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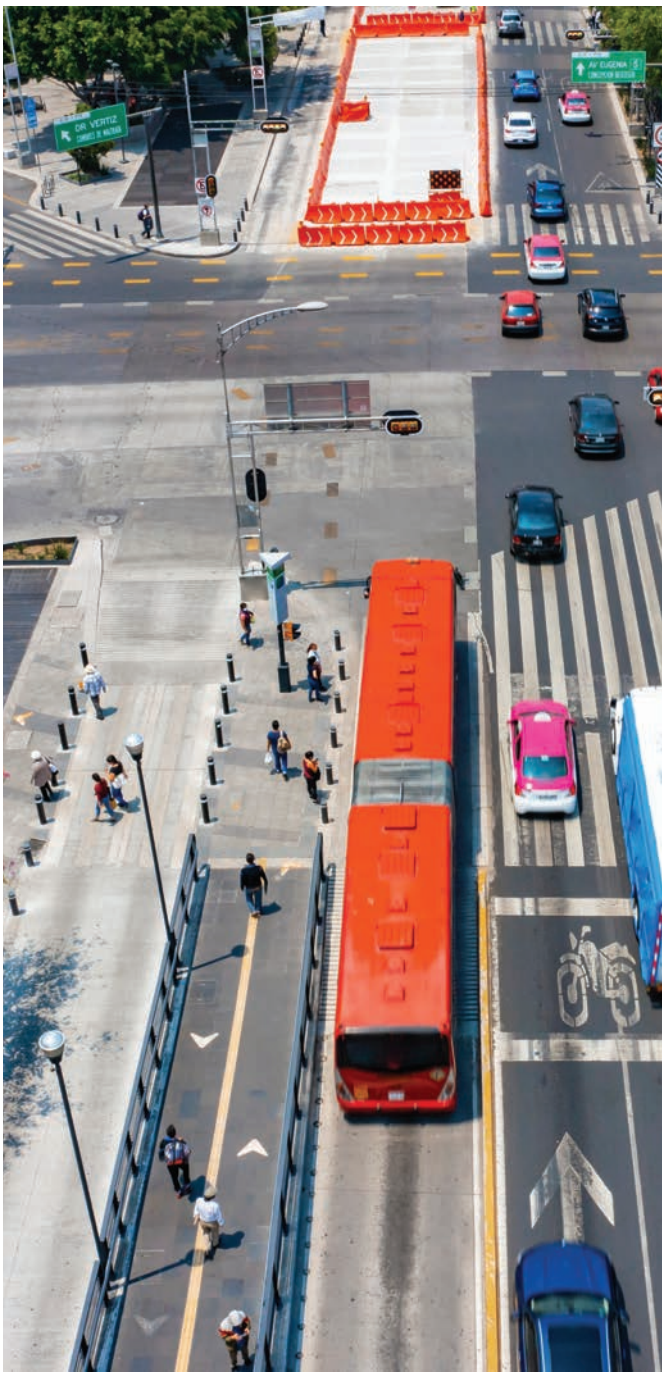
Better streets.
Better cities.
Better lives.

This issue highlights the importance of investing in well-managed, well-funded, zero-emission transport systems worldwide.

ITDP
Institute for Transportation & Development Policy

Table of Contents

December 2026



— Images: A Metrobús BRT station in Mexico City, Mexico (Above, ITDP); A bikeshare station and bus in Rio de Janeiro, Brazil. (Cover, ITDP)

2 ① *A Letter from ITDP's CEO*

4 ② *Global Perspectives*

4 Why Compact, Electrified Cities Are More Resilient to Energy Shocks

7 As Two-Wheelers Rise, Cities Need to Prioritize Public Transport Ridership

10 Bogotá's Systems Approach to Mobility, Housing, and Renewal

13 Why Socioeconomic Factors Matter for Successful Transport Projects

16 Salvador's Next Chapter: More Connected and Sustainable Mobility

20 ③ *A World of Transformation*

20 Growing Smarter: The Journey to Better Urban Mobility in East Africa

23 In Brazil, Aggregated Procurement is the Key to Scaling E-Buses

26 The Freight Transition: Advancing Zero-Emission Corridors in China

29 Inclusive and Equitable Indian Cities Begin with Healthy Streets

32 Indonesia's Future Is Electric. Women Are Driving It.

35 Funding the "Right to Mobility" Across Mexico

38 ④ *ITDP's Reading List*



Letter from Heather Thompson, CEO: A Decisive Moment for Our Climate, Economies, and Cities

The world continues to face deep uncertainty around climate action and sustainable development. International aid is under pressure, governments are reassessing climate commitments, and major development institutions are recalibrating their approaches to climate finance. At the same time, the consequences of inaction are becoming increasingly impossible to ignore.

The summer of 2026 has offered a stark reminder of what is at stake. Western Europe experienced extraordinary heat, including its hottest June on record, with temperatures exceeding 40°C in parts of the continent. Prolonged heat and dryness fueled severe wildfires, putting enormous pressure on communities, infrastructure, and public services. In Canada, another extreme fire season has burned millions of hectares, forcing evacuations and sending smoke across borders.

These events are more than environmental disasters. They disrupt economies, threaten public health, damage infrastructure, and place growing demands on governments already facing constrained resources. They underscore the need to fundamentally change how the world operates: investing not only in drastic emissions reductions, but also in cleaner infrastructure and services that remain reliable as climate risks intensify. Unfortunately, this urgency is unfolding against an increasingly volatile landscape for climate policy.

Countries are not adapting their climate targets at the required pace, and major institutions are also weakening their commitments. This year, the World Bank Group extended its Climate Change Action Plan but retired its previous 45% loan target for climate projects, signaling a concerning shift for the world's largest development institution. The Bank

said it will, however, continue tracking emissions and climate-related outcomes while honoring existing financial commitments. Still, removing a clear institutional climate financing target creates greater unknowns—a shift we cannot afford.

For ITDP, this moment reinforces the need to remain steadfast in our vision for advancing well-managed, well-funded, zero-emission urban transport. This is essential not only to reduce emissions, but also to strengthen economies, improve public health, and expand access to opportunity. Transport sits at the intersection of climate, energy, economic development, and quality of life, and cities cannot build resilient low-carbon futures without rethinking the way we all move.

This transformation cannot happen unless we reduce our costly dependence on fossil fuels and private vehicles. Vehicle electrification is essential, but it is not enough. We must also make it easier and more affordable for everyone in cities to choose and access high-quality public transport, walking, and cycling. Fundamentally, this means creating more compact, transit-oriented cities that prioritize electric mobility, particularly urban bus systems.

Buses are critical across low- and middle-income countries (LMICs), where they remain the backbone of hundreds of millions of daily trips. Yet many systems face inadequate funding, aging fleets, unreliable service, and insufficient operations, often built around outdated fossil fuel infrastructure. ITDP is dedicated to motivating our partners, governments, and institutions to take the bold steps needed to accelerate transit improvements and to capitalize on the growing momentum behind vehicle electrification.

The evidence is there. Well-funded public transport combined with compact urban planning greatly reduces dependence on costly fossil fuels, lowers emissions and air pollution, expands access to jobs and services, and provides an affordable alternative to private vehicles. Recent research from ITDP and the University of California, Davis found that such sustainable policy choices could, by 2050, reduce annual fuel consumption in urban passenger transport by 70% and liquid fuel demand by 85% across six of the world's largest economies. Combining electrification with a shift toward sustainable mobility can further strengthen economic resilience against today's energy shocks.

These approaches can only reach their full potential when paired with more investment in charging infrastructure, transport depots, workforce development, and the operational components needed to keep public transport safe and reliable. Rather than letting uncertainty slow the transition, we must empower cities to show the world *why* sustainable transport deserves a larger share of public and development financing. These investments will deliver benefits far beyond transport alone by strengthening economies and building more livable communities.

In cities across the LMICs where ITDP works, we are helping them do just that—showcasing how electric mobility combined with smarter planning can deliver better service, stronger infrastructure, and more access. In India, national investment programs are supporting the procurement of thousands of electric buses, and the program continues to expand. Dozens of cities across Brazil and Mexico are leveraging innovative technologies and data to strengthen transport operations and institute constitutional reforms. Eastern African countries are collaborating to develop policies that accelerate a transition to electric mobility while reducing costly government-backed fuel subsidies.

Ultimately, a better future for cities requires sustained large-scale investments, not just short-term project financing. The challenges of 2026 remind us why these commitments cannot waver. The tangible progress ITDP sees in our work reminds us to hold firm in a vision for a brighter, more resilient future. Despite the hurdles created by shifting political and institutional interests, pockets of progress remain at the local level, and we are grateful to the partners who help us stay the course and light the way forward.

Sincerely,
Heather Thompson

Why Compact, Electrified Cities Are More Resilient to Energy Shocks

By Jacob Mason, ITDP Global



A Familiar Shock, Unevenly Felt

In 1973, an oil embargo emptied gas stations and forced governments to ration fuel. Today, we are living through a similar crisis. Since February 2026, the closure of the Strait of Hormuz has blocked shipments of roughly 20% of the world's oil and liquefied natural gas, causing what the International Energy Agency has deemed the largest disruption the global oil market has ever seen. In just a few months, oil prices rose by as much as 60%, and natural gas by as much as 100%. Yet the pain has not been shared equally.

The Centre for Research on Energy and Clean Air found that the poorest countries bear roughly twice the relative burden of the richest. As a result of the



— Ethiopia is setting an example with major investments in sustainable transport. Image: ITDP

closure, Pakistan, for example, had to close schools and move to a four-day work week. For a family that relies on a motorbike or minibus to reach work, there is no cushion. This is what dependence on oil looks like when cities are built around the car. ITDP's *Compact Cities Electrified* approach offers another model: compact, mixed-use neighborhoods served by fast public transport, safer walking and cycling options, and electric vehicles. New research from ITDP and the University of California, Davis, supported by the FIA Foundation, demonstrates that reducing oil dependence can make cities far less vulnerable to future market volatility.

