



SR 99 REPLACEMENT PROJECT

Surface Street Impacts Issues/Impacts/Possible Solutions

Washington State Transportation Commission

February 16, 2011

Presented by Tim Payne

Nelson | Nygaard
consulting associates



Image from Nelson\Nygaard.

Key Issues

Key Issues

- Changing patterns of surface street traffic
- Traffic diversion due to Tolling
- Secure and Reliable transit routing
- Pedestrian and bicycle conflicts with vehicle traffic
- Deterioration of transportation system performance indicators; VMT, Greenhouse gas emissions



Image from Nelson\Nygaard.

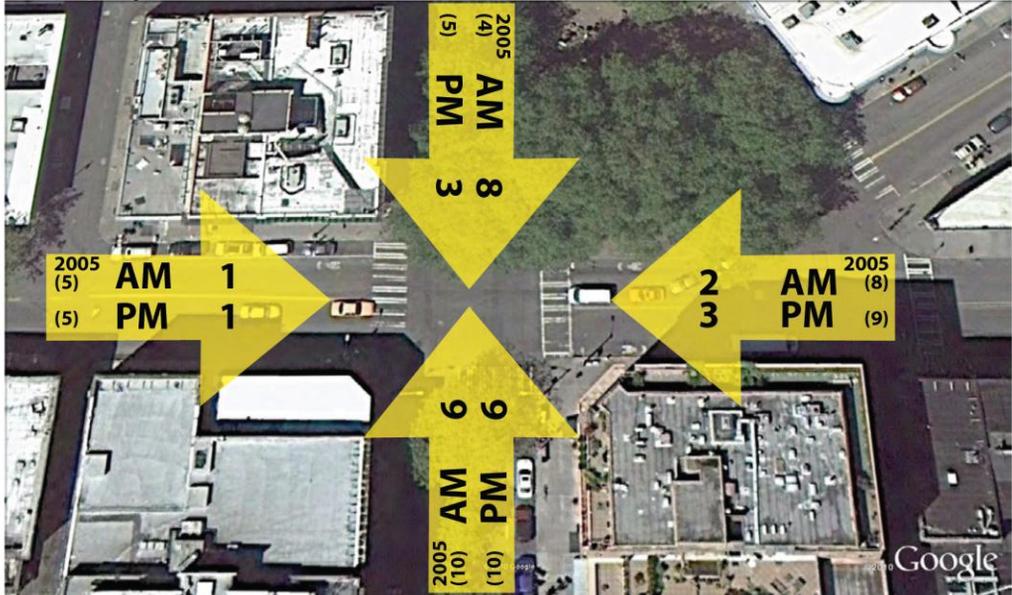
Impacts

SR 99 South Portal Traffic Impacts

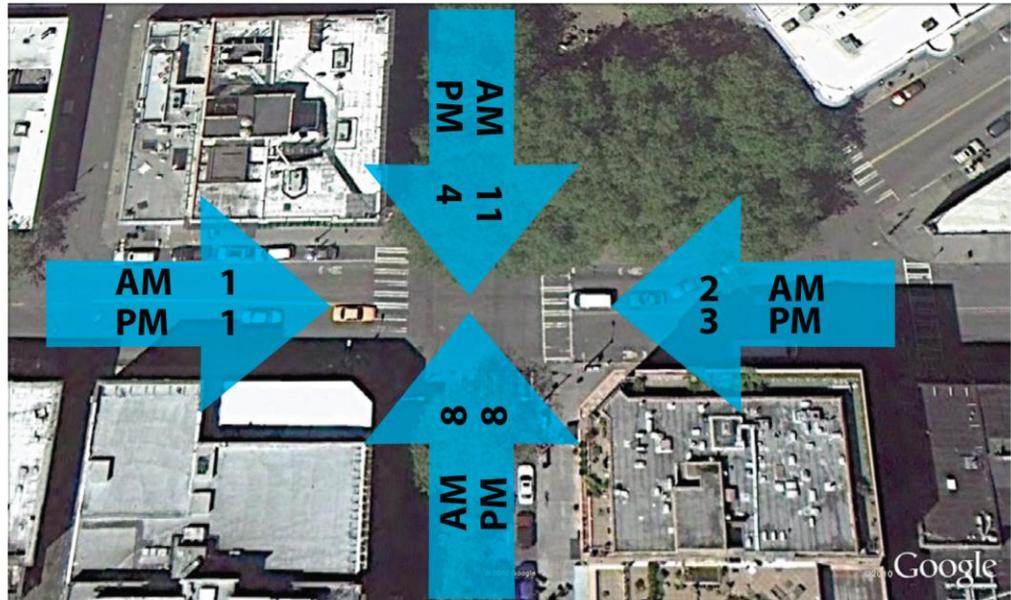
1 1st Avenue & Yesler Way

Change in Volume per Minute by Direction and Time of Day

How will traffic change with downtown growth, the tunnel, and other road projects?



How will traffic change with all of the above and tolls on the tunnel?

