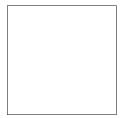


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SUSTAINABLE TRANSPORT NEWSLETTER

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A NOTE FROM ITDP CEO HEATHER THOMPSON WHY THIS IS OUR YEAR OF THE BUS



In March, ITDP debuted the 2024 edition of the *Bus Rapid Transit (BRT) Standard*, the first update in eight years and one of our hallmark publications since its launch a decade ago. BRT is now a much more familiar concept worldwide, with over 150 corridors opening in 91 cities across 24 countries since 2012. The updates in this new edition include an expanded focus on gender equity, public safety, and accessibility, as well as a continued emphasis on vehicle electrification, climate resilience, and operations.

The *BRT Standard's* framework draws on ITDP's decades of experience working on public transport projects worldwide to transform high-level policy into real-world infrastructure. The updated *Standard* comes at a pivotal moment for public transport all around the world. While hundreds of billions of journeys are made via public transport each year—and more than 60% of those trips taking place on formal and informal buses—most systems face ongoing challenges with planning, operations, and investment. High-quality bus systems anchored by walking, cycling, and transitoriented development are essential to the future of all of our cities.

Our teams at ITDP have firsthand experience with the progress and potential of modern, efficient, and low-emission bus systems that can make a big impact. Last year, almost 50,000 electric buses were sold globally—bringing the world's stock of e-buses to over 630,000—with notable growth in emerging markets like Asia, Africa, and Latin America. In West Africa this year, ITDP's planning and support helped launch an all-electric BRT corridor in Dakar, Senegal that is expected to serve over 300,000 daily users. We are also seeing change in Mérida, Mexico, the first city in the country to deploy a full fleet of e-buses for a local system that will serve over 25,000 daily riders. And, in Jinan, China, ITDP's support led to the implementation of over 1,100 e-buses and trolleybuses across the city, many of which are serving BRT corridors. We know that the potential for even more growth exists, particularly as BRT is gaining global recognition as a cost-effective, fast-toimplement, and scalable form of public infrastructure.

For cities to truly leverage all of the social, economic, and climate benefits of BRT, however, we will need much more targeted investment and political backing from all levels of decision-makers, funders, and institutions. This is why ITDP is putting a spotlight on this year as our 'year of the bus' to call attention to the best practices that are already transforming the cities where we work and the need for more financing, infrastructure, and transit-oriented development policies. At ITDP, our vision for public transport is centered on systems that provide good service (both well-managed and well-funded) with clean vehicles that benefit communities everywhere. This vision is built on extensive experience with sustainable, accessible BRT projects that-as World Bank President Ajay Banga said in an interview last yearare some of the best examples of scalable and measurable infrastructure investments.

So, throughout this year of the bus, ITDP will be highlighting more projects and sharing more resources to help planners, policymakers, and advocates improve the state of BRT and public transport everywhere. This includes forthcoming reports on e-bus charging infrastructure, briefs addressing issues of equity and user accessibility, and a comprehensive online course on BRT planning. These resources complement and elevate the on-the-ground work that our teams and partners are doing every day to promote sustainable development, integrate cycling, walking, and public transit networks, and reduce the demand for private vehicles.

Now is the moment for us all to be optimistic and encouraged by the possibilities ahead for our bus and public transport systems. As you will read in this newsletter, transformation is only made possible when we have the right mix of government support, investment, and multi-sector partnerships coming together. This can be the year that buses help carry us all towards a better future for our cities and our climate. •

A NEW GLOBAL STANDARD FOR BUS RAPID TRANSIT

Since its debut in 2012, the BRT Standard has served as both a framework for understanding BRT and an evaluation tool for BRT corridors based on international best practices. It began as the centerpiece of a global effort by transport leaders, designed to establish a common definition of BRT and ensure that corridors deliver world-class rider experiences, significant economic benefits, and positive environmental outcomes. The Standard has been instrumental in guiding and encouraging city and transport agencies to build better BRT with a focus on quality and service with users at the center. The Standard has also helped elevate a global understanding of what quality BRT can be, earning endorsements from major institutions like the UN Environment Programme and UN-Habitat, as well as the development agencies of governments like Germany (GIZ) and France (AfD).



