

CITIES FORUM

COAM | COLEGIO OFICIAL ARQUITECTOS DE MADRID

MADRID2050

Global Best Practices in Sustainable Urban Mobility Projects

30 case studies from Europe, Latin America, Africa, Asia, and Oceania showcasing innovations in transport reform, urban design, climate action, and social inclusion.

MARCH 2026 · CITIES FORUM & COAM MADRID

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Global Best Practices in Sustainable Urban Mobility Projects

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ABOUT CITIES FORUM

Cities Forum is a strategic advisory firm and think tank specialised in sustainable urban development globally. We support local governments, international organisations, and development agencies in designing evidence-based urban transformation programmes.
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ABOUT COAM

The Colegio Oficial de Arquitectos de Madrid (COAM) is the professional association of architects in Madrid, promoting architectural excellence, urbanism, and sustainable city development.

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EXECUTIVE SUMMARY

Mobility as Urban Transformation

Cities are at a structural inflection point. Rapid urbanization, climate emergency commitments, technological disruption, demographic change, and growing social inequality are reshaping the way mobility systems must be conceived and governed. Transport can no longer be addressed as a purely technical or infrastructural domain. It is a spatial, social, environmental, and economic system that directly influences public health, access to opportunity, territorial equity, and urban resilience.

This publication presents 30 global best-practice projects implemented or significantly scaled between 2022 and 2025, selected according to rigorous criteria of spatial transformation, measurable impact, governance innovation, and replicability. The cases span five continents and diverse urban contexts, from megacities to mid-sized metropolitan regions. Together, they illustrate a new generation of mobility interventions that move beyond incremental improvement and instead integrate transport reform with urban design, climate mitigation and adaptation, gender inclusion, and digital governance.

30	5	25+	5
CASE STUDIES	CONTINENTS	COUNTRIES	SDG BADGES

The projects demonstrate five consistent structural characteristics:

1. Mobility as Urban Transformation. Street space reallocation, superblocks, school streets, cooling corridors, and complete streets programs show that mobility policy is fundamentally public space policy. Reclaiming space from private vehicles generates measurable improvements in safety, social interaction, air quality, and local economic vitality.

2. Climate Integration by Design. Electrification, active mobility infrastructure, green corridors, and emission-reduction strategies are embedded into spatial planning rather than treated as isolated transport measures. The most successful cases align decarbonization targets with tangible street-level interventions.

3. Equity and Gender Mainstreaming. Mobility systems disproportionately affect vulnerable populations. Several case studies incorporate gender-sensitive audits, inclusive night mobility, affordability reform, and workforce diversification programs, demonstrating that social inclusion strengthens system performance.

4. Innovation Ecosystems Beyond Government. NGOs, MSMEs, startups, civic laboratories, and hybrid governance coalitions play a central role in piloting, scaling, and institutionalizing change.

5. From Tactical Pilot to Structural Reform. Temporary interventions, demonstrator corridors, and data-driven experimentation frequently act as accelerators for permanent regulatory and infrastructural change.

To systematize comparative analysis, each project is evaluated using a five-badge framework: **Gender & Inclusion; Street & Public Realm Transformation; Climate & Green Mobility; Active & Shared Mobility; and Urban Innovation & Data.** This evaluation matrix allows practitioners, public officials, designers, and policy-makers to quickly understand both thematic strengths and transferability potential.

The intention of this study is neither celebratory nor purely descriptive. It is strategic. By identifying patterns across global contexts, the publication provides decision-makers with actionable insights that can inform metropolitan mobility strategies, national reform agendas, and international cooperation frameworks. The emphasis on replicability reflects a practical ambition: to reduce the distance between inspiration and implementation.

Gender & Inclusion

SDG 5: Safety, accessibility, workforce diversity for women and vulnerable populations.

Street & Public Realm

SDG 11: Reclaiming urban space through street redesigns, plazas, car-lite districts.

Climate & Green

SDG 13: Electrification, emission reduction, green corridors, urban resilience.

Active & Shared

SDG 3 & 11: Walking, cycling, modal integration for healthier lifestyles.

Innovation & Data

SDG 9: Governance reform, digital systems, collaborative ecosystems.

Madrid 2050 as an International Reference Framework

This publication forms part of the broader strategic reflection promoted by the Colegio Oficial de Arquitectos de Madrid through the Madrid 2050 initiative. Madrid 2050 is a forward-looking platform that convenes architects, urbanists, engineers, policy experts, and institutional actors to debate the long-term spatial, environmental, and social future of metropolitan Madrid. Its objective is to position the city within global urban transformation agendas, aligning local innovation with international knowledge exchange.

Within this context, the present study contributes a comparative global lens. By documenting best practices worldwide, it situates Madrid within a broader ecosystem of experimentation and reform, enabling cross-learning and strategic benchmarking. Rather than treating global examples as distant case studies, Madrid 2050 frames them as operational references that can inform metropolitan decision-making while simultaneously projecting Madrid's own experiences outward as part of a shared international dialogue on sustainable urban mobility.

In this sense, the publication operates bidirectionally: it brings global evidence into the Madrid debate and uses Madrid's strategic platform as a node from which best practices can circulate internationally.

Selection Criteria: Implemented or significantly scaled in the last ten years · Demonstrates clear urban intervention or spatial redesign · Shows measurable or observable social impact · Includes replicable governance or financing model · Highlights role of NGOs, startups, MSMEs, or collaborative ecosystems.

Eight Dimensions of Urban Quality

In addition to the five-badge SDG framework, each project is assessed against **eight dimensions of urban quality** that identify which aspects of the urban environment are prioritised by each intervention. A project may address two, three, or more dimensions depending on its scope and ambition.

ETD Energy Transition & Decarbonization

NC Nature & Circularity

HI Health & Inclusion

PT People & Talent

QU Quality

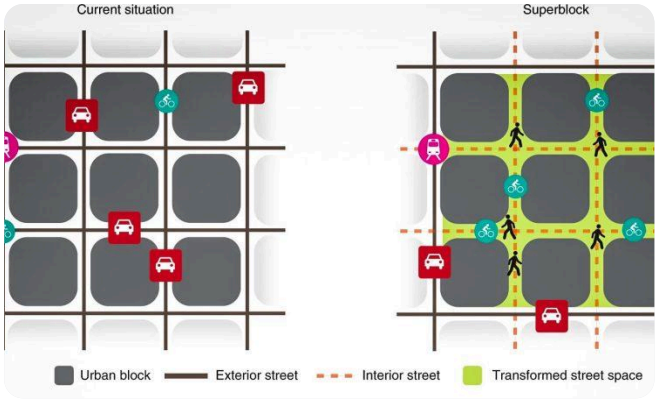
ID Innovation & Digitalization

INV Investment

PPR Public-Private Collaboration & Regulation

Europe





Barcelona Superblocks

📍 Barcelona, Spain · 2016–present

Barcelona City Council, Urban Ecology Agency, neighbourhood associations

ETD | NC | HI | QU | Street & Public Realm | Climate & Green | Active & Shared | Gender & Inclusion

Launched in 2016 by the Barcelona City Council (Ajuntament de Barcelona), the Superblocks (Superilles) program reconfigures the city's iconic grid to prioritize people over cars. The initiative redirects through-traffic to perimeter roads while restricting internal streets within selected nine-block clusters to local access only.

This transformation allows former car-dominated streets to become pedestrian-priority environments featuring green spaces, playgrounds, shaded seating, bike lanes, and community gathering areas. The project was developed with contributions from the Barcelona Urban Ecology Agency, mobility planners, urban designers, and local neighborhood associations.