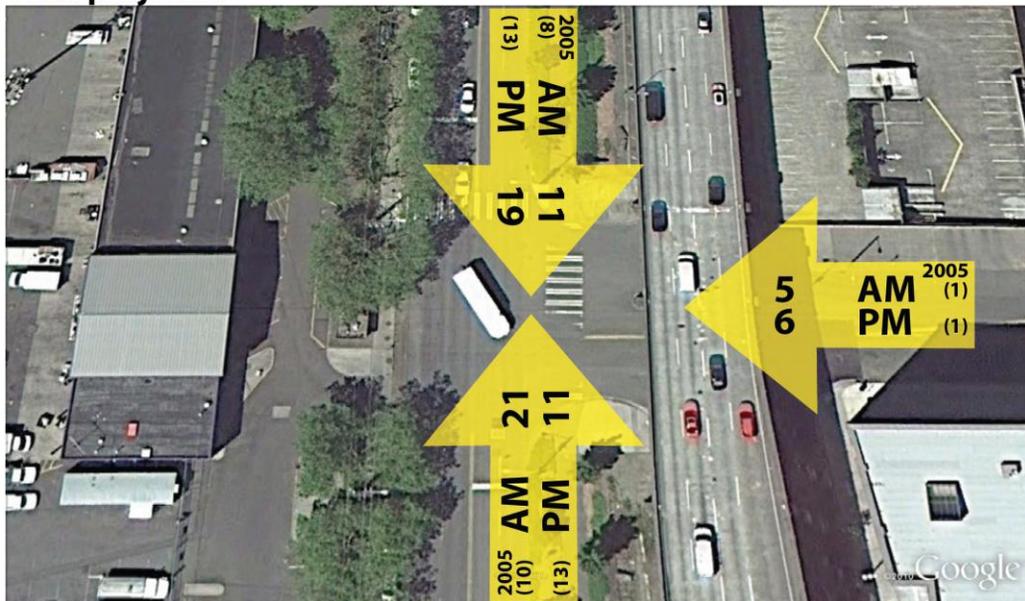


SR 99 South Portal Traffic Impacts

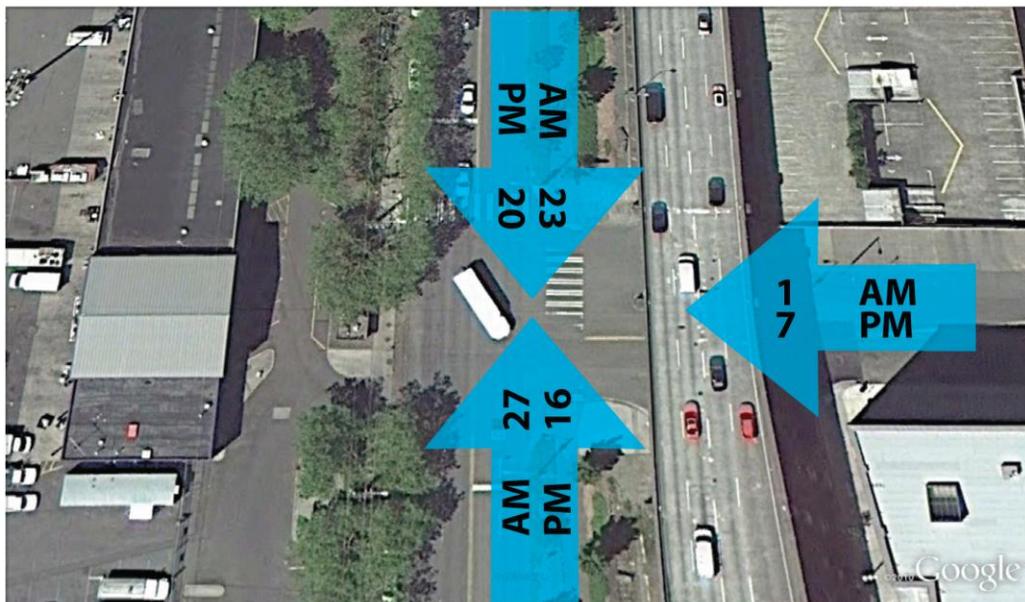
② Alaskan Way & King Street

Change in Volume per Minute by Direction and Time of Day

