Land Use and Transit Service

Members have asked for more information regarding the relationship between service, land use, and density. The next slides show the relationship between Metro's service types and the population density in the areas they serve. For the purposes of this analysis, we have defined low density as land that has less than seven people per acre. This land use is not generally transit supportive. Medium population density has been defined as land that has between eight and fourteen people per acre. This land use can typically support lower levels of transit service. High population density has been defined as land that has more than fifteen people per acre. This land use can typically support more frequent transit service.

> **Land Use and Service Types**: Maps of each of Metro's three service types in relationship to the population density. The High Ridership map shows that high ridership routes serve the areas of the highest population density. The local routes tend to be located on the fringes of the high population areas and tend to serve medium to low density areas. The commuter routes connect areas of low and medium density to the largest employment centers.

> **High Ridership Routes**: Shows an example of a high ridership route in each of the three subareas – Route 169 from the South, Route 271 from the East, and Route 28 from the West. The vertical lines represent the boardings and alightings that take place at each stop along the route. The shading indicates the density along the route. As can be seen from these three routes, the density along the route is medium to high and there are boardings consistently along the routes, particularly in activity centers.

> **Local Routes**: Shows an example of a local route in each of the three subareas – Route 155 from the South, Route 204 from the East, and Route 39 from the West. The vertical lines represent the boardings and alightings that take place along the route. The shading indicates the density along the route. As can be seen from these three routes, the density along the route is low to medium and there are low boardings along the majority of the routes. An exception is Route 39, which has a high number of boardings and alightings in Downtown Seattle. However, along the remainder of the route, the boardings and alightings are lower.

