

World Cities Summit

MUNUC CHINA ONLINE 2021



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CHAIR LETTER

Dear Delegates,

I would like to warmly welcome you to the World Cities Summit. My name is Jingwen Zhang, and I will serve as your committee chair for this conference. I am more than excited to meet and work with you in May!

I am a second-year college student at the University of Chicago majoring in Mathematics. Besides writing proofs, I am also passionate about political theories and how they can be applied to domestic and global developmental issues. Last year, I served as an Assistant Chair for the UN World Tourism Organization at MUNUC 32. This year, I am the Chair for ECOSOC Special Meetings on Emergency Situations at MUNUC 33. On campus, I am also a reporter for the Exploring Race magazine and a popper from Groove Theory - UChicago's street dance crew.

As a delegate, you will be addressing critical developmental issues in modern urban growth. With constant growing global populations, megacities are emerging across the globe. In this committee, you will debate on how to solve the most concerning questions that come along with the development of megacities, ranging from deteriorating traffic congestions to housing shortage and from social welfare to sustainable development. These are all challenging problems, but I hope that through representing your city, you would be able to understand what is at stake and to explore how we can solve this problem.

As your chair, I ask you to research thoroughly and think creatively, debate and cooperate with each other with respect and empathy. I hope that you will enjoy the research process, and I look forward to seeing you all virtually in May! Please feel free to contact me at cso@munuc.org if you have any questions.

Warm regards,

Jingwen Zhang

HISTORY OF THE COMMITTEE

The World Cities Summit, first held in 2008, brings high-ranking government officials together with leading experts in their field to address some of the most serious problems facing cities across the world. In the past, the World Cities Summit has addressed the issues of city governance, urban planning, environmental and economic sustainability, climate change, and quality of life. According to their website, their main purpose is to address the question "How do we create a roadmap towards a more liveable [sic] and sustainable urban future?" As more and more people move to cities, and as issues of urban poverty and pollution worsen, working toward answering this question becomes more and more necessary.

Every two years, leaders from cities all around the world come together in the Asia Pacific region, an area with huge growth in urban areas, to tackle the problem of achieving sustainability in cities. The most recent, 2014 World Cities Summit chose the theme "liveable [sic] and sustainable cities: common challenges, shared solutions." 20,000 participants from 118 countries debated the definitions of "smart city" and of sustainable development. According to the Urban Redevelopment Authority, "participants at the World Cities Summit also stressed the need for governments to collaborate more closely with businesses, academia and citizen networks to create more holistic and cost-effective solutions and improve quality of life." Although the World Cities Summit is a fairly new organization, it has already attracted a wide range of high-ranking officials and academics from all over the world. Moving into the future, the Summit will undoubtedly become an extremely important forum for debate relating to the development of green, sustainable cities. ¹

¹ Singapore Urban Redevelopment Authority, World Cities Summit concludes on a high note with new partnerships and stronger collective resolve to build better cities for people.

TOPIC: THE RISE OF THE MEGACITY

Statement of the Problem

In 2007, the estimated number of people on Earth living in urban areas exceeded the number of people living in rural areas. What happens when extremely large numbers of people live in a limited amount of space? While urban growth can have many benefits for the residents it affects, it also creates challenges local governments need to solve in order to ensure these benefits are shared equitably and sustainably. Delegates will examine the farthest stage of this trend by taking a close look at megacities. To do so, delegates should keep the three pillars of sustainable development in mind: economic, social, and environmental. Here, we will specifically examine a number of problems common in megacities: slums, crime, transportation infrastructure, and overcrowding.

What is a Megacity?

The UN defines the term **megacity** as a city with 10 million inhabitants or more. In 2014, there were 28 megacities in the world—a number that has tripled since 1990 and is projected to reach 41 by 2030. Where are these megacities? Historically, the largest conglomeration of urban areas have been located in the more developed regions of world, but today, the fastest growing urban areas are located in Asia and Africa. The UN estimates that India, China, and Nigeria will account for 37% of total projected urban growth between 2014 and 2050. From these figures, it is unsurprising that 79% of all megacities are found in Asia, Latin America, and Africa and that an estimated one out of every eight urban resident in the world lives in a megacity.

² "World Urbanization Prospects-2014 Revision." https://esa.un.org/unpd/wup/Publications/Files/WUP2014-Highlights.pdf.

³ "World Urbanization Prospects-2014 Revision." https://esa.un.org/unpd/wup/Publications/Files/WUP2014-Highlights.pdf.