How will traffic change with downtown growth, the tunnel, and other road projects?



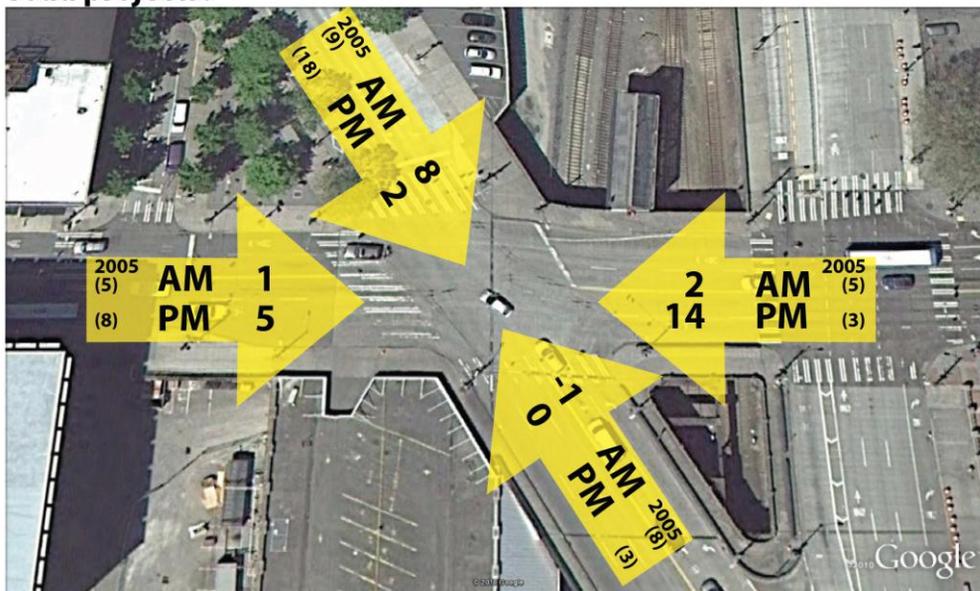
How will traffic increase if the tunnel is tolled?