Expansion phases between 2020 and 2024 accelerated implementation, embedding the model into broader climate and public health strategies. Superblocks have significantly reduced traffic volumes, noise levels, and air pollution within intervention zones, while increasing walkability and cycling.

The redesign integrates gender-sensitive urban planning principles by improving lighting, visibility, accessibility, and inclusive public amenities that support children, elderly residents, caregivers, and diverse communities.Beyond mobility, the Superblocks foster social cohesion by transforming streets into multifunctional public spaces.

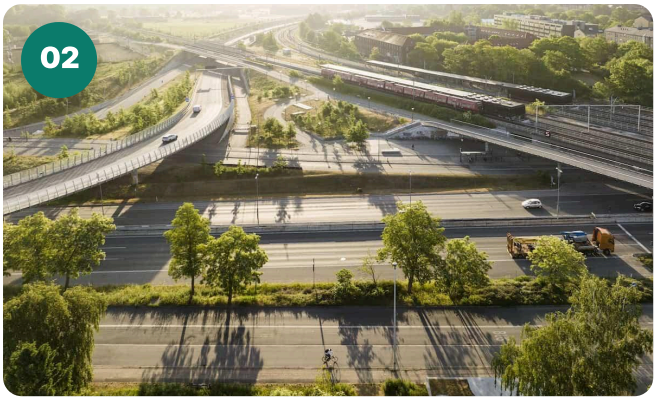
The model demonstrates how tactical interventions can evolve into permanent structural urban reform. Its phased, scalable approach makes it highly adaptable for other dense cities seeking to reduce car dependency, improve environmental quality, and reclaim public space for community life.

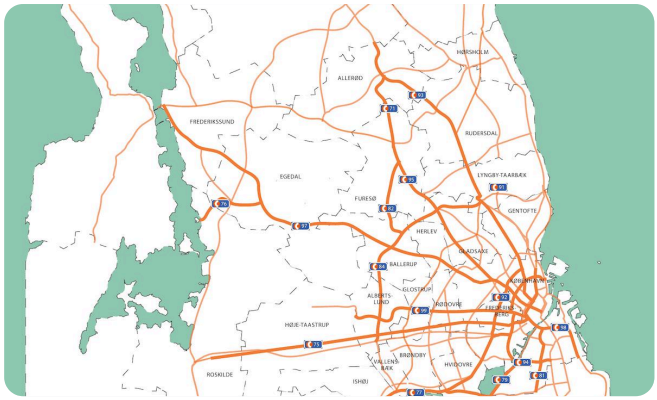
RELEVANT DATA

667	-25%	503	€500M	30%
DEATHS PREVENTED PER YEAR	NO_2 AIR POLLUTION REDUCTION	TOTAL SUPERBLOCKS PLANNED	ANNUAL HEALTHCARE SAVINGS	INCREASE IN FOOT TRAFFIC

KEY INFORMATION

- Phased, scalable model for dense cities
- Integrates gender-sensitive urban planning
- Transforms streets into multifunctional public spaces
- Neighbourhood associations co-design process





Copenhagen Cycle Superhighways

Greater Copenhagen, Denmark · 2012–present

Capital Region of Denmark, 29 municipalities, Cycle Superhighway Secretariat

ETD HI QU | Active & Shared | Climate & Green | Innovation & Data

The Cycle Superhighways network in Greater Copenhagen is a regional initiative designed to promote cycling as a primary commuting mode between suburban municipalities and the city center. Developed through collaboration between the Capital Region of Denmark and nearly 30 municipalities, the project addresses congestion, emissions, and public health challenges by creating high-quality cycling corridors that connect residential areas, workplaces, and transit hubs across municipal boundaries.

Unlike standard bike lanes, the superhighways are designed for long-distance cycling, prioritizing speed, safety, and comfort. Infrastructure features include wide lanes, smooth pavement, dedicated crossings, lighting, clear wayfinding, and amenities such as air pumps and winter maintenance to ensure year-round usability.

The network has significantly increased commuter cycling, with traffic rising by around 52% on key routes, while a portion of new users previously traveled by car. The project demonstrates how coordinated regional governance and high-quality cycling infrastructure can shift commuting behavior, reduce car dependency, and support low-carbon metropolitan mobility.

RELEVANT DATA

+52%	29	45km+	100%
CYCLING INCREASE ON KEY ROUTES	MUNICIPALITIES COORDINATED	SUPERHIGHWAY NETWORK BUILT	YEAR-ROUND WINTER MAINTENANCE

KEY INFORMATION

- High-quality long-distance cycling corridors
- Air pumps and wayfinding amenities
- Connects suburban areas to city centre
- Coordinated regional governance model





Utrecht Pop-Up Public Space

Utrecht, Netherlands · 2018–2020, ongoing

Municipality of Utrecht, EIT Climate-KIC

NC | QU | Street & Public Realm | Climate & Green

Utrecht's Pop-Up Public Space initiative explores how temporarily transforming car parking spaces into public areas can reshape urban mobility and public life. Developed through the Climate-KIC Sustainable Cities Mobility Challenge, the project tests small-scale interventions such as converting parking spaces into green areas, bicycle parking zones, seating areas, and community gathering spaces.

These temporary installations serve as living laboratories to evaluate how reducing space dedicated to private cars can create more people-centered streets. The initiative encourages residents to experience alternative uses of street space and participate in discussions about the city's future mobility strategy.

By reclaiming small sections of road infrastructure for public use, the project supports walking, cycling, and social interaction while reducing the dominance of parked vehicles in dense urban areas.The pilots inform Utrecht's broader goal of transitioning toward a low-car, climate-resilient city by 2040, where streets prioritize sustainable mobility, public space quality, and environmental sustainability.

RELEVANT DATA

2040	20+	EIT
TARGET YEAR FOR LOW-CAR CITY	PARKING SPACES CONVERTED IN PILOT	CLIMATE-KIC FUNDED

KEY INFORMATION

- Living laboratories testing alternative street uses
- Residents participate in co-design workshops
- Parking converted to green zones and bike parking
- Informs broader city mobility strategy



Cornellà Climate Itineraries

📍 Cornellà de Llobregat, Spain · 2020–2023

Municipality, AMB, Covenant of Mayors, climate researchers

ETD NC HI QU | Climate & Green | Gender & Inclusion | Active & Shared

The Climate Itineraries project in Cornellà de Llobregat addresses the growing risks of extreme heat and climate vulnerability in dense urban environments by redesigning everyday mobility routes. The initiative focuses on creating climate-resilient walking and cycling corridors that connect essential destinations such as schools, healthcare facilities, public transport stops, and community services.

Using climate data and predictive modeling, the city identified areas most vulnerable to heat exposure and prioritized these routes for intervention. Urban design measures include increased tree canopy, shaded pathways, permeable surfaces, improved street furniture, and redesigned pedestrian spaces to enhance thermal comfort.

By integrating climate adaptation with mobility planning, the project improves safety and accessibility for vulnerable populations, particularly elderly residents, children, and caregivers who rely on walking for daily activities. The initiative demonstrates how cities can combine public health, climate adaptation, and sustainable mobility to create cooler, safer, and more inclusive urban environments while encouraging walking and reducing reliance on motorized transport.