Lessons From the 1970s

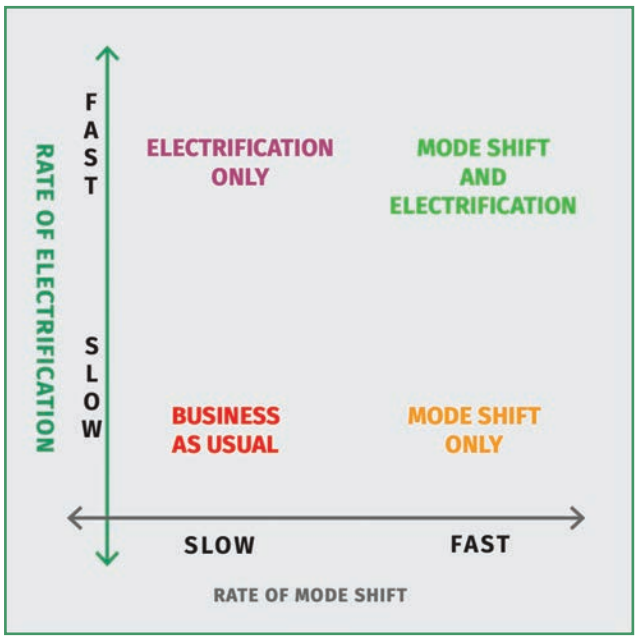
Western Europe's response to the 1973 crisis offers an instructive case. Emergency measures came first: car-free Sundays in the Netherlands, Belgium, Germany, Switzerland, and Denmark, and lower speed limits. While the Sunday bans ended within months, Dutch cities used the momentum to build protected cycling networks and people-friendly streets through sustained investment in sustainable transport systems over the following decades. The United States, by contrast, doubled down on highways and sprawling development. Today, despite similar wealth, the average American burns roughly three times as much gasoline and diesel as the average Dutch resident.

Currency Flows: The Hidden Cost

Oil is bought in U.S. dollars, so price spikes rapidly deplete foreign-currency reserves in oil-importing countries, making essential items like food and medicine far more expensive to import. The International Monetary Fund compared the shock to a large, sudden tax on income for fuel-importing economies. The energy think tank Ember calculates that 74 low- and lower-middle-income countries spend more than USD $155 billion a year on fossil fuel imports. Even for fuel exporters like Brazil and Mexico, the economic implications are not purely positive: pumping and refining oil are complex parts of a global supply chain, and local customers still face higher costs, while revenues do not always offset localized pain.

The Trap of Fuel Subsidies

Faced with anxious drivers, many governments reach for fuel subsidies. It is an understandable impulse, but it can cause great damage. Subsidies encourage people to burn more of an already scarce



— The ITDP-UC Davis research assesses four scenarios for the future of urban transport. Image: ITDP

fuel, strain public budgets, and flow predominantly to wealthier, car-owning households. Once in place, fuel subsidies cannibalize government budgets and are notoriously hard to remove. Indonesia offers an example of a different path: it cut fuel subsidies from about 20% of its budget in 2014 to just 5% in 2015, and paired this with a program to fund and improve public transport. This type of policy supports access, especially for low-income households, without driving up fuel consumption.

Modeling Shows Electrification and Mode Shift Work Best Together

ITDP and UC Davis' report *Compact Cities Electrified: Energy Outlook* examines Brazil, China, India, Indonesia, Mexico, and the U.S., which together hold nearly half the world's people. It found that combining electrification with a shift to public transport, walking, and cycling could cut urban passenger energy use by about 70% and liquid fuel demand by 85% by 2050. Gross oil and gas imports would fall by between 11% in China and 57% in Indonesia, and roughly 2.5 billion barrels of oil equivalent a year across all six countries.

An electric motor turns roughly 75% of its energy into motion, versus about 20% for a combustion engine, so electrification cuts the fuel needed for every trip. Mode shift cuts the number and length of car trips, because a full bus or train moves far more people with less energy. Each serves as an insurance policy for the other: if electric vehicle adoption lags, mode shift still slashes fuel demand; if efforts to restrain car growth are less successful, electrification can keep reducing oil use. Electricity can also be generated domestically rather than shipped through a chokepoint. Fortunately, change can also come quickly: in 2024, Ethiopia banned combustion-engine vehicle imports while investing in walking, cycling, and public transport, and riders are already using cleaner buses and new bike lanes.

What Governments Can Do Now

Governments can still borrow the 1970s playbook. They can use temporary measures such as car-free days and remote work as a bridge. They can quickly reallocate street space with temporary materials, as many cities did during the COVID-19 pandemic, then make bus and protected bike lanes permanent. They can fund improvements to public transport operations and set minimum service standards. They can signal demand to e-bus manufacturers, aggregate e-bus demand to cut costs, and build bus charging networks. Finally, in oil-exporting countries, they can redirect fuel subsidies and oil windfalls towards all of this.

No government can set the price of oil or guarantee that a strait stays open, but every government *can* decide how much oil its cities need, and cities do not need to sacrifice basic mobility to do so. ITDP, with teams across Africa, Asia, Latin America, and the U.S., works with cities to do exactly that—from planning bus rapid transit to building protected bike lanes to creating policies that support e-bus adoption. The 1970s showed us that countries can have a high quality of life while being much less vulnerable to oil prices, and a new crop of countries should learn from and build on these crucial lessons. The best protection against the next oil shock is needing less oil.

As Two-Wheelers Rise, Cities Need to Prioritize Public Transport Ridership

By Dana Yanocha, ITDP Global



— In sprawling cities like Jakarta, Indonesia, two-wheelers are surging in popularity. Image: ITDP

Over the past 15 years, Global South cities have seen a massive increase in two-wheelers on their roads. In many places, two-wheeler growth has outpaced that of car ownership. Economic opportunities tied to two-wheeler use, such as moto-taxis and app-based ride-hailing and delivery work, have driven much of this growth. In Kenya, more than 600,000 moto-taxis were operating in 2018, up from only 4,000 in 2005. Beyond economic opportunities, two-wheelers are also attractive because they are affordable, especially compared to cars. In addition, chronic underinvestment in public transport, urban sprawl, and security concerns—especially for women—are underpinning the exponential uptake of two-wheelers in recent years.

The Two-Wheeler Electrification Trade-Off

Although two-wheelers can expand access and reliability, especially for people with low incomes, their proliferation has not been without negative

consequences. Their contributions to rising air and noise pollution, as well as greenhouse gas emissions, are well documented. An often-cited solution to address pollution concerns is to electrify two-wheelers. Many countries, development banks, and private sector actors have been investing in vehicle electrification broadly and two-wheeler electrification in particular. This is especially true in places where two-wheelers account for most vehicle trips. However, the uptake of electric two-wheelers has been slow. Outside of cities in China, most two-wheelers on the street—9 out of every 10—are not electric.

While electrification is a critical step toward reducing emissions and pollution from the rise of two-wheelers, it does little to address another major challenge: traffic-related injuries and fatalities. In 2021, two-wheelers surpassed deaths from private cars, cyclists, and pedestrians, accounting for 30% of all traffic deaths globally. Because of their high-density batteries and motors, electric two-wheelers are often heavier and accelerate faster than internal combustion engine (ICE) models, increasing crash frequency and severity. Though a better alternative for the planet, an unlimited number of electric two-wheelers in cities threatens everyone's safety.

Improving Public Transport is Still the Key

Governments, investors, and manufacturers have focused so much on two-wheeler electrification that they overlook another important issue: continued disinvestment in public transport as two-wheeler use grows. In other words, as two-wheeler ownership becomes more accessible, private vehicles increase in demand and in value, while shared transport is seen as less desirable.

By continuously shifting priority and investment away from collective transport solutions (like metros and buses) because personal two-wheelers and moto-taxis seem to fill the gaps, cities are—intentionally or not—undermining their public transport systems. While this feedback loop has been on the horizon in Global South cities for decades, car ownership was, and still is, out of reach for many. The rise of more affordable two-wheelers, electric or not, may accelerate the speed of that feedback loop.

In the short term, governments *should* work to electrify shared two-wheelers, such as those used by ride-hail and moto-taxi services and delivery drivers. Local delivery trips using two-wheelers are least likely to shift to public transport and should therefore be a priority for transitioning to electric vehicles. However, personal two-wheeler trips (and even some ride-hail and moto-taxi trips) *could* shift to public transport, a more ideal outcome than electrification. Governments need to look beyond simply replacing ICE two-wheelers with electric ones and consider how a substantial, long-term reallocation of investment into quality public transport could meaningfully limit two-wheeler growth and its potential negative impacts.

Improving public transport services can also attract two-wheeler users to buses and trains, and that effect could be even stronger than for private car users. In other words, public transport investments are more likely to encourage two-wheeler users to shift away from car use. One area for service improvement is reducing travel time and improving reliability, for example by replacing bus lines that run in mixed traffic with bus rapid transit (BRT) corridors. Modeling in Khon Kaen City, Thailand, where more than 50% of trips are made using two-wheelers, shows that reducing travel time is the most significant factor in encouraging two-wheeler users to shift to public transport. In Jakarta, Indonesia, where four out of every five vehicles are two-wheelers, closer proximity to a Transjakarta BRT corridor was found to reduce the probability of using a private two-wheeler or moto-taxi.

Another way to improve service and reduce costs for system operators is to electrify buses. E-buses



— Improving public transport can shift people away from unsustainable two-wheeler use. Image: ITDP

provide quieter, smoother rides for passengers and drivers. They are often equipped with features like climate control and digital fare payment platforms, which offer additional comfort and reliability for users. In Singapore, an 8% increase in bus ridership was attributed to electrification (even controlling for other variables such as bus age); however, that study did not evaluate which modes users shifted from. Two-wheeler users in Jakarta reported preferring electric buses to conventional ones, suggesting that electrification could draw two-wheeler users toward public transport.

Alongside infrastructure investments that improve service, digitalization, and integration, fare affordability programs can further encourage change. Jakarta's JakLingo program increased public transport use by expanding microbus feeder coverage into urban villages and introducing flat-fare transfers between modes to ensure affordability. In Seoul, Korea, investments in bus and metro fare integration, discounted transfers, and improved service coordination led to a 21% increase in bus ridership over a three-year period.

