Bus Network Redesign: Design Principles

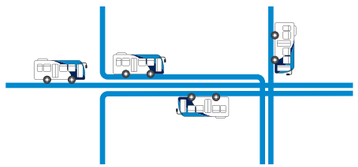
Project Goals

- Make Link BRT a Success
- Increase Transit Ridership
- Leverage Capital Investment in Bus Rapid Transit
- Design Transit Network around Design Principles
- Support Major Services and Travel Destinations
- Align with Long-term Growth Plans
- Prudent Use of Taxpayer Supported Resources

Today vs. Goal

Through public engagement, help determine how far towards the principles on the right of each graph the transit network should reflect in its design.

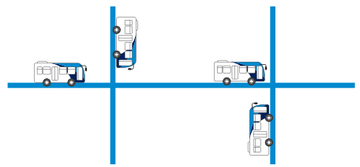
Service Duplication vs. Connective Network



4 Routes **4 Buses**

5.5 km routing

- Buses are spread over more routes and more route distance, resulting in lower frequency.
- Trips to some places at certain times are easy to do, but travel across the city or at different times is difficult.
- Fewer transfers are required.

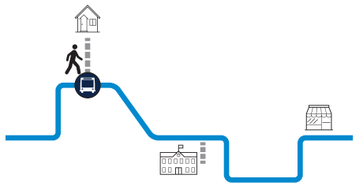


3 Routes **4 Buses**

3.0 km routing

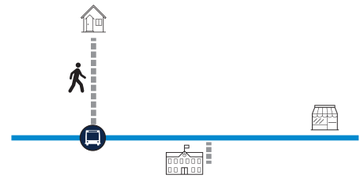
- Buses come more frequently with fewer routes and shorter routing.
- Getting around the city is easier, with more options for when you arrive, but some previously easy trips may take longer.
- Transfers may be required for some trips.

Circuitous Routing vs. Direct Routing



3km routing

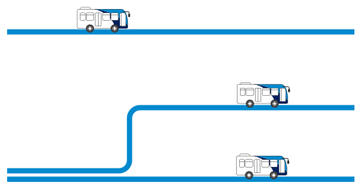
- Buses are less frequent because a route takes longer to complete.
- Customers spent more time on the bus because the route is longer.
- Customers have a shorter walk to a bus stop (less than 5 minutes).



2km routing

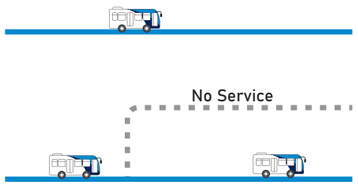
- Buses are more frequent because the route is faster to complete.
- Customers spend less time on the bus because the route is shorter.
- Some customers have a longer walk to a bus stop, but most are still within a short walk.
- Buses continue to travel close to places that generate high ridership.

Coverage-Oriented vs. Frequency-Oriented



3 Routes **3 Buses**

- Buses come less often as there are more routes that need to be served.
- Buses are slower as extra stops need to be added to minimize walk distances.
- Most customers have a shorter walk to a bus stop (<5 min), while many have even less walk distance (<3 min).



2 Routes **3 Buses**

- Buses come more often with fewer routes to serve.
- Buses get to your destination faster as there are fewer stops required along the way.
- Some customers have a longer walk distance to a stop (5-10 min), but most are still within a short walk (<5 min).

Peak Travel vs. All-Day Travel

- Serves customers travelling at only certain times of day.
- Disproportionate negative impacts for equity seeking groups.
- A car or other mode of transport may be required for trips at other times of day.

- Serves customers travelling at most times of day.
- Better meets the travel needs of equity seeking groups.
- Transit can be used for most trips, reducing the need to own a car or arrange other modes of transport.