RELEVANT DATA

40°C+	3 yr	AMB
SUMMER PEAK TEMPERATURES ADDRESSED	PROJECT IMPLEMENTATION PERIOD	METROPOLITAN BARCELONA PARTNERSHIP

KEY INFORMATION

- Priority connections: schools, healthcare, transit
- Predictive climate modelling for route selection
- Covenant of Mayors for Climate & Energy member
- Increased tree canopy and shaded pathways



Timiș Blue-Green Corridor

📍 Brașov/Timișoara, Romania · 2020–2023

FedEx, Climate-KIC, local partners

NC QU HI PPR | Climate & Green | Street & Public Realm

The Timi Blue-Green Corridor pilot in Brașov seeks to reclaim neglected urban river space and transform it into a climate-resilient public mobility corridor. In many parts of the city, rivers such as the Timi are hidden beneath concrete infrastructure. The project identifies strategic sections of the 12-kilometre river stretch where rapid interventions can restore ecological and social value.

A key pilot focuses on Enușprului Street, where part of the buried stream will be uncovered and integrated into a blue-green urban corridor. The initiative combines nature-based solutions, green infrastructure, and pedestrian-cycling connectivity to convert the street into a shaded route linking homes, schools, and local businesses.

Community engagement and participatory planning are central components of the pilot, ensuring that residents help shape the transformation. The project aims to create cooler microclimates, improve walkability, and expand access to green public spaces while promoting clean transport options.

RELEVANT DATA

12 km	2035	1
TOTAL RIVER CORRIDOR TARGETED	CLIMATE-NEUTRALITY TARGET YEAR	KEY PILOT STREET (ENUȘPRULUI)

KEY INFORMATION

- Community co-design and participatory planning
- Uncovering buried stream for blue-green corridor
- Nature-based solutions for urban cooling
- FedEx corporate partner funding





Milan Piazze Aperte

Milan, Italy · 2018–present

Municipality of Milan, Bloomberg Associates, GDCI, AMAT

QU HI PPR | Street & Public Realm | Active & Shared | Gender & Inclusion

Piazze Aperte ("Open Squares") is a tactical urbanism program in Milan that transforms underused intersections and streets into vibrant public spaces. Initiated by the Municipality of Milan in collaboration with Bloomberg Associates and the Global Designing Cities Initiative, the project reclaims asphalt previously dominated by car traffic and converts it into pedestrian plazas using quick, low-cost interventions.

Through temporary materials such as paint, modular seating, planters, and playground installations, large traffic intersections are redesigned to prioritize pedestrians, cyclists, and community activities. These tactical pilots allow the city to test street redesigns before making permanent infrastructure changes.

The initiative has improved safety by reducing vehicle speeds and simplifying complex intersections while creating spaces for social interaction, outdoor learning, and neighborhood events. By involving local residents, schools, and community groups in the design process, Piazze Aperte strengthens social cohesion and encourages local ownership of public spaces.

RELEVANT DATA

17,000m²	60+	10
NEW PEDESTRIAN SPACE IN 2024	COMMUNITY SUGGESTIONS RECEIVED	NEW SCHOOL STREETS FOR 2025

KEY INFORMATION

- Tactical urbanism tests before permanent changes
- Co-design with residents, schools, communities
- Bloomberg Associates and GDCI partnership
- Reclaims asphalt intersections for people



ShareDiMobiHub

Rotterdam, Netherlands · 2017–2022

EU Interreg, city municipalities, mobility providers

ID QU PPR Innovation & Data Active & Shared

The Shared e-Mobility Hub Project explores how physical mobility hubs can integrate multiple shared transport services into a single, accessible urban node. Implemented across several European cities, the initiative focuses on creating designated hubs where users can easily switch between different sustainable mobility options such as bike sharing, e-scooters, car-sharing, and public transport.

Rather than leaving micro-mobility devices scattered across sidewalks, the hubs organize vehicles into clearly white-marked stations located near transit stops, residential districts, and commercial centers. This improves accessibility while reducing street clutter and improving pedestrian safety.

The project also developed operational guidelines for hub placement, governance models, and cooperation between municipalities and private mobility providers. Through pilot implementations and evaluation, the project demonstrated that shared mobility hubs can strengthen multi-modal travel behavior, reduce reliance on private cars, and improve the efficiency of urban transport networks.

RELEVANT DATA

5+	4+	2017–22
EUROPEAN CITIES IN PILOT	TRANSPORT MODES INTEGRATED PER HUB	EU INTERREG PROGRAMME PERIOD

KEY INFORMATION

- Multi-modal hub governance model developed
- Reduces street clutter from scattered micro-mobility
- Practical planning tools for cities at scale
- Organises vehicles in clearly marked stations



Jelbi Integrated Mobility

📍 Berlin, Germany · 2019–present

BVG, Trafi, Tier, Lime, Voi, Miles, Nextbike

ID | ETD | PPR | Innovation & Data | Active & Shared | Climate & Green

Jelbi is Berlin's integrated mobility platform designed to connect public transport with a wide range of shared mobility services through a single digital interface and a network of physical mobility hubs. Developed by BVG in partnership with mobility technology company Trafi and multiple private operators, Jelbi allows users to plan, book, and pay for different transport modes including public transit, bike sharing, e-scooters, car sharing, and ride pooling within one application.

A key innovation of the system is the creation of Jelbi mobility hubs distributed across the city. These hubs consolidate shared vehicles in designated spaces near transit stations, residential districts, and major activity centers, improving multimodal connectivity and reducing sidewalk clutter.

By integrating services digitally and spatially, Jelbi encourages users to combine public transport with micromobility options, helping reduce dependence on private cars. The project demonstrates how public transport authorities can coordinate diverse mobility providers to create a seamless Mobility-as-a-Service (MaaS) ecosystem that supports flexible, low-carbon urban travel.

RELEVANT DATA

7+	6	2019
MOBILITY PROVIDERS INTEGRATED	TRANSPORT MODES IN ONE APP	PLATFORM LAUNCH YEAR

KEY INFORMATION

- Physical Jelbi hubs near all major transit stations
- Plan, book, pay for all modes in one interface
- Reduces private car dependence through seamless MaaS
- Consolidates shared vehicles reducing sidewalk clutter

09



Luleå's Ice Road

📍 Luleå, Sweden · Annual since 2000s

Municipality of Luleå, Tourism Board

QU HI Active & Shared Street & Public Realm

The Luleå Ice Track (Isbanan) is a seasonal mobility corridor built across the frozen waters of the Gulf of Bothnia in northern Sweden. Each winter, the city prepares approximately 10 kilometers of ice routes connecting Luleå's southern harbor with nearby islands and coastal districts.

The track is carefully maintained and cleared to ensure safe access for pedestrians, cyclists, skiers, kick-sled users, and sometimes even small vehicles. Beyond recreational use, the ice track functions as an alternative mobility route that shortens travel distances between neighborhoods and surrounding islands during the winter season.

Warming huts, seating areas, cafés, and lighting installations transform the frozen landscape into a vibrant public space that supports community activity and tourism. The initiative demonstrates how cities in cold climates can adapt natural seasonal conditions to expand public space and promote active mobility.

RELEVANT DATA

10 km	3 mo	20+ yr
ICE CORRIDOR ACROSS GULF OF BOTHNIA	JANUARY–MARCH SEASONAL OPERATION	ANNUAL TRADITION SINCE EARLY 2000S

KEY INFORMATION

- Warming huts, cafés, and lighting on the ice
- Serves pedestrians, cyclists, skiers, kick-sled users
- Alternative mobility route between neighbourhoods
- Climate-responsive seasonal infrastructure model

Latin America



BiciCarga Bogotá

Bogotá, Colombia · 2020–2021

World Bank, Nutresa, LOGYCA, Despacio

ETD ID INV PPR | Climate & Green | Innovation & Data | Active & Shared

BiciCarga is a zero-emission last-mile logistics initiative in Bogotá that deploys electric cargo bikes to cut transport pollution while improving delivery efficiency. Funded by the World Bank and Developed through a partnership between Nutresa, LOGYCA, and Despacio, the project tested a collaborative distribution model built around a cross-docking platform: electric trucks bring goods to a consolidation hub, where shipments are sorted and transferred to solar-powered e-cargo tricycles for final delivery.