A Way Forward for Two-Wheelers

The rapid growth of two-wheelers in Global South cities reflects real gaps in affordability, access, and security that public transport systems have struggled to address. Electrifying two-wheelers is an important step toward reducing associated pollution and emissions, particularly for commercial trips unlikely to shift to public transport. But electrification alone cannot address the broader consequences of two-wheeler dependence, nor can it substitute for investment in collective transport. Cities facing rapid two-wheeler growth should instead pursue a complementary approach: electrify two-wheelers where they are essential, while focusing urban mobility investments on creating more reliable, affordable, and integrated public transport that serves everyone.

Bogotá's Systems Approach to Mobility, Housing, and Renewal

By Vanessa Velasco, Secretary of Habitat of Bogotá, and Julián Castro Agudelo, Advisor at the Secretariat of Habitat of Bogotá



— Bogotá's recent mobility policies focus on improving transit-oriented housing development. Image: Secretariat of Habitat of Bogotá

It is 5 a.m. in the San Carlos neighborhood of Bogotá, Colombia's capital, and Sonia Marcela begins her day. For the past two years, she has managed a shop in the city center, an area that accounts for more than a tenth of Bogotá's businesses and has a high concentration of job opportunities. Sonia arrived in Bogotá after being forcibly displaced and now lives in the city's southside. Concerned about safety after dark, she often prefers riding the city's TransMilenio bus rapid transit (BRT) system, but the journey takes nearly two hours.

This physical and safety divide translates into an "invisible tax" on travel, shouldered primarily by people who live on the city's outskirts. Sonia's experience is no exception; it reflects the reality of more than half of the capital's households for whom access to jobs, education, healthcare, and public space is measured in time, distance, and safety.

According to Colombia's National Administrative Department of Statistics, Bogotá grew from 1.6 million to 4.9 million residents between 1960 and 1990, far outpacing the government's ability to



— Vanessa Velasco

provide adequate land, housing, and transportation. The result was an informal expansion toward the periphery, where land was cheaper, and development controls were weaker. This deep spatial segregation continues to shape the opportunity cost of living farther away, even today.

At the beginning of the 2000s, Bogotá embraced a paradigm shift with the development of the TransMilenio BRT, which has since grown to one of the largest bus systems in the world with the support of partners like ITDP. Today the system operates 114-km of trunk corridors with more than 3 million trips per day, complemented by a network of 630-km of cycle lanes that support over 7% of daily trips. Together with progress in land-use planning, these advances are helping establish Bogotá as a global model for mobility.

Yet the intervening years have also revealed a clear need: transport infrastructure alone does not generate the expected development around it. Major corridors, for example, continue to face disinvestment and physical decline. By contrast, recent mobility projects, like an aerial cable car system built in Ciudad Bolívar and San Cristóbal, show that pairing public transport with social investment and urban revitalization can transform surrounding areas.

Metro Line 1: Backbone of Bogotá's Territorial-Housing Model

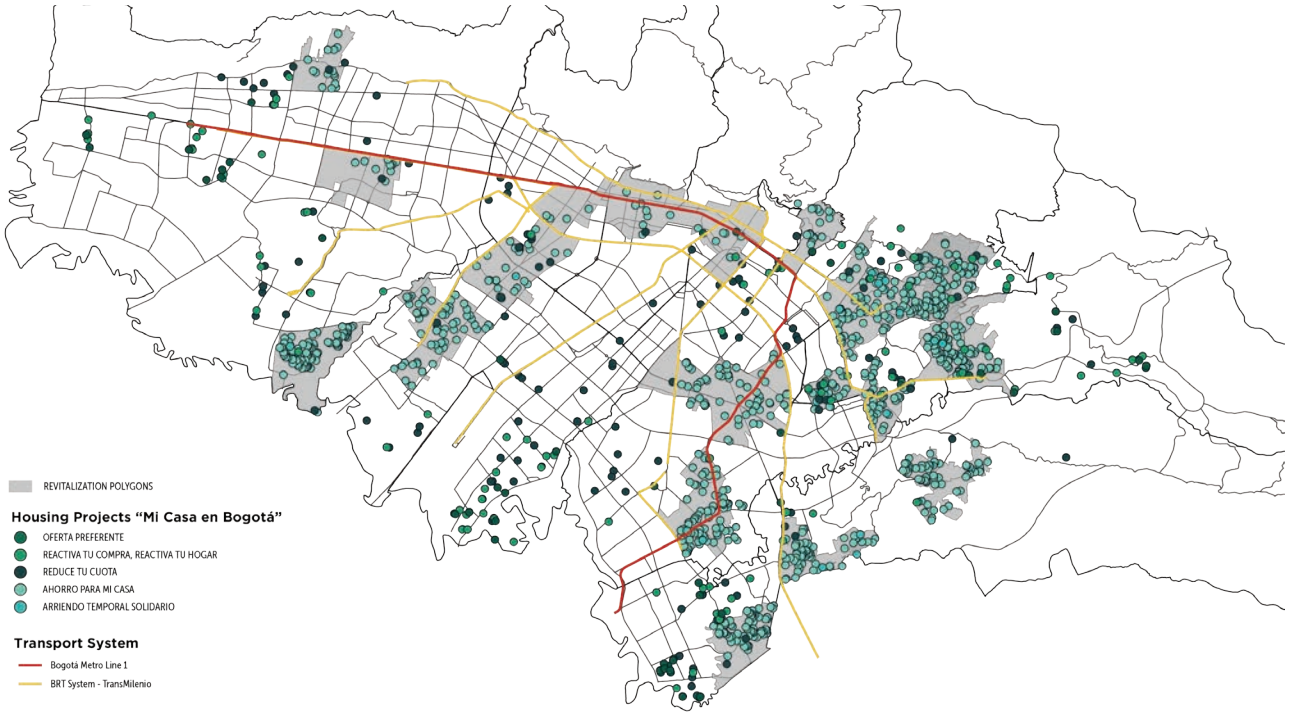
Today, Bogotá's Metro Line 1 is conceived not only as a transport project, but as a key opportunity to address the urban integration deficit by developing formal housing and community facilities (see map). At 23.9-km, with 16 stations and over 80% of construction complete, the project will connect the city's southwest to Bogotá's main employment centers. Policy and implementation challenges remain: How can this infrastructure project be integrated into neighborhood life without adversely affecting residents? Can housing and revitalization catalyze development so that the project becomes more than just a corridor?

Bogotá is responding with three mechanisms. On the regulatory side, District Decree 229 (2026) redraws 13 Multimodal Integration Areas along the corridor and allows direct licensing, channeling private investment into improving housing in surrounding neighborhoods. The city is also implementing *PRUMS*—Urban Renewal Projects for Sustainable Mobility—which overcome bottlenecks associated with conventional instruments, such as partial development plans. On the implementation side, the District Secretariat for Habitat leads *Revitaliza tu Barrio* (Revitalize Your Neighborhood), which is already working in 20 areas across 484 neighborhoods and benefiting 1.1 million residents under the principle of "additionality," which pools efforts and investments across agencies.

On the housing side, *Mi Casa en Bogotá* (My House in Bogotá) integrates savings, credit, and housing assistance to expand access for households previously excluded from the formal housing market, in line with the right to choose where they live. Clearer regulations support both urban revitalization and housing assistance, aiming to create an innovative, integrated city-management package that can spur private-sector investment. Together, these initiatives aim to ensure that public transport, housing, and opportunity work together to create a better life for all.

An Institutional and Financial Model of Shared Responsibility

This transformation rests on a deliberately integrated institutional architecture. While the Bogotá Metro Company delivers the transport assets, the District Secretariat for Habitat broadens the focus to a 400-meter radius around each station to ensure that neighborhoods are walkable and livable. This radius is not arbitrary: it reflects the pedestrian-accessibility benchmark established by



ITDP's *Transit-Oriented Development (TOD) Standard*, a globally recognized methodology for assessing walkability and livability around transport stations.

At the same time, RenoBo (Bogotá Urban Renewal and Development Corporation) leads the renewal of large deteriorated urban sites, while TransMilenio ensures coordination across the multimodal system. A key innovation in this arrangement is a fund financed through urban planning obligations for private developers. This enables Bogotá to capture land value and reinvest it directly in the public spaces surrounding stations, sharing the value created with the community.

Housing Where the Opportunities Are

This TOD and revitalization model breaks with the historic pattern of pushing affordable housing to the periphery by expanding housing choices for lower-income households. Changes around Metro and TransMilenio stations encourage the development of social-interest housing (VIS) and priority-interest housing (VIP), with *Mi Casa en Bogotá* housing assistance allocated in these central areas. The results are already measurable, with more than 4,400 households having received housing assistance in areas with better access to public transport.

Metro 22, strategically located in the city center, shows how this works in practice. For residents like Sonia Marcela, buying a home in this development means being closer to work while also advancing her personal development. With housing support, Sonia can now say that when her new home is ready, she will live just a 15-minute walk from her workplace. Centrally located social-interest housing does more than reduce physical barriers to mobility; it creates opportunity, allowing her to use the time she gains to pursue other goals.

Sustaining Coordination Beyond a Single Administration

This model's primary challenge will be institutional, rather than technical. Today, it brings together the District Secretariat for Habitat, Planning, and Mobility with urban operators—EMB, RenoBo, and TransMilenio—but for it to endure beyond one administration, this coordination must become a long-term city policy, not the initiative of a single government.

Living on the urban periphery has always been "cheaper" per square meter, but that lower price has hidden a tax on these communities: time, higher transport costs, and a lower quality of life. Revitalizing the areas around transport stations with better space, more housing, and access to services is designed to close that gap. For Sonia and thousands of households like hers, the promise is not only a shorter commute to work or services. It is the opportunity and freedom to choose an affordable, accessible urban life.

Why Socioeconomic Factors Matter for Successful Transport Projects

By Rafik Yanni, ITDP Africa



— Cairo, Egypt, continues to expand investment into major transport projects. Image: ITDP

In July 2022, Egypt's Ministry of Transport (MoT) launched Cairo's Light Rail Transit (LRT), a 105-km line costing over USD $1.3 billion. Designed to connect nine new urban communities to the New Capital region, the project promised to improve mobility for millions. Two months later, as government entities began relocating to the New Capital, the MoT announced a 30%-40% reduction in LRT ticket prices. In 2026, four years after launch, it introduced a subscription system offering discounts of up to 50% to encourage more ridership.