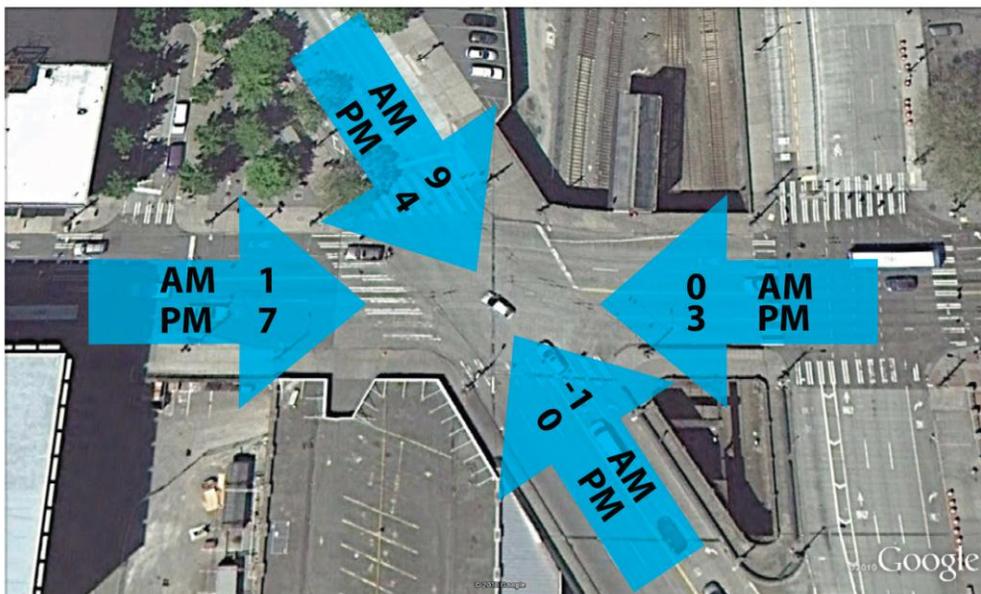
SR 99 South Portal Traffic Impacts

③ 2nd Avenue Extension & Jackson Street Change in Volume per Minute by Direction and Time of Day

How will traffic change with downtown growth, the tunnel, and other road projects?



How will traffic increase if the tunnel is tolled?