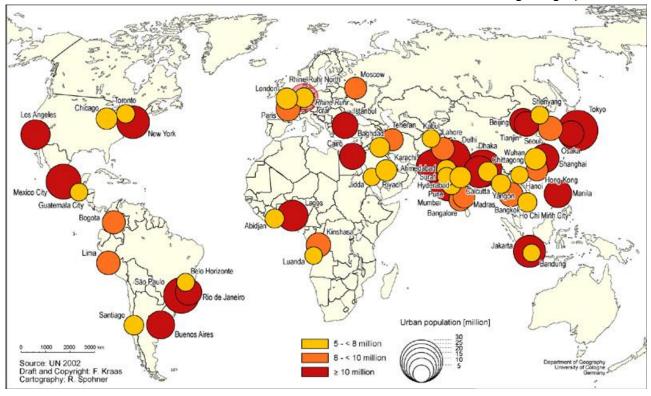
⁴ "World's Population Increasingly Urban with More than Half Living in Urban Areas | UN DESA | United Nations Department of Economic and Social Affairs." http://www.un.org/en/development/desa/news/population/world-urbanization-prospects-2014.html.

⁵ Kuo, Lily. "80% of the World's Megacities Are Now in Asia, Latin America, or Africa." *Quartz*. http://qz.com/688823/80-of-the-worlds-megacities-are-now-in-asia-latin-america-or-africa/.

Slums

UN-Habitat describes a slum as "a heavily populated urban area characterized by substandard housing and squalor." On one hand, slums can be housing areas that were previously respectable and suffered a decline in conditions as residents moved to newer and better areas of the cities. These areas were then rented out to poorer city residents and make up what are known as "inner-city" slums in many cities today. On the other hand, the term "slums" also refers to vast informal settlements common in the developing world that are made up of squatter settlements and illegal subdivisions. Dwellings in these slums range from shacks to permanent structures and are a highly visible expression of urban poverty.

In slums, there is a lack of access to basic services like water, electricity, sanitation facilities and infrastructure. Community services like schools, health centers, and marketplaces are also lacking with little help from public authorities. Housing structures in these areas are substandard or illegal and are often built with materials unsuitable for local conditions. Overcrowding is highly evident in



⁶ UN-Habitat. "The Challenge of Slums: Global Report on Human Settlements 2003." http://mirror.unhabitat.org/pmss/listItemDetails.aspx?publicationID=1156.

⁷ Ibid.

⁸ Ibid

⁹ "Defining Squatter Settlements." http://www.gdrc.org/uem/squatters/define-squatter.html.

slum units, with five or more people sharing a one-room unit for cooking, sleeping, and living. Living conditions in these slums are extremely unhealthy and hazardous. A lack of basic services can entail open sewers, unpaved roads (or no roads at all), pollution, and settlements built in dangerous locations close to industrial plants or built on shaky geography. These slum conditions all contribute to a central characteristic of slums, which is poverty. People living in slums are extremely vulnerable to economic, social, physical, and legal disasters, resulting in a very poor quality of life. Slums commonly act as barrier to human and social development, making it difficult for residents to rise out of poverty.

Slums have been an important public policy issue in the past 20 years. As urban populations grew, especially in areas as a result of rural-urban migration, low-cost and affordable housing provided by municipal governments could not keep up with the demand. As a result, public housing declined, and informal settlements grew. These settlements are particularly concentrated in Asia, Latin America, and Africa and are characterized by their semi-legal status and by a lack of basic services such as drinking water and waste removal.

Historically, housing has not been a priority in national or international political agendas. According to a report by UN-Habitat, housing accounts for more than 70% of land use in most cities. ¹⁵ Policies in place have failed to provide adequate or affordable housing for all city residents and a disproportionate number are focused on helping the middle class obtain home-ownership. As a result, slums have persisted as a problem, especially in developing cities. ¹⁶ The number of people living in slums globally has increased by 28% from 1990 to 2014. In developing countries, the percentage of the urban population living in slums decreased from 39% to 30% from 2000 to 2014.

¹⁰ UN-Habitat. "The Challenge of Slums: Global Report on Human Settlements 2003."

http://mirror.unhabitat.org/pmss/listItemDetails.aspx?publicationID=1156.

¹¹ Nordenman, Peter Engelke and Magnus. "Megacity Slums and Urban Insecurity." Atlantic Council.

http://www.atlanticcouncil.org/blogs/futuresource/megacity-slums-and-urban-insecurity.

¹² UN-Habitat. "The Challenge of Slums: Global Report on Human Settlements 2003."

http://mirror.unhabitat.org/pmss/listItemDetails.aspx?publicationID=1156.

¹³ "UN-Habitat: World Cities Report 2016." http://wcr.unhabitat.org/wp-content/uploads/sites/16/2016/05/WCR-%20Full-Report-2016.pdf.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

Given the demand, an estimated one billion new homes are needed by 2025. ¹⁷ Municipal governments have much to do in response to a global housing shortfall.