These measures recognize cost as the barrier to public transport use. Yet affordability alone does not guarantee accessibility. Designed to carry up to 500,000 passengers daily, the LRT has attracted far fewer riders than projected. What truly makes people choose one mode of transport over another? Travel choices depend on more than fares and physical infrastructure. Socioeconomic circumstances, social perceptions, habits, and daily needs all influence mobility. Without accounting for these factors, major infrastructure

projects may fail to deliver truly equitable, sustainable mobility.

Understanding Transport Equity

As cities grow and congestion intensifies, governments are under pressure to deliver better infrastructure and mobility policies. But new projects and policies succeed only when they respond to the realities and needs of all potential users. This is where the distinction between "transport equity" and "transport poverty" is critical. According to the Partnership for Sustainable Low-Carbon Transport (SLOCAT), of which ITDP is a key partner, equitable transport prioritizes disadvantaged groups, including women, immigrants, children, older people, people with disabilities, and communities with low incomes. Its goal is to counter existing inequalities and give everyone a fair opportunity to access essential resources and services.

In contrast, transport poverty occurs when financial, social, or physical barriers prevent people from accessing jobs, healthcare, education, and other essential services. But affordable fares alone do not guarantee equitable transport; services may still be inaccessible, inconvenient, unsafe, or ill-suited to certain groups' needs. To design truly equitable mobility systems, planners must understand all factors that shape travel choices, including cost, comfort, safety, privacy, convenience, social norms, and cultural expectations. While infrastructure and service design *can* help address affordability and physical safety, less tangible considerations such as social perceptions, habits, and lifestyle preferences are equally important.

The Challenge of Attracting Diverse Users

Cairo's new Eastern Monorail, a key connection to the LRT, illustrates some of these challenges. Launched in 2026, the 56.5-km line has 22 stations and connects Nasr City with the New Capital, passing through New Cairo—a growing community of more than a million with stark income disparities between high-income residents (who mainly use private vehicles) and low-income ones (who commute primarily on microbuses). Attracting *all* types of riders to public transport requires addressing different priorities. Wealthier residents may be reluctant to give up the privacy, comfort, and autonomy of cars. For people with lower incomes, the higher fares could make the Monorail less affordable than existing alternatives.



— The first phase of the much-anticipated Cairo BRT debuted in 2025. Image: ITDP Africa

Both groups may also face a convenience barrier: reaching final destinations can require additional feeder services from stations. This last-mile gap matters when cars and microbuses can take passengers closer to where they need to go. Even a fast, modern rail connection may be unattractive

if reaching stations or completing the journey is inconvenient or costly. A key question then arises: Who is the Monorail designed to serve, and will it attract riders across income groups? High-technology systems *can* transform mobility, but *only* if they meet actual ridership needs. Without understanding users' motives and routines, governments risk investing in projects that fail to deliver public benefits.

Changing Perceptions Alongside Infrastructure

Transport planning must address both a system's infrastructure (the "hardware") and its social and behavioral dimensions (the "software")—people's mindsets, motivations, and perceptions. In many cities, car ownership signals wealth, security, and social status. Meanwhile, using public transport, walking, and cycling may be seen as options mainly for people who cannot afford vehicles. These perceptions can discourage higher-income groups from using public transport, even when services are available, and can push others to eventually seek car ownership.

Changing attitudes requires more than new lines or lower fares. Governments should pair quality infrastructure with messaging campaigns presenting public transport, walking, and cycling as desirable choices. Reliable services, safe routes, feeder connections, and modern stations must reinforce this idea. Without such efforts, habits and social norms persist. Wealthier residents may keep driving because public transport seems inconvenient, while other groups will remain dependent on familiar, relatively affordable microbuses or two-wheelers. The result is an inequitable, fragmented system.

Lessons from Indonesia

Jakarta, Indonesia, offers an example of public transport that can serve users across socioeconomic groups. Like Greater Cairo, Jakarta has tens of millions of residents with substantial socioeconomic disparities. Since 2004, however, the city has developed Transjakarta, one of the world's largest bus rapid transit (BRT) systems. ITDP provided early technical assistance and continues to support planning for feeder services, station design, and fleet electrification.

The government initially envisioned a bus system for everyone, not only passengers with low incomes. Relatively cheap, subsidized fares help make it accessible to working-class households while remaining affordable for middle-class users. Expanded feeder services have also strengthened connections to surrounding neighborhoods and helped the network accommodate demand.

Transjakarta recently exceeded a million daily riders on multiple occasions, demonstrating its ability to serve a diverse base. Challenges do remain, including route efficiency, connectivity, and security, but future improvements could attract even more ridership. Transjakarta's steady growth in popularity shows the value of integrating affordability, connectivity, and inclusivity. Its model demonstrates that equitable transport projects require a sustained commitment to serving all types of users.

Planning for People, Not Just Projects

The challenges facing Cairo's LRT and Monorail systems underscore a broader lesson for cities everywhere: expanding infrastructure and lowering fares are not, on their own, enough to change travel behavior. Successful transport investments must reflect how people move, considering not only affordability but also safety, comfort, convenience, reliability, and the social and cultural factors that shape mobility choices.

This requires engaging communities early, understanding their needs, and measuring success not by the amount of infrastructure built or projected ridership, but by whether people actually use the system and can gain better access to opportunities. When cities overlook these human dimensions, they risk underused infrastructure, wasted investment, and deeper inequalities. But when socioeconomic inclusion and user experience are embedded in planning from the outset, transport projects can do far more than move people from one place to another.



— Salvador, Brazil's, expanded BRT aims to improve public transport access citywide. Image: SEMOB

Salvador's Next Chapter: More Connected and Sustainable Mobility

By the Secretaria Municipal de Mobilidade (SEMOB) of Salvador, and Alphonse Tam, ITDP Global

Salvador, Brazil, has always been a city shaped by movement. As a major mobility hub in northeastern Brazil, it serves roughly 2.4 million residents navigating a landscape that stretches from the historic center to coastal and inland districts. Over the past decade, growth has brought new opportunities, but also new pressures. Longer journeys, congestion, and the outward expansion of lower-income communities have made reliable public transport increasingly essential for connecting people to jobs, services, and opportunities.

Today, Salvador is responding with a different vision of urban mobility. The goal is not simply more buses or bigger infrastructure, but a public transport network that works as a system. Through investments in connectivity, cleaner vehicles, public spaces, and inclusive institutions, the city is bringing together metro, bus rapid transit (BRT), ferry services, cycling, walking, and other modes. This transformation is one reason Salvador received the **2026 Sustainable Transport Award (STA)**, which honors cities each year that showcase how urban mobility projects can be integrated, sustainable, and people-centered.

Infrastructure to Integration

Salvador's shift began with reforms to modernize the foundations of its transport system. A 2014 public transport tender restructured bus operations, while a 2016 revision of the city's *Urban Development Master Plan* strengthened connections among land use, mobility, and transit-oriented development. The city's *PlanMob* mobility plan reinforced these efforts by placing greater emphasis on network connectivity and integrating different modes. The result was a more multimodal network.

The Salvador Metro provides a backbone for high-demand corridors across its two-line, 38-km system, with connections to BRT and services that extend its reach. Ferry services, municipal water transport, funiculars, and planned light rail and cable-car projects add further layers to the network, particularly for communities that are difficult to serve via conventional road-based transport. This matters because success is ultimately measured by how easily people can move across an entire network. A BRT corridor delivers less value if walking and cycling connections are lacking. Cleaner buses cannot deliver their benefits if the surrounding system is fragmented.

Salvador's recent policies increasingly recognize this bigger picture of urban mobility.

Bringing Public Transport Closer to People

BRT has played an important role in strengthening Salvador's network. In 2024, the city expanded its BRT with a new 7-km corridor and 8 stations connecting to Lapa, a major mobility hub, while also improving connections across several key neighborhoods. Improvements around the corridor's stations have also focused on often-overlooked parts of a transport journey: getting to the station, crossing the street, and transferring between modes. Thus, sidewalks, crossings, cycling connections, lighting, and station accessibility all became part of the broader BRT investment.

Salvador now boasts more than 300-km of bikeways, with around 40% physically protected, while improvements to pedestrian infrastructure are also helping connect active mobility with mass transit. That connection matters in a city where density and transit access do not yet fully align. ITDP's *Atlas of Sustainable City Transport* (atlas.itdp.org) reports Salvador having approximately 20,000 people per square km, yet only 13% of metropolitan residents lived near medium- or high-capacity transit in 2025. At the same time, 26% lived near cycling infrastructure. The opportunity *is* there: connect more people to high-capacity transport and make those connections safe and convenient.