> **Commuter Routes**: Shows an example of a commuter route in each of the three subareas – Route 192 from the South, Route 257 from the East, and Route 77 from the West. The vertical lines represent the boardings and alightings that take place along the route. The shading indicates the density along the route. As can be seen from these three routes, there are areas of high boardings combined with stretches of the route that have few or no boardings. This is due to the fact that most of these routes connect two areas of activity, such as a park-and-ride and a Downtown core or urban center, without many interim stops.
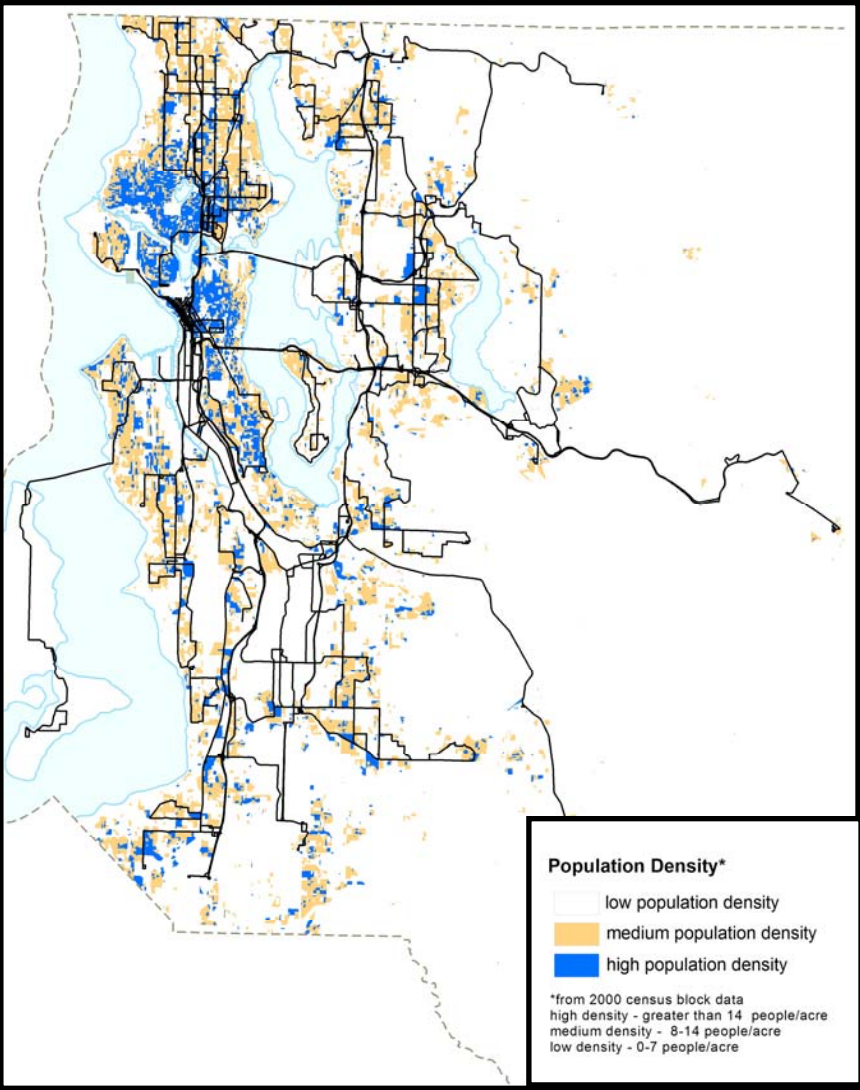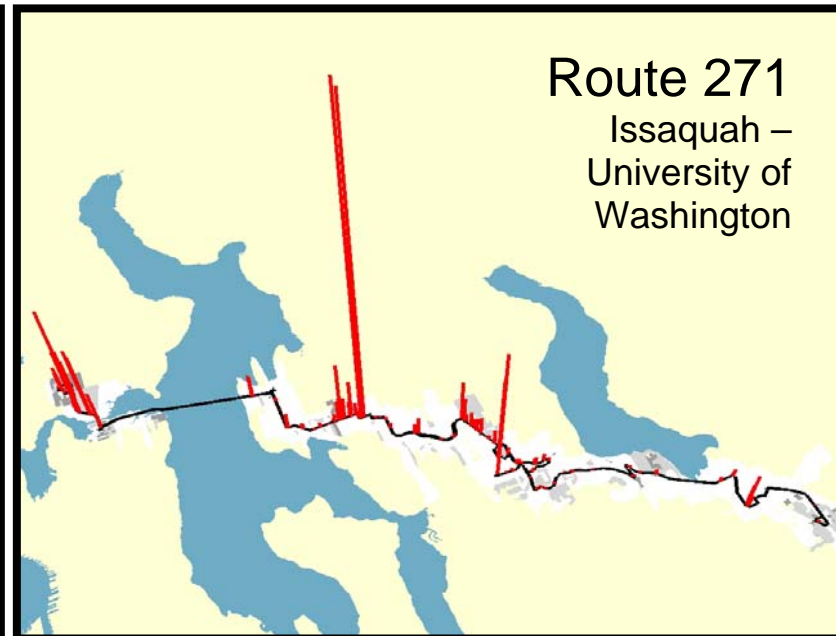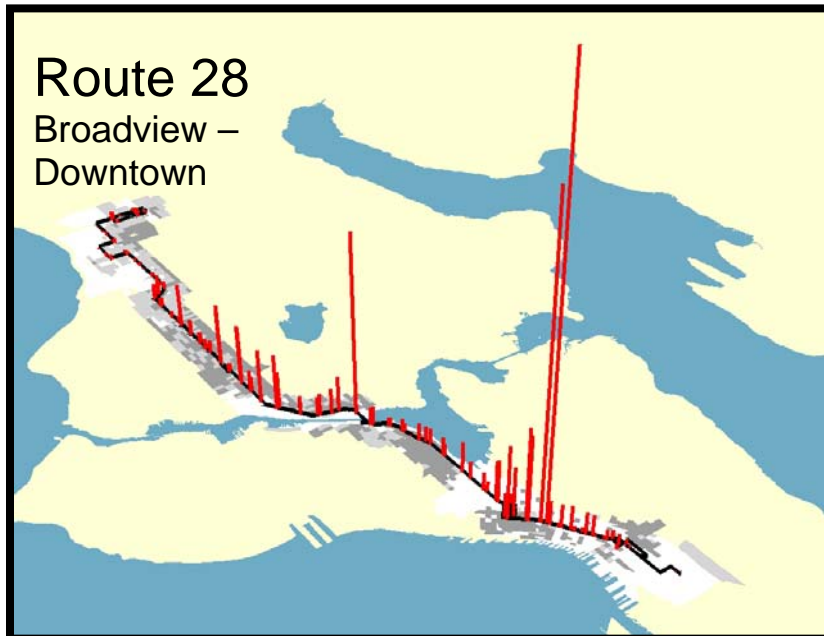
