

# **LIGHT-RAIL TRANSIT (LRT)**



More Information: tti.tamu.edu/policy/how-to-fix-congestion

# Description

Light-rail transit (LRT) is rapid transit that operates electric-powered single cars or short trains on fixed rails. Light refers to lighter passenger capacity, not the physical weight of the vehicles. Today's LRT originates from traditional streetcar systems but is redesigned to run faster and carry more passengers over greater distances in a metropolitan area.

#### **Target Market**

LRT best provides quick and cost-effective service for interurban transportation in a metropolitan area. LRT service addresses a gap between local buses and heavy rail. LRT can flexibly carry large volumes of commuters to and from the city center with higher speeds than local buses and at a lower cost than heavy rail.

# **How Will This Help?**

 Provides cost-effective service on high-volume corridors. LRT has a higher capacity than buses (including bus rapid transit) and requires a significantly smaller investment than highways, heavy rail, and commuter rail.

- Provides greater flexibility in station location and routes than other rail systems.
- Promotes economic and land development along corridors and stations through improved access and mobility.
- Attracts more riders from other modes.
- Is environmentally friendly.

## **Implementation Issues**

LRT requires a large initial investment in infrastructure and generally cannot operate without government funding. Before a system can be self-sufficient, it requires subsidies from local, state, and federal sources (usually from sales taxes or grants) for a certain period of time. For LRT operating on existing local streets, transit agencies often provide street benches, additional shade, and amenities to attract local bicycle and pedestrian users to increase ridership.













## **SUCCESS STORIES**

## Dallas, Texas

Dallas Area Rapid Transit opened its first 20-mile starter line (the Red Line) in June 1996. Ridership quickly exceeded the agency's expectations and as of 2014:



#### Boston, Massachusetts

The Massachusetts Bay Transportation Authority's Green Line is the most heavily used light-rail line in the United States.



Most used line in the U.S. with 69 million annual ridership (as of 2014).





