

**About AECOM**

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivaled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a *Fortune 500* firm and its Professional Services business had revenue of \$13.3 billion in fiscal year 2021. See how we are delivering sustainable legacies for generations to come at [aecom.com](http://aecom.com) and [@AECOM](https://twitter.com/AECOM).

# Accelerating passenger service

Bus Rapid Transit



Printed on recycled paper.

©2022 AECOM. All Rights Reserved.



Cover:  
**UTA/UDOT Provo-Orem  
 Transportation Improvement  
 Project, Utah County, Utah**

Opposite:  
**MBTA Silver Line, Boston,  
 Massachusetts**

## AECOM's Expertise in Electrification and BRT

Bus fleets across the country are electrifying rapidly. In California, all buses purchased in the state are required to be electric by 2030, and it is expected that all municipal bus fleets will be electric by 2040. AECOM is experienced and qualified in helping our clients retrofit existing BRT projects to support battery electric buses and electric charging infrastructure. Additionally, we are skilled at supporting transit agencies across North America in constructing new BRT lines with electrification in mind. BRT electrification reduces air and noise pollution and eliminates greenhouse gas emissions, advancing local, state, and national climate and equity targets. For example, AECOM is leading efforts to retrofit four bus facilities to accommodate over 500 new electric buses. Working closely with LADOT and the Los Angeles Department of Water and Power (LADWP) we are designing charging infrastructure for the buses, coordinating the facilities' integration, and developing smart solutions to reduce costs of fleet infrastructure conversion. Each facility anticipates about eight megawatts of new demand and will require coordination, collaboration, and innovation to develop an effective electric transit ecosystem.

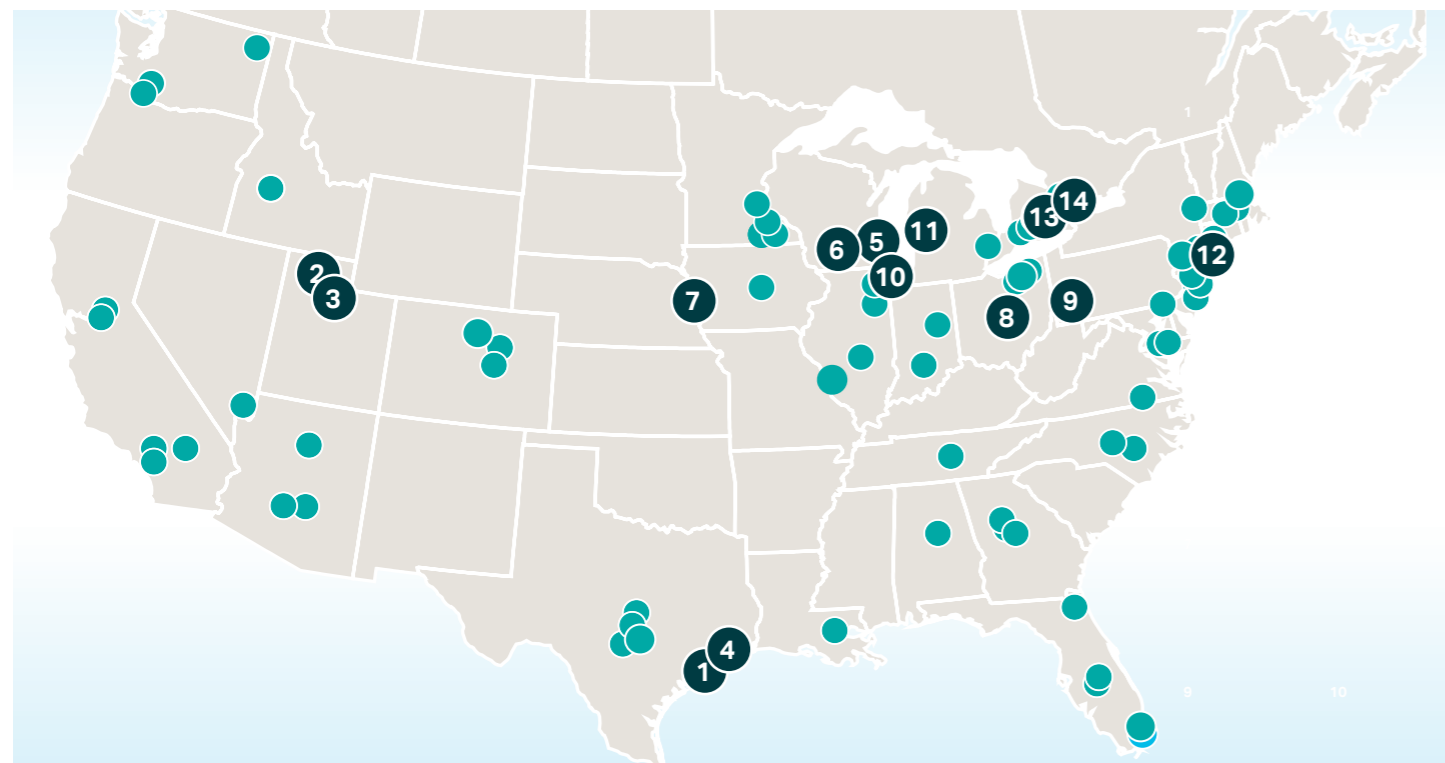
**LADOT Transit Zero-Emission  
 Bus Rollout Plan,  
 Los Angeles, California**

