t4ma.org @T4MASS (413) 367-T4MA info@t4ma.org

Fact Sheet: Bus Rapid Transit

Cost-Effective, High-Quality, Public Transportation

What Can Make Riding the Bus Better? Bus Rapid Transit!

- Bus rapid transit ("BRT") is a public transit system that is designed to increase capacity, comfort, speed, and reliability of buses by separating them from other vehicles on the road. This makes riding a bus comparable to using a light rail system, like the MBTA's Green Line.
- Buses can be a highly cost-efficient, flexible way to move many people quickly and efficiently—if they are part of a well-designed system. Poor system design has given buses an unfortunate reputation of being slow, overcrowded, and unreliable. BRT designs can increase bus frequency, thereby providing increased service with the same number of buses since the buses are not stuck in traffic.

Bus Rapid Transit Features

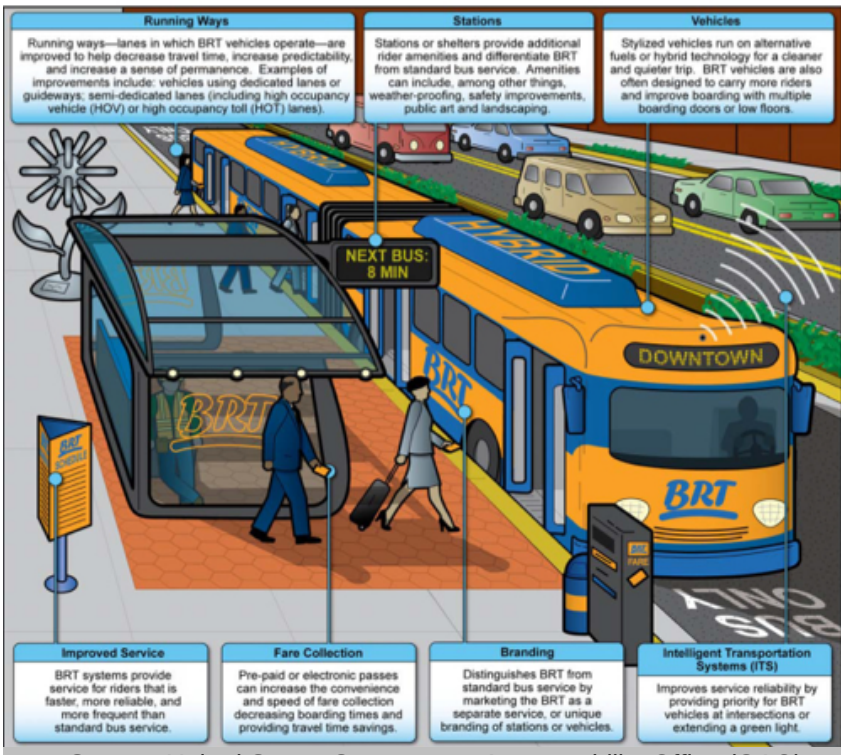
1. Dedicated Road Space: Separated bus lanes ensure that buses move quickly, separated from congested traffic.

2. Busway Alignment: Bus lanes lie either in the center of a roadway, or another designated, separated lane to minimize conflicts with traffic.

3. Off-board Fare Payment: Riders pay fares in advance with "proof-of-payment" systems to reduce boarding times and speed up average speeds for shorter trips.

4. Priority at Intersections: Giving BRT the green light, such as prohibiting turns across bus lanes and extending green lights for approaching buses, reduces time spent waiting at intersections.

5. Level Boarding: Providing a bus stop that is level with the floor of the vehicle by eliminating both vertical steps and horizontal gaps improves accessibility and reduces boarding time for all riders.



Source: United States Government Accountability Office (GAO)

Which Cities Have BRT, and How is it Working?