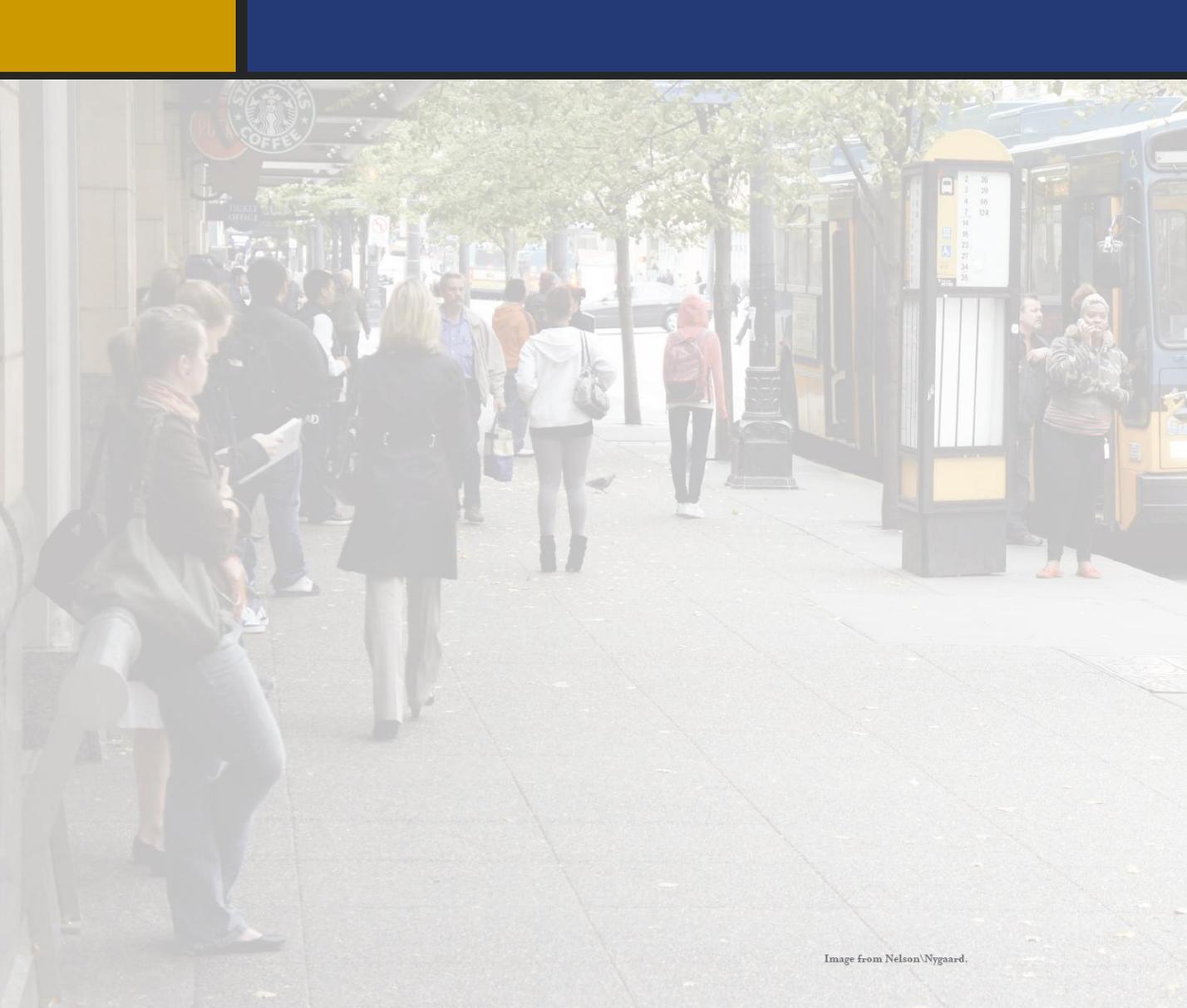


Image from Nelson\Nygaard.

Possible Solutions

Toolkit

- What can be done when traffic patterns change?
 - Strategic Capacity Management
 - Transit/HOV Priority and RapidRide Expansion
 - Aggressive TDM and Parking Management
 - Urban Design Measures
 - Tolling

Toolkit

Strategic Capacity Management

- Signal timing
 - Set signal phases to influence vehicle speeds and improve traffic flow
 - Use signals to meter flow into downtown
- Traffic calming
 - Implement arterial traffic calming to manage speed and volume
 - Measures signal motorists that downtown is not meant to be a by-pass

Toolkit

Transit/HOV Priority and RapidRide Expansion

- Transit Only Lanes and Transit Streets
- Signal Priority
- Expanded RapidRide network
- Higher quality RapidRide service prompted by lane dedication in downtown
- Permitted HOV transit lane use

Aggressive TDM and Parking Management

- Parking Pricing – variable by time of day
- Parking Cash Out/Unbundled Parking Costs
- Employee/Resident Transit Passes
- Transportation Management Association

Toolkit

Urban Design Measures -- Enhance the pedestrian environment

- Pedestrian separation

 - curb extensions

 - wider sidewalks

 - on-street parking buffers

- Reclaim underutilized space

 - Examine areas in intersections where space is devoted to auto traffic, but not utilized

Toolkit

Tolling

- Integrated regional congestion pricing
 - Comprehensive approach to reduce diversion and enhance revenue
- Segment tolling on SR 99
 - Subset of regional pricing, possibly transitional
 - Should consider tolls on key city streets
- Buy down tolls
 - New revenue source, not identified, to support bond payments and reduce tolls
 - Could be implemented after diversion impacts are assessed

