take decisive action. They were able to flatten the pandemic curve through early detection thus keeping their health systems from becoming rapidly overwhelmed.

Not surprisingly, cities that have robust governance and health infrastructure in place are in a better position to manage pandemics and lower case fatality rates

(CFR) and excess mortality than those that do not. Adopting a combination of proactive surveillance, routine communication, rapid isolation and personal and community protection (e.g. social distancing) measures is critical.

Many of these very same measures were adopted by the Chinese city of Hangzhou within days of the discovery of the virus. Likewise, the number, quality and accessibility (and surge capacity) of hospitals, internal care units, hospital beds and IV solution and respirators can determine whether a city effectively manages a pandemic, or not. City networks such as the US Conference of Mayors and the National League of Cities understand intuitively.

Ultimately, the hardware of pandemic prevention - functioning surveillance systems, healthcare providers and health infrastructure – is necessary but insufficient to ensure effective pandemic response. What is also needed is software such as established and tested protocols, proper provider education, and close collaboration between qualified doctors, nurses and others from the state to the local levels. To be sure, a lack of governance, poor planning and decentralized health care systems can undermine pandemic response – by generating confusion, fear and higher costs.

What Global Mayors Has Done to Combat COVID-19?
a. Mayor of Milan Giuseppe Sala and C40 Vice-Chair
We are focused on containing the spread of Covid-19 and protecting the citizens of Milan as much and for as long as necessary. We know nonetheless that steps must be taken now to support the rebirth of our city after this crisis. For all those who have lost their job or income and to sustain vulnerable families and citizens we have launched a Mutual Aid Fund. I believe it will be instrumental to respond to the needs of the citizens of Milan in terms of social justice, environmental transition and health.

b. Mayor of Seoul Won-soon Park and C40 Vice-Chair
Coronavirus knows no borders. Our solidarity among cities and countries is critical in resolving this global crisis. The city of Seoul is willing to share our practices in the coronavirus containment with the international community and promises to stay committed to overcoming this pandemic together with the global citizens.

c. Mayor of Freetown Sierra Leone, Yvonne Aki-Sawyerr
There are to date no confirmed COVID-19 cases in Sierra Leone, but Freetown is on high alert as all stakeholders work to prevent, and prepare to respond in the event of an outbreak. The main preventative measures, hand washing and social distancing, are extremely challenging to effectively implement in a densely populated city of 1.2m when 47% of the population do not have access to running water and 35% live in severely overcrowded informal settlements. Our city's experiences from the Ebola outbreak have informed our local plans

but we are also learning from ongoing COVID-19 responses of other cities from around the world as we try to prevent and prepare to respond to the crisis.

d. Mayor of London, Sadiq Khan

Cities are at the epicentre of this crisis and stopping the spread of Coronavirus will require unprecedented action from across the globe. It is critical we learn from the experiences of other countries, which is why I joined an urgent call with mayors from around the world to share our very latest knowledge and advice on how to respond to this global pandemic. These are testing times for all of us and I want to reaffirm London's commitment to working with our friends and partners overseas to limit the impact of this pandemic on people across the world. We stand ready to support and cooperate with our fellow cities during this difficult time.

e. Lord Mayor of Melbourne, Sally Capp

Leadership and collaboration from the C40 Cities may help to discover more effective ways to combat COVID-19. We need to cooperate globally but act locally to respond effectively to this pandemic. Cities have been the driving force for other major global issues such as climate change so we have a track record of delivering results. In Melbourne we are working to increase city cleaning measures and still provide essential services to our most vulnerable communities during the crisis. We are also providing grants and financial assistance to local businesses

and the arts community that have been economically devastated by COVID-19.

f. Mayor of Paris, Anne Hidalgo

In Paris, as in one-third of the planet, the lockdown measure has become the rule in order to contain the epidemic outbreak and protect the people and health systems. It is imperative that this measure is respected by all. In view of this, I have emblematically decided to post every night, on the Eiffel tower, a message to thank all Parisians and professionals who are fighting the COVID-19 and reminding people to STAY AT HOME.

