AGIL®

Bus Rapid Transit

ST Engineering

Future-Ready Your City's Transport System

As cities grow, the need for reliable, affordable and sustainable mass transit increases. AGIL® Bus Rapid Transit (BRT) serves as a beacon of future-ready mobility, enhancing public transport capacity and delivering cost-effective, efficient and flexible transport for cities.

Combining the Best of Rail and Bus Systems

AGIL BRT is designed to offer higher capacity, better schedule reliability and more efficient services than standard bus systems. It also matches the speed and reliability of rail transit with lower capital and operating costs, and shorter implementation time.

Key Transport Modes For Different Cities' Needs

Transport Modes	Standard Bus	Bus Rapid Transit (BRT)	Light Rail Transit (LRT)	Metro Rail Transit (MRT)
Network Capacity (pphpd*)	3,000 – 7,000	9,000 – 30,000	12,000 – 30,000	>50,000
Schedule Reliability	Low-Medium	Medium-High	High	High
Capital Cost (cost per mile)	<1.0x	1.0x	2.5 – 4.0x	>12.0x
Operating Cost (cost per vehicle revenue mile)	Low	Low-Medium	High	Medium
Implementation time	<12mths	18 – 36mths	36 – 60mths	48 – 120mths

* Passengers per hour per direction.

Sources : Institute for Transportation & Development Policy (ITDP); EMBARQ; World Resources Institute (WRI); and Recent Developments in Bus Rapid Transit: A Review of the Literature (Taotao Deng & John D. Nelson).

Why is BRT Suitable For Your City?

Cost-effective and Shorter Time to Implement

BRT offers high-quality transit services with greater cost-savings and shorter implementation time compared to conventional light rail and metro solutions. Cities can realise the benefits of BRT at a fraction of the cost and time.

Flexible Deployment

BRT systems can be incrementally implemented, scaled and modified to meet evolving transport needs with minimal disruption and costly road changes. It can also serve as temporary routes for swift adaptation to changing land use, and integration with building infrastructures.

Highly Reliable

BRT offers highly reliable transport with consistent schedules and service frequency, supported by dedicated lanes and priority signalling. It improves predictability of bus arrivals and reduces waiting and travel time for commuters.

Sustainable Public Transport

With separate lanes from mixed traffic, BRT allows buses to bypass congested roads, reducing frequent bus start-stop cycles and increasing average bus speeds on the road. This leads to reduced carbon emissions and contributes to a cleaner and more sustainable transport ecosystem, especially when electric buses are utilised.

Shared Infrastructure

Unlike rail infrastructures, BRT bus stations can also serve regular buses. BRT buses can co-share existing road infrastructure with other vehicles, optimising limited road capacity and resources.

Full Suite of AGIL BRT Solutions

Integrated, Modular, Scalable

We offer over **30** years of experience deploying more than **400** mobility projects in over **90** cities worldwide.

Integrated Operations Control Centre

- Real-time monitoring and control of BRT operations
- Full integration with traffic management systems
- Centralised security and incident response

Comprehensive Depot Management

- Fleet maintenance system
- Electric bus charging management system

Integrated Smart Traffic Junction

- Priority signalling for BRT fleet
- Optimised mixed-traffic management with AI

Real-time Passenger Information

- Interactive display at stations and on buses
- Mobile app information and route planning

Commuter-centric Bus Station

- Enhanced amenities and wheelchair accessibility
- All-weather platform screen doors for enhanced safety and security
- Integrated security and emergency communication

Advanced Fleet Management

- Real-time monitoring, scheduling and management of BRT fleets
- Manage multiple types of vehicle fleets
- Predictive maintenance

Seamless Fare Collection and Ticketing

- On-board and off-board fare collection
- Open and closed loop payment modes
- Account-based ticketing

Driver and Commuter Safety

- Advanced Driver Assistance Systems (ADAS)
- Vision-based analytics systems

One-Stop
BRT Solutions Provider

We provide a one-stop consultancy service and turnkey project management to help cities through every stage of BRT design and implementation.

From initial planning and feasibility studies to system design, deployment, operations and maintenance, our experience in leading and managing a consortia comprising multiple parties and global partners contributes to the success of BRT projects.

Consultancy and Project Management

Feasibility Study

Detailed Designs

Construction and Installation

Vehicle and System Supply

Testing and Commissioning

Operations and Maintenance

Reliable, Trusted and Proven

Global Mobility Partner

ST Engineering's deep domain experience in managing large-scale mobility projects is benchmarked against global standards, meeting the stringent needs of cities, municipalities, transport agencies and public transport operators.

Whether it is a green field deployment, brownfield implementation or setting up of last-mile connectivity for cities, our team of domain and solution experts, engineers and project managers is committed to delivering a BRT system that meets the transport needs of cities and enhances connectivity, liveability and sustainability, improving quality of life for residents.

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