The 2024 edition is the first comprehensive update since 2016 with improvements to definitions and scoring designations for systems around the world. Similar to the LEED designation for green buildings, BRT corridors may achieve a basic, bronze, silver or gold designation based on the criteria set forth in the *Standard*. The 2024 updates are the product of feedback from a group of leading BRT engineers, designers, and planners. Fundamentally, the *Standard* has been refreshed by adding, combining, and revising elements based on this feedback. Notable changes in this edition include an expanded focus on gender, safety, and access; more attention to climate, greening measures, and resiliency; better considerations for user experience; and updated operational improvements.

The 2024 edition is the right transport tool for our times, offering a critical framework and roadmap for the future of not just BRT, but good public transport systems all over the world. ITDP will be sharing content throughout the year to offer stakeholders more insights into the *Standard*, including tools, webinars, technical articles, and beyond. **Full translations of the 2024 edition into Arabic, Bahasa Indonesia, Chinese, French, Portuguese, and Spanish are upcoming**. Visit **BRTStandard.org** for updates. •

A FIRST-OF-ITS-KIND ATLAS OF SUSTAINABLE CITY TRANSPORT

ITDP's Atlas of Sustainable City Transport is an online data dashboard that displays key indicators of sustainable and inclusive urban passenger transport-many of which have never before been measured globally-for over 1,000 metropolitan areas and 40,000 legal jurisdictions and districts. These indicators do not just measure infrastructure; rather, they measure what infrastructure means for people and can be useful for anyone seeking to improve transport projects with data. The Atlas permits unprecedented insight into sustainable transport at a local level nearly anywhere around the globe. As many crucial decisions about cities are often made at the municipal, district, or neighborhood-level, the Atlas is a tool that can help planners and decision-makers set meaningful goals to measure the progress of their city's sustainable mobility infrastructure.



The Atlas of Sustainable City Transport

Key Atlas indicators include measures such as People Near Frequent Transport; People Near Rapid Transport; People Safe From Highways; People Near Protected Bikelanes; People Near Car-Free Places; and more. ITDP has drawn on our extensive global experience promoting sustainable, inclusive urban transport to produce this dashboard, and its indicators are built on a decade of work designing measurements to inform policy. Major cities around the world—from Seattle, USA to Primpri-Chinchwad, India—have already seen that using these indicators for transport planning can be beneficial for advancing people-oriented mobility.

The Atlas allows users to zoom in on their cities and measure all indicators at the level of wards or even neighborhoods. As the Atlas is also built on open-source data, its data is made publicly available. ITDP is committed to fostering collaboration amongst the mobility sector by allowing the public to contribute, provide suggestions, and correct inaccuracies in the Atlas. ITDP also plans to update the Atlas annually to make it possible for cities to track progress over time and to ensure that it continues to be a hub for evidence-based public transport planning. Visit Atlas.ITDP.org to explore. Questions or suggestions can be directed to data@itdp.org. •

Cities Deserve Better Mobility

How can you support cleaner transportation for a better future? By supporting ITDP today!

In cities around the world, cars continue to clog streets while emissions skyrocket and sustainable mobility options like transit, walking, and cycling fall by the wayside. At ITDP, we are working to create cities with abundant and accessible mobility that is better for people and for the planet.

Give online at <u>itdp.org/donate</u>, scan the QR code, or use the convenient envelope attached.



We need your help to build the mobility cities deserve! Your continued support is crucial in creating the path to a better future.

Give a \$45 gift today

AROUND THE WORLD

Learn about the many BRT and public transport projects ITDP is working on worldwide.

The city of Dakar, Senegal began to explore the development of a BRT system after preliminary presentations and studies developed by ITDP Africa. With this support, Dakar officially launched its much-anticipated 18.3-kilometer, fully electric BRT system in 2024. The Dakar BRT is expected to carry 300,000 passengers a day and reduce travel time by more than 50% for riders. The system is set to also operate a robust fleet of over 140 articulated e-buses, spearheading a shift towards zero-emission transport in Africa that can inspire other big cities. ITDP Africa prepared initial feasibility studies for Dakar with support from USAID and helped to identify optimal travel patterns in the city for BRT routes based on congestion,

travel demand, road capacity, and other strategic opportunities.