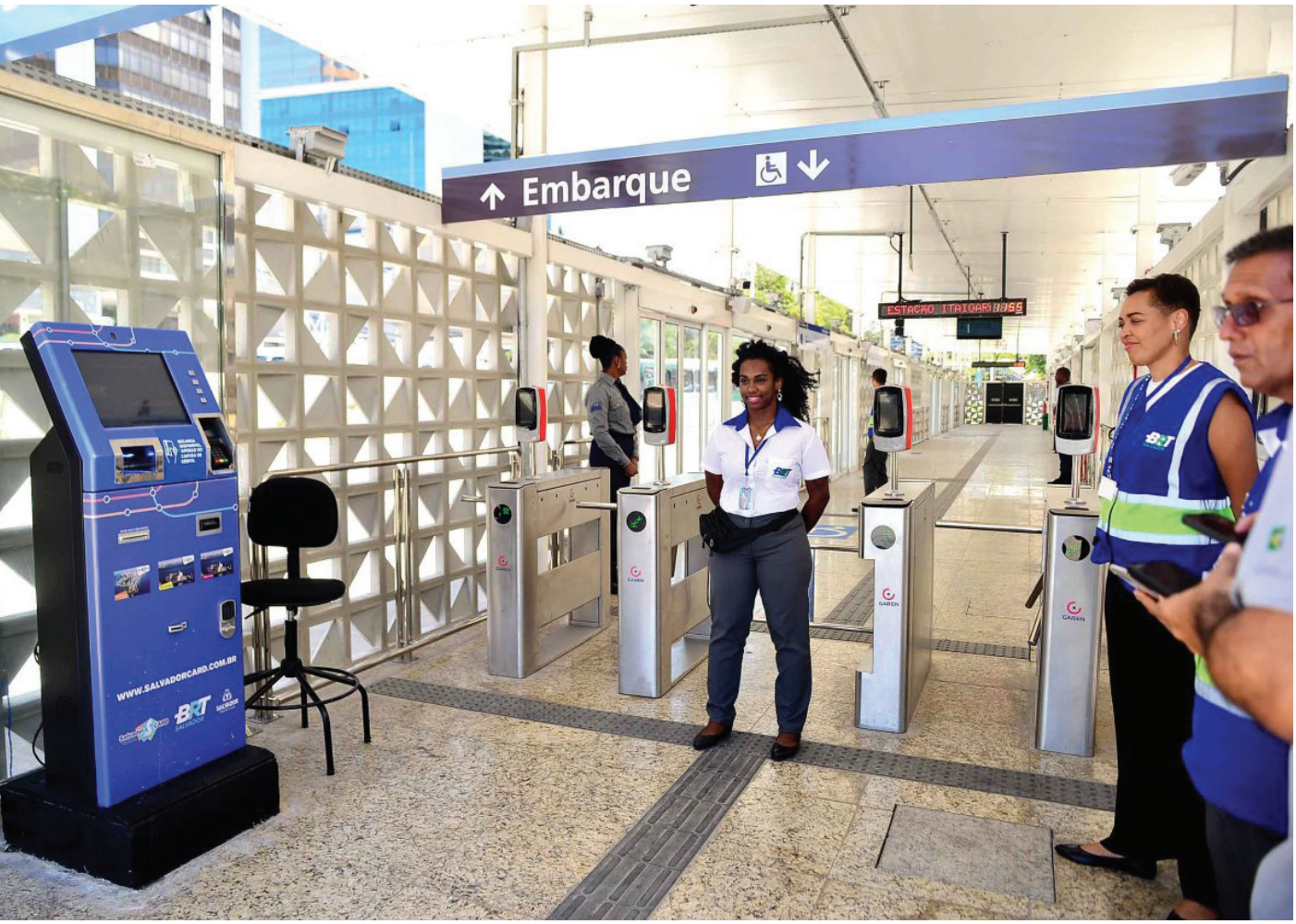
A Chance for Electrification and Inclusion

Salvador is also looking beyond where public transport can go to consider how it should operate. The city's climate strategy sets an ambitious goal of carbon neutrality in urban transport by 2049. Electrification is not simply an opportunity to reduce emissions; it is also a chance to modernize public transport entirely. Electric buses can improve local air quality and reduce noise, while newer vehicle technologies can also support safer operations through improved visibility, cameras, and speed control.

Visit STAward.org to learn more about all of the Sustainable Transport Award winners since 2005.

Salvador began introducing e-buses to its BRT system in 2022. The initial pilot now includes eight e-buses, supported by infrastructure designed to enable larger-scale deployment. In 2023, the city inaugurated Brazil's largest public e-bus charging terminal, capable of charging up to 20 buses simultaneously and located alongside the new BRT corridor. Building out charging infrastructure, adapting operations, and preparing institutions for electric fleets are all prerequisites for a successful long-term transition.

Another critical dimension of Salvador's transformation focuses on the users, beyond infrastructure and technology. The city has taken steps to make the transport workforce more inclusive. The *Women Behind the Wheel* initiative, launched in 2022 and strengthened with SEMOB's



— Dedicated teams in BRT Salvador stations work to assist passengers. Image: SEMOB

involvement in 2024, has supported training and opportunities for women to enter bus operations and workforce roles.

The city also invested in the daily passenger experience. Dedicated station teams now assist riders, while QR-code surveys and social media channels let passengers provide real-time feedback. Accessibility improvements—including elevators, tactile guidance, level boarding, lighting, and safe crossings—are helping make stations more welcoming. These initiatives point toward a broader understanding of what makes public transport successful. Good service is not only about speed or capacity; it is also about whether people can reach a station safely and trust that their needs will be met.

What's Ahead

Salvador's progress is significant, but the city's transformation is just beginning. Its density, expanding footprint, and uneven access to high-capacity transport continue to create a need for investment. Future plans—including expanded water transport, cable-car connections, and more integration between rail, BRT, and active mobility—could bring the network's benefits to even more communities. The key lesson from Salvador may be less about any single project than about how it all fits together. Together, Salvador's recent transport, infrastructure, and people-centered policies form the foundation of a system that can serve the growing city while reducing its environmental impact. The next chapter for this 2026 STA winner is not simply about moving more people; it is about inspiring other cities to take action.

Growing Smarter: The Journey to Better Urban Mobility in East Africa

By Denis Miring'u and Derrick Ogonji, ITDP Africa



— A high-level bike ride event organized by ITDP Africa in Mombasa, Kenya. Image: ITDP Africa

East Africa's rapidly growing cities face mounting challenges from motorization, congestion, road crashes, and transport emissions. Yet urban growth also presents an opportunity to prioritize public transport, walking, and cycling over car-dependent development. Supported by the International Climate Initiative (IKI) of the Federal Government of Germany*, ITDP's *Growing Smarter: Sustainable Mobility in East Africa* program has worked with governments in Ethiopia, Kenya, Rwanda, Tanzania, and Uganda to develop the policies, technical standards, plans, and institutional capacity needed to promote people-centered urban growth.

Beyond individual projects, *Growing Smarter* has helped shift how East African cities design and deliver transport, moving from isolated interventions toward more integrated systems. By translating policies and standards into safer streets,

improved public transport, and coordinated urban development, the program is helping governments build the institutional capacity to sustain progress and create better cities for all.

From Policy to Better Streets

Lasting transport transformation begins long before construction starts. Government policies, standards, and plans shape how streets are designed, where investment goes, and whose mobility needs are prioritized. Across East Africa, *Growing Smarter* is helping governments embed walking, cycling, accessibility, and people-centered street design into formal planning and investment frameworks.

In Ethiopia, the *National Non-Motorized Transport (NMT) Strategy, Urban Street Design Manual,* and *Addis Ababa NMT Implementation Plan* are helping establish a consistent approach to safer and more inclusive streets, with these principles influencing urban mobility planning in more than 70 cities. Kenya has similarly strengthened provisions for walking, cycling, and universal accessibility through a *Street Design Manual for Urban Areas*, while Rwanda has developed national frameworks for street design, NMT, and parking.

These frameworks are important because they move sustainable mobility beyond isolated interventions. Common standards give governments a consistent basis for designing, assessing, and approving projects, while national guidance lets one city's approach inform investments elsewhere. The transition is increasingly visible. In Kisumu, "Complete Streets" principles are supporting safer walking and cycling infrastructure. Nairobi has improved pedestrian and public spaces in its city center, while Addis Ababa continues to expand walking and cycling networks as part of its urban transformation. Together, these interventions reflect a broader shift in street planning that prioritizes people.

Public Transport for All People

Growing Smarter is also helping governments move beyond just planning individual corridors towards building integrated public transport. In Nairobi, demand modeling and service planning have laid the foundation for a connected bus rapid transit (BRT) network, supported by the *NaMATA BRT Design Framework*, which establishes consistent requirements for demand analysis, service planning, corridor design, and network integration. Similar technical support is advancing BRT planning in Addis Ababa and Kampala, the development of Dar es Salaam's BRT, and further system planning in Kigali.

These efforts are strengthening how public transport is designed, managed, and operated, helping improve service, oversight, and network integration. Consistent engagement with existing operators is helping create more inclusive pathways towards structured and coordinated transport. Electrification is also becoming a key part of this wider transformation. Addis Ababa is advancing plans for Ethiopia's first electric BRT corridor, while Kigali has developed an *E-Bus Charging Master Plan* to support cleaner fleets. The opportunity is not simply to replace diesel buses with electric ones, but to integrate cleaner vehicles with routes, infrastructure, service plans, and operating models.

The same systems approach extends to how cities grow around transit. In Dar es Salaam, transit-oriented development (TOD) planning is linking BRT investment with land use, density, housing, and more. Rather than viewing transit simply as a means of moving people between places, this approach uses investments to shape neighborhoods where more people can live, work, and access opportunities without private vehicles.

Building the Institutions to Sustain Change

Infrastructure may be the most visible sign of transformation, but lasting change depends on the institutions and people responsible for planning, delivering, and sustaining it. Throughout the *Growing Smarter* program, ITDP worked closely with government officials, providing technical assistance, hands-on design reviews, collaborative planning, training, and regional knowledge exchange. These partnerships strengthen the capacities of both national and local institutions to plan, implement, and scale sustainable mobility projects.



* This project is supported by the International Climate Initiative (IKI) of the Federal Government of Germany. Within the Federal Government, the IKI is anchored in the Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN). Selected individual projects are also the responsibility of the Federal Foreign Office (AA).

— Improvements were made to streets in cities like Kisumu, Kenya. Image: ITDP Africa

The lessons learned from implementation can help strengthen future transport projects, while regional knowledge exchange enables governments to learn from one another and adapt proven approaches. This institutional capacity is what turns individual interventions into lasting change. By embedding knowledge, tools, and technical capabilities within government institutions, *Growing Smarter* has helped African cities sustain and scale better mobility in the long term.

"The IKI–ITDP partnership has supported Ethiopia in translating sustainable mobility policies into practical implementation, including through the national NMT Strategy, Addis Ababa's NMT Strategy, implementation plan, cycle network plan, and bikeshare studies," said Hon. Mr. Bareo Hassen Bareo, the State Minister of Transport and Logistics of Ethiopia. "Through the Corridor Development Program, the government has now developed more than 240-km of cycle tracks, 400-km of walkways, and 40-km of riverside in Addis Ababa, along with several NMT improvements in secondary cities. This support has strengthened government capacity and contributed to safer, more accessible, and more inclusive urban mobility."