Crime

As cities expand and slums become more widespread within them, crime and violence can often emerge as a consequence of the concentration of people. Particularly in countries with shaky political systems or unstable economies, slum conditions can be conducive to the creation of gangs or criminal networks. Goods, people, and weapons are all examples of what is commonly smuggled through slum networks. Because official governance and policing can be absent from slums (especially those seen as illegal settlements), recruitment of young slum dwellers by gangs or criminals can be very successful. This often results in unchecked criminal organizations growing their operations and massively influencing the surrounding cityscape.

In particular, slums cannot be thought of as an isolated part of the city: crime affects the areas around a slum as much as the slum itself. Much of what occurs in slums, including more intangible factors such as ethnic tensions, can spill out into the rest of the city. For example, inadequate sanitation systems and a lack of clean water combined with slum overcrowding, enable communicable diseases to spread quickly from slums into other areas. ²⁰ These unforeseen consequences of urban sprawl and the development of slums oftentimes affects the livelihood of residents across the city, especially those who live within slum areas.

Transportation Infrastructure

Transportation is an integral part of a city's infrastructure. Not only is transportation necessary for the movement of people and goods, but a functioning system also permits an area's economy to run smoothly and improves the quality of life for a city's residents. Megacities have unique problems

¹⁷ Ibid.

¹⁸ Nordenman, Peter Engelke and Magnus. "Megacity Slums and Urban Insecurity." *Atlantic Council*. http://www.atlanticcouncil.org/blogs/futuresource/megacity-slums-and-urban-insecurity. ¹⁹ Ibid.

²⁰ Nordenman, Peter Engelke and Magnus. "Megacity Slums and Urban Insecurity." *Atlantic Council*. http://www.atlanticcouncil.org/blogs/futuresource/megacity-slums-and-urban-insecurity.

surrounding the use of highways and public transit, as outdated infrastructure is only made worse by massive overuse by a growing populace.

First, traffic congestion has become infamous in several megacities. Dhaka's traffic jams are estimated to cost Bangladesh \$3.86 billion in productivity every year. ²¹ In Mumbai, athletes supposedly missed the closing ceremony of the South Asia Games because of a traffic jam. ²² Urbanization and population growth means increasing motorization. However, the economic growth that brings about an increase in individual's ability to pay for motorized transportation is often too fast for public officials to order infrastructure projects accordingly. As a result, cities are left with poor roads and a glut of car-usage. ²³ Megacities suffer from higher levels of congestion than other urban areas and as a result, contribute more to automobile emissions and urban air pollution.

Developing countries in this era of modernization often have less space allocated for roads than compared to western cities during their initial phase of motorization. ²⁴ Megacities in these nations have a more difficult time to construct and operate road networks and in obtaining land for expand roads. They also possess fewer resources to dedicate to building up urban infrastructure compared to cities at the beginning of the 21st century. Megacities in developed countries tend to possess more established sources of funding for public infrastructure. However, it is also true that these megacities have to maintain and rehabilitate existing road systems, a prospect possibly more difficult than building new ones. ²⁵ In either case, space is often problematic for megacities seeking to expand their infrastructure and cater to more residents of their cities.

Lastly, public transit has not kept up with increased demand in megacities. Public transportation can be old, crowded, slow due to traffic congestion, and even dangerous. Delhi reported that over a 100 people were killed in bus accidents in 2007. ²⁶ Some cities have turned to Bus Rapid Transit (BRT)

²¹ "How Can Mega-Cities Innovate to Reduce Traffic Congestion?" *UNDP*. http://www.undp.org/content/undp/en/home/blog/2014/6/6/how-can-mega-cities-innovate-to-reduce-traffic-congestion.html.

²² "Megacities and Megatraffic." http://www.uctc.net/access/37/access37_megacities_traffic.pdf.

²³ Ibid.

²⁴ Meeting the Challenges of Megacities in the Developing World: A Collection of Working Papers. Washington, D.C.: National Academies Press, 1996. http://www.nap.edu/catalog/5267.

²⁵ "The Global Infrastructure Gap." Strategic Infrastructure 2014. http://wef.ch/P8chB7.

²⁶ "Transportation in Megacities: A Local Issue, a Global Question." http://www.bu.edu/pardee/files/documents/BU-Pardee-Policy-Paper-oo4-Megacities.pdf.

systems that involve elevated board platforms and dedicated bus lanes because of their relative affordability to build.²⁷ However, BRTs are difficult to implement and have had varying success. There has been less of a movement to modernize regular public bus or subway systems because of the cost to upgrade technology. Additionally, new, rather than renovated public transit system can often leave out the poor because of high fares.²⁸

Overcrowding

Overcrowding is an issue very much related to slums and increased demand for transportation. It occurs when there is insufficient space for residents to have privacy, to move around freely, and to keep up hygienic needs, leading to an overall decrease in their quality of life. ²⁹ The World Health Organization computes the overcrowding indicator by dividing the total resident population by the available floor space in dwellings. The higher the indicator value, the more overcrowded housing conditions are. ³⁰ Worldwide, the rise of the overcrowding indicator in many major cities has led to health risks, greater social discontent, and other major concerns for residents and policymakers.