The platform supports multiple product types, including parcels, packaged goods, and refrigerated food, and generates operational and energy data to assess smart energy management, optimal locations for urban freight operations, and practical deployment conditions. In the pilot's first phase, the partnership replaced two trucks and four motorcycles with eight electric bikes, avoiding 1.

tons of CO. In the second phase, four additional e-bikes replaced two trucks, saving another 1. tons of CO. Beyond emissions reductions, BiciCarga improved working conditions and productivity: it reduced driver working hours by 2. hours per day, increased deliveries per hour by 67%, and increased deliveries per kilometer by 63%.

The partnership also developed a financial model to identify when cargo bikes outperform combustion fleets, concluding they are most efficient and sustainable where customer density is high-supporting a clear pathway for scaling in similar urban contexts.

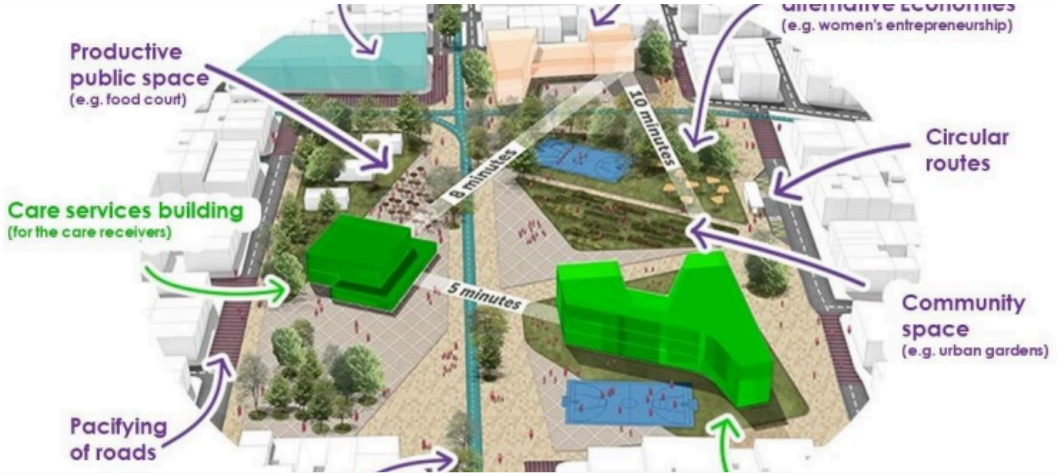
RELEVANT DATA

+67%	+63%	-2.3h	3.59t	-30%
INCREASE DELIVERIES/HOUR	INCREASE DELIVERIES/KM	DRIVER HOURS SAVED/DAY	CO_2 EMISSIONS AVOIDED	DELIVERY COST REDUCTION

KEY INFORMATION

- Solar-powered e-cargo tricycles
- Cross-docking distribution hub model
- World Bank funded pilot project
- Outperforms combustion fleets in dense areas

11



Bogotá Care Blocks

📍 Bogotá, Colombia · 2020–present

Mayor's Office, Secretariat for Women, IDU, OECD

HI PT QU ID | Gender & Inclusion | Street & Public Realm | Innovation & Data

The Bogotá Care Blocks (Manzanas del Cuidado) initiative integrates social infrastructure, mobility access, and public space improvements to support unpaid caregivers, primarily women in the city. The program creates neighborhood-scale service hubs where residents can access education, healthcare, childcare, and employment support within walking distance.

The initiative is built on mapping daily mobility patterns of caregivers to ensure services are located within a 15–20 minute walking radius, reducing time spent on unpaid care work and improving access to opportunities. Each care block integrates safe pedestrian routes, accessible public spaces, and proximity to public transport to ensure inclusive mobility.

The program also redesigns streets and community spaces around these hubs to improve safety, visibility, and accessibility. By addressing the mobility barriers faced by caregivers, Bogotá links gender equality with urban planning and transport policy. Research shows the initiative reduces time poverty and enhances economic participation for women while strengthening neighborhood-level social infrastructure.

RELEVANT DATA

15–20	OECD	100%
MINUTES WALKING RADIUS TO SERVICES	INTERNATIONAL KNOWLEDGE PARTNER	SAFE PEDESTRIAN ROUTES AROUND HUBS

KEY INFORMATION

- Explicit focus on unpaid women caregivers
- Maps daily mobility patterns of care workers
- Street redesign for safety and visibility
- Integrates education, healthcare, childcare



Santiago Zero-Emission Buses

📍 Santiago, Chile · 2018–2025

Government of Chile, Red Metropolitana de Movilidad

ETD HI QU INV | Climate & Green | Gender & Inclusion

Santiago has emerged as a global leader in the electrification of public transport, operating one of the largest electric bus fleets outside China. Through the Red Metropolitana de Movilidad system, the Chilean government has progressively replaced diesel buses with electric vehicles as part of a broader strategy to reduce urban emissions and modernize public transit.

The initiative integrates electric buses with new charging infrastructure, upgraded depots, and improved operational management across the city's transport network. Electrification has significantly reduced air pollution and noise in densely populated corridors while improving passenger comfort and reliability.

The buses include universal accessibility features such as low floors, wheelchair access, and digital passenger information systems. In parallel, the government has expanded charging infrastructure and strengthened partnerships with private operators and energy companies to support large-scale fleet deployment.

By integrating clean technology with long-term mobility planning, Santiago demonstrates how electrification can accelerate the transition to sustainable urban transport while improving service quality and reducing greenhouse gas emissions. 18 Welcome To Zscaler Directory Authentication.

RELEVANT DATA

800+	#2	100%
ELECTRIC BUSES IN FLEET (2025)	LARGEST E-BUS FLEET GLOBALLY	UNIVERSAL ACCESSIBILITY STANDARD

KEY INFORMATION

- Low-floor, wheelchair access, digital passenger info
- Expanded charging infrastructure network
- Public-private operator partnership model
- Progressive diesel-to-electric replacement





Mexico City Cablebús

Mexico City, Mexico · 2021–present

Government of Mexico City, SEMOVI

ETD HI QU INV | Gender & Inclusion | Climate & Green | Street & Public Realm

The Cablebús network in Mexico City is an urban cable car system designed to improve mobility for residents in the city's peripheral hillside communities, where steep terrain and limited road infrastructure have historically restricted access to reliable public transport. The system provides an aerial electric transit option that connects densely populated neighborhoods with the city's metro and bus rapid transit systems, significantly reducing travel times for daily commuters.

Cablebús lines operate above existing urban fabric, minimizing land acquisition and avoiding road congestion while offering consistent travel speeds. The system has dramatically reduced commuting times for residents often cutting trips that previously took over an hour to less than 30 minutes.

Stations are integrated with improved pedestrian access and public transport interchanges, helping create safer and more connected mobility environments. Beyond transportation efficiency, the project promotes social inclusion by linking undeserved neighborhoods to employment, education, and services in the city center.