## AECOM's Sustainable Legacies and BRT Projects

AECOM is a committed partner for designing, engineering, and program management for BRT projects across North America. BRT is a key tool for AECOM to advance our environmental, social, and governance (ESG) goals through the sustainable legacies program. We help our clients reduce carbon emissions on bus service with battery electric buses and electric charging infrastructure for BRT projects. Our BRT projects help agencies reduce noise and air pollution for surrounding residents while improving the quality of service, advancing our social equity goals for cities in North America. BRT projects can be delivered quickly and cost-effectively, while creating cities that are more resilient to climate change and



Representative projects continued



As the leader in BRT system planning and design, AECOM has more than US\$1 billion of operating BRT projects in North America.

- |  |   |  |   |
|--|---|--|---|
| <p><b>Alabama</b></p> <ul style="list-style-type: none"> <li>-Downtown Circulator, Birmingham</li> <li>-US 280 Corridor, Birmingham</li> </ul> <p><b>Arizona</b></p> <ul style="list-style-type: none"> <li>-35th Ave BRT, Phoenix</li> <li>-Mountain Line (NAIPTA), Flagstaff</li> <li>-Rural Road LINK, Scottsdale</li> <li>-I-10 BRT West Concept, Phoenix</li> </ul> <p><b>California</b></p> <ul style="list-style-type: none"> <li>-Wilshire Corridor, Los Angeles</li> <li>-Orange Line, Los Angeles</li> <li>-Foothill Boulevard, San Bernardino</li> <li>-Line 51, Oakland</li> <li>-Alum Rock, Santa Clara</li> </ul> <p><b>Canada</b></p> <ul style="list-style-type: none"> <li>-Dundas Connects / Dundas Street BRT, Mississauga</li> <li>-West to Downtown BRT, Edmonton</li> <li>-BRT Workshop, Calgary</li> <li>-17th Avenue SE, Calgary</li> <li>-N-S Corridor, Hamilton</li> <li>-E-W and N-S, London</li> <li>-3 MetroLink, Nova Scotia</li> <li>-BRT Lines, Nova Scotia</li> <li>-BRT Program Management, Ottawa</li> <li>-Broadway/ UBC B-Line, Vancouver</li> <li>-York University Busway, York</li> <li>-Viva Next, York</li> <li>-Southwest Transitway, Winnipeg</li> </ul> <p><b>Colorado</b></p> <ul style="list-style-type: none"> <li>-MAX, Fort Collins</li> <li>-US-36, Denver-Boulder</li> <li>-US 287 BRT, Boulder</li> </ul> <p><b>Connecticut</b></p> <ul style="list-style-type: none"> <li>-CTfastrak, Hartford-New Britain</li> </ul> <p><b>District of Columbia</b></p> <ul style="list-style-type: none"> <li>-Georgia Avenue Express Bus, Washington, DC</li> <li>-K Street Circulator, Washington, DC</li> <li>-Arlington/Alexandria Crystal City-Potomac Yard Transitway,</li> </ul> | <ul style="list-style-type: none"> <li>Washington, DC</li> <li>- Alexandria West End Transit Way, Washington, DC</li> <li>- Fairfax County Route 1 Transitway, Washington, DC</li> <li>- Dulles Corridor, Washington DC</li> </ul> <p><b>Florida</b></p> <ul style="list-style-type: none"> <li>-South Corridor Rapid Transit, Miami-Dade County</li> <li>-Rapid Transit System Plan, Jacksonville</li> <li>-Southwest Corridor, Jacksonville</li> <li>-LYMMO, Orlando</li> <li>-I-Drive Circulator &amp; Corridor, Orange County</li> </ul> <p><b>Georgia</b></p> <ul style="list-style-type: none"> <li>-I-20 East, Atlanta</li> <li>-Arterial, Atlanta</li> <li>-Clayton BRT, Atlanta</li> <li>-Revive 285, Atlanta</li> <li>-Southlake BRT, Atlanta</li> </ul> <p><b>Idaho</b></p> <ul style="list-style-type: none"> <li>-State Street, Boise</li> </ul> <p><b>Illinois</b></p> <ul style="list-style-type: none"> <li>-Central Loop, Chicago</li> <li>-Jeffery Boulevard, Chicago</li> <li>-Ashland Avenue, Chicago</li> <li>-ART Implementation Plan, Pace Suburban Bus, Northeastern