After a decade of development, the TransBrasil BRT corridor also debuted in 2024, opening up more opportunities for quality public transport in Rio de Janeiro. ITDP Brazil has been supporting the planning of BRT corridors in the city for years by providing technical support and policy guidance to help design systems that highlight sustainability, connectivity, and equity. TransBrasil stands out as not just a local improvement, but as a key piece of regional infrastructure for integrating neighboring municipalities, some of which are majority low-income, with the city's center. The corridor debuted with 20 stations and is expected to serve upwards of 250,000 people a day by 2030. Rio de Janeiro also recently approved a Citywide Master Plan based on ITDP Brazil's recommendations that will serve as a guiding framework for the city's urban and public transport developments over the next decade.



 — Jinan, China has rolled out over 1,100 e-buses and trolleybuses. Photo: ITDP China

In the city of Jinan, **ITDP China** has been working alongside the Asian Development Bank to transition the region's bus system to a fully electric fleet, providing planning support that has led to the construction of six trolleybus lines and 80 kilometers of BRT corridors. These routes are served by a fleet of over 1,135 e-buses and trolleybuses. Following the completion of



- The city of Mérida debuted the first e-bus system of its kind in Mexico. Photo: Agencia de Transporte Yucatán

these trolleybus and BRT projects, Jinan is forecasted to reach more than 1.58 million bus passengers a year while significantly reducing transport-related greenhouse gas emissions. In addition, these bus projects involved the implementation of nearly 75 kilometers of power supply facilities that can also provide charging for other electric vehicles like cars and trucks.

In the western state of Maharashtra, India's State Road Transport Corporation (MSRTC) inaugurated a state-wide rollout of 5,150 e-buses in the city of Thane. This marks one of the largest e-bus transition initiatives of any state agency in India, making Maharashtra a national model for the electrification of inter-city and rural public transport systems. **ITDP India** continues to be a knowledge partner for this milestone project, supporting MSRTC as it documents its journey and assesses the economic and social benefits for the state. ITDP India has also been organizing workshops on e-bus planning for State Road Transport Undertaking agencies as well as communications sessions for bus operators to further enhance public transport operations nationwide.

In Indonesia, ITDP Indonesia developed a national roadmap and incentives program for the electrification of public transport in support of the country's broader climate targets. The roadmap consists of an action plan and policy framework with recommendations for addressing the institutional, financial, and operational challenges to achieving urban transport electrification. Indonesia's Minister of Transportation participated in the roadmap's launch and notably emphasized the importance of prioritizing electric public transport for the country's future. Transjakarta also hit an e-bus milestone in the past year with over 100 e-buses now

fully operational. In addition, the system also marked an impressive ridership record of more than 1.25 million daily users.

ITDP Mexico collaborated closely with the city of Mérida to evaluate the first operational line of the city's BRT, IE-Tram, which also marks the first e-bus system of its kind in the country's southeast region. At 28 kilometers in length in the first phase, the system already operates three lines with two more lines set to start operations later this year. ITDP Mexico is helping the city explore possible plans for future BRT routes, providing technical assistance for both the corridor selection and conceptual design of a sixth line. Also in Mérida, ITDP Mexico is helping improve road safety measures in tandem with the bus system by identifying areas for walking and cycling improvements at key intersections citywide.



— In the Boston region, bus shelters were redesigned by local artists. Photo: Ad Hoc Industries

ITDP US has worked on improving bus systems in the Boston, USA region over the past decade through the BostonBRT initiative. The past year led to the debut of creative and innovative efforts to transform local bus systems into community-centered hubs of arts and culture. In the city of Chelsea, ITDP worked with local groups, advocates, and artists to re-develop a high-traffic bus stop into a colorful 'Flower Walk' art project that included a new level-boarding platform, landscaping, ergonomic seating, and more. This intervention also gathered data utilizing innovative biometric tools to assess the public's engagement with the new space. In the nearby city of Lynn, ITDP US and partners worked closely with city officials and local artists to transform several bus shelters with custom and unique art installations. •



- Riders using the new BRT system in Dakar, Senegal. Photo: ITDP Africa

WHAT'S NEW AND NEXT

New and upcoming resources on BRT, public transport, active mobility, and beyond.