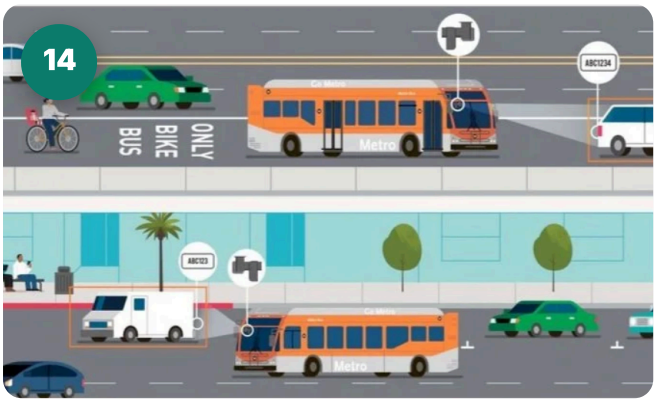
RELEVANT DATA

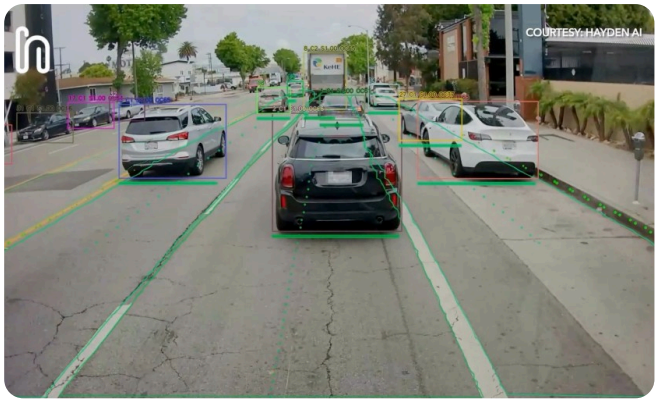
60→30	100%	2
MINUTES COMMUTE TIME HALVED	ELECTRIC AERIAL TRANSIT	CABLEBÚS LINES OPERATIONAL

KEY INFORMATION

- Integrated with Metro + BRT network
- Connects hillside peripheral communities
- Minimal land acquisition (operates above streets)
- Promotes social inclusion for underserved areas

North America





LA Bus Lane Enforcement

📍 Los Angeles, USA · 2024–ongoing

LA Metro, LADOT

HI | ID | PPR | Innovation & Data | Gender & Inclusion

Bus Lane Enforcement (BLE) Program in Los Angeles is a technology-driven initiative designed to improve the reliability and efficiency of public transport by preventing illegal parking and vehicle intrusion in dedicated bus lanes. Under the program, automated cameras installed on buses identify vehicles that block or park in bus lanes and bus stops, allowing authorities to issue parking citations.

The system helps ensure that dedicated transit corridors remain clear, enabling buses to move more efficiently through congested urban streets. Bus lane obstruction has historically slowed transit operations in Los Angeles, affecting service reliability and increasing travel times for passengers.

By introducing automated enforcement, the program strengthens bus priority policies and improves travel conditions for transit users, many of whom rely on buses as their primary means of mobility. Beyond improving transit performance, the initiative supports broader urban mobility goals by encouraging drivers to respect dedicated transit infrastructure and reinforcing the role of buses as a key component of sustainable urban transport systems.

RELEVANT DATA

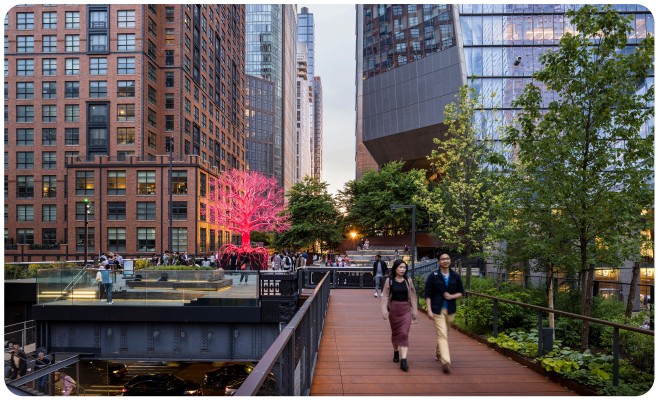
2024	24/7	2
PILOT LAUNCH YEAR	AUTOMATED CAMERA ENFORCEMENT	AGENCIES PARTNERED (METRO + LADOT)

KEY INFORMATION

- Technology-driven consistent enforcement
- Improves reliability for transit-dependent riders
- Strengthens dedicated bus lane policy compliance
- More equitable than manual enforcement

15





The High Line

New York City, USA · 2006–2019

City of NY, Friends of the High Line, James Corner Field Operations, Diller Scofidio + Renfro

NC HI QU INV PPR | Street & Public Realm | Active & Shared

The High Line in New York City is a landmark urban regeneration project that transformed an abandoned elevated freight railway on Manhattan's West Side into a linear public park and pedestrian corridor. Initiated through community advocacy by the nonprofit Friends of the High Line, the project preserved historic rail infrastructure while converting it into a green public space that runs approximately 2. kilometers through the city. Designed by James Corner Field Operations with Diller Scofidio + Renfro, the park integrates walking paths, seating areas, native plantings, cultural spaces, and scenic overlooks that reconnect people with the urban landscape. The High Line has dramatically reshaped the surrounding neighborhood by attracting visitors, supporting local businesses, and catalyzing new urban development.

RELEVANT DATA

$2B+	$900M	8M+	2.3 km
NEW ECONOMIC ACTIVITY GENERATED	TAX REVENUE FOR NYC	VISITORS PER YEAR	ELEVATED LINEAR PARK

KEY INFORMATION

- Community advocacy (Friends of the High Line) initiated
- James Corner Field Operations + Diller Scofidio + Renfro design
- Adaptive reuse of abandoned railway infrastructure
- Catalysed neighbourhood development and new businesses

Africa





Dakar Electric BRT

Dakar, Senegal · 2022–2025

Government of Senegal, CETUD, World Bank, AfDB, ITDP

ETD HI QU ID PPR INV | Climate & Green | Gender & Inclusion | Innovation & Data

Dakar's 18. km fully electric Bus Rapid Transit (BRT) corridor is Africa's first electric BRT system and a major step toward climate-aligned urban transport. The corridor connects Guédiawaye to central Dakar, serving densely populated and historically underserved communities. Featuring dedicated lanes, off-board fare collection, accessible stations, and electric buses, the system significantly reduces travel time-cutting some commutes nearly in half.The BRT reduces greenhouse gas emissions and local air pollution while modernizing public transport operations.

Universal accessibility measures, improved lighting, secure station environments, and formalized employment structures enhance safety and inclusion, particularly for women and vulnerable users. The corridor redesign includes safer pedestrian crossings and reorganized traffic flows, improving the public realm along the route.

Informal transport workers were integrated into the formalized system, ensuring social inclusion in sector restructuring. Dakar's BRT demonstrates how electrification can align mobility reform with climate commitments while improving equity and service quality. It serves as a replicable model for rapidly growing African cities seeking structured, sustainable mass transit solutions.

RELEVANT DATA

18.3km	300K	144	~50%	1st
BRT CORRIDOR LENGTH	EXPECTED PASSENGERS/DAY	CRRC ARTICULATED E-BUSES	COMMUTE TIME REDUCTION	ELECTRIC BRT IN AFRICA

KEY INFORMATION

- Off-board fare collection and accessible stations
- Universal accessibility and improved safety for women
- Informal transport workers integrated into formal system
- World Bank + AfDB + ITDP partnership





Nairobi NMT Corridors

Nairobi, Kenya · 2020–present

NMS, Government of Kenya, KURA

ETD HI QU | Active & Shared | Street & Public Realm | Gender & Inclusion

The Nairobi Non-Motorised Transport (NMT) Corridors project is a large-scale initiative aimed at improving safe mobility for pedestrians and cyclists across the Kenyan capital. Led by Nairobi Metropolitan Services, the program involves the development of dedicated walkways, cycling lanes, and pedestrian bridges along major transport corridors.