Illinois</li> <li>-Regional TSP Implementation Plan, Pace Suburban Bus, Northeastern Illinois</li> <li>-MTD, Champaign-Urbana</li> </ul> <p><b>Indiana</b></p> <ul style="list-style-type: none"> <li>-Citilink, Fort Wayne</li> <li>-CityBus, Purdue University</li> </ul> <p><b>Iowa</b></p> <ul style="list-style-type: none"> <li>-CyRide, Ames</li> </ul> <p><b>Louisiana</b></p> <ul style="list-style-type: none"> <li>-Florida Boulevard, Baton Rouge</li> </ul> | <p><b>Maryland</b></p> <ul style="list-style-type: none"> <li>-US 29, Montgomery County</li> <li>-Corridor Cities Transitway, Montgomery County</li> <li>-MD 355 Montgomery County</li> <li>-Southern Maryland Rapid Transit</li> </ul> <p><b>Massachusetts</b></p> <ul style="list-style-type: none"> <li>-State Street/Boston Road, Springfield</li> <li>-Silver Line, Boston</li> </ul> <p><b>Michigan</b></p> <ul style="list-style-type: none"> <li>-Michigan Avenue, Detroit/Ann Arbor</li> <li>-Silver Line, Grand Rapids</li> <li>-Laker Line, Grand Rapids</li> </ul> <p><b>Minnesota</b></p> <ul style="list-style-type: none"> <li>-Riverview Corridor, Minneapolis/St. Paul</li> <li>-Red Line, Minneapolis/St. Paul</li> <li>-MARQ, Minneapolis/St. Paul</li> <li>-Nicolette Mall, Minneapolis/St. Paul</li> <li>-I-35 W, Minneapolis/St. Paul</li> </ul> <p><b>Missouri</b></p> <ul style="list-style-type: none"> <li>-Northside/Southside BRT Alternative</li> </ul> <p><b>Nebraska</b></p> <ul style="list-style-type: none"> <li>-ORBT, Omaha</li> </ul> <p><b>Nevada</b></p> <ul style="list-style-type: none"> <li>-Metro Bus Rapid Transit, Omaha</li> </ul> <p><b>New Jersey</b></p> <ul style="list-style-type: none"> <li>-Union County BRT</li> <li>-Monmouth County</li> <li>-Princeton</li> <li>-Route 1 Corridor, Central New Jersey</li> <li>-Route 571, Central New Jersey</li> </ul> <p><b>New York</b></p> <ul style="list-style-type: none"> <li>-Capital District Transportation Authority, Albany</li> <li>-Flushing/Jamaica, New York City</li> <li>-34th St, New York</li> <li>-Webster Avenue, Bronx</li> <li>-Utica Avenue, New York City</li> <li>-Nostrand Avenue, New York City</li> </ul> | <ul style="list-style-type: none"> <li>-LaGuardia/Manhattan, New York City</li> <li>-South Brooklyn</li> </ul> <p><b>North Carolina</b></p> <ul style="list-style-type: none"> <li>-Chapel Hill</li> <li>-NC54/I-40, Raleigh</li> </ul> <p><b>Ohio</b></p> <ul style="list-style-type: none"> <li>-East Main BRT, Columbus</li> <li>-Healthline, Cleveland</li> <li>-Thrive 105-93, Cleveland</li> <li>-West Broad BRT, Columbus</li> </ul> <p><b>Oregon</b></p> <ul style="list-style-type: none"> <li>-South Corridor, Portland</li> </ul> <p><b>Pennsylvania</b></p> <ul style="list-style-type: none"> <li>-Downtown-Uptown-Oakland BRT, Pittsburgh</li> </ul> <p><b>Tennessee</b></p> <ul style="list-style-type: none"> <li>-Amp, Nashville</li> </ul> <p><b>Texas</b></p> <ul style="list-style-type: none"> <li>-MetroRapid, Austin</li> <li>-University Line, Houston</li> <li>-Uptown BRT, Houston</li> <li>-VIA Primo, San Antonio</li> <li>-Waco BRT</li> </ul> <p><b>Utah</b></p> <ul style="list-style-type: none"> <li>-Davis / Salt Lake Community Connector</li> <li>-UVX, Utah County</li> <li>-OGX, Ogden</li> </ul> <p><b>Virginia</b></p> <ul style="list-style-type: none"> <li>-Norfolk</li> <li>-Envision Route 7, Fairfax County</li> <li>-Broad Street, Richmond</li> <li>-GRTC Pulse, Henrico County</li> </ul> <p><b>Washington</b></p> <ul style="list-style-type: none"> <li>-East Sprague, Spokane</li> <li>-Fourth Plain, Vancouver</li> </ul> <p><b>Wisconsin</b></p> <ul style="list-style-type: none"> <li>-East-West BRT, Milwaukee</li> <li>-East-West BRT, Madison</li> </ul> |
|--|---|--|---|

