



## BUS RAPID TRANSIT (BRT)



**More Information:** [tti.tamu.edu/policy/how-to-fix-congestion](http://tti.tamu.edu/policy/how-to-fix-congestion)

### Description

Bus rapid transit (BRT) combines the advantages of traditional bus systems and light-rail systems. BRT preserves the flexibility and lower cost of fixed bus routes, but has improved efficiency and other amenities like light rail. BRT routes run at a higher frequency than other bus routes, making BRT a competitive alternative and attractive to riders.

### Target Market

BRT typically operates within an urban core and connects nearby suburbs. In large cities, BRT complements existing transit service and serves as a substitute for costly rail service. For many suburban markets and medium-size cities, BRT serves as a high-capacity main line while other bus routes serve as feeders.

### How Will This Help?

- **Reduces travel time.** BRT saves time for both transit and road users in congested corridors.
- **Improves safety.** BRT reduces injuries and fatalities on BRT streets because it uses exclusive

lanes and has priority at intersections.

- **Improves air quality.** BRT reduces transportation-related carbon dioxide emissions by using clean and alternative vehicles.

### Implementation Issues

During the planning process, community willingness to support BRT is important to successful implementation. Planners must recognize and respond to community concerns at each stage in the process.

During implementation, agencies should carefully consider where to put exclusive bus lanes. Converting an existing lane to BRT may reduce the space available to general traffic, possibly worsening congestion (though some studies have shown this may not be the case).

Additionally, some BRT systems, referred to as rail-convertible BRT, are designed with the capability of being switched to a light-rail system. BRT facilities for these systems should be designed so that they can be easily converted.

### COST



### TIME



### IMPACT



### WHO



TRANSIT AGENCY/  
CITY

### HURDLES



PUBLIC SUPPORT  
& DESIGN

### SUCCESS STORIES

**In Austin, Texas,** the Capital Metropolitan Transportation Authority launched the agency's first BRT line, MetroRapid Route 801, in January 2014.



The BRT line saves Austin commuters **95,000 passenger hours per year** equaling **\$1.5 million in annual value of passenger time.**

**In Boston, Massachusetts,** the Massachusetts Bay Transportation Authority started the agency's first BRT line, the Silver Line, in July 2002.



Two years after implementing phase 1, **ridership increased over 30 percent.**

Twelve years later, the line has attracted over **\$750 million of development.**