From Foundations to Scale

Growing Smarter demonstrates how strong policies, integrated planning, and capable institutions can drive lasting mobility transformation. Across East Africa, the program is laying the groundwork for replicable, scalable mobility systems. The next challenge is securing the political leadership and financing needed to implement these foundations at scale. As cities expand BRT networks, electrify bus fleets, and implement walking, cycling, and TOD plans, sustained institutional capacity and reliable funding will be essential.

Governments must now translate plans into investment programs, while development banks and financing partners should help mobilize the capital needed to meet growing demand. This closely aligns with ITDP's own vision for a future of well-funded, well-managed, and zero-emission public transport that serves everyone. Ultimately, *Growing Smarter's* impact will be measured by how Africans can experience their cities through better public transport, safer walking and cycling, and urban growth centered on accessibility rather than car dependence. Across East Africa, the foundations for this transformation are now in place.



— São Paulo currently has the largest e-bus fleet in Brazil. Image: ITDP Brazil

In Brazil, Aggregated Procurement is the Key to Scaling E-Buses

By Clarisse Cunha Linke and Leonardo Veiga, ITDP Brazil

Brazil has pledged significant funding for electric buses, but the buses are not yet on the road. The first round of the federal Novo PAC's Fleet Renewal funding line made R$10.6 billion (around USD $2 billion) available and approved 2,296 e-buses. Yet only about 2% of the country's urban bus fleet is actually electric, mostly in São Paulo, and turning approvals into purchases has proven difficult.



— Modern e-bus fleets can improve the public transport experience for all riders. Image: ITDP Brazil

The stakes have never been higher. With the 2024 floods in Rio Grande do Sul and increasingly frequent heat waves, Brazil is committed to cutting its net emissions by 59% to 67% by 2035, and transport *must* do its part. Buses are the backbone of public transport in Brazilian cities. Electrifying them cuts emissions and air pollution where people live and ride, and Brazil's largely renewable electricity mix makes the opportunity especially significant. Cleaner, quieter buses also make public transport more attractive, so electrification can boost ridership while reducing emissions.

ITDP estimates that at least 14,000 diesel buses could, and should, be replaced by electric models by 2030. To find a faster path, ITDP led a study on e-bus fleet standardization and aggregated procurement, in partnership with the national Ministry of Cities and with support from Germany's KfW Development Bank, drawing on international experience and interviews with manufacturers, charging providers, public managers, and operators.

The Main Barriers

Several barriers stand in the way. Many municipal teams lack experience procuring and managing electric fleets. Depots often lack chargers and adequate grid connections. The domestic industry is just beginning its transition, and Brazil's battery production is still in its early stages. Above all, financing remains the main bottleneck. E-buses cost much more upfront and the traditional business model, in which operators own their vehicles and recover the investment through fares and resales, struggles to absorb that cost. Many cities struggle to provide even the 5% counterpart funding the federal Novo PAC program requires. And because each city applies, contracts, and buys separately, the program works as a credit line rather than a coordinated market signal.

Lessons from India

Aggregated procurement turns small purchases into one large one through a single tender divided into lots, a national price registry, or a central buying agency. The goal is economies of scale, lower unit costs, more competition, and simpler procurement, especially when combined with standardized technical specifications. Brazil has a precedent: a national price registry has enabled the purchase of more than 44,000 school vehicles through the *Caminho da Escola* (On the Way to School) program.

India shows what this approach can achieve for e-buses. In 2021–2022, the state-owned Convergence Energy Services Limited ran the "Grand Challenge," pooling demand for 5,450 e-buses from five cities into a single tender with standardized specifications and contracts. Buses were procured under gross cost contracts, in which private consortia finance, operate, and maintain the fleet and are paid per km-traveled. Prices came in 23–27% below the cost of diesel or natural gas buses, even without subsidies, and up to 52% lower than earlier tenders, saving an estimated USD $1.3 billion over 12 years.

Brazilian stakeholders agree that the potential exists. Pooled demand can lower prices and improve financing terms, give industry the predictability it needs to plan production, simplify procurement, and offer greater legal certainty, especially for cities without specialized technical teams. They also agree that aggregation depends on standardization. Today, each city designs its own tender, forcing manufacturers into customized projects that raise costs. Common national specifications would enable demand aggregation, ensure interoperability between buses and chargers from different brands, and reduce dependence on a single supplier.

A Pipeline for Attracting Financing

India's example shows that aggregation works as part of a long-term policy, not as a one-off tender: standardization without aggregation loses its economic benefit, and aggregation without standardization cannot reach scale. For Brazil, that means lower costs and relief for overstretched municipal teams. It also means something bigger: a predictable, multi-year national pipeline, with standard contracts and shared guarantees, that development banks and climate funds can finance far more easily than dozens of separate city projects. And it lets Brazil's large bus industry plan its shift to electrify production lines and build a local battery supply chain. The federal government is already discussing next steps.

"We have been working on studies on fleet standardization and aggregated procurement, including through partnerships, to gather international and national experiences as well as lessons from other public programs such as *Caminho da Escola* and *Caminhos da Saúde*," says Daniele Holanda, General Coordinator of Urban Mobility Planning at the Ministry of Cities. "The goal is to improve, structure, and implement an aggregated bus procurement model that is possible and viable for the next government cycle, 2027–2030."

From Slow Motion to Full Speed

Getting there requires policies over three horizons. In the short term: better governance, minimum stakeholder consensus, and the first regulatory milestones. In the medium term: consolidating technical standards, creating financing and guarantee instruments, and the first aggregated procurements. In the long term: establishing a permanent aggregating entity and conducting periodic reviews to keep specifications aligned with the technology.

This is where ITDP's strategic vision matters—ensuring more people ride public transport on fully electric systems that are funded at scale. Brazil can show that these three concepts reinforce each other. This will require the government to set standards and governance, financiers to build guarantees and pipelines around them, and technical partners to support cities. Regionally, ITDP will keep working on all three and convey the model to other countries where we work. By buying together, Brazil *can* move its bus electrification efforts from slow motion to full speed ahead.

The Freight Transition: Advancing Zero-Emission Corridors in China

By Han Deng, ITDP China



— Designing more efficient freight corridors can benefit many Chinese cities. Image: ITDP

Why Heavy-Duty Freight Matters

Heavy-duty freight is one of the hardest parts of transport to decarbonize *and* one of the most important. According to a 2025 policy document from the Research Institute of Highway under China's Ministry of Transport, road transport accounts for more than 80% of carbon emissions across China's transport modes, with heavy-duty trucks responsible for more than half of road transport emissions. Their high annual mileage, large energy demand, and continued reliance on diesel make trucks a priority for both climate action and better air quality.

Heavy-duty trucks also operate very differently from passenger vehicles. They travel longer distances, carry heavier loads, operate for longer hours, and often follow demanding schedules across cities and provinces. These characteristics mean that decarbonizing freight is not simply a matter of replacing diesel trucks with electric ones. It requires changes across vehicles, infrastructure, energy supply, and freight operations.

Electrifying Trucks Alone Is Not Enough

China's electric heavy-duty truck market is expanding rapidly, and electric trucks are moving beyond short-distance industrial operations into longer-distance freight. But putting more electric trucks on the road is only one part of the transition. A logistics company needs confidence that charging or battery swapping will be available where and when trucks need it. An infrastructure operator, meanwhile, needs enough predictable demand to justify investing in high-power chargers, swap stations, grid connections, and other equipment. This creates a familiar "chicken-and-egg" problem: fleets wait for infrastructure, while infrastructure waits for fleets.

Zero-emission freight corridors offer one way to break that cycle. Rather than spreading vehicles and infrastructure thinly across an entire road network, the corridor approach focuses on routes where freight demand is concentrated. Truck deployment, charging and swapping infrastructure, grid capacity, clean electricity, and supportive policies can then be planned together. This systems approach is closely aligned with ITDP's vision for fully electrified transport. Electrification is not simply about changing the vehicle; it also requires creating the conditions that allow zero-emission vehicles to operate reliably and at scale.

A Practical Guide for Building Corridors

This systems perspective is at the heart of ITDP China's *Zero-Emission Freight Corridor Development Guidelines*. Developed with transport research institutions and industry partners, the Guidelines provide a practical framework for governments, logistics companies, infrastructure providers, and other stakeholders working to decarbonize freight. It begins with three basic questions: Why should a corridor be developed? Which freight scenarios and technical pathways are suitable? How should the corridor be planned, built, and operated?

There is no single answer. High-frequency fixed routes may suit battery swapping or depot charging, while longer-distance trunk routes may require fast or megawatt-scale public charging. Freight volumes, vehicle utilization, electricity prices, grid capacity, land availability, and access to renewable energy are all factors to consider. The Guidelines therefore look beyond vehicle purchase costs. It considers the full life cycle of vehicles and infrastructure, freight demand, energy supply, operating efficiency, and policy support. It also emphasizes the importance of a "corridor ecosystem," bringing together logistics operators, shippers, energy providers, highway operators, governments, financial institutions, and research organizations to coordinate investment, information, and risk.

Scale matters as well. In one illustrative scenario in the Guidelines, a 500-km corridor serving 1,000 electric heavy-duty trucks could create annual demand for around 160 million kW-hours of renewable electricity, displace roughly 31 million liters of diesel, and reduce CO_2 emissions by about 85,000 tonnes (if powered by renewable electricity). The point is not that every corridor should follow this model, but that concentrating freight demand



— Electrifying heavy-duty trucks at scale can have a big impact on urban transport. Image: ITDP China

can turn fragmented vehicle and infrastructure investments into a coordinated transition.

ITDP is helping apply this thinking into practice. In a bulk freight corridor initiative in Northwest China, the transition is moving toward a fleet of around 1,000 zero-emission heavy-duty trucks. At this scale, electrification is no longer simply a vehicle demonstration. It begins to influence how charging infrastructure, fleet operations, energy supply, and supportive policies are planned as a system.

Cleaner Trucks, Smarter Freight

Electrification alone is also not enough for another reason: a zero-emission truck running empty is still inefficient. This is where freight decarbonization connects with ITDP's work on transport demand management. For freight, the principle is straightforward: reduce unnecessary truck travel, shift suitable freight to more efficient modes, and make better use of the road freight that remains.