## National BRT advisors

Bus Rapid Transit (BRT) is the fastest growing mode of public transportation. BRT offers a distinct combination of reliability and flexibility that makes it an effective solution to meet transit demands in a wide range of urban and suburban settings. As a lower cost option to rail transit, many BRT lines throughout North America have exceeded expectations to increase ridership, enhance the transit experience, and drive economic development. Our extensive experience with BRT, along with our broad technical and project management expertise, makes us an effective partner in the planning and developing advanced bus systems such as BRT.

We have played an integral role in the development of some of the most innovative and successful BRT projects in the U.S.:

- Implementation of the nationally acclaimed HealthLine resulted in a 60 percent increase in ridership, 35 percent increase in operating speeds, and over \$10 billion in economic development
- led the development of New York City's "Select Bus Service" (SBS), a unique brand of enhanced bus operation. By converting existing bus lines to SBS, City bus lines experienced 10-15 percent increases in operating speed and up to 20 percent increases in ridership
- served as the lead designer for the fully dedicated,

14-mile, \$349 million Orange Line (now known as the G Line) for Los Angeles County

Our hands-on experience in BRT development is nationally recognized, having served as the Federal Transit Administration's technical support advisor for the national BRT Initiative Program. In this capacity, we assisted in developing transit industry guidance on individual BRT elements and identifying the range of impacts these elements have on ridership, costs, operating capacity, environment and economic development. Our BRT professionals were engaged by the National Bus Rapid Transit Institute at the University of South Florida to provide technical assistance in updating *Characteristics of Bus Rapid Transit for Decision-Making*. This key reference tool for planners and decision makers supports evaluation of BRT concepts as one of many options during initial project planning and development. We are also part of the American Public Transportation Association (APTA) Committee that updates the Recommended Practices for BRT Design.

Our staff have planned, designed, financed, constructed and operated a wide variety of BRT systems that all offer service that is **Fast, Simple, Safe and First Class**.



CTA Loop Link, Chicago, Illinois



Clockwise, from top:

**The Rapid Silver Line BRT**, Grand Rapids, Michigan

**LA Metro Orange Line BRT**, Los Angeles, California

**UTA/UDOT Utah Valley Express (UVX) BRT**, Utah County, Utah

## BRT development

BRT systems have the flexibility to be integrated into the current urban or suburban environment and can be implemented incrementally in different settings including dedicated busways, freeway rights-of-way and city streets. As a low-cost option to rail, it is essential to consider the potential for modifications and enhancements to existing services, new bus routes and a variety of other services.

We approach every planning study as a unique assignment, understanding its context within the local environment. Our planning professionals have performed more than 50 BRT studies, and aided in design and implementation of BRT in more than 30 cities across North America. Working closely with operators, governing agencies and the public, we identify the existing problems, and then define and build the best solutions to meet the needs of your town, city or region.

When considering BRT, there are a number of innovative options for running ways and corridors, stations and vehicles, fare collection and operations, transit signal prioritization and branding. The proper application of these elements is critical to finding the right solution for the right corridor. In fact, we serve as general engineering consultant for Houston's University Corridor BRT project, called METRORapid University Line. This planned 25-mile University Corridor will enhance service and connections to the METRORail light-rail lines. Once complete, the METRORapid University Line will be the longest contiguous BRT system in the U.S.

This is just one example of our commitment to providing clients with a cost-effective, innovative transit investment that can increase transit ridership, as well as the vitality of a community.

**9 Downtown-Uptown-Oakland BRT**, Pittsburgh, Pennsylvania—AECOM completed 60% design in 2019 on the 7.1-mile BRT Core corridor, connecting to the existing 4.3-mile East Busway with dedicated bus lanes. AECOM provided final design services and coordinated utility betterments and relocations through 2022. AECOM will provide construction phase design services as the BRT project is anticipated to begin construction in 2023 with 23 stations, bike lanes along the BRT Core, transit signal priority throughout the corridor, and 15 battery electric articulated buses.



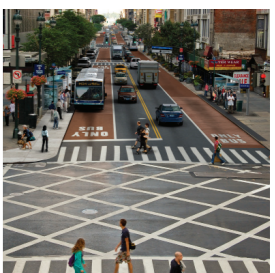
**10 Loop Link**, Chicago, Illinois—We led the development from initial conception through final design of a next generation BRT facility across the center of the Downtown Chicago Loop to link Union Station and Ogilvie Transportation Center to the Lakefront, Navy Pier, and Michigan Avenue. This project became known as the "Central Loop BRT" and was ultimately branded as the "Loop Link".