A healthy housing environment necessitates not only the appropriate sanitary and hygienic resources but also encompasses the "whole health spectrum of physical health, mental health, and social well-being both within the dwelling and the residential environment."³¹ Poor housing and congested living conditions in combination with socio-economic factors can all contribute to an increased risk of the spread of infectious disease, large volumes of uncollected waste building up and creating health hazards, and to difficulty in accessing potable water and basic necessities.³²

It is important to note that overcrowding is a subjective term and should not be confused with "density." The term **density** is an objective measure of the number of people in one physical space and overcrowding is a subjective term. The WHO gives no threshold to their overcrowding indicator,

²⁷ Ibid.

²⁸ Ibid.

²⁹ "Definitions of Crowding and the Effects of Crowding on Health." http://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/archive/2001-definitionsofcrowding.pdf.

³⁰ "WHO: Overcrowding." http://apps.who.int/ceh/indicators/overcrowding.pdf.

³¹ "Definitions of Crowding and the Effects of Crowding on Health." http://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/archive/2001-definitionsofcrowding.pdf.

³² Society, National Geographic. "Urbanization, Overpopulation - National Geographic." http://environment.nationalgeographic.com/environment/habitats/urban-threats2/.

meaning they have no cut off point to determine whether an area is overcrowded or not.³³ Therefore, overcrowding can be defined differently depending on cultural norms and expectations, socioeconomic status, and differences in opinion between policy makers. Regardless, the rise of the megacity has contributed to the overall overcrowding problem across the globe and can only be solved through a careful consideration of how it affects can be mitigated or prevented.

^{33 &}quot;WHO: Overcrowding." http://apps.who.int/ceh/indicators/overcrowding.pdf.

History of the Problem

Since the beginning of the Industrial Revolution, cities have begun to expand at a breakneck speed. The number of people on Earth has increased from around 800 million in 1750 to over 7 billion in 2016.³⁴ With close to 10 times more people than the pre-industrial world, people have congregated in denser urban areas to find jobs, social ties, and a life for themselves. Over time, this prompted an unprecedented growth in the size and scale of cities around the world. As megacities have risen and fallen across the world, the question still remains: what has contributed to the rise of the megacity? What's more, what lessons can be learned from the development of cities (and megacities) over the past 2,000 years?

Early Megacities

The first city to reach a population of one million was Rome in around 5 BC. Cities flourished in the Roman Empire, with a large concentration in northern Italy and the southern tip of Spain. The Roman Empire collapsed at the end of the 4th century and many of her cities disappeared when the Middle Ages ushered in an era of agrarian-based feudal society. It wasn't until the 19th century and the Industrial Revolution that cities saw growth and once again reached one million people.³⁵ Since then, economic development and urbanization have gone hand in hand.

Industrial Revolution

The main factor leading to the rise of the megacity was the introduction of modern medicine, sanitation, and industrial production as a result of the Industrial Revolution. As jobs drew people from the countryside to burgeoning industrial centers, a number of major cities emerged by the year 1800: London, Paris, Brussels, and other cities were among the largest industrial centers of the area. As people flocked to the city, however, a number of problems emerged. First, the unprecedented concentration of people and the resulting sewage caused epidemics on a massive scale, resulting in millions of deaths from disease. Second, overcrowding caused social tensions to flare and often

³⁴ "How many people have ever lived on Earth?" *Population Reference Bureau*. October 2011. Accessed November 13, 2016. http://www.prb.org/Publications/Articles/2002/HowManyPeopleHaveEverLivedonEarth.aspx.

^{35 &}quot;The Emergence of Megacities." http://www.ippnw.org/pdf/mgs/6-2-schubel.pdf.

sparked violence between densely-packed city residents. Third, working hours were long and conditions were poor, as laborers often had little bargaining power compared to factory owners. These major changes have been the unavoidable consequences of urban growth, and pose a dilemma to city planners and policymakers at all levels.

Case Study: New York

Starting in the late 19th century, New York City emerged as one of the preeminent metropolises of the western world. Though it could not rival the culture of many cities in Europe, including London and Paris, it became apparent that New York City would be a central hub of the American economy and one of the world's most important and fastest growing cities. After the Industrial Revolution reached America in the early 1800s, industrial production spread throughout the northeast and found a home in New York City, which served particularly useful as a port for shipping and travel along the Atlantic coast of the US. This is particularly common of most megacities: they emerge as centers of manufacturing or commerce and draw people from across the region and world. As jobs become more common in the city, more people flock there to seek more stable employment and a better life.