With an investment of approximately KSh 1 billion, the project focuses on redesigning road infrastructure that historically prioritized vehicles while neglecting the needs of pedestrians and cyclists. The corridors include wider sidewalks, separated cycle lanes, improved lighting, road safety features, and landscaping.

These upgrades aim to reduce pedestrian fatalities, which have historically represented a large share of traffic deaths in Nairobi. By improving accessibility and safety, the project encourages active travel while providing affordable mobility options for residents who rely on walking or cycling for daily commutes.

RELEVANT DATA

KSh 1B	NMS
TOTAL NMT INVESTMENT	NAIROBI METROPOLITAN SERVICES LEAD

KEY INFORMATION

- Focus on reducing pedestrian fatalities
- Wider sidewalks, separated cycle lanes
- Improved lighting, landscaping, road safety
- Affordable mobility for walking/cycling commuters



Accra Paratransit Mapping

📍 Accra, Ghana · 2022–ongoing

SECO (Switzerland), MLGRD, Transport for Cairo (RouteLab)

ID | PPR | PT | Innovation & Data

This project focuses on Tro-Tro operations, private minibuses, one of the staples of Accra's recent mobility scene. One of the main pitfalls of the current situation is that the fluctuations in routes and services levels of Tro-Tro operations is still relatively difficult to depict, thus leaving authorities lacking in insights pertaining to implementing adequate regulatory frameworks.

Implement and oversee the data collection of a sample of the public transport network in GAMA, introduced "RouteLab", a software suite developed by TfC that focuses on capturing and managing the complex data for paratransit (informal) transport, allowing passengers access to better information on their public transport networks by disseminating the resulting data in a user-friendly format that enables trip-planning, and building the local capacity for government to continue on this data collection process and basic data analysis from resulting data to gain insights on the running services in the city and use it for better planning.

RELEVANT DATA

100%	CHF	Trip
INFORMAL ROUTES DIGITALLY MAPPED	SWISS SECO INTERNATIONAL FUNDING	PLANNING ENABLED FOR PASSENGERS

KEY INFORMATION

- Maps informal Tro-Tro minibus operations
- Enables trip-planning for passengers
- Builds local government data capacity
- Evidence-based regulation framework

Asia



Kochi Water Metro

Kochi, Kerala, India · 2023

KMRL, KfW (Germany), Govt. of Kerala

ETD HI ID INV PPR | Climate & Green | Innovation & Data | Gender & Inclusion

Kochi Water Metro is an innovative ferry-based public transport system serving the Indian port city of Kochi, home to over two million residents spread across the mainland, islands, and peninsulas. Previously reliant on outdated ferries, traditional boats, and limited bridges, daily commuters faced long travel times and congestion.

In 2023, the first two routes of the new Water Metro became operational, marking the beginning of a larger transformation led by Kochi Metro Rail Limited (KMRL). The full project envisions 15 ferry routes and 38 jetties, with 78 primarily battery-powered catamaran boats connecting island communities to the metropolitan core.

Travel times are expected to decrease by up to one-third compared to road transport, while improving access to employment, education, and healthcare. Over 20 years, the system is projected to save approximately 158,000 tonnes of greenhouse gas emissions, while reducing air pollution and noise.

Supported by a 110 million loan from KfW on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the Water Metro is integrated with buses and the land-based metro under a unified timetable and ticketing system. By offering a reliable alternative to private vehicles, Kochi is advancing toward a cleaner, multimodal, and future-ready urban mobility system.

RELEVANT DATA

78	34K	-33%	158Kt	€110M
BATTERY-POWERED CATAMARANS	PASSENGERS/DAY (PHASE 1)	TRAVEL TIME VS ROAD	GHG SAVED OVER 20 YEARS	KFW LOAN FINANCING

KEY INFORMATION

- 15 routes, 38 jetties planned at full scale
- Unified ticketing with buses + land metro
- Connects island communities to metro core
- Annual carbon savings ~7,900 tonnes/year



Singapore Car-Lite District

📍 Woodlands, Singapore · 2022–present

URA, LTA, Singapore Government

ETD NC HI QU | Street & Public Realm | Active & Shared | Climate & Green

The Woodlands Central Car-Lite initiative is part of Singapore's broader strategy to reduce car dependency and create pedestrian-focused urban districts. Located in the northern regional center of Woodlands, the project redesigns key streets and public spaces to prioritize walking, cycling, and public transport over private vehicles.

Under the "car-lite" concept, certain streets and plazas restrict or limit vehicle access while improving connectivity through pedestrian corridors, cycling paths, and integrated transit links.

The development introduces wider walkways, shaded public spaces, cycling infrastructure, and seamless access to nearby MRT stations and bus networks.

By reducing traffic within the district core, the initiative improves safety, reduces noise and air pollution, and encourages active mobility. Public spaces are designed to support social activities, retail interaction, and community events, transforming the area into a vibrant mixed-use center.

RELEVANT DATA

200km	URA+LTA	2024
SHELTERED WALKWAYS PLANNED NATIONALLY	JOINT URBAN-TRANSPORT PLANNING	CAR-FREE SUNDAY EVENTS LAUNCHED

KEY INFORMATION

- Woodlands northern regional centre pilot
- Seamless MRT and bus station access
- Wider walkways and shaded cycling infrastructure
- Public spaces for social and retail activities





Seoul Smart Shelters & LiDAR

Seoul, South Korea · 2019–present

Seoul Metropolitan Govt., Quanergy Systems

HI | ID | PPR | Innovation & Data | Gender & Inclusion

Seoul has introduced a range of smart mobility and safety innovations through the deployment of Smart Shelter bus stops and LiDAR-enabled smart crosswalks. In Seongdong District, the Smart Shelter initiative upgrades traditional bus stops with digital infrastructure that improves comfort, safety, and accessibility for passengers.

These shelters provide real-time traffic and bus arrival information along with more than 18 integrated services, including public Wi-Fi, mobile phone charging stations, air-conditioning and heating, air purification systems, and surveillance for public safety. The shelters function as digitally connected urban micro-hubs that enhance the public transport experience.

Complementing this initiative, smart crosswalk systems equipped with 3D LiDAR sensors from Quanergy have been deployed in Nowon District. These sensors monitor vehicle and pedestrian movement in real time, detecting unsafe behaviors and alerting drivers to prevent accidents, particularly near schools and high-risk intersections.

Together, these technologies demonstrate how smart infrastructure can enhance safety, improve transit accessibility, and support data-driven urban mobility management. 27 Everyday Safety and Convenience through Cutting-Edge Technology: Seongdong's Smart Shelter & Crosswalk - Observatory of Public Sector Innovation.

RELEVANT DATA

18+	3D	24/7
DIGITAL SERVICES PER SHELTER	LIDAR REAL-TIME DETECTION	SMART SURVEILLANCE AND SAFETY

KEY INFORMATION

- Priority deployment near schools for child safety
- Wi-Fi, charging, air purification, heating/cooling
- Real-time bus arrival and traffic information
- Surveillance for enhanced security



Chongqing Vertical City

Chongqing, China · Ongoing

City Government, metro/transit authorities

QU ID INV Innovation & Data Street & Public Realm

Chongqing, China is often described as one of the world's most complex vertical cities due to its dramatic geography at the confluence of the Yangtze and Jialing rivers, and its multi-layered urban form that defies conventional planning logic. Built on steep hills and river valleys, the city's urban fabric features vertical layering where ground-level access can occur on multiple floors depending on the topography, creating what locals call an "8D" spatial experience.

This results in overlapping roadways, pedestrian flows, and transport networks that function in stacked layers rather than on a single horizontal plane. Transportation infrastructure is a defining element of Chongqing's complexity. The city's mobility system includes extensive metro and monorail lines, tunnels, bridges, motorways, cable cars, and escalators that intersect at different elevations to connect disparate parts of the urban terrain.

