Inclusive Mobility: Four insights to ensure your city’s transit infrastructure works for everyone

Making Tech Work for People
A series of insights gleaned from global cities
Inclusive Mobility: Four insights to ensure your city’s transit infrastructure works for everyone

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The Making Tech Work for People series shares insights on a variety of topics gleaned from our work with hundreds of cities around the world, including the members of the City Possible Global Network.

As we enter the 2020s, the global phenomenon of urbanization is gathering steam. Cities are growing at an unprecedented rate as they attract both new residents and millions of visitors. By 2030, 1.8 billion tourists will travel internationally each year.1 By 2050, nearly 70% of the world’s population will live in cities.2

Urbanization presents both exciting opportunities and daunting challenges. Cities provide individuals with significant opportunities for education, employment, entertainment, and enrichment. But residents and visitors cannot take advantage of these opportunities unless they can reach them. Mobility is the key that unlocks individual potential and drives prosperity.

Nearly 70% of the world’s population will live in cities by 2050.
The connection between transit and inclusivity

The ease of digital communications has become our new normal so it’s not surprising that 70 percent of us become frustrated when forced to handle government transactions in-person or by phone. Fortunately, municipalities are using technology to make their social services more accessible and user-friendly.

Inclusive urbanization depends on making sure that all citizens and visitors alike can move easily and seamlessly around cities using an array of transportation solutions. Too often, cities find themselves stuck with transit networks, systems, and technologies that no longer meet the needs of their growing populations. This can lead to overcrowding and congestion, which causes stress, reduces productivity, impedes economic growth, and diminishes quality of life.

As people become frustrated with public transit systems, they may turn to private automobiles as their primary mode of transit, increasing traffic congestion and undermining sustainability initiatives. Elsewhere, groups of residents or even entire neighborhoods may be underserved or cut off entirely from transit networks. These ‘transit deserts’ are the enemies of inclusion. People who live or work in these deserts face an extra hurdle in trying to participate fully in the urban community.

Here are four insights gleaned from global cities that can help city leaders develop strategies to make transit systems more inclusive and convenient to use for residents and visitors alike.

1. Digital fare collection can streamline transit for residents and visitors alike.

Fare management is a major pain point in many urban transit systems. Residents frequently must endure long lines at ticket booths or top-up kiosks (particularly...
if they are stuck behind a first-time user trying to figure out how the system works). Or they may have trouble finding a functional kiosk or open merchant nearby. Smartcards offer only a slight improvement. There are hundreds of unique smartcard solutions in different cities, which means out-of-town visitors typically struggle to comprehend the nuances of dealing with a unique system that they have never encountered before.

Current transit ticketing options—whether reliant on proprietary transit cards, paper tickets, or cash—simply no longer meet user expectations for simplicity, speed, and convenience. Residents and visitors alike have become accustomed to using instant, digital payment methods in other aspects of their lives—from on-demand TV to making flight reservations—and they expect the same ‘instant gratification’ when dealing with transit systems.

To address these issues, many cities are adopting digital payment systems with global interoperable platforms that provide the ease consumers demand while removing access barriers for visitors to the city. Mastercard recently worked with the Metropolitan Transportation Authority (MTA) in New York City to introduce a new contactless fare payment system called OMNY.

With OMNY, customers can use a contactless card (credit, debit, or reloadable prepaid) or the digital wallet on their mobile phone or wearable device to pay fares on bus and subway routes. Instead of fumbling with tickets or balky smartcards, riders simply tap and go. OMNY is designed to put speed and efficiency back into transit. The name is based on the prefix “omni,” which means “all,” underscoring the fact that this contactless ticketing solution extends across geographical boundaries and can be implemented anywhere in the world.

2. Reducing congestion helps everyone breathe easier

To optimize urban mobility, cities have to address the issue of demand management. One way to reduce crowding on public highways and transport systems so they can operate at peak efficiency is to redistribute riders across space and time.