Case Study: Tokyo

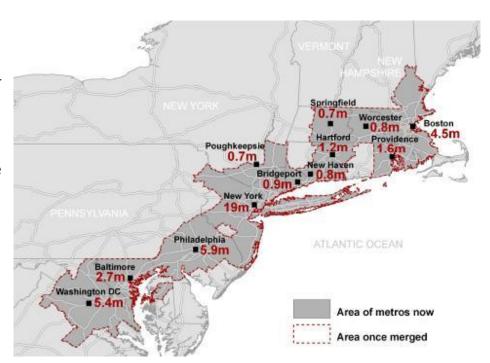
The first megacity of the modern era was the city of Tokyo. Previously named "Edo," the city became known was "Tokyo" during the Meiji Restoration, when reformers attempted to modernize society and the economy. Rail, tram, and a modern water supply network were all introduced by the beginning of the 1900s. The city's population surged after the end of the World War II, when post war boomers immigrated for jobs and opportunities for higher education in city centers. Today, the Tokyo metropolitan area is home to more than 37 million people and has a highly developed public transportation system to accommodate its numbers. Tokyo's population explosion over the past 100 years embodies many of the key traits of a megacity's development: industrialization and the

³⁶ Okata, Junichiro, and Akito Murayama. "Tokyo's Urban Growth, Urban Form, and Sustainability."

creation of jobs, followed by infrastructural development and population growth, and lastly concluding with overcrowding and a strained public transit system.

Megacity Corridors

Indeed, cities across the world have grown rapidly in much the same manner Tokyo did. In the past 20 years alone, several areas of the world have become megacity corridors holding far more than 10 million residents. For instance, the Hong Kong-Shenhzen-Guangzhou corridor in southern



China contains over 120 million residents in one uninterrupted expanse of habitable land.³⁷ Such massive stretches of occupied land are not uncommon, either; urban corridors are common across the entire world, from Southern California (23 million) to Rio de Janeiro-Sao Paulo (43 million).³⁸ These growing mega corridors are both continuous and interconnected, usually with multiple major methods of transportation connecting the disparate communities within. As megacities expand over the next 100 years and begin to merge into each other, cities must become more traversable, expand public transit, and access to important services across the city.

³⁷ Bruce Sterling, "Mega-Region Urban Corridor," *Wired*, March 25, 2010, accessed November 13, 2016, https://www.wired.com/2010/03/mega-region-urban-corridors/.

³⁸ Ibid.

Past Actions

As cities have expanded over the past 200 years, so too have efforts to control them. Whether in the form of new policies, infrastructure projects, or modern environmental practices, cities have developed new methods of mitigating the negative effects of urban expansion. Here, we will examine past actions from two different viewpoints: first, the efforts of individual cities to better cater to their residents, and second, the efforts undertaken at the 2010 World Cities Summit to address issues of public housing and sustainable development. Our examination of these two approaches will reveal areas where delegates can improve on past developments through their resolutions.

Municipal Efforts

Eco-Cities

Some of the most important urban developments of the past 30 years have included the rise of environmentally-friendly designs across the world. Eco-cities first rose to prominence in the early 1990s as residents across the world sought more "self-sustaining" and "resilient structures" that produce little waste and create a net-positive quantity of renewable resources. ³⁹ Three cities have had enormous success incorporating eco-friendly technologies on a massive scale: Tianjin, China and Curitiba, Brazil. Tianjin, an ongoing eco-city built in partnership by China and Singapore, is designed to house 350,000 residents and provide the standard urban amenities without the related pollution. ⁴⁰ Public parks and potable water will be abundant, as will be public transit systems and bike routes to reduce emissions. ⁴¹ Cities like Tianjin are becoming more common across the world as green spaces become more important to city planners and policymakers worldwide. Similarly, Curitiba, a city of 1.83 million in southern Brazil, has a bus system with 45 percent daily usage; indeed, such a large-scale mass transit system can still be energy-efficient and cost-efficient to taxpayers and residents. ⁴²

³⁹ "What is an Ecocity?" *EcoCity Builders*, 2016, accessed November 10, 2016, http://www.ecocitybuilders.org/what-is-an-ecocity/.

⁴⁰ Gaia Vince, "China's eco-cities: Sustainable urban living in Tianjin," *BBC*, May 3, 2012, accessed November 12, 2016, http://www.bbc.com/future/story/20120503-sustainable-cities-on-the-rise.

⁴¹ Ibid

⁴² Hiroaki Suzuki et al, *Eco2 Cities: Ecological Cities as Economic Cities*, Washington: World Bank, 2010, 169.

Eco-cities have benefitted from improved green spaces, public transit, and cost reduction, all while providing valuable services to residents and reducing their carbon footprint.