Land Use and Service Types
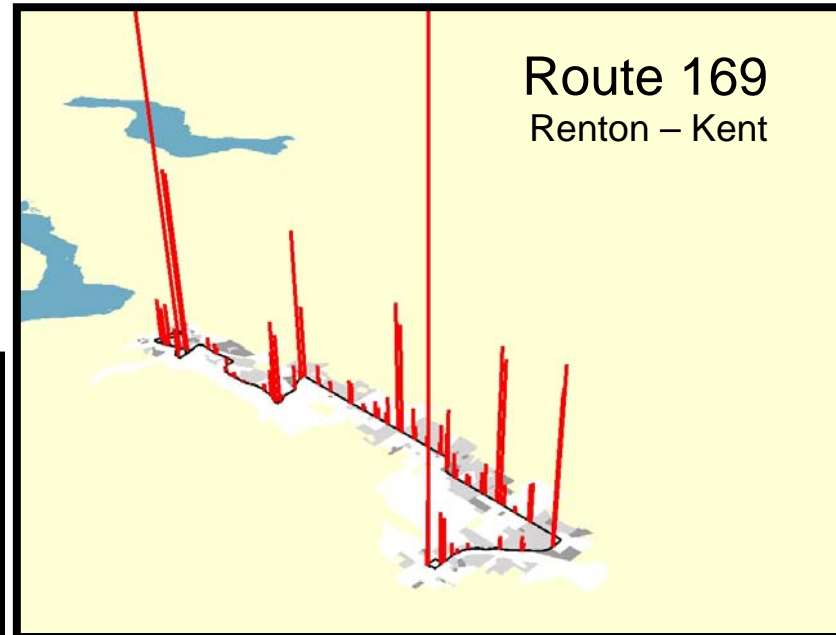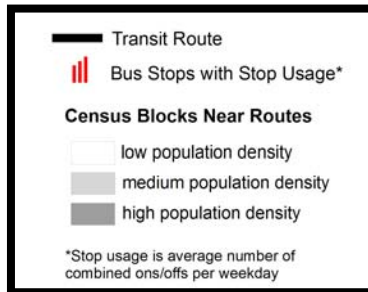
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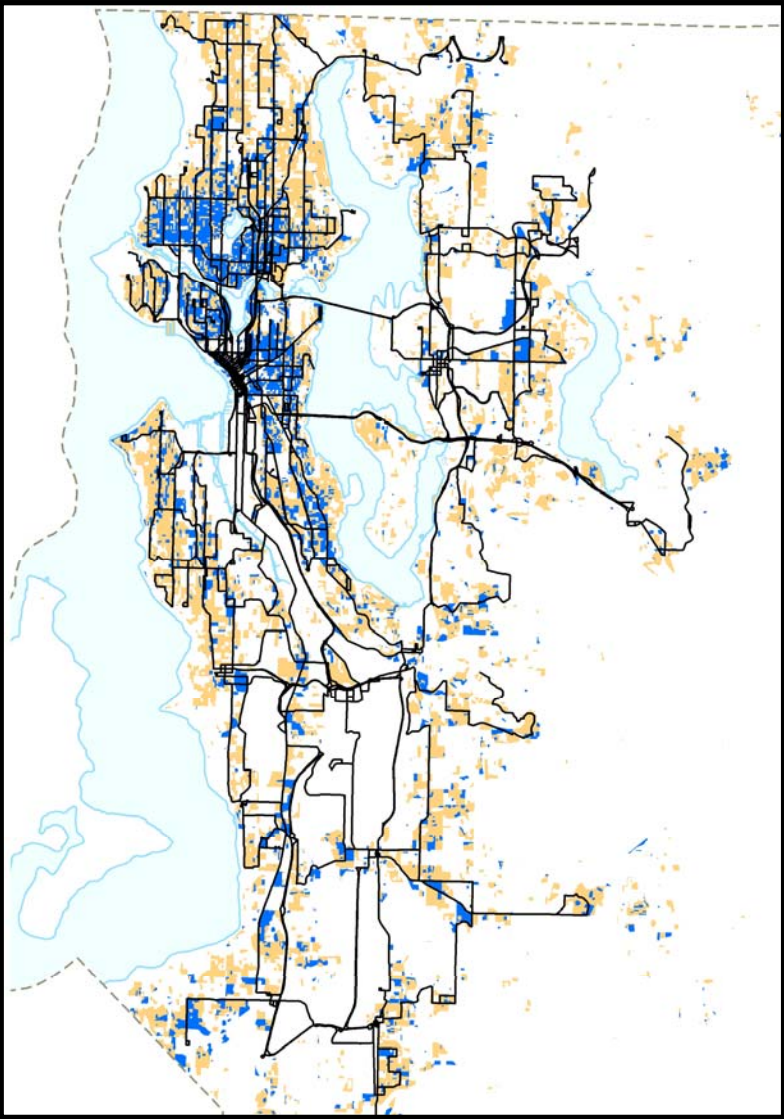
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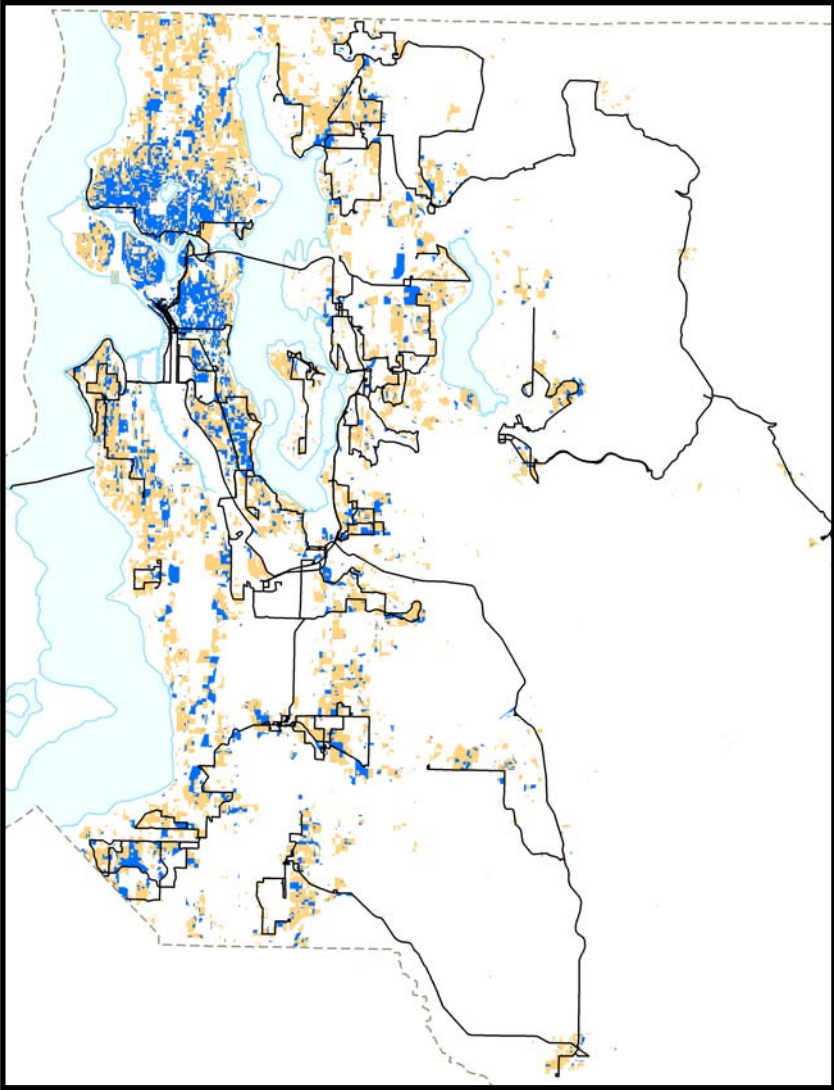
Commuter

