



Freight Master Plan

Advisory Committee Meeting
May 21, 2015

Location: Seattle Municipal Tower, 700 Fifth Avenue, Seattle
41st Floor, Conference Room 4155

Project Team: Kevin O’Neill (SDOT), Sara Zora (SDOT), Ian Macek (SDOT), Gabriela Vega (SDOT), Chris Eaves (SDOT), Ron Borowski (SDOT), Craig Moore (SDOT), Chad Lynch (SDOT), Bridget Wieghart (PB), Allison Dobbins (PB).

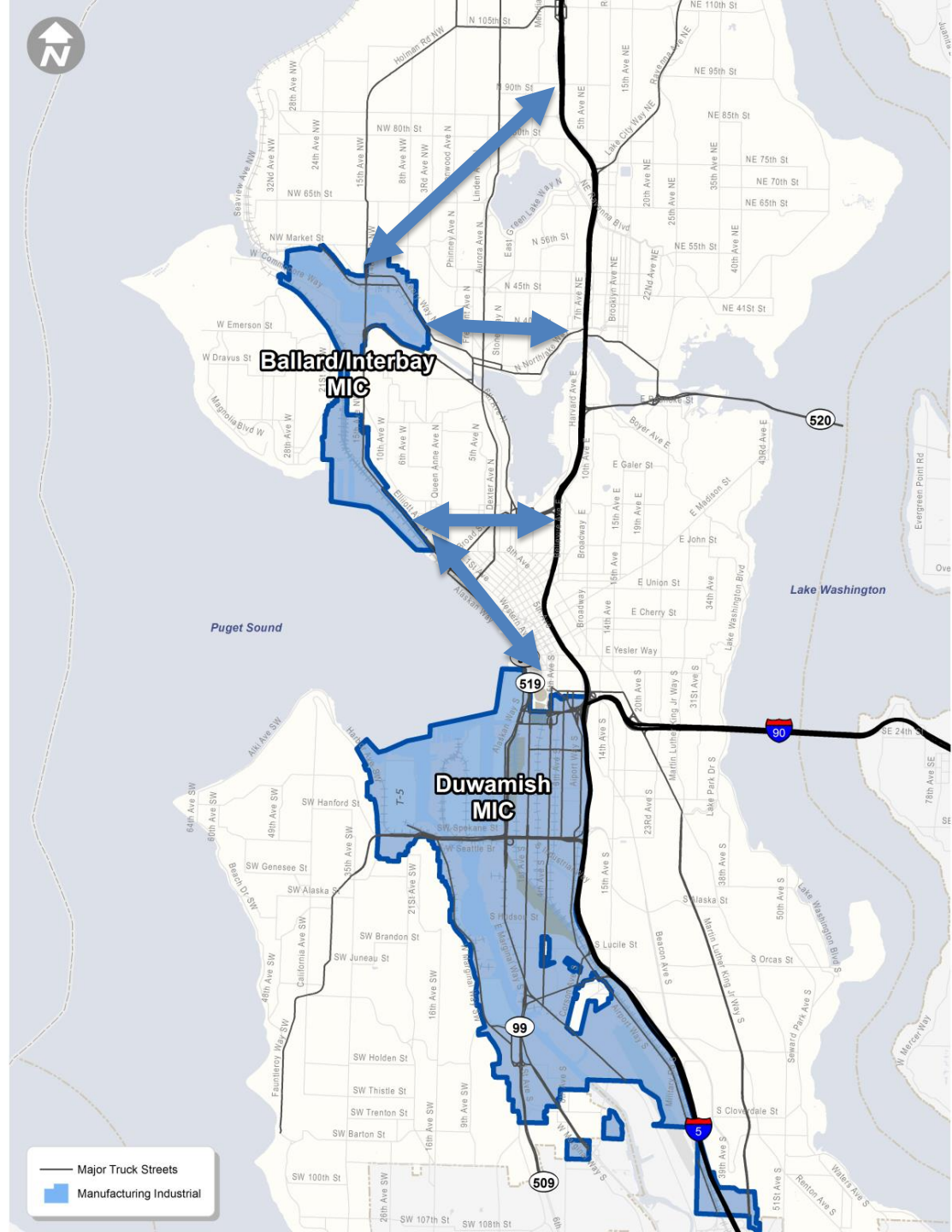
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|---|-------------------------|
| 1. Welcome and Introductions (5 minutes) | 3:30 – 3:35 p.m. |
| 2. Update - Freight Access Project Final Report (15minutes)
SDOT | 3:35 – 3:50 p.m. |
| 3. Future Conditions – Truck Flow Map (20 minutes)
SDOT | 3:50 – 4:10 p.m. |
| 4. Potential Freight Network Designations (45 minutes)
PB and Committee | 4:10 – 4:55 p.m. |
| 5. Neighborhood Case Studies (30 minutes)
PB and Committee | 4:55 – 5:25 p.m. |
| 6. Future Meetings (5 minutes)
SDOT | 5:25 – 5:30 p.m. |

An aerial photograph of Seattle, Washington, showing a mix of urban residential areas and industrial zones. The top half of the image shows a dense residential neighborhood with a grid street pattern and a large body of water. The bottom half shows a more industrial area with large buildings, parking lots, and a waterfront area with ships and cranes. A white banner with black text is overlaid in the center.

