



Arterial BRT

Presented to the SH 7 Coalition
April 24, 2015

Types of BRT

- BRT exists on a “spectrum” with a range of possible categories/different definitions

Seattle RapidRide



“Rapid” or “BRT Lite”

Cleveland, Eugene,
Las Vegas



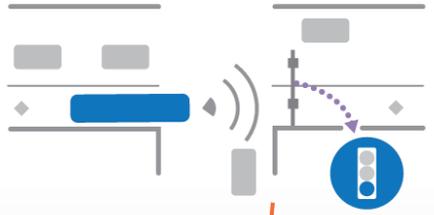
“Full-featured
arterial BRT”

Latin American,
East Asian examples



“Full BRT”

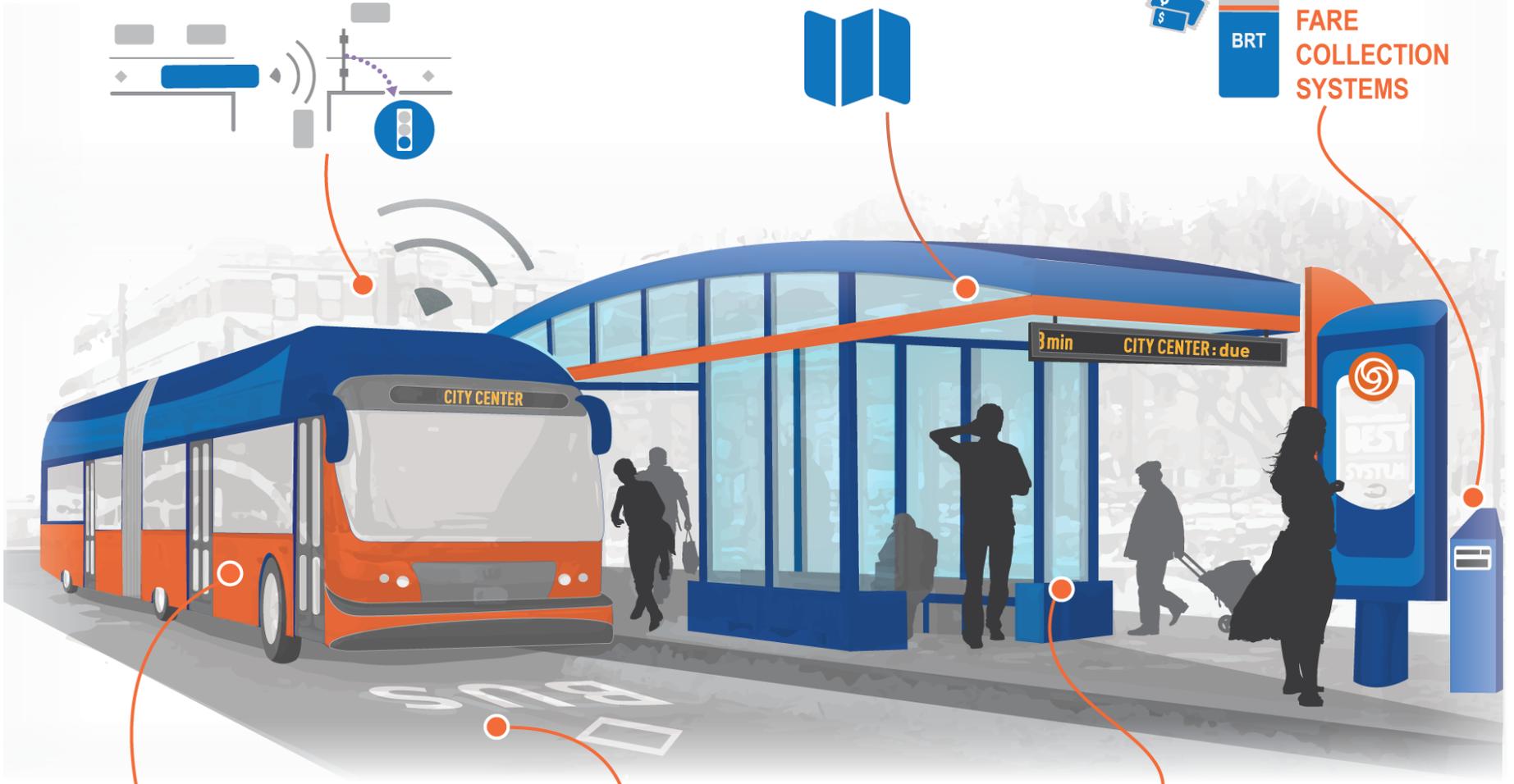
TRANSIT SIGNAL PRIORITY



BRT BRANDING



ENHANCED FARE COLLECTION SYSTEMS



SPECIALIZED VEHICLES



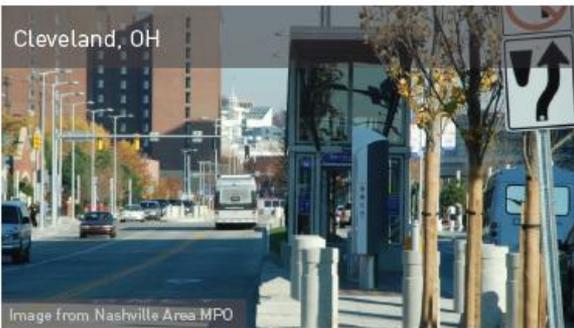
DEDICATED RUNNING WAYS



ENHANCED STATIONS



Center-Running BRT



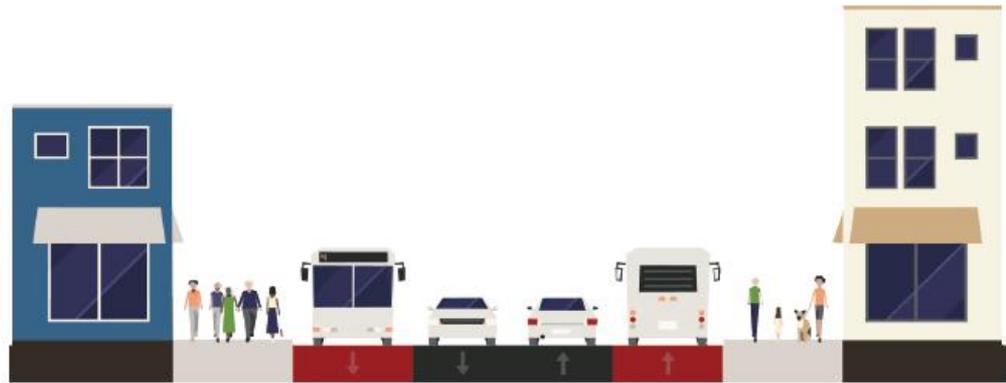
PROS:

- Traffic is never allowed in the bus lanes, and lanes may even be physically separated by curbs or medians.
- Both center lanes and stations on islands are highly visible, and there may be more room on platforms for shelters and other amenities.
- Stations can double as refuges for pedestrians crossing the street.

CONS:

- Island platforms require more space.
- Some left turns may be restricted.
- Passengers may not be comfortable waiting in the middle of the street.

Side-Running BRT