**11 Grand Rapids Silver Line BRT**, Grand Rapids, Kentwood, Wyoming, Michigan—We were the primary urban design consultant as part of the team developing the 9.6-mile BRT project located on Division Avenue in the Cities of Grand Rapids and Kentwood, Wyoming. This included assisting in prep of the Alternatives Analysis, the FTA Small Starts application (the first in the U.S.) and Environmental Assessment. Our team was also responsible for design of numerous aspects of the Silver Line's 33 stations as well as hardscape pavement design, platform snowmelt, landscaping and planting beds, electrical infrastructure design and utility relocation designs for water services.



**12 34th Street Transitway**, New York City, New York—Commissioned by the New York City Department of Transportation to develop and visualize conceptual designs of a BRT Transitway on Manhattan's 34th Street, by way of renderings and 3D-animations. Our BRT professionals refined these concepts, performed a FTA compliant Alternative Analysis, developed conceptual alignment plans and assembled Environmental Clearance documentation (CatEx). Accommodations were made throughout the transitway for local bus separate from BRT.



**13 Dundas BRT**, Hamilton, Burlington, Oakville, Mississauga, and Toronto, Canada—Metrolinx and the City of Mississauga chose AECOM to lead preliminary design, preliminary design business case, and the transit project assessment process for the 30-mile BRT project connecting four cities within the Greater Toronto Area. The Dundas BRT project includes widening the street to accommodate BRT lanes, cycling facilities, wider sidewalks, and amenity space along the corridor. Curbside and median BRT lanes are being considered for this project and is in the preliminary design stage.



**14 VIVA BRT**, Toronto, Ontario—This award-winning project is being designed as a new high-end BRT system, convertible to light rail, that interfaces with Toronto's subway system and other transit agencies operating within the Greater Toronto Area. The initial \$150-million quick-start program installed baseline BRT services and stations in all four corridors. We provide overall project and program management, financial management, and detailed design services including roadway design, structural design, and transit architectural services. Phased implementation of vivaNext is ongoing.



**MDC South Corridor Rapid Transit**, Miami-Dade County, Florida



## Representative projects

**1 University Corridor BRT,** Houston, Texas—As the engineering lead, AECOM provides project management and preliminary engineering services for the Metropolitan Transit Authority of Harris County's University Corridor BRT. The new transit line will be the longest contiguous BRT line in the US at 25.3-miles, connecting to the METRO Rail Red, Purple, and Green LRT lines. Our work plan revolves around five key segment leads, modeled on past successful BRT projects around the country. As part of this scope, AECOM also drafted BRT Design Criteria for use throughout the service area.



**2 Ogden Express (OGX) BRT,** Ogden, Utah—As lead designer for the OGX project, AECOM manages key roles including overall project roadway design, transit design, drainage design management roles, project geotechnical analysis, and pavement design. The 5.3-mile corridor utilizes a combination of both dedicated bus lanes and mixed traffic running BRT. AECOM is coordinating with UTA on the design of the electric vehicle charging stations for battery electric buses, as well as the installation of pre-cast canopy columns.



**3 Utah Valley Express (UVX) BRT,** Utah County, Utah—Retained as the lead design firm for this UTA/UDOT project that services a corridor along two of the most highly traveled arterial roadways in Utah. UVX includes dedicated bus and BAT lanes, additional general purpose traffic lanes, bike lanes, sidewalks and trail connections. The 10.5-mile long BRT line includes 21 station platforms with level boarding, signal prioritization technology, platform canopies, off-board fare collection, and other amenities to create a system that provides fast, reliable service.



**4 Silver Line Uptown BRT,** Houston, Texas—AECOM provided project management support for the 10 station, 4.7-mile BRT project for Houston Metro. The \$177.5-million BRT line utilizes articulated buses along dedicated bus lanes connecting the Northwest and Lower Uptown Transit Centers. Our involvement included a review of construction documents, day-to-day coordination between agencies, system integration and testing, assembly of a master construction schedule, and implementation of bus operations strategy for revenue service. The Silver Line BRT opened in August 2020.