g. Mayor of Bogota, Claudia Lopez

Faced with the COVID-19 crisis, in Bogotá we have placed people at the centre of our response, with intelligence and collective action. To make decisions and act, we have gathered information and generated knowledge, we have learnt. This crisis brought us the opportunity to put into practice our new social contract to understand better the particular situations of many groups and respond accordingly, in particular to the most vulnerable communities. What we are learning will not only allow us to act today, it will also make us a better city in the future, stronger, more conscious, more sustainable, and more caring. This challenge came to change our lives for the better, to teach us to live with a better lifestyle, better production and consumption habits, more empathy and solidarity. To teach us to learn, change and move forward. Everything is going to turn out all right!

h. Chief Minister of Delhi, Arvind Kejriwal

India is fortunate that Corona arrived late here. Learning from experiences of other countries, we have aggressively pursued the policy of identifying contacts and isolating them. As a result, today, Delhi has less than 40 confirmed cases, 25 days after the first case was detected. Out of the 39 cases that we have, 29 cases contracted it from abroad and just 10 are due to local transmission. Therefore, local transmission is also pretty limited. However, we are not complacent. We wish to limit any further local transmission and would like to avoid entering stage 3 of community transmission. Therefore, we have implemented a complete lockdown from 23rd March.

The economic fallout of the lockdown has disproportionately impacted the city's poor, especially migrant workers from across the country who live in Delhi. To mitigate their miseries, we have started providing free cooked meals to 400,000 people every day from 550+ distribution points. We have already released a two months advance social security pensions for widows, senior citizens and the specially-abled to help families tide over the lack of economic activity. Construction workers are being provided with sustenance allowances of ₹5000. Our approach has been that we cannot afford to lose a single life to COVID-19 or to starvation. This is a crisis of unprecedented scale and we are committed to learn and collaborate

with leaders across the world. Together, we will win.

i. Mayor of Montréal, Valérie Plante

The battle against COVID-19 requires the participation of all levels of government, but it is cities that are at the forefront of the fight. In these times of crisis, it is important to work together, to share the information we have and to identify best practices so that our actions are as effective as possible and allow us to save lives. I welcome the initiative of the Mayor of Los Angeles, Eric Garcetti, to bring together representatives of major cities so that we can share our experiences as we enter a critical phase in our fight against COVID-19. Together, I am convinced that we will be stronger.

j. Mayor of Curitiba Brazil, Rafael Greca

In addition to WHO guidelines, Curitiba is using innovation to fight the spread of the disease, The city's fab lab is producing face shields with 3D printers. We are also using videocalls to make early diagnosis on patients with coronavirus symptoms. Sharing this sort of experiences with other C40 mayors is paramount to find common solutions that will help us win the battle against coronavirus.

k. Secretary General of Dubai Executive Council and C40 Vice-Chair, His Excellency Abdulla Mohammed Al Basti

This emergency has greatly emphasized the importance of international collaboration and

solidarity. We see countries exchanging knowledge, talent and medical supplies with others in need, with China leading the effort in sharing its lessons learnt and support. This is a clear proof of how global action can be mobilized within a short period of time when everyone is focused on a clear objective. God willing, it will help us get out of this crisis stronger, wiser and more resilient.

Assessing City Preparedness

National, state and city governments could benefit from a pandemic preparedness index to better plan for, and respond to, epidemic outbreaks. Such an index could draw inspiration from, for example, the global health index produced by the Nuclear Threat Initiative, the Johns Hopkins Centre for Health Security, and the Economist Intelligence Unit. An up-to-date dashboard tracking city capacities to manage pandemics could help build safer urban centres and minimize the threat of global and community spread. Identifying gaps in city planning and the underlying socio-economic determinants of population health could also help stimulate more effective resource flows to vulnerable areas.

The extent of a city's preparedness depends on its capacity to prevent, detect, respond and care for patients. This means having action plans, staff and budgets in place for rapid response. It also requires having access to laboratories to test for infectious disease and real-time monitoring and reporting of infectious clusters as they occur. The ability to communicate and implement emergency response plans is also essential, as is the availability, quality and accessibility of hospitals, clinics, care facilities and essential equipment.