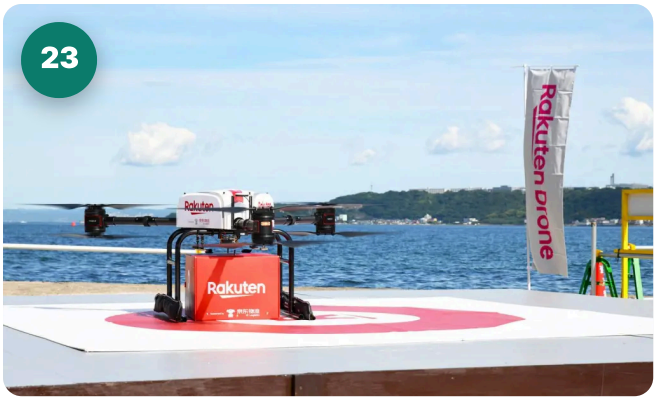
These networks are engineered to navigate extreme topography and link dense urban centers with hills, river edges, and elevated districts, ensuring connectivity despite steep gradients. This integrated, multi-layered transport logic makes Chongqing not just a spatial anomaly but a functional urban organism where mobility infrastructure is interwoven vertically with residential, commercial, and public spaces offering a unique model of transit-oriented layered urbanism for contemporary megacities.

RELEVANT DATA

30M+	8D	6+
METROPOLITAN POPULATION	MULTI-DIMENSIONAL SPATIAL FORM	TRANSPORT MODES INTEGRATED VERTICALLY

KEY INFORMATION

- Metro, monorail, tunnels, bridges, cable cars, escalators
- Stacked transport networks at multiple elevations
- Unique transit-oriented layered urbanism model
- Geography: confluence of Yangtze and Jialing rivers





Rakuten Delivery Robots

Tokyo, Japan · 2019–present

Rakuten Group, local municipalities

ETD | ID | PPR | Innovation & Data | Climate & Green

Rakuten's autonomous delivery robot initiative explores how small self-driving robots can support last-mile logistics in urban and suburban environments. The pilot program deploys compact electric robots capable of transporting groceries, parcels, and everyday goods from local stores directly to nearby households.

Customers place orders through a digital platform, after which autonomous robots travel along sidewalks using sensors, cameras, and GPS navigation to reach their destination. The initiative was developed to address challenges in urban logistics, including rising delivery demand, labor shortages, and congestion caused by conventional delivery vehicles.

By shifting small deliveries to autonomous electric robots, the project aims to reduce road traffic, improve delivery efficiency, and support contactless logistics services. Operating primarily on sidewalks at low speeds, the robots interact safely with pedestrians while integrating with existing retail and delivery ecosystems.

RELEVANT DATA

Zero	100%	5 km/h
DIRECT EMISSIONS FROM OPERATION	AUTONOMOUS SIDEWALK NAVIGATION	SAFE PEDESTRIAN-ZONE SPEED

KEY INFORMATION

- Compact electric sidewalk delivery robots
- Last-mile grocery and parcel delivery
- Addresses labour shortages in urban logistics
- Low-speed safe pedestrian interaction



Delhi Pink Saheli Smart Card

📍 Delhi, India · 2024–present

Government of Delhi, DTC

HI | ID | Gender & Inclusion | Innovation & Data

The Government of Delhi has introduced a free bus travel initiative for transgender passengers as part of its broader effort to improve equity and accessibility in public transport. The policy extends existing free bus travel schemes previously available to women to include members of the transgender community, aiming to reduce financial barriers and encourage greater mobility participation.

Delhi's public bus system, operated by Delhi Transport Corporation (DTC) and cluster bus services, is one of the most widely used forms of public transport in the city. By removing fare costs for transgender passengers, the initiative seeks to improve access to employment, healthcare, education, and social services while promoting dignity and inclusion in everyday mobility.

The program also signals an important policy shift toward gender-inclusive transport planning, recognizing the mobility challenges faced by marginalized groups. By integrating social equity goals with public transport policy, Delhi aims to make its bus network a more inclusive and accessible mobility system for all residents.

RELEVANT DATA

Free	2024	100%
ZERO-FARE BUS TRAVEL FOR TRANSGENDER	POLICY LAUNCH YEAR	BUS NETWORK COVERAGE

KEY INFORMATION

- Extends existing free bus schemes for women
- Gender-inclusive transport policy milestone
- Access to employment, healthcare, education
- Recognises mobility challenges of marginalised groups

Oceania



Adelaide Waste-to-Energy Mobility

Adelaide, Australia · 2022–present

ARENA, state governments, energy developers

ETD NC ID INV PPR | Climate & Green | Innovation & Data

Australian cities are increasingly integrating waste-to-energy (WtE) systems with broader urban sustainability and mobility strategies, particularly in metropolitan regions such as Adelaide. Waste-to-energy facilities convert non-recyclable municipal waste into electricity through advanced thermal treatment, reducing landfill dependence and methane emissions while producing stable local energy supplies.

This energy is increasingly linked to urban electrification and sustainable mobility systems. Electricity generated from WtE plants can support electric bus fleets, EV charging infrastructure, and municipal electric vehicle fleets, helping cities transition away from fossil-fuel-based transport.

Because WtE plants operate continuously, they provide reliable baseload energy that can power transport depots, charging stations, and public infrastructure. The system also improves urban logistics efficiency by reducing the need to transport waste long distances to landfills. Optimized waste collection routes and centralized resource recovery facilities help reduce emissions from municipal truck fleets.

RELEVANT DATA

24/7	Zero	100%
CONTINUOUS BASELOAD ENERGY OUTPUT	LANDFILL WASTE DIVERTED TO ENERGY	POWERS ELECTRIC MUNICIPAL FLEET

KEY INFORMATION

- Waste → Energy → Mobility circular economy loop
- Powers electric bus fleets and EV charging stations
- Reduces landfill dependence and methane emissions
- Non-recyclable waste converted to electricity



NZ Electric Hydrofoil Ferries

📍 Auckland, New Zealand · 2024–present

Vessev, Fullers360

ETD | ID | INV | Climate & Green | Innovation & Data

The VS-9 electric hydrofoil vessel, developed by marine technology company Vessev, represents a new generation of sustainable maritime mobility designed to reduce emissions and improve efficiency in passenger ferry systems. Unlike traditional ferries that move through water, the VS-9 uses hydrofoil technology that lifts the vessel above the water surface once it reaches cruising speed.

This reduces hydrodynamic drag and significantly lowers energy consumption while enabling faster travel times. The vessel operates using fully electric propulsion, producing zero direct emissions and reducing noise pollution in sensitive marine environments. Designed primarily for short-distance passenger transport, the VS-9 is intended for use in coastal cities and archipelagos where water transport forms an essential part of daily mobility networks.