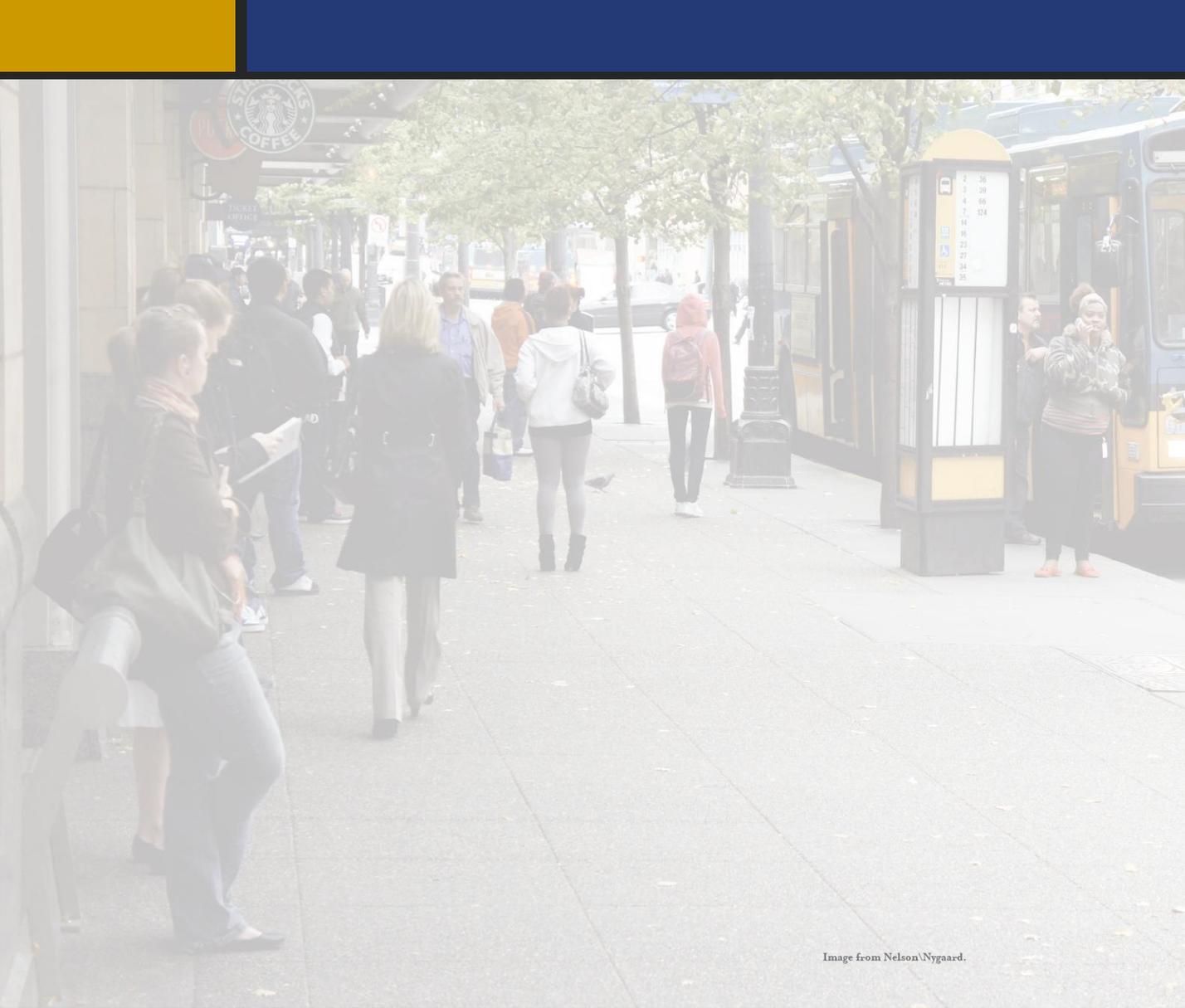


Image from Nelson\Nygaard.

Questions or Comments?

Nelson | Nygaard
consulting associates

Contact Information

Tim Payne

1402 Third Avenue
Seattle, WA 981001
Tel: (206) 357-7524
tpayne@nelsonnygaard.com
www.nelsonnygaard.com

Mobility Accessibility Sustainability



Contact Information

Tim Payne

1402 Third Avenue
Seattle, WA 981001
Tel: (206) 357-7524
tpayne@nelsonnygaard.com
www.nelsonnygaard.com

Mobility Accessibility Sustainability