To this end, the Center for Global Health Science and Security at Georgetown University has created an evaluation tool – the Rapid Urban Health Security Assessment (RUHSA) – as a resource for assessing local-level public health preparedness and response capacities. The RUHSA draws from multiple guidance and evaluation tools. It was designed precisely to support city decision-makers prioritize, strengthen and deploy strategies that promote urban health security. These kinds of platforms need to be scaled, and quickly. There is widespread recognition that a preparedness index would be useful.

In November of 2019, the Global Parliament of Mayors issued a call for such a platform. It called for funding from national governments to develop crucial public health capacities and to develop networks to disseminate trusted information. The mayors also committed to achieving at least 80 percent vaccination coverage, reducing the spread of misinformation, improving health literacy, and sharing information on how to prevent and reduce the spread of infectious disease, a measure that Bloomberg backed this month. At a time when global leadership is lacking, cities, their networks and philanthropic organizations are stepping-up. We urgently need to see national governments doing the same.

City Resilience Hubs

Resilience Hubs are partnerships between local governments and community-based organizations (sometimes partially funded by foundations) that provide services such as job training and childcare, community programming, resource distribution, communications coordination and generally enhance quality of life. Based in trusted community-serving facilities (e.g. recreation centres or faith-based institutions), they enhance capabilities in crisis, including solar and battery backup systems, access to potable water and healthy food, and supply distribution. Resilience Hubs can be activated to serve vulnerable communities without overloading local governments. In practice, how would they handle the coronavirus?

a. Resilience Hubs could provide community-based testing sites for medical personnel. One of the primary concerns for many cities, for example, is overloading emergency rooms. In Seattle, individuals that suspect they have COVID-19 are urged to call their doctor first while hospitals scramble to set up drive-thru testing sites. Because Hubs are local by design, they could provide free testing in a trusted space, minimizing public transportation and worry of health insurance or citizenship proof. With widely available testing this would increase access to testing and reduce the number of carriers spreading COVID-19.

b. Hubs could be neighbourhood distribution centres that provide residents with access to healthy food, clean water, soap, and items that are routinely selling out such as toilet paper, antibacterial wipes, sanitizers, and basic medical supplies. Sold-out items and crowded grocery stores have become such a problem that global retailers have established at-risk and senior-only shopping hours. If Hubs had been established in their neighbourhoods, these folks would've had safer access to supplies earlier.

d. As schools close around the world, Hubs could be locations to coordinate childcare and meals to ensure children have access to healthy food and clean water throughout the day, while supporting parents that still have to work. They could act as spaces to bring in people that are without work to fill the gaps for those who still have to go to work – a win-win.

e. Hubs could organize virtual platforms to connect neighbourhoods, coordinate volunteers, and share response funds among individuals who lost jobs or small businesses forced to close. Communities are attempting this informally with mutual aid networks. In London, Every One, Every Day, a Hub-style project in an underserved borough, has transitioned in-person events and programming to online support, information sharing, storytelling and activities to keep people connected, all of which helps combat isolation.

f. Hubs could offer equity-cantered proactive planning, providing opportunities to anticipate what's next, while prioritizing the needs of those with the most risk and least resources –

all the while supporting different language, ethnic and cultural differences. Currently, community members are stepping up to fill this gap.

g. Hubs could provide redundancy. Many systems we rely on to support physical distancing – power, water, internet, etc. – are intact in developed countries (less so in developing countries). In crises such as earthquakes or hurricanes, these systems are often undermined, creating a need for Hub-like backup. In Puerto Rico, a community-led Hub is developing community capacity and response to hurricanes and is outfitting the space with solar, water purification, communications and other elements of disaster-support.

If we had Resilience Hubs in underserved communities, we could have this more coordinated approach. We could reduce the strain on our medical and emergency management system. We could improve dissemination of accurate information, resources and supplies. We could enhance community connectivity and social cohesion. Now, as governments invest in recovery, let's prioritize holistic solutions that build stronger communities rather than rebuilding broken systems. That's how you build resilience.