Seattle Industrial Areas Freight Access Project (FAP)

FAP

- Joint City/Port effort
- Focused on MICs
 - Ballard/Interbay
 - Duwamish



Primary deliverables

- Evaluate existing and future conditions within and between the MICs
- Recommend prioritized improvements within the project area
- Identify policy issues and opportunities to be addressed by the Freight Master Plan



FAP & Move Seattle address the importance of freight

“Goods movement is the lifeblood of our city and must be supported”

Near-term actions

- Complete Freight Master Plan
- Make spot improvements to help truck move more quickly at key bottlenecks
- Study pilot freight-only lanes in the Greater Duwamish MIC
- Ramp up the monitoring and collection of truck volume data

Large Capital Projects

- East Marginal Way Corridor Improvements, including reconstruction to heavy haul vehicle standards
- South Lander Street Grade Separation/Railroad Crossing

FAP recommendations to FMP

- Overall economic importance of freight in the City of Seattle
- Examine freight linkages throughout the city
- Update Major Truck Street network
- Refine Citywide policies and design standards

FAP schedule

March	FAB, NSIA, MIC briefings
April 13	Release draft report for public review
May 4	Close of public review
May 26	Release final report

Potential Freight Network Designation

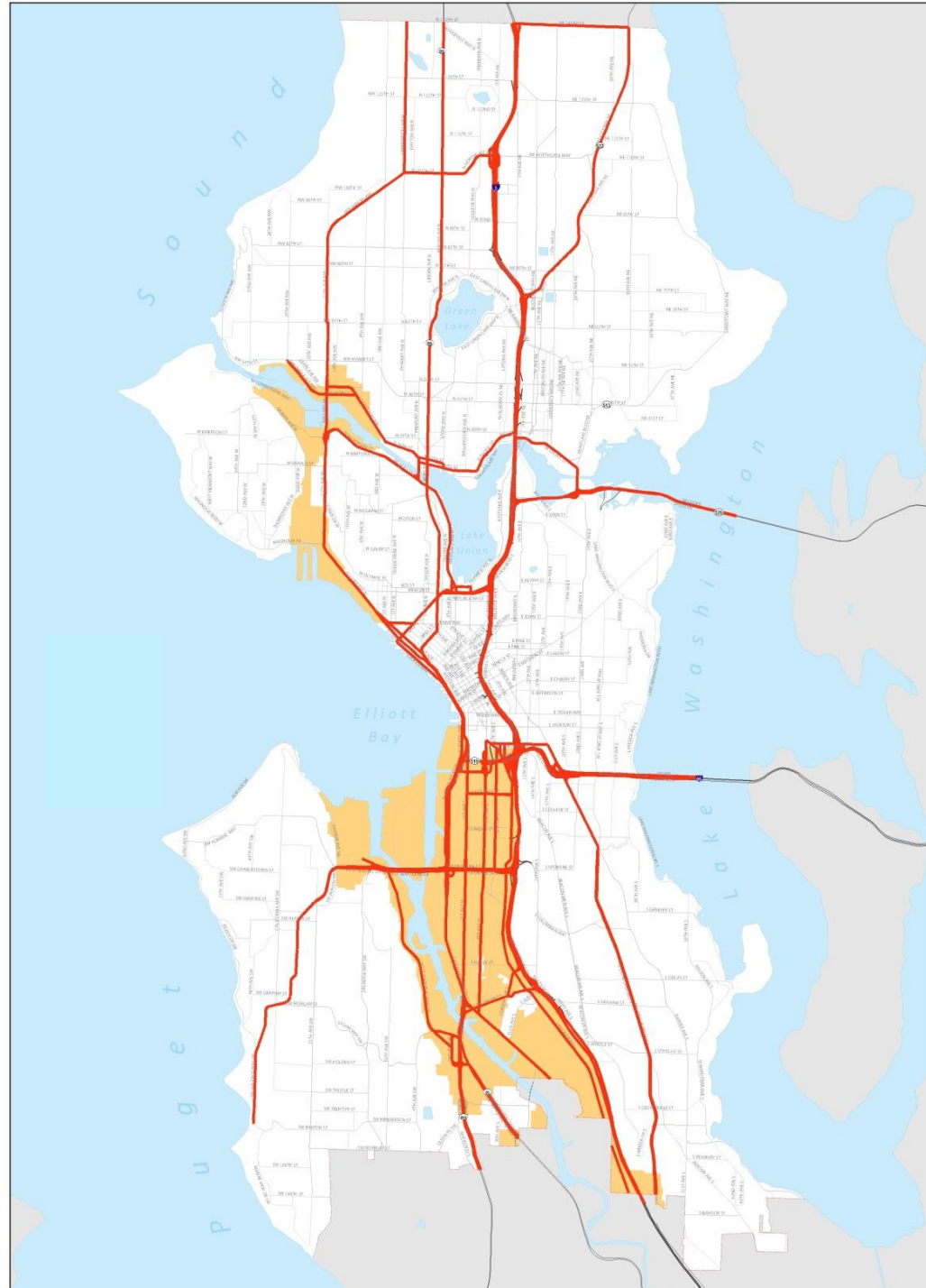


Freight Network Designation Overview

- Why update network?
 - Existing networks
- Why recommend a multi-tiered network?
- What are other cities doing?
- Freight Access Project suggestion
- Proposed criteria for discussion

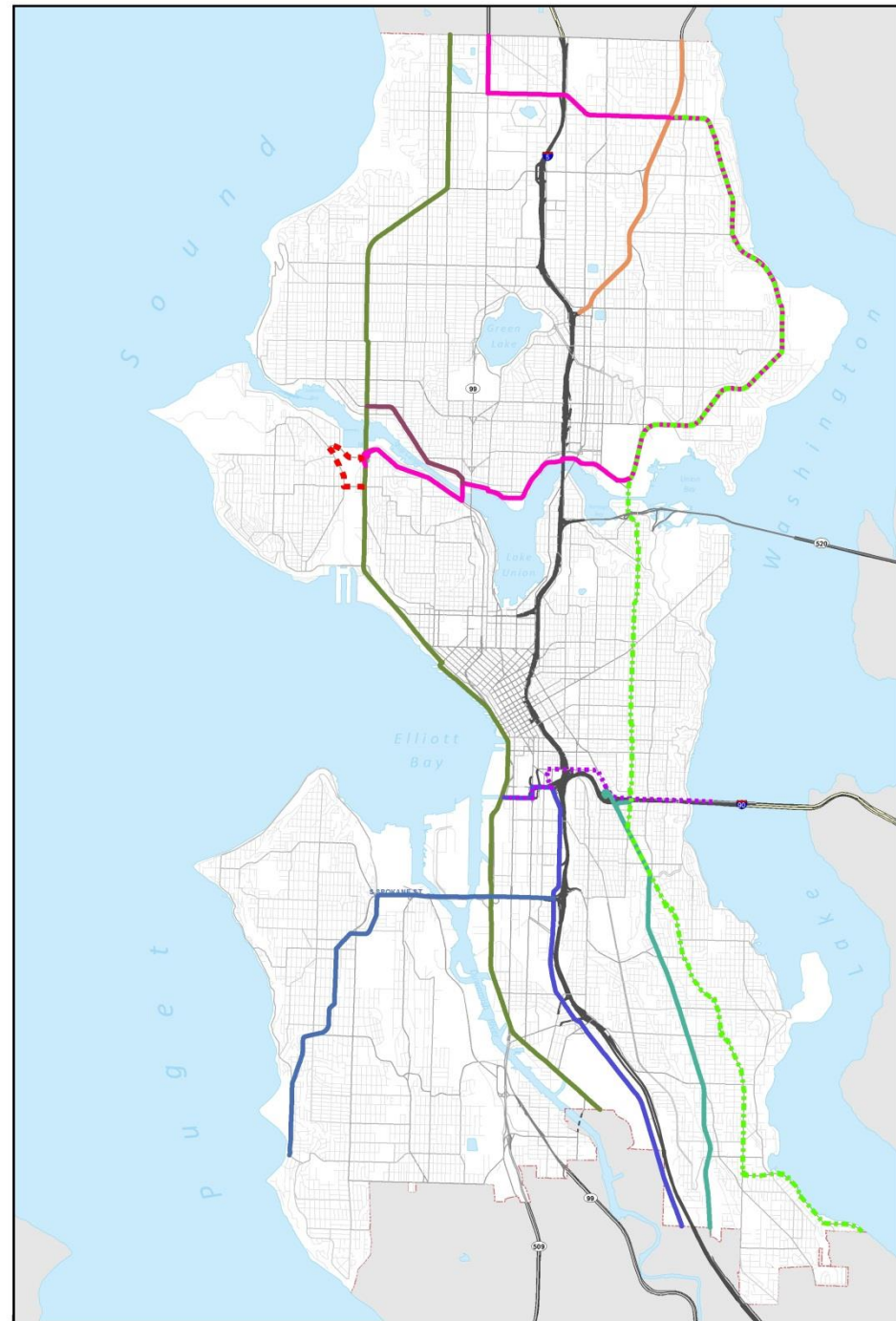
Seattle's Major Truck Streets

- Serve as primary routes for the movement of goods and services
- Improve freight mobility and safety within the City



Over-legal vehicles & loads