The Future of Active, Electric Mobility in Cities

ITDP and the World Bank recently published a paper, The Path Less Travelled: **Scaling Up Active Mobility to Capture** Economic and Climate Benefits, to make the case for scaling up financing for active mobility projects in cities. The paper identifies and assesses best practice case studies to demonstrate how successful investment mechanisms can be replicated to leverage the return on investment into cycling infrastructure. The paper advocates for active mobility infrastructure as one of the most cost-effective strategies for reducing transport-related emissions while supporting broader investments into our public transport systems.

Further highlighting the importance of cycling, ITDP also released a report entitled E-bikes: Charging Toward Compact Cycling **Cities**, featuring in-depth interviews with electromobility experts and case studies of e-bike strategies in cities. As e-bikes surge in popularity in many places, they can be close substitutes for fuel-powered cars and two-wheelers if deployed at scale. However, the electrification of bicycles has been largely overlooked as an important climate and mobility solution. This report emphasizes the need for governments to recognize e-bikes as a component of their transport plans and to take steps to make e-bikes and cycling networks safer, more affordable, and more accessible. Both reports are available now at ITDP.org/ Publications.

The SCOPE of Emissions: ITDP's BRT Climate Impact Calculator

ITDP has introduced an updated tool for estimating the climate and environmental impacts of BRT projects around the world to complement the 2024 edition of the *BRT Standard*. The **BRT Simple Calculator Of Project Emissions** (or BRT SCOPE) is a user-friendly spreadsheet tool that estimates the potential climate and air



- Integrating cycling, walking, and public transit is key to sustainable mobility. Photo: ITDP

quality impacts of these types of transport projects. The tool includes robust default values, but is also fully customizable, allowing users in both data-rich and datapoor contexts to calculate preliminary estimates of climate impacts. It can be used by transport stakeholders like development banks and city agencies to make the case for funding more BRT projects. Visit **ITDP.org** for the latest on the tool.

A New Learning Hub Course for BRT Planning

ITDP's Learning Hub debuted with selfguided, publicly-accessible courses on cycling infrastructure and accessible urban design. The next course in the Learning Hub will provide a roadmap for urban planners, city officials, and civil society groups to advance BRT planning and development with a myriad of resources. With different levels of basic and technical information. this course will be useful to decisionmakers, advocates, and academics who want to discover global best practices and lessons learned drawn from ITDP's deep experience with BRT and public transport projects. The resources in the course will include detailed guides, case studies, explanatory videos, webinars, and more. Visit ITDP.org/Learning-Hub to learn more.

A Guide for Battery Electric Buses and Charging Infrastructure

An upcoming paper from ITDP will serve as a guide for **E-bus Battery and Charging Technology** to help cities and planners as they consider battery and charging technology options for their transport systems. This research will dive deep into the state of battery and charging options for buses, including e-buses that can run partially on overhead lines. A comprehensive understanding of these options is important for any city when determining which interventions are appropriate for their transition to electric vehicles. By choosing the right mix of charging infrastructure and strategic placements, cities can more effectively implement electrification as part of their public transport plans. Visit **ITDP.org/Publications** for updates.

Exploring Compact Cities Electrified Worldwide

Building on ITDP and UC Davis' The Compact City Scenario – Electrified research, the team is continuing to develop a series of regional reports assessing the benefits of transport electrification and compact city planning within countryspecific contexts. With reports on Egypt, India, and the U.S. released over the past year, the upcoming publications on the African region, Brazil, Indonesia, and Mexico will further make the case for the importance of *Electrification* + Shift scenarios to address rising transport emissions. Beyond the electrification of transportation, this research demonstrates the need to design cities to also be more centered around walking, cycling, and public transit. These reports provide useful infrastructure targets that can be integrated into national policymaking.

The research is already making an impact with regional stakeholders. For example, findings were integrated into the strategies of Brazil's national Climate Observatory; debuted to decision-makers at a national urban mobility event in India; and presented to federal government and civil society representatives in Washington, DC. Visit **ITDP.org** for current and upcoming reports. •