Public Housing and Slum Relocation

The recent surge in public housing use by municipal governments in the developing and developed world and subsequent relocation of slums have both improved the quality of life for residents while simultaneously uprooting entire communities in some cases. Many slums across the world have been the target of concentrated—and often malicious—government relocation campaigns. In preparation for the 2016 Olympic Games, Rio de Janeiro relocated many slum residents away from the Games facilities by offering compensation or the opportunity to relocate to public housing elsewhere. ⁴³ On the other hand, the maintenance of public housing has proven prohibitively expensive, making costsaving measures extremely important to the fiscal success of new proposals. Recently, the United Kingdom was able to reduce maintenance costs by up to 30 percent on certain affordable housing units through green technology. ⁴⁴ Relocating slums and building centrally-planned housing units can create more efficient cities and alleviate the burden placed on the global poor.

Infrastructure and Urban Planning

Over the past 20 years, major cities across the world have drastically restructured their infrastructure—and even their basic forms—in order to better serve the needs of their rapidly expanding populations. On a smaller scale, the American city of Buffalo serves as a model for many of the principles of sustainable urban planning: it included a surplus of public sites and designated sites for future development. ⁴⁵ As cities expand even faster, pre-planned developments (like those included in Buffalo in 1872) will help accommodate the needs of all city residents.

⁴³ Dom Phillips, "Rio 2016: Favela residents being evicted days ahead of Olympics," *Independent*, August 2, 2016, accessed November 12, 2016, http://www.independent.co.uk/news/world/americas/rio-2016-olympics-favela-shanty-towns-evicted-brazil-a7168221.html.

⁴⁴ Woetzel et al, "Tackling the world's affordable housing challenge," *McKinsey Global Institute*, October 2014, accessed November 12, 2016, http://www.mckinsey.com/global-themes/urbanization/tackling-the-worlds-affordable-housing-challenge.

⁴⁵ Francis R. Kowsky, "The Best Planned City in the World," *University of Massachusetts*, June 2013, accessed November 12, 2016, http://www.umass.edu/umpress/title/best-planned-city-world.

WCS Efforts, 2010

The 2010 World Cities Summit conference addressed the creation of "Liveable and Sustainable Cities" for the Future," focusing on infrastructure, affordable housing, and sustainable urban planning. The first area, concerning the financing of infrastructure projects, underscored the needs of cities in raising sufficient tax revenues and prioritizing projects correctly.⁴⁶ The second area, concerning the creation of affordable housing, highlighted Indonesia's 1970s "Kampung Improvement Program," where community members collectively improved slums in major cities across the country. ⁴⁷ The third area, sustainable urban development, focused on Singapore's successful expansion in the 1970s: the city was able to expand because proper investment in public infrastructure like roads able to handle a rapidly growing population.⁴⁸ Altogether, the World Cities Summit of 2010 encouraged cities to adopt more sustainable means of expanding as populations soar throughout the 21st century.

⁴⁶ "World Cities Summit proceedings, 2010," World Cities Summit, July 2010, accessed November 12, 2016, http://www.worldcitiessummit.com.sq/sites/sites2.globalsignin.com.2.wcs-2014/files/WCS_2010_PROCEEDING.pdf. ⁴⁷ Ibid, 137.

⁴⁸ Ibid, 75.

Possible Solutions

As the megacities of the world expand and proliferate, urban planners and policymakers at the World Cities Summit should heed three principles: first, design neighborhoods that can accommodate future growth while preserving access to essential public services; second, locate new developments along key transit lines with access to commercial venues and workplaces without creating congestion; and third, use environmentally-friendly building materials and methods to create sustainable, carbon-neutral settlements across the cityscape. The following section details how cities can design communities to best curb the dangerous and unencumbered growth of megacities around the world—or avoid becoming one entirely.

Smart Growth Communities

A "smart growth community" is a town or city with the infrastructure and plans necessary to sustain the delivery of services over long periods of time. For many growing cities around the world, these will be the only answer to the problems created by the megacity. Smart growth cities often incorporate a number of features to improve quality of life. First, they place residential areas in close proximity to commercial areas, public amenities like parks, and office buildings for local companies by promoting mixed land use. ⁴⁹ Second, smart growth communities engage communities in the process of developing new areas, giving people a greater stake in their own wellbeing and improving circumstances for all. ⁵⁰ Third, proper zoning laws encourage compact building designs, which conserves space and inhibits urban sprawl. Altogether, smart growth communities catalyze sustainable practices within a city and act as a positive model for growth.

Transit Villages

One of the major factors adversely affecting residents of megacities is the availability of transportation and the problem of highway congestion. Transit villages are settlements located along major arteries, like train stations, in order to promote the use of public transit in lieu of cars. By incentivizing public transit through low-cost fares and easy access to transport, cities can prompt

⁴⁹ "About Smart Growth," *EPA*, accessed November 13, 2016, https://www.epa.gov/smartgrowth/about-smart-growth.