PROS:

- Stations can be on the sidewalk, which may be more comfortable for waiting passengers.
- Fewer left-turn restrictions may be necessary.
- The lane can double as a right-turn lane at intersections.

CONS:

- Buses must share the lane with cars and trucks turning right, slowing buses down.
- Side-running bus lanes are often used by regular buses, so the public may be less aware of BRT.
- Sidewalk stations are less visible than stations in the street.



BRT SYSTEM EXAMPLES

System Examples

Primarily Side-Running	Primarily Center-Running	Hybrid
New York, NY – XXX	Cleveland, OH - HealthLine	Salt Lake City - MAX
Boston, MA – Silver Line	San Francisco, CA – Van Ness*	Eugene, OR - EmX
San Francisco, CA – Geary*	Vancouver, BC – Richmond 98-B (Converted to LRT)	Seattle – Madison BRT*
Kansas City, MI – MAX		Las Vegas, NV - MAX
El Paso, TX – Brio		
Minneapolis, MN – Red Line		
Seattle, WA – RapidRide		
Snohomish County, WA - SWIFT		
San Jose, CA (VTA) – El Camino Real		

* Planned



PRIMARYLY SIDE-RUNNING BRT SERVICES

Community Transit

Swift BRT

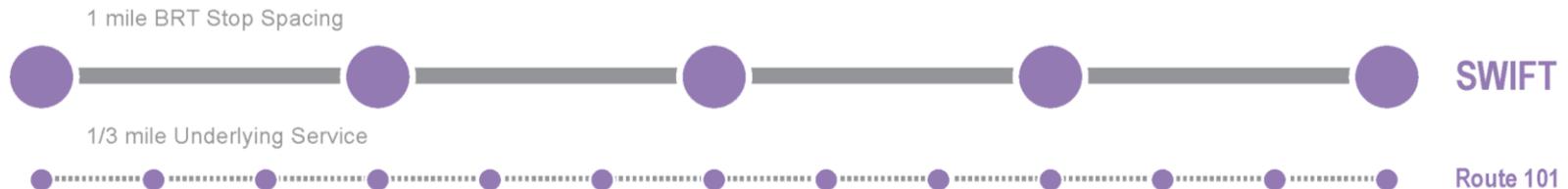
Snohomish County, WA

SWIFT at a glance:

- **17** miles long
- **1** mile average stop spacing
- **12** minute peak frequency
- **18** hours of weekday service
- **60** foot vehicles, all-door boarding
- **16** BRT station pairs



Service Design



KCATA MAX BRT

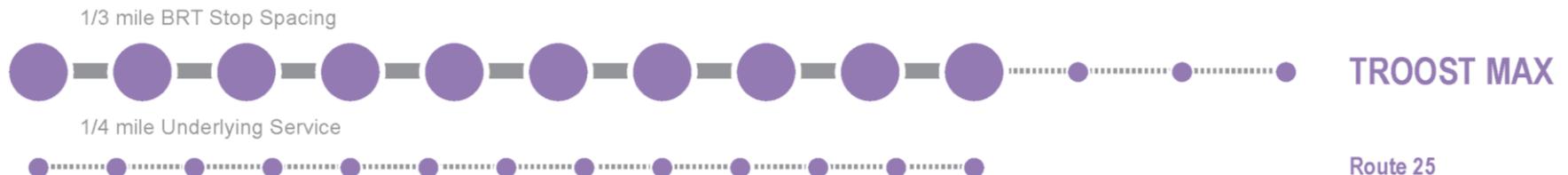
Kansas City, Missouri

MAX at a glance:

- **2 lines** Main St. (5.7 miles) and Troost Ave. (8.4 miles)
- **1/3** average stop spacing
- **10** minute peak frequency
- **21** hours of weekday service
- **40** foot vehicles, single-door boarding
- **24** station pairs (Main St.) and **28** station pairs (Troost Ave.)



Service Design



King County Metro

RapidRide BRT

King County, WA

RapidRide at a glance:

- **6 lines** and **64** total miles
- **1/2** mile average stop spacing
- **10** minute peak frequency
- **24** hours of weekday service
- **60** foot vehicles, all-door boarding
- **319** total stops and stations



Service Design

1/2 mile BRT Stop Spacing



Metro Transit

Red Line BRT

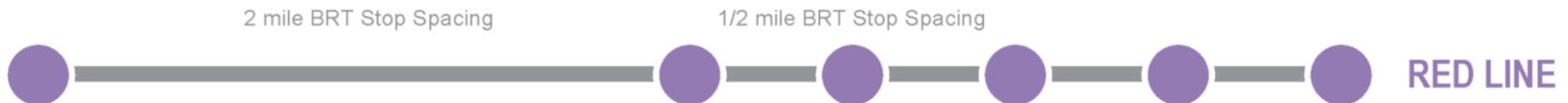
Minneapolis, MN

Red Line at a glance:

- **10** miles total length
- **1/2 – 2** mile stop spacing
- **15** minute headway, peak and off-peak
- **19.5** hours of weekday service
- **40** foot vehicles, all-door boarding
- **5** station pairs



Service Design



Sun Metro

Brio BRT

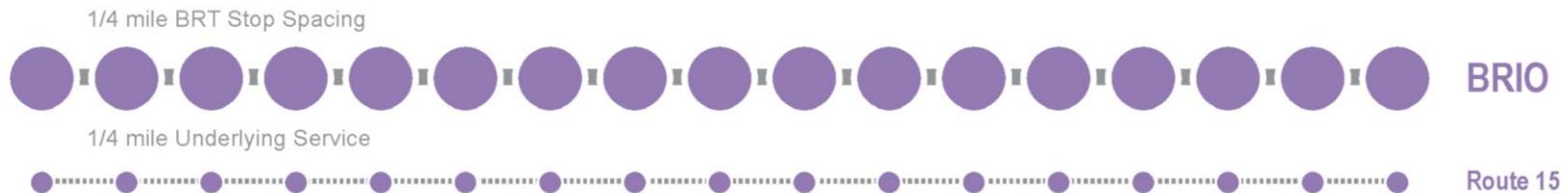
El Paso, TX

Brio at a glance:

- **8.8** miles total length
- **1/4 mile** average stop spacing
- **10** minute peak headways
- **14** hours of weekday service
- **60** foot vehicles, all-door boarding
- **14** station pairs



Service Design



San Jose – El Camino BRT

Before



With BRT and Bus-Only Lane



BRT Station Development + Land Uses





PRIMARILY CENTER-RUNNING BRT SERVICES

Cleveland - HealthLine





Oakland, CA – East Bay BRT







HYBRID

Eugene - EmX





Salt Lake City, UT – MAX



Las Vegas, NV – MAX BRT

- Center-running portion





TO SOUTH STRIP &
LV OUTLET CENTER

042

ONLY
BUS

ONLY
BUS

LIQUOR
STORE



Las Vegas, NV – MAX BRT

- Side-running portion





Questions