**5 East-West Bus Rapid Transit,** Milwaukee, Wisconsin—Lead for feasibility study and final design to implement transit investment in the seven-mile corridor connecting major employment and activity centers between downtown Milwaukee, the Milwaukee Regional Medical Center, and Milwaukee County Research Park. The study followed a three-tier evaluation process that led to the identification of a BRT Locally Preferred Alternative (LPA) that meets the project's purpose and needs, and was also competitive for consideration of federal funding. AECOM provides construction phase design support, including certification and commissioning for revenue service in 2023.



**6 Madison East-West BRT,** Madison, Wisconsin—AECOM led a 24-month study through advanced planning, conceptual design, selection of a Locally Preferred Alternative, entry into the Small Starts Project Development pipeline, and a NEPA class of action request for City of Madison Metro Transit US\$160 million BRT project. The project includes 8.2 miles of exclusive bus lanes utilizing 60-foot electric buses. We completed 60% design in 2021 and final design in 2022. AECOM supports the City to deliver revenue service anticipated in 2024.



**7 Omaha Rapid Bus Transit (ORBT),** Omaha, Nebraska—Metro Transit selected our team for the final design and construction services phase of ORBT, a service that operates with 10-minute frequencies during peak times. Twenty-four raised platforms have been integrated into the Dodge Street urban arterial corridor through 59 signalized intersections. Business Access Transit (BAT) lanes provide the downtown advantage on the one-way pair of Dodge and Douglas. We worked with the City of Omaha to coordinate adaptive signals with Traffic Signal Priority (TSP) and queue jumps to give BRT vehicles priority passage outside the downtown core.



**8 Columbus East-West BRT,** Columbus, Ohio—Central Ohio Transit Authority chose AECOM to conduct the study for the High-Capacity Transit Alternatives for the East-West corridor within Franklin County. The 20-mile-long corridor was broken into three East-West alignments pursuing Small Starts funding, a faster and less intensive process compared to designing one project under New Starts. AECOM is advancing the West Broad and East Main corridors into the 30% design phase and was awarded Program Management of the East-West High-Capacity Transit corridor.



## BRT for everyone

Our toolbox of transit strategies can address any challenge. Whether you require full system implementation or modulated services, we can tailor a scalable design that fits your immediate needs and allows for growth as ridership increases.



assembled from the BRT toolbox (shown below). The conceptual design alternatives are then evaluated in relation to one another, based on a quantitative analysis using available data or a qualitative assessment of their ability to fulfill each objective.

**Assess the "fit" of the preferred alternative.** Every project is unique. To be successful, the project must be viewed in the full context of its physical and economic environment. The ultimate goal is to help build better and more successful communities.

**Advance from principle to practice.** Our team has applied its BRT planning and design expertise in many diverse urban and suburban environments with great success. The following case study is just one example of how we can help you find the right BRT enhancements to meet your needs.

**Relate corridor-specific transportation issues to the potential service options.** An early identification of existing transportation problems is essential for the preferred service option corridor. Design alternatives can then be developed that specifically target solutions to these problems and enforce the successful integration of the priority service.

**Provide context-sensitive alternative screening.** The purpose of a technical screening process is to ensure that design decisions align with the specific objectives of the project across all five primary categories of a typical BRT corridor (as depicted above).

The screening analysis includes a comprehensive range of criteria to reflect the multi-modal character of a corridor. We have found this approach to be very effective in guiding the design process, and conveying the advantages and disadvantages of each alternative to stakeholders and the public.