Some cities are deploying sensors, global satellite tracking systems and other smart technologies to get real-time feedback on traffic levels. This sets the stage for demand management initiatives like congestion pricing in high-traffic zones. Congestion pricing imposes a hierarchy of highway tolls based on such variables as when the car is traveling and the number of occupants. The goal is to discourage certain behaviors—like traveling alone during peak times—while rewarding and encouraging positive ones, like carpooling.

Other data-based initiatives are targeting public transit. In Chicago, Mastercard partnered with the City Tech Collaborative accelerator to give users information that helped them avoid busy transit hours. Using a combination of fare rebates and charitable donations, the program encouraged users to switch their travel to less congested times. As a result, 18 percent of participating riders shifted their commute away from the peak post-work rush hour (5 to 6 p.m.), helping to reduce congestion and rider transit time.
3. Bring relief to transit deserts with a network of providers

The term ‘transit desert’ refers to an area with a high demand for transit but limited options: people have to walk more than a half-mile for rail service and a quarter-mile for bus service. Given the density of transportation infrastructures in major cities, it’s hard to believe transit deserts exist. But consider Cook County, Illinois. In this region surrounding Chicago, roughly half a million people live in transit deserts.3 Their restricted mobility limits their access to job opportunities, educational facilities, and cultural and recreational attractions. This problem is not exclusive to Chicago. A recent study that examined transit access in 52 cities across the U.S. found transit deserts in each one.4

One solution is for cities to implement Mobility as a Service (MaaS). This approach brings together public and private transit to partner on serving all residents in the area. High-capacity public transport providers focus on urban centers while private providers serve the peripheral transit deserts. Commuters might need a mix of transit modes (bus, train, ride-share, or subway) to complete their journeys, but would have a coordinated, reliable way to get from their homes in outlying neighborhoods to jobs, schools, and entertainment in the heart of the city, and back again—all accessed and paid for on their smart devices.

4. Help low-income and disadvantage residents climb aboard and move up in life

To improve mobility and inclusivity for disadvantaged populations, many cities are taking a two-pronged approach: developing programs to subsidize transportation for those in need and facilitating access to public transportation through a universal city services card.

Having a single city services card on one platform can help simplify residents’ daily lives and increase the effectiveness of city services. Such a card would be multi-functional, enabling the holder to prove their identity; pay for transportation; access government services; accept and make payments; and manage other essentials of daily life. Thus, a
worker would require only one card to take a train or bus to their job, access healthcare services for their family, vote in an election, and manage their transit subsidy.

From an administrative standpoint, a city card could complement contactless ticketing in a multi-layered transit solution that enables cities to phase out existing fare management and distribution systems that are expensive and inefficient to operate.

**Final thoughts ...**

The world’s cities are places of incredible energy, excitement, and creativity. But as economies and populations have increased, cities find themselves facing a cascade of challenges – overcrowding, gridlock, waste, and pollution. Efficient public transit systems and associated mobility services have a major role to play in helping cities realize their full potential as inclusive, welcoming hubs of innovation and progress.

Getting there is a challenge. **City Possible**, a new model for urban collaboration pioneered by Mastercard, can help. Through City Possible, you can tap into insights and resources from other cities to help inform your own strategies around mobility and inclusive transportation options so all residents can achieve their dreams. A platform like Mastercard City Key could help your city engage with its residents, please contact us.

**The superpower of collaboration**

We encourage you to inquire about joining City Possible to bring the collaboration superpower to your city. City Possible enables a global network of cities, companies and communities working together to promote inclusive and sustainable urban co-development focused on addressing pressing urban challenges.

If you would like to discuss your city’s urban mobility goals more deeply, our multidisciplinary team of technologists and transit agency experts at Mastercard Transit Solutions can also help. The team is helping hundreds of cities transform the rider experience for residents and visitors alike, and would be happy to share their insights.

**References**

1. UN News, “World could see 1.8 billion tourists by 2030 – UN agency,” 2017.
2. United Nations Department of Economic and Social Affairs, “68% of the world population projected to live in urban areas by 2050 says UN,” 2018.