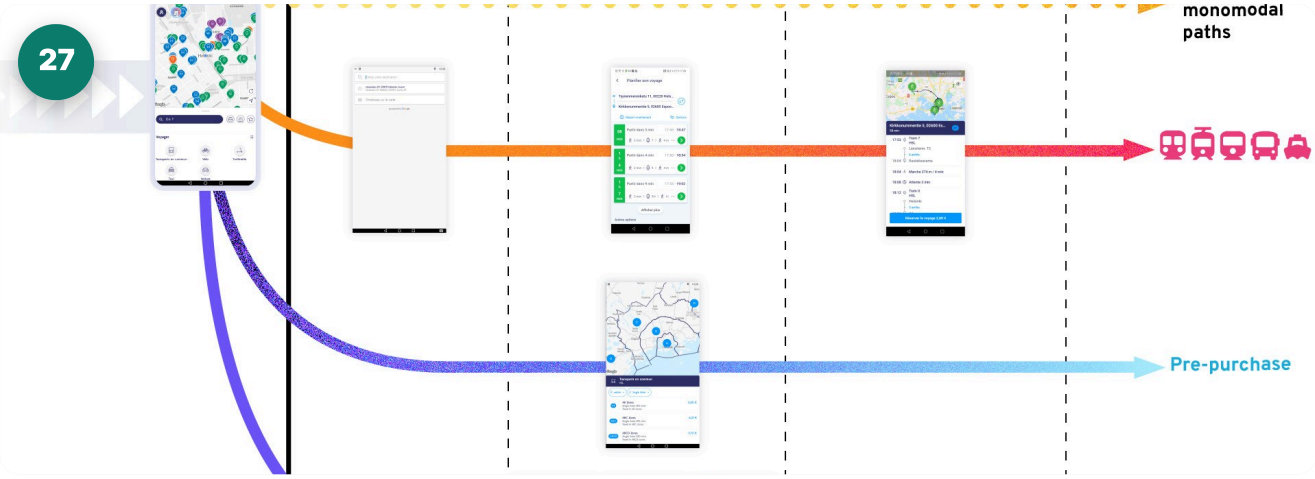
RELEVANT DATA

Zero	80%+	2024
DIRECT EMISSIONS IN OPERATION	HYDRODYNAMIC DRAG REDUCTION	RED DOT PRODUCT DESIGN AWARD

KEY INFORMATION

- VS-9 electric hydrofoil vessel model
- Lifts above water at cruising speed
- Designed for coastal and archipelago transit
- Reduced noise in marine environments

Urban Data & Innovation



Helsinki MaaS Scaling

Helsinki, Finland · 2016–present

MaaS Global (Whim), City of Helsinki, HSL

ETD ID PPR Innovation & Data Active & Shared

Whim is one of the world's first fully operational Mobility-as-a-Service (MaaS) platforms, launched in Helsinki to integrate multiple transportation modes into a single digital service. Developed by MaaS Global in partnership with Helsinki's transport authorities and private mobility providers, the Whim app allows users to plan, book, and pay for various transport options, including public transport, taxis, bike sharing, and car rental within one platform.

The system introduces flexible payment models, including subscription packages that bundle multiple mobility services for a monthly fee. This approach encourages users to rely less on private car ownership by offering seamless access to alternative transport modes. By integrating digital trip planning, ticketing, and payment, the platform simplifies multi-modal travel and improves the efficiency of urban mobility networks.

RELEVANT DATA

1st	4+	2016
FULLY OPERATIONAL MAAS PLATFORM GLOBALLY	TRANSPORT MODES IN ONE SUBSCRIPTION	COMMERCIAL LAUNCH YEAR

KEY INFORMATION

- Monthly subscription bundles all transport modes
- Reduces private car ownership through convenience
- Plan, book, pay for transit, taxis, bikes, car rental
- Flexible payment models for different user needs



Lisbon Walkability Tech

📍 Lisbon, Portugal · 2024–2026

Lisbon City Council, Walk21, Climate-KIC, FedEx, Alstom

HI QU ID PPR | Innovation & Data | Active & Shared

Portugal is transforming its urban landscape through the National Strategy for Active Pedestrian Mobility, aiming for a 35% increase in walking trips by 2030. To address gaps in pedestrian data, Lisbon City Council has partnered with the Walk21 Foundation to deploy the Walkability.App.

Supported by the Sustainable Cities Mobility Challenge, this data-driven project allows residents and tourists to report real-time experiences, attach images, and identify barriers like noise, pollution, and physical obstacles. A key focus is inclusive accessibility, integrating feedback from diverse groups, including those with reduced mobility, to ensure equitable urban design.

Through participatory walking assessments and systematic data collection, Lisbon aims to remove sidewalk barriers and enhance the walking environment with green infrastructure. By gathering 1,000 localized reports, the city seeks to develop scalable, evidence-based policies that serve as a blueprint for walkable cities worldwide.

RELEVANT DATA

1,000+	+35%	Walk21
WALKABILITY REPORTS COLLECTED	NATIONAL WALKING TARGET BY 2030	INTERNATIONAL FOUNDATION PARTNER

KEY INFORMATION

- Walkability.App for real-time experience reporting
- Inclusive accessibility: reduced mobility feedback
- Climate-KIC + FedEx + Alstom supported
- Scalable evidence-based walkability policies



Athens Cooling Streets

📍 Athens, Greece · 2021–present

Municipality of Athens, ADDMA, EU Covenant of Mayors, Impact Hub

ETD NC HI QU ID | Climate & Green | Street & Public Realm | Active & Shared

Athens has launched a series of urban cooling initiatives to address rising temperatures and extreme heatwaves affecting the city. A central component of the strategy is the Cooling Routes app, which guides residents and visitors through shaded walking routes that connect parks, tree-lined streets, water features, and air-conditioned public buildings.

The routes help people move through the city while minimizing exposure to heat, improving pedestrian comfort during summer months. Alongside the digital tool, the city is developing "cooling havens" and pocket parks, small green public spaces equipped with trees, seating, and water features that provide shaded rest areas in dense urban neighborhoods.

These interventions are complemented by restoration projects such as the rehabilitation of a historic Roman aqueduct, which supports irrigation and helps expand urban greenery. By combining nature-based solutions, digital mobility tools, and small-scale public space interventions, Athens aims to improve climate resilience while promoting walkable, people-centered urban mobility.

RELEVANT DATA

45°C	2021	10+
PEAK SUMMER TEMPERATURES ADDRESSED	COOLING ROUTES APP LAUNCHED	POCKET PARKS ("COOLING HAVENS") CREATED

KEY INFORMATION

- Pocket parks as "cooling havens" in dense areas
- Nature-based + digital tools for heat resilience
- Shaded walking routes connecting key destinations
- Tree-lined streets, water features, reflective surfaces



Autonomous On-Demand Shuttles

📍 Hamburg, Germany · 2019–present

HOCHBAHN, Hamburg Senate, autonomous vehicle partners

ETD HI ID PPR | Innovation & Data | Climate & Green | Gender & Inclusion

Hamburg is testing autonomous on-demand shuttle services as part of its strategy to develop the future of integrated and sustainable urban mobility. Led by Hamburger Hochbahn AG, the project explores how self-driving electric minibuses can complement existing public transport networks by providing flexible first- and last-mile connections.

The autonomous vehicles operate on predefined routes or respond to on-demand ride requests through digital booking platforms. The initiative builds on the HEAT (Hamburg Electric Autonomous Transportation) pilot, which tested driverless electric buses in the HafenCity district. The shuttles are equipped with advanced sensors, cameras, and artificial intelligence systems that enable them to detect obstacles, navigate streets, and operate safely in mixed traffic environments.

By integrating autonomous technology with public transport systems, Hamburg aims to improve accessibility in areas underserved by conventional bus routes while reducing emissions through electric mobility. The project demonstrates how automated and shared mobility services could reshape urban transport networks and enhance multimodal connectivity in future smart cities.

RELEVANT DATA

10	2019	100%
PASSENGERS PER AUTONOMOUS SHUTTLE	HEAT PILOT LAUNCH IN HAFENCITY	ELECTRIC ZERO-EMISSION FLEET

KEY INFORMATION

- Tested in HafenCity innovation district
- On-demand ride requests via digital platform
- First/last-mile connection to public transport
- Self-driving electric zero-emission minibuses

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