Cities Post COVID-19 Pandemic
Our mayors, governors, and community leaders must do whatever is necessary to get their cities back up and running as soon as they safely can. After, we will need plans in place to prepare for future pandemics, and any social or economic lockdowns they necessitate. The federal government must do its part too, with bold and unprecedented programs to bolster the economic situation of our states and cities as well as our workers and business, especially small business. Getting this response right may be as important as what we are doing today. Below is a 10-point plan based on detailed tracking of the current pandemic and historical accounts of previous ones, presenting some key measures to prepare our cities, economy, and workers for the next phase of the coronavirus crisis and beyond;

a. **Pandemic-proof airports:** Airports are a critical engine of economic development—they cannot be idled indefinitely. We need to make sure they can get up and running again quickly, and that means mobilizing like we did in the wake of the 9/11 terrorist attacks by adding temperature checks and necessary health screenings to the security measures already in place. It also means reducing crowding: Simple things like stanchions or painted lines on floors can promote social distancing in waiting areas. Airports should have large quantities of masks and hand sanitizer available, and airlines will need to reduce their passenger counts and keep middle seats open during future health crises.

b. **Prepare large-scale civic assets:** Cities are also home to other forms of large-scale infrastructure: stadiums, arenas, convention centres, performing arts centres, etc. Because they bring together large groups of people, city leaders must pandemic-proof these assets as much as possible, too. Audience sizes may need to be

reduced in theatres, with seats left open. Masks may need to be required and made available to patrons as needed, and temperature checks carried out. This will be critical for communities that are dependent on such attractions: A Brookings analysis shows that COVID-19's economic downturn will hit tourism-driven cities such as Orlando and Las Vegas hardest. The sooner such large-scale civic infrastructure can be safely reopened, the faster our urban economies will be able to rebound in the aftermath of a pandemic.

c. **Modify vital infrastructure:** As we've seen during the first phase of the COVID-19 crisis, buses, subways, and trains need emergency infusions of cash to keep the systems solvent when ridership is low or non-existent. When they are back in service, design changes in stations and seating will be needed to prevent the spread of infectious diseases. Streets may need some retrofits too; New York Governor Andrew Cuomo has called for pedestrianizing some New York City streets to promote social distancing during COVID-19. Some of these changes should be permanent. Cities need to expand and better protect their bike lanes too, while refining bike- and scooter-sharing programs for when public transit in compromised.

d. **Ready key anchor institutions:** Medical centres, hospitals, and universities are on the front lines of the battle against COVID-19, and many are already overtaxed. With dormitories, dining halls, and large groups of people, they will be highly vulnerable to the secondary waves of contagion. How can we ensure that they can operate safely to carry out vital research during pandemics? Just as with other large-scale civic assets, classes in these institutions can be kept small, but institutions will need to retrofit dormitories and dining halls with temperature checks and ensure adequate social distancing so they can safely function.

e. **Embrace telework:** We are in the midst of a massive experiment in remote work. Most people will eventually go back to their offices, but some workers and companies may find remote work to be more effective. Tulsa, Okla. has leveraged this concept through its Tulsa Remote initiative, which pays remote workers a small grant to relocate there while helping them forge community and civic connections. Cities can learn from one another about how to best support the growing cadre of remote workers and make them connected, engaged, and vital parts of their communities.

f. **Ensure Main Street survives**: The restaurants, bars, specialty shops, hardware stores, and other mom and pop shops that create jobs and lend unique character to our cities are at severe economic risk right now. Some projections suggest that as many as 75% of them may not survive the current crisis. The loss of our Main Street businesses would be irreparable, and not just for the people whose livelihoods depend on them, but for cities and communities as a

whole. The places that have protected their Main Streets will have a decisive competitive advantage as we return to normalcy. Loan programs from government, foundations, and the private sector as well as support from small business and technical organizations will be essential for ensuring these businesses survive. Cities need to provide this type of assistance and advice to these vital small businesses so they can safely reopen and weather the storm of future lockdowns.

g. **Protect the arts and creative economy:** The creative economy of art galleries, museums, theatres, and music venues—along with the artists, musicians, and actors who fuel them—is also at dire risk. Cities must partner with other levels of government, the private sector, and philanthropies to marshal the funding and expertise needed to keep their cultural scenes alive. Once they are allowed to reopen, these places will also need to make interim and long-term changes in the way they operate. Cities should provide advice and assistance on necessary procedures—from temperature screenings, better spacing for social distancing, and other safety measures—for these venues to continue as part of the urban landscape.