- While 36 BRT corridors exist in the US as of September 2018, the Institute for Transportation and Development Policy (ITDP) recognizes only seven US cities as having "BRT standard systems": Albuquerque, NM; Cleveland, OH; Eugene, OR; Hartford, CT; Las Vegas, NV; Pittsburgh, PA; and Los Angeles, CA.
- All the above systems received Bronze ratings, aside from Hartford and Albuquerque, which received Silver and Gold, respectively. Several other US cities have BRT corridors, including Boston and New York City, but they don't yet meet the ITDP recommended standards to realize the full benefits of BRT.

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Successful Example: Albuquerque Rapid Transit

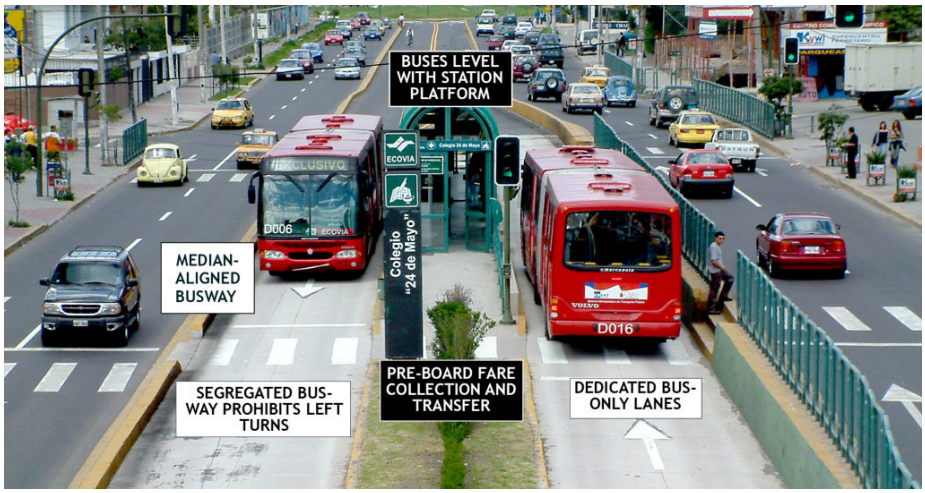
Albuquerque Rapid Transit, launched in November 2017 along Central Avenue and a portion of Route 66, was the first BRT system in the US to receive the ITDP Gold Standard for design. It includes more than 6.3 miles with exclusive lanes, busway alignment in the center of the road, traffic signal priority, off-board fare payment collection, level-platform boarding, and electric buses. Albuquerque Rapid Transit promises to improve travel time by 15% and on-time performance by 20-25%.

Albuquerque Gold Standard BRT

Unsuccessful Example: MBTA Silver Line

Although the MBTA's Silver Line was originally designed as a BRT system, it is missing key features that ensure quality service. Some of these features include high-level boarding platforms, off-vehicle fare collection, transit signal priority, and enforced exclusive bus lanes, which means the Silver Line is often affected by traffic congestion. The Silver Line runs through the Boston neighborhoods of Roxbury, the South End, and Seaport, with recent extension to Chelsea and East Boston.

MBTA's Silver Line



Challenge: "BRT Creep"

BRT systems fail by falling victim to "BRT Creep." Creep happens with cost-cutting measures and political pressure, such as a shared right-of-way or non-dedicated lanes, affect the system's frequency, time savings, and overall distinction between BRT and regular bus service. The present-day Silver Line suffers from BRT Creep, and is therefore not considered to be "true" BRT by ITDP standards, although these problems are solvable.

Spotlight: Off-Board Fare Collection in New York City

One of the most effective ways to reduce "dwell time," or time needed to board and de-board riders, is off-board fare collection, as with New York's Select Bus Service ("SBS"). Launched in 2009, SBS reduced its per-rider dwell time by nearly 50% as compared to non-SBS services. This led to a significant increase in ridership on four SBS bus routes. These routes rely on proof-of-payment through random on-board receipt inspection by transit police, which has reduced overall fare evasion on SBS routes.

NYC Select Bus Service

ITDP.org | **BostonBRT.org** | **TransitMatters.org**

tinyurl.com/theBRTstandard | **t4ma.org/agenda** | **livablestreets.info/transitpriority**

Published: 5/25/18