Digital dispatchers can reduce "empty running" when a vehicle drives without cargo. Better coordination between shippers and carriers can improve load factors. Freight consolidation can reduce fragmented trips. Where conditions allow, medium- and long-distance bulk freight can shift to rail or waterways, with zero-emission trucks providing road connections. Low-emission zones and differentiated access policies can also encourage cleaner freight in places where truck traffic significantly impacts air quality and local communities.

China's national policies are increasingly combining these approaches, promoting cleaner medium- and heavy-duty trucks while also encouraging more bulk freight to move by rail and waterways and increasing the use of clean transportation at ports and major industrial facilities. The two strategies reinforce each other. Electrification reduces emissions from each kilometer traveled; better freight management reduces unnecessary kilometers in the first place. A sustainable freight transition requires both.

Lessons from China, Adapted Locally

China's freight market, industrial geography, energy system, and policy environment create conditions for potential zero-emission freight corridors. Of course, other countries will have different freight patterns, infrastructure, and capacities, and not every region will need the same type of corridor. The broader lesson is more widely applicable: heavy-duty freight decarbonization is a coordination challenge as much as a technology challenge. Vehicles, charging, energy, operations, and policy all need to move together.

For ITDP, the goal is not simply to put more electric trucks on the road. It is to help create freight systems that move goods more efficiently while using less fossil fuel and producing fewer emissions. Zero-emission corridors are one practical way to bring these pieces together and to move heavy-duty freight decarbonization from isolated pilots towards systems change—within China and beyond.

Inclusive and Equitable Indian Cities Begin with Healthy Streets

By Varsha Vasuhe V. and Shreesha Arondekar, ITDP India



— "Healthy Streets" principles improve quality of life for all communities. Image: ITDP India

Streets in Indian cities are not experienced equally by all users. Conventional, car-oriented street designs disproportionately constrain women, children, older people, persons with disabilities, and informal workers through everyday barriers of safety, comfort, and accessibility. Improving a street therefore goes beyond physical interventions. It changes how people experience and participate in the city.

Typically, people evaluate street improvements through direct outcomes such as pedestrian footfall, improved traffic flow, fewer crashes, and better mobility. However, many significant impacts are indirect and cumulative, such as improved livelihoods and health, safety, social participation, and people's ability to access opportunities. So, how do we capture these less visible effects? What are the changes people's lives who use it?

The *Healthy Street Dividend*—a study conducted by the Ministry of Housing and Urban Affairs (MoHUA), Government of India, through GIZ India's SUMACA project, and developed in collaboration with ITDP—answers these questions. Across ten Indian cities, the study compared "Healthy Streets" with improved walking and cycling infrastructure to less walkable streets. It looked beyond conventional measures of mobility, using observation and

perception studies to reveal impacts on economic activity, safety, health, inclusion, and participation in public life.

Improving Economic Agency

For many people, the street is more than a route to work. It is the workplace itself. The *Healthy Street Dividend* found a clear link between street-environment quality and economic activity. Average daily vendor sales increased by 50.6% per vendor after street improvements. This change shows how the physical environment can create supportive conditions for livelihoods by making it easier for people to reach businesses and engage in economic and commercial activity.

For informal workers, these conditions are particularly important. Among women vendors, who primarily walk or use public transport, all respondents reported that access felt safer and more convenient on Healthy Streets. Six in ten women vendors also reported that accessing amenities had become easier and more comfortable, while organized parking made vending easier. These changes may seem peripheral to actual income, but for someone whose workplace *is* the street, they shape their everyday earning conditions.

On Healthy Streets, 78.9% of female shopkeepers reported increased turnover, compared with 34% of female vendors on "Unwalkable Streets". These figures do not establish that street improvements alone led to changes in business performance. However, they do show how changes in the street environment can affect people's interactions, how long they stay, and when they feel comfortable being there. A female shopkeeper in Chennai noted that more women on the street had expanded her customer base and let her extend her working hours beyond 8 p.m.

More Freedom and Participation

A less visible impact of better streets is the freedom they give people to move through the city. For women in India, this freedom is often constrained by the threat of harassment and violence in public spaces, making safety a prerequisite for equal access to the city. While



— Streets that offer equal access to multiple types of road users can benefit everyone. Image: ITDP India

addressing gender-based violence requires broader changes, street design can play a critical role in creating safer environments through well-lit, active streets, continuous footpaths, and spaces that encourage natural surveillance. On Healthy Streets, 89% of women reported feeling safer at night, compared to 66% on Unwalkable Streets. Overall, 1.5 times more women were observed using Healthy Streets.

For people who depend on walking to access work, public transport, shops, and services, continuous and comfortable footpaths are part of the infrastructure that makes independent movement possible. A street's physical features determine how freely people can navigate it. Footpaths were the most preferred feature among street users, cited by 58.3% of the 3,200 people surveyed.

Women preferred footpaths more than men, with 62.6% identifying them as important compared to 53.8% of men. The same pattern holds for children,



older people, and people with disabilities—62% of street users felt that Healthy Streets were safe for children aged 8 and above to navigate independently, compared to only 37% feeling safe on Unwalkable Streets. Researchers also observed 1.6 times more children and 2.1 times more older people walking on Healthy Streets.

For people with disabilities, amenities like continuous footpaths, adequate seating, and unobstructed routes can determine whether they can move through public space without assistance. Eight in ten people with disabilities who commute by public transport using Healthy Streets reported safe and convenient access to public transit stops. If any part of a public transport journey is inaccessible or uncomfortable, access can remain limited even when the service itself is available. In cities like Chennai and Gurugram, women and families described staying out later because better lighting and walkability improvements made them feel safer.

Increasing Agency and Ownership

When a street becomes more than a route to move through, it can become a place people use, recognize, and make their own. The study identifies new social behaviors emerging on Healthy Streets, including social gatherings, fitness walks, and family outings. Women placed greater importance on pedestrian and public-realm features such as footpaths, seating, lighting, greenery, shade, and public amenities. For women, this ability to stay is significant—43.7% said they now linger to eat or engage in commercial activities, compared to 39.5% of men, while 32.7% said they bring their families.

This matters for young people as well, for whom accessible public spaces can become places to meet, learn, exercise, and express themselves. When streets and public spaces give young people opportunities to gather and activate them, they can become cultural, educational, and social hubs within a neighborhood. If people embrace the street as part of their everyday environment, responsibility for maintaining it shifts from the government to a shared civic practice.

On Healthy Streets, 38% of shopkeepers participate in community maintenance initiatives, including cleaning, waste management, and tree planting, compared to around 10% on Unwalkable Streets. This creates a different relationship where people become active participants in, and custodians of, public spaces.

What Happens When We Measure More Than Just the Physical Benefits of a Street?

Healthy Streets create benefits that rarely exist in isolation. Access supports livelihoods. Safety enables freedom. Participation creates activity and economic value. When people see a street as part of their everyday lives, they also see themselves as having a stake in its care. This is the multiplier effect of a Healthy Street: one investment creates conditions for multiple forms of value to emerge. The opportunity is to move beyond thinking about just the individual street. When Healthy Streets are planned and connected across urban networks, their benefits can reinforce one another at a much larger scale. Now imagine the impact and potential of multiple Healthy Streets, connected and expanded across an entire city!



— Participants in the Transjakarta Academy in 2025. Image: ITDP Indonesia

Indonesia's Future Is Electric. Women Are Driving It.

By Deliani Siregar, ITDP Indonesia



As Jakarta expands and electrifies its public transport, the transition is about more than just replacing diesel buses with electric ones. It is also an opportunity to rethink *who* gets to work in, and benefit from, the city's transport system. That opportunity matters especially for women. Around 60% of Transjakarta passengers are women, yet in early 2025 women accounted for only around 2% of its bus drivers. A workforce that better reflects the people using the system can support more responsive services, strengthen sensitivity to the needs of women and other vulnerable passengers, and contribute to passengers' sense of safety.

These factors matter for making public transport more attractive and supporting higher ridership. This conversation is also timely for Indonesia's labor market. The World Bank's June 2026 *Indonesia Economic Prospects* notes that, although near-term labor-market pressures have eased, structural concerns around job quality and wage stagnation remain. At the same time, Indonesia is accelerating its green transition.

In September 2026, Indonesia's National Development Planning Agency (Bappenas) highlighted the development of high-quality, inclusive green jobs as a national priority and projected demand for more than 5.3 million green workers by 2029. Public transport electrification can contribute to this agenda by creating pathways into skilled operational and technical work while preparing workers for a low-carbon economy. For Transjakarta, electrification therefore creates an opportunity to pursue two transitions together: towards a cleaner bus fleet, and towards a more inclusive workforce.

Transjakarta Academy: Opportunities for Women in Electric Mobility

In 2025, ITDP and Transjakarta, supported by UNEP and BMZ Germany, implemented the second batch of the Transjakarta Academy. This initiative builds on 2024 recommendations from ITDP and UNEP, as well as Transjakarta's human resource development plan, which highlighted the low participation of women in the electric mobility sector. This is reflected in the small number of female drivers, the lack of targeted recruitment schemes, and the limited number of female applicants for technically-skilled positions.

The second batch of Transjakarta Academy recruited entirely women and was designed as a capacity-building platform to support women in contributing as public transport drivers. Titled the *Women Empowerment Program*, Transjakarta Academy's Batch 2 used an open recruitment process that specifically sought female applicants. The Program also welcomed participants without

prior bus-driving experience, allowing applicants with a standard driver's license to undergo training to upgrade their license qualifications. The recruitment process selected fifteen women for a one-month training program held in late 2025.

In addition to experience driving light or heavy vehicles, the participants came from diverse professional and educational backgrounds, including administrative staff, teachers, and recent graduates with high school, bachelor's, and master's degrees. The training followed a structured curriculum covering electric vehicle technology, operational safety standards, and the strengthening of both technical and professional competencies. Beyond technical skills, the program also included modules on gender sensitivity, responses to gender-based violence, and handling passengers from vulnerable groups.

Through this approach, drivers gained the skills needed to provide safer, more responsive, and more inclusive services for all public transport users. To complete the training program, participants were required to pass both theoretical and practical examinations. The theoretical exam, known as the block test, was conducted in the classroom, and the questions were compiled from summaries of the pre-tests and post-tests administered throughout the learning sessions. Participants completed it in a single day, and it covered the full scope of the training materials.