⁵⁰ Ibid.

people to use more efficient means of transportation and reduce a city's environmental footprint. Transit villages can be encouraged in three major ways: first, by developing and promoting further growth around major transportation hubs; second, by locating affordable housing projects nearby; and third, by creating major transportation lines accessible from the street for local residents. Furthermore, they also raise the quality of life for residents by providing quick and convenient transportation around the city. Easy access to transportation via transit villages promotes long-term sustainability for all residents of a megacity.

Eco-Villages

Much like other types of communities, eco-villages are small-scale planned settlements devoted to sustainable economic and ecological practices. Unlike smart growth communities, eco-villages are meant as even more radical ways to promote healthy community living; they are meant to reverse the damage caused by urban sprawl and economic development instead of merely slowing it. For instance, an eco-village might place a heavier emphasis on green technologies (like solar or wind power) as well as subsistence farming (via hyper-efficient farming models). On a larger scale, an eco-village may resemble an eco-city: it is meant to minimize its carbon footprint and contribute positively to the environment around it.

Bloc Positions

Established Megacities

Bangkok, Buenos Aires, Cairo, Dhaka, London, Manila, Mexico City, Moscow, New York City, Paris, Rio de Janeiro, Shanghai, Seoul, Tokyo

These cities are already at a critically large size, so that the issue of dealing with a large dense population is already pressing. All of these cities have somehow attempted to solve the issues of traffic congestion, slums and overpopulation, and urban sprawl. Some, such as Tokyo have been met with relative success. Despite being the densest metropolitan area in the world, Tokyo has more than 50% of tis working population commuting by public rail transportation – more than double the rail usage of the United States of America by population – and, consequently relatively few traffic problems. ⁵¹ Others, such as Moscow, have regular traffic jams that more than double commute times, which are already abnormally high. ⁵² Consequently, these cities are the ones with the most experience with urban development and most invested in finding cheap, efficient solutions to urban problems.

Despite how attractive new innovations such as smart cities may sound, many of these cities will be hesistant to push these changes immediately. Because of their already established populations, transportation networks and infrastructure, a shift towards new forms of transportation and building infrastructure would present an expensive and inconvenient investment. Rather, these cities will want to slowly replace aging systems and work on the developing suburban areas to alleviate the strain of such a large urban population.

⁵¹ "World Urban Areas," Demographia, April 2016, accessed November 14, 2016, http://demographia.com/dbworldua.pdf.

⁵² Peter Spinella, "Moscow and St. Petersburg Lead Europe in Traffic James," The Moscow Times, April 1,2015, accessed November 14, 2016, https://themoscowtimes.com/articles/moscow-and-st-petersburg-lead-europe-in-traffic-jams-45349.

Rapidly Growing Cities

Bogota, Casablanca, Delhi, Istanbul, Jakarta, Karachi, Lagos, Lima, Nairobi, Riyadh, San Francisco, Vancouver

Just as in the first bloc, these countries are in various stages of urban development and have very disparate economic situations. Still with an average yearly population growth rate of over 1.5%, these cities all expanding quickly and should be looking to newer forms of urban development to provide sustainable population growth and alleviate the strain of urban sprawl. Vancouver is a good example of a city that has been taking advantage of its growing population to implement bicycling initiatives and increase its public transportation networks (with plans to support more than 25% of its working population with public transportation). ⁵³ In general, these cities should be looking to experiment with newer green city infrastructures, as it easiest to implement these changes while the city is still growing.

Specific policies that would benefit rapidly growing populations, are transit villages and smart villages. Transit villages allow for population growth to continue while reducing commute times and form generally eco-friendly areas. Smart villages are further step in ensuring that the growth is ecologically sustainable. Both are propositions that this bloc would likely want to further.

Stable or Declining Non-Megacities

Amsterdam, Athens, Barcelona, Berlin, Caracas, Dubai, Rome, Singapore, Sofia, Stockholm, Sydney, Tehran, Warsaw

This bloc consists of cities that are neither megacities nor rapidly expanding. Some, such as Athens, even have declining populations. Regardless, all of the cities are historic and have been foci for trade, commerce and industry for hundreds of years, meaning that the infrastructure has been in place for a long time and is based on older urban planning and technology. Revitalizing urban planning could be easy as in the case of Berlin, where there are only about .3 cars per inhabitant, and commute times

⁵³ "Transportation 2040: Moving Forward," City of Vancouver, accessed November 14, 2016, http://vancouver.ca/files/cov/transportation-2040-plan.pdf.

have been declining in recent years. But Berlin went through a public transportation reform after the reunification of East and West Berlin, where it was forced to establish a new infrastructure. A transition will not be so seamless in other cities. Still, by focusing on new and green approaches, these cities stand to increase quality of living and potentially draw a larger population to their doors.