h. **Assess leading industries and clusters:** It's not individual firms but clusters of industry and talent that drive economic development. Some of those clusters are at greater risk than others: Sectors such as transportation, travel and hospitality, and the creative arts will be hit the hardest, while e-commerce and distribution or advanced manufacturing for health care and food processing may grow. Cities and economic development organizations must assess the industries and clusters that are most vulnerable in their territory, evaluate the impacts future pandemics will have for their labor markets and communities, and plan to make their economies more resilient and robust. They should pull together cluster working groups of business and non-profit representatives and local academics and experts to best assess the impact of the pandemic and pandemic-related response on key clusters and develop medium-range plans.

i. **Upgrade jobs for front-line service workers:** Nearly half of Americans work in low-wage service jobs. A considerable percentage of them—emergency responders, health care aides, office and hospital cleaners, grocery store clerks, warehouse workers, delivery people—are on the front lines of the pandemic. They need better protection, higher pay, and more benefits. States such as Vermont and Minnesota have paved the way by designating grocery store employees as emergency workers, making them eligible for benefits including free child care. Having a well-paid cadre of front-line service workers who can keep our communities safe and functional will help protect us from future wave of this pandemic and others that may follow.

j. **Protect less-advantaged communities:** The economic fallout of pandemics will hurt most for the least-advantaged neighbourhoods and their residents, who lack adequate health coverage and access to medical care, and who are the most vulnerable to job losses. This, too, is a fundamental issue of both safety and equity. Concentrated poverty, economic inequality, and racial and economic segregation are not only morally unjust—they also provide fertile ground for pandemics to take root and spread. Economic inclusion and more equitable development are critical factors for the health, safety, and economic competitiveness of our places. Cities and local leaders can work with federal and state agencies, community development organizations and local foundations to target needed funds, support services and technical assistance ot these areas.

Conclusions

The COVID-19 pandemic is a wake-up call and maybe also an opportunity to build better and more sustainable societies and cities. Currently it may give us time to reflect and think about long-term solutions while tackling the short-term problem. Can we effect a permanent paradigm shift? Is it possible to prevent a return to the bad old habits? In the short term we need to focus on the health of our colleagues, friends and family and the effectiveness of our health care systems.

For the medium-to-long term, we should analyse the data that become available, take a more holistic view of the pandemic, and evaluate, build and implement policies to address health care system requirements, including surveillance, environmental and climate impacts, and governance—policies designed to prevent premature death in both the short and the long term.

The high population density, close contact between people, high level of mobility and shared means of transport, among other features, tend to turn cities into the hotspots of outbreaks and gateways for the disease. In this case, however, rural areas have also been hit hard. In any case, the advantage of urban outbreaks is that cities often have better more accessible health care systems in place. Furthermore, cities are also part of the solution because they are centres of innovation and can be the drivers improvements in public health , for example through better urban and transport planning, by moving away from a car-centred model and favouring active forms of transport, such as walking and cycling. Walking and cycling have the advantage that they involve a lower risk of contagion and at the same time strengthen the lungs and immune system.

Social distancing programmes are likely to remain in place for the foreseeable future and we need to prepare our cities for this, for example by rapidly putting in place an adequate and safe infrastructure for walking and cycling to work as well as providing opportunities for daily physical activity without causing high air pollution levels and sufficient safe public spaces (parks, beaches and other outdoor spaces) where people can meet and

exercise without running a high risk of contagion.

Sources
1. The Brookings Institution
    1775 Massachusetts Ave.
    NW Washington, DC 20036
    USA

2. International Institute for
    Environment and Development,
    80-86 Gray's Inn Road,
    London, WC1X 8NH,
    United Kingdom

3. C40 Cities Climate Leadership
    Group, Inc.
    120 Park Avenue,
    Floor 23, New York,
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4. Centre for Global Health Science and
    Security
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    USA

5. UCLG
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