The practical examination consisted of two stages: a driving test on a training route and a final driving test on an operational Transjakarta route. The main assessment took place during the final stage, when participants operated buses along Transjakarta routes. Instructors evaluated participants' driving performance and compliance with the Minimum Service Standards, such as opening and closing bus doors on time. Participants who did not meet the passing threshold could also retake the exam. Thus, Transjakarta Academy aimed not only to increase the number of women drivers and technicians, but also to build women's confidence and job readiness to contribute to the broader transport sector.

After completing the training sessions and assessments, thirteen participants graduated and were officially inaugurated as Transjakarta's latest women bus drivers. High-level officials, including Jakarta Governor Pramono Anung, attended the graduation ceremony in November 2025.

A Workplace for Safer, Inclusive Public Transport

Although the program has successfully expanded access to recruitment, an evaluation of Transjakarta Academy's Batch 2 shows that increasing women's participation cannot rely solely on inclusive recruitment and training. Field observations and interviews with women drivers indicate that several structural challenges still affect the sustainability of their participation, including issues like early-morning shifts, limited rest time, and insufficient support facilities in the operational environment. While these working conditions affect all genders, they tend to impact women more, who often must balance professional responsibilities with domestic duties such as caring for children and other family members at home.

The Transjakarta Academy's recruitment of women bus drivers found that increasing their participation in the transport sector requires strategies that also actively engage and support them. One approach is to create opportunities for women without bus-driving experience by providing targeted training and support to upgrade their driver's licenses. These efforts also need to be paired with stronger awareness and understanding of gender equality in the workplace.

However, recruitment alone is not enough. Women who enter the sector also need a supportive work environment, including equal pay policies, access to childcare facilities, and work arrangements that account for caregiving responsibilities. Initiatives such as the Transjakarta Academy represent an important first step in expanding opportunities for women as the sustainable transport sector grows. Inclusive working conditions will not only create more opportunities for women, but also raise overall labor standards and improve people's experience across all public transport.

Funding the "Right to Mobility" Across Mexico

By Gonzalo Peon Carballo and Naomi Varinois Dehez, ITDP Mexico



— Well-funded public transport systems are key to the right to mobility in Mexico. Image: ITDP

In 2020, Mexico enshrined the "right to mobility" in Article 4 of its Constitution, guaranteeing that mobility must be safe, accessible, efficient, sustainable, high-quality, inclusive, and equitable. This legal reform reflects a major paradigm shift. By elevating mobility to a fundamental right, the Mexican government assumes the obligation to develop the instruments and policies necessary to guarantee its implementation nationwide. In this context, the *General Law on Mobility and Road Safety* (LGMSV) was further enacted in 2022 to establish the foundations and principles needed to make the right to mobility effective across Mexico.

Under this new legal framework, States and Municipalities plan and deliver mobility projects, with strategic, regulatory, and financial guidance from the federal government. Fulfilling this mandate requires substantial funding and resources to plan and implement truly safe, sustainable mobility

systems. Yet these new responsibilities have not been matched by adequate fiscal and financial support. Subnational governments still rely heavily on federal transfers and public transport fares to fund mobility programs, limiting their capacity to meet growing demand. As Mexico works to realize the right to mobility, a critical question remains: What types of funding and financing mechanisms can empower cities to turn this constitutional right into reality?

New Institutions, Ongoing Fiscal Challenges

The LGMSV establishes the competencies and responsibilities of the three levels of government in Mexico's mobility governance framework. States oversee most public transport regulation and planning, while Municipalities are responsible for active mobility programs and public transport infrastructure. The federal government provides strategic direction and promotes policy coherence through national standards and policy guidelines. This distribution of responsibilities is intended to coordinate mobility planning and implementation across all government levels. However, the fiscal resources available to each level remain a critical challenge to their ability to fulfill the responsibilities assigned under the LGMSV.

Mexico's federal system is notably characterized by strong fiscal centralization. The Federation collects the largest taxes, including Income Tax (ISR) and Value Added Tax (VAT), and redistributes a portion of this revenue to States and Municipalities through revenue-sharing transfers (*participaciones*) and earmarked transfers (*aportaciones*). Subnational governments supplement these transfers with their own tax and non-tax revenue, but their revenue-raising powers remain limited. Municipalities, in particular, rely heavily on property taxes and fees.

This creates a significant fiscal mismatch. States and Municipalities bear much of the responsibility for mobility planning and implementation, which requires substantial technical expertise and financial resources, yet they have limited capacity to generate their own revenue. Consequently, they depend heavily on federal transfers, which account for 81% of state revenues (outside of Mexico City), to develop and implement mobility policies. Overcoming this mismatch requires subnational governments to strengthen their fiscal autonomy through new funding mechanisms. One promising option is the creation of State Mobility Funds—managed by relevant local authorities and private actors—to raise, secure, and channel funding to mobility projects.

The Opportunity of State Mobility Funds

The new legal framework does not introduce new funding mechanisms to support mobility projects, leaving resource allocation for this purpose to local government discretion. One interesting mechanism for raising and channeling funds for mobility projects relates to the State Mobility Funds. These funds are trust funds (*fideicomiso*), generally created by the State government and managed by a bank that holds the allocated resources. They follow operational rules defined by a technical committee that represents various types of mobility stakeholders.

State Mobility Funds offer several benefits for funding new mobility initiatives. First, they are backed by dedicated revenue, guarantee investments in mobility and public transport, and make investments more predictable. Second, the technical committee makes decision-making and revenue spending collegial, and periodic reporting can make resource use transparent and public. Third, they may open a debate around new financing sources for mobility. Seventeen States have mobility laws that mention such funds, representing about half of the country (see map).

A State Mobility Fund's assets include public revenue and public asset income, but it could also seek additional funding sources—especially from indirect beneficiaries of public transport and mobility systems, users of other transport modes, and general or specific taxpayers. ITDP's work has focused on assessing fiscal and tax mechanisms targeting these groups, based on the premise that they either benefit from the positive externalities generated by public transport or generate negative externalities related to private car use. Accordingly,



— States whose laws include the potential for creating a State Mobility Fund. Image: ITDP Mexico

State authorities should consider funding sources such as vehicle ownership tax shares or payroll tax shares, based on "the beneficiary pays" or "the polluter pays" principles.

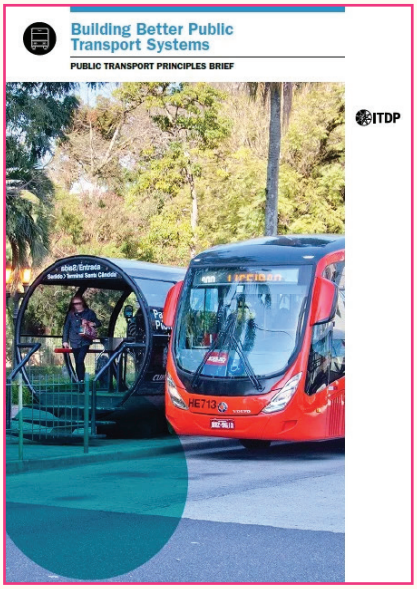
Although some local mobility laws mention creating State Mobility Funds, an implementation gap remains, as very few have been created so far. However, Mexico City offers a successful example. In May 2025, Mexico City created its Fund for Infrastructure, Mobility, Water and Security (FIMAS) to raise and channel resources to infrastructure and equipment projects related to urban development, mobility, the environment, and more. Through FIMAS, the city raised its Payroll Tax (ISN) rate from 3% to 4% and used the additional revenue to support mobility projects. By May 2026, the city had allocated MX $3.26 billion (about USD $174 million) to transport projects tied to high-profile needs, such as the 2026 FIFA World Cup. This approach could inspire other States to find new, innovative ways to invest in their own sustainable mobility programs and funds.

Mexico's 2020 constitutional reform and the LGMSV marked a historic step toward recognizing mobility as a fundamental right. Yet, they did not establish clear mechanisms to ensure that local governments have the resources to make this right a reality. States and Municipalities bear much of the responsibility for planning and managing mobility systems, but their limited fiscal capacity and dependence on federal transfers constrain their ability to deliver. Addressing this fiscal mismatch is essential to ensuring continued investment in safe, sustainable, and accessible transport. Actualizing people's right to mobility will require not only more effective funding and financing mechanisms, but also a long-term government commitment to public transport infrastructure that is backed by sustained leadership, technical assistance, and investment.

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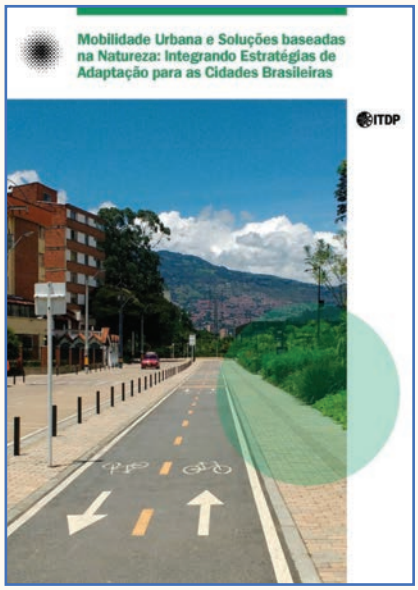


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This publication explores a foundational framework for public transport based on the principles of: *good service, zero emissions, well-funded, well-managed,* and *for everyone*.

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This publication identifies climate threats in Brazil's cities and their impact on urban mobility, then explores opportunities for more nature-driven solutions. Learn more at **ITDPBrasil.org**

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This study calls for a broader transport transition that goes beyond technology toward structural changes in planning, traffic management, and public transport. Learn more at **ITDP-Indonesia.org**

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This NMT Implementation Plan 2025–2028 provides a practical framework for strengthening walking and cycling as key mobility systems in Ethiopia. Learn more at **Africa.ITDP.org**

An Interoperable National Traffic Registry for Mexico
This publication promotes creating a National Traffic Registry to strengthen coordination among transport authorities and to improve road safety in Mexico's cities. Learn more at **Mexico.ITDP.org**

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