**Develop concepts, evaluate and select a preferred design.** Utilizing the project objectives, the conceptual designs are

BRT Toolbox			
Operational Improvements	Dedicated Bus Lane and Bus Lane Enforcement		
	Transit Signal Priority and Queue Jumps		
	Wider Station Spacing		
	Off-Board Fare Collection and Multi-Door Boarding		
Customer Amenities	Enhanced Stations		
	Real-Time Information		
	Multi-Door/Level Boarding		
	Rapid Transit Vehicles/Branding		
	Corridor Fit	BRT's Function	Development Potential
Design Considerations	Community features	Users, ridership, transfers	Underutilized land
	Existing and future land use	Pedestrian and bicycle access	Transit-oriented development
	Right-of-way constraints	Station amenities, ADA requirements	Potential for higher densities
	Utility accommodations	Public art potential	Existing and future activity centers

# 7 Basics of Bus Rapid Transit

Transportation Efficiency • Economic Development • Safety Improvements • Environmental Sustainability

## 1 RUNNING WAYS

Options range from BRT in mixed traffic to dedicated side or center lane.

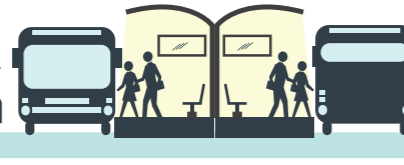


Examples of BRT runningways include center running (left) and side running (right)



High-frequency bus service minimizes passenger wait time.

Security and safety will be increased through lighting or monitoring features.



## 2 STATIONS

Stations will include fare ticketing machines, covered-waiting areas, level boarding, and real-time transit information.

Dedicated lanes give buses uninterrupted travel, increasing reliability.

Streetscaping, pedestrian amenities, and bicycle facilities promote healthy lifestyles.



## 3 VEHICLES

BRT vehicles may be 40' or 60' long to accommodate more riders, may include upgraded interiors, streamlined vehicle designs, and features like multi-door boarding and interior bike storage.



Making the shift to BRT buses helps reduce vehicle emissions and pollutants. Options for alternative fuel buses can also increase environmental sustainability.

Level boarding platforms and wider and additional doorways provide greater accessibility.



## 4 FARE COLLECTION

Fare payment will occur at BRT stations.



Cashless and automated systems eliminate on-board fare collection, reducing boarding times.

## 5 INTELLIGENT TRANSPORTATION SYSTEM (ITS)

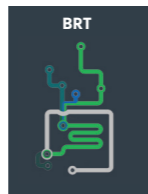
Technology is used to help improve system operation and passenger experience, including transit priority at intersections, real-time arrival information for waiting passengers, and safety and security enhancements.

Sophisticated traffic signal management can minimize delays and increase reliability by extending green signals for buses approaching an intersection.



## 6 SERVICE AND OPERATION PLAN

BRT routes are designed to efficiently connect riders with their destinations by optimizing routes, station locations, and service schedules to meet rider demand.

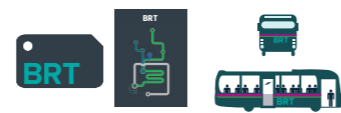


BRT systems generate permanent jobs in operations.



## 7 BRANDING

Unique name, color scheme, logo or other visual identifiers to differentiate BRT service from existing bus service.



Transit improvements can have a positive impact on property, such as increasing property value and supporting diverse types of development.



## AECOM's continued involvement with BRT projects throughout the years

PROJECT	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
G Line (aka Orange Line), Los Angeles, CA																												
HealthLine, Cleveland, OH																												
CTfastrak, Hartford, CT																												
Silver Line, Grand Rapids, MI																												
34th Street Transitway, New York, NY																												
Loop Link, Chicago, IL																												
Laker Line, Grand Rapids, MI																												
Milwaukee E-W BRT, Milwaukee, WI																												
UVX (Provo-Orem), Utah County, UT																												
Omaha Rapid Bus Transit, Omaha, NE																												
Ogden BRT, Utah County, UT																												
Madison E-W BRT, Madison, WI																												
Downtown-Uptown-Oakland BRT, Pittsburgh, PA																												
MetroLinx Dundas BRT, Toronto, ON, Canada																												
MetroLinx Dundas BRT, Toronto, ON, Canada																												



The Rapid Laker Line BRT, Grand Rapids, Michigan