Population Density*

- [ ] low population density
- [ ] medium population density
- [ ] high population density

*from 2000 census block data
high density - greater than 14 people/acre
medium density - 8-14 people/acre
low density - 0-7 people/acre

Land Use and High Ridership Routes

- Serve shorter trips
- Experience a lot of on and off activity
- Offer service levels that reflect demand

Legend:
- Transit Route
- Bus Stops with Stop Usage*

Census Blocks Near Routes
- low population density
- medium population density
- high population density

*Stop usage is average number of combined ons/offs per weekday

Route 169
Renton – Kent

Route 28
Broadview – Downtown

Route 271
Issaquah – University of Washington

Land Use and Local Routes

- Provide circulation within a neighborhood or community
- Connect riders to other transit service
- Offer mobility for people with few options

Legend:
— Transit Route

▮▮▮ Bus Stops with Stop Usage*

Census Blocks Near Routes

☐ low population density

▨ medium population density

▩ high population density

*Stop usage is average number of combined ons/offs per weekday

Route 155
Tukwila - Fairwood

Route 39
Rainier Beach – Downtown Seattle

Route 204
Mercer Island
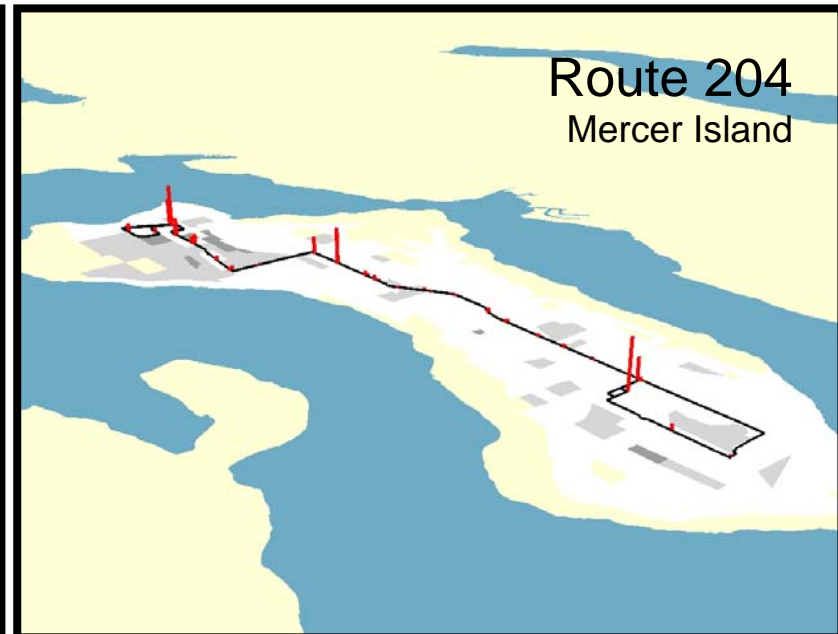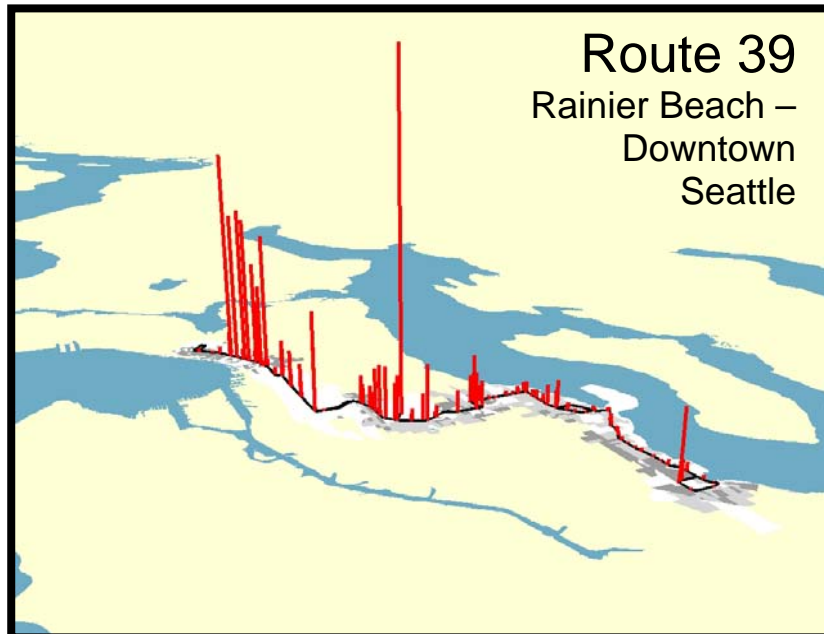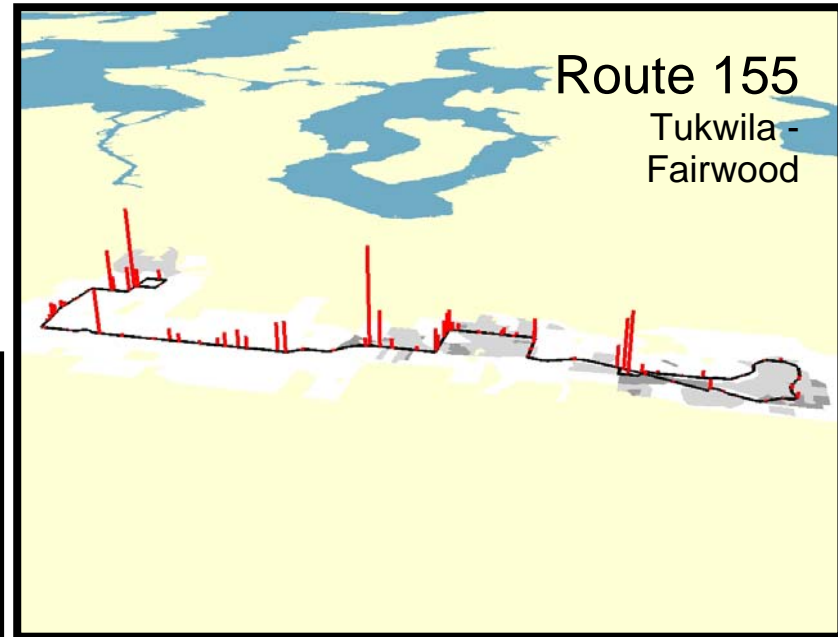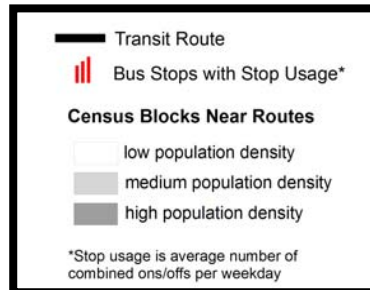
Land Use and Commuter Routes

- Operate at higher speeds
- Operate on freeways and major arterial streets
- Serve longer trips
- Experience low levels of on and off activity along the route

Legend:
- Transit Route
- Bus Stops with Stop Usage*

Census Blocks Near Routes
- low population density
- medium population density
- high population density

*Stop usage is average number of combined ons/offs per weekday

Route 192
Star Lake – Downtown Seattle

Route 77
North City – Downtown Seattle

Route 257
Kingsgate – Downtown Seattle