Works Cited

- "About Smart Growth." *EPA*. Accessed November 13, 2016.

 https://www.epa.gov/smartgrowth/about-smart-growth.
- "The Challenge of Slums: Global Report on Human Settlements 2003." UN Habitat.
- "Defining Squatter Settlements." Urban Squatters and Slums.

 http://www.gdrc.org/uem/squatters/define-squatter.html.
- "The Global Infrastructure Gap." Strategic Infrastructure 2014. http://wef.ch/P8chB7.
- Gray, Alison. "Definitions of Crowding and the Effects of Crowding on Health." The New Zealand
 Ministry of Social Policy. http://www.msd.govt.nz/documents/about-msd-and-ourwork/publications-resources/archive/2001-definitionsofcrowding.pdf.
- "How Can Mega-Cities Innovate to Reduce Traffic Congestion?" *UNDP*.

 http://www.undp.org/content/undp/en/home/blog/2014/6/6/how-can-mega-cities-innovate-to-reduce-traffic-congestion.html.
- "How Many People Have Ever Lived on Earth?" *Population Reference Bureau*. October 2011, accessed November 13, 2016.

 http://www.prb.org/Publications/Articles/2002/HowManyPeopleHaveEverLivedonEarth.aspx.
- Kowsky, Francis R. "The Best Planned City in the World." *University of Massachusetts*. June 2013, accessed November 12, 2016. http://www.umass.edu/umpress/title/best-planned-city-world.
- Kuo, Lily. "80% of the World's Megacities Are Now in Asia, Latin America, or Africa." *Quartz*. http://qz.com/688823/80-of-the-worlds-megacities-are-now-in-asia-latin-america-or-africa/.
- Kutzbach, Mark. "Megacities and Megatraffic." UC Transportation Center. Fall 2010. http://www.uctc.net/access/37/access37_megacities_traffic.pdf.

- Meeting the Challenges of Megacities in the Developing World: A Collection of Working Papers, (Washington, D.C.: National Academies Press, 1996). http://www.nap.edu/catalog/5267.
- Nordenman, Peter Engelke. "Megacity Slums and Urban Insecurity." *Atlantic Council*. http://www.atlanticcouncil.org/blogs/futuresource/megacity-slums-and-urban-insecurity.
- Okata, Junichiro and Murayama, Akito. "Tokyo's Urban Growth, Urban Form, and Sustainability."
- Phillips, Dom. "Rio 2016: Favela residents being evicted days ahead of Olympics." *Independent*, August 2, 2016, accessed November 12, 2016.

 http://www.independent.co.uk/news/world/americas/rio-2016-olympics-favela-shanty-towns-evicted-brazil-a7168221.html.
- Schubel, J.R. and Levi, Carolyn. "The Emergence of Megacities." *Medicine and Global Survival* 6 no. 2 (June 2000). http://www.ippnw.org/pdf/mgs/6-2-schubel.pdf.
- Sterling, Bruce. "Mega-Region Urban Corridor." *Wired*. March 25, 2010, accessed November 13, 2016. https://www.wired.com/2010/03/mega-region-urban-corridors/.
- Suzuki, Hiroaki et al. *Eco2 Cities: Ecological Cities as Economic Cities* (Washington: World Bank, 2010): 169.
- Taiyab, Nadaa. "Transportation in Megacities: A Local Issue, a Global Question." Boston University.

 November 2008. http://www.bu.edu/pardee/files/documents/BU-Pardee-Policy-Paper-004-Megacities.pdf.
- "Urbanization, Overpopulation." National Geographic.

 http://environment.nationalgeographic.com/environment/habitats/urban-threats2/.
- Vince, Gaia. "China's eco-cities: Sustainable urban living in Tianjin." *BBC*. May 3, 2012, accessed November 12, 2016. http://www.bbc.com/future/story/20120503-sustainable-cities-on-therise.

- "What is an Ecocity?" *EcoCity Builders*. 2016, accessed November 10, 2016. http://www.ecocitybuilders.org/what-is-an-ecocity/.
- Woetzel et al, "Tackling the world's affordable housing challenge." *McKinsey Global Institute*.

 October 2014, accessed November 12, 2016, http://www.mckinsey.com/global-themes/urbanization/tackling-the-worlds-affordable-housing-challenge.
- "World Cities Report 2016." UN Habitat. http://wcr.unhabitat.org/wp-content/uploads/sites/16/2016/05/WCR-%20Full-Report-2016.pdf.
- "World Cities Summit proceedings, 2010." World Cities Summit. July 2010, accessed November 12, 2016. http://www.worldcitiessummit.com.sg/sites/sites2.globalsignin.com.2.wcs-2014/files/WCS_2010_PROCEEDING.pdf.
- "World Urbanization Prospects-2014 Revision."

 https://esa.un.org/unpd/wup/Publications/Files/WUP2014-Highlights.pdf.
- "World's Population Increasingly Urban with More than Half Living in Urban Areas." United Nations

 Department of Economic and Social Affairs.

 http://www.un.org/en/development/desa/news/population/world-urbanization-prospects-2014.html.