

Summary of Transit Modes for Detailed Evaluation

Arterial Bus Rapid Transit (BRT)



Swift, Everett, WA
Local example: A Line BRT

“Arterial” meaning BRT operates on arterial roads or busy urban streets.

BRT is different from the local bus but similar to limited stop service

- BRT buses have their own look to differentiate these buses to waiting passengers
- High-frequency, limited stop service with fare collected at the station prior to boarding
- High-amenity stations for comfortable customer experience

Shared lanes, faster than local bus

- Operates typically within existing roadways with mixed traffic, but with operational advantages

Station spacing

- Typically one-eighth to one-half mile apart

Span of service

- All day
- Every 10 to 15 minutes most of the day

Dedicated BRT



Health Line, Cleveland, OH
Dedicated BRT in median--doors on both sides of bus
Local example: University of Minnesota transitway

Dedicated BRT uses specialized buses, has high-frequency, limited stop bus service with pre-boarding fare payment and high-amenity stations.

Dedicated lanes for bus traffic

- Makes for faster travel because buses are not delayed by traffic congestion
- BRT lane configurations in road right-of-way can be center-running lanes or curbside-running lanes

BRT lane configuration affects:

- Station locations: center stations or curbside stations
- Bus maneuvers into and out of station
- BRT vehicle specifications

Station spacing

- Typically one-half to one mile apart

Span of service

- All day
- Every 10 minutes during the peak period; 15 minutes during midday

Modern Streetcar



Portland, OR
No local examples

Modern Streetcar system elements include stations and amenities similar to those described for BRT. Modern Streetcar is smaller scale than LRT.

Shared right-of-way

- Embedded tracks that allow streetcar to operate in mixed traffic
- May have dedicated space within the roadway

Station spacing

- Typically one-eighth to one-half mile apart

Span of service

- Typically most of the day
- Every 7 to 15 minutes

Summary of Transit Modes for Detailed Evaluation

Light Rail Transit (LRT)



Twin Cities LRT

Local examples: Green Line and Blue Line

LRT in the Twin Cities hold two tracks and typically are not shared with other transportation modes except at at-grade crossings like intersections.

LRT in Twin Cities = dedicated right-of-way, such as:

- Former rail right-of-way
- Alongside freight tracks
- Along urban streets
- Exception: Green Line at East Bank Station

Station spacing

- One-half to one mile apart

Span of service

- All day
- Every 10 minutes during the peak period; 15 minutes during midday

Diesel Multiple Unit (DMU)



A-Train, Denton County, TX

No local examples

DMU system elements include those similar to LRT and require no overhead electric wires.

DMU operates in an dedicated right-of-way, such as:

- Former rail right-of-way
- Alongside freight tracks
- Shared with freight and passenger tracks
- Along urban streets

DMU can use existing freight tracks (“shared use”)

- “Shared use” governed by the Federal Railroad Administration (FRA) and the individual railroads
- Compare freight train volumes and frequency of transit service

Station spacing

- One-half to one mile apart

Span of service

- All day
- Every 10 minutes during the peak period; 15 minutes during midday

Hybrid Alternatives:

Intended definition of the RiverView Study:

- Would run in a combination of dedicated right-of-way and mixed traffic
- Strike a balance with various users of right-of-way

“Hybrid Bus”

Example system



Metro Orange Line, Los Angeles County, CA

Runs in dedicated guideway alongside urban streets, and in mixed traffic to Warner Center

“Hybrid Rail”

Example system



J Church, San Francisco, CA

Track transition between dedicated and mixed operations, shared right-of-way on Church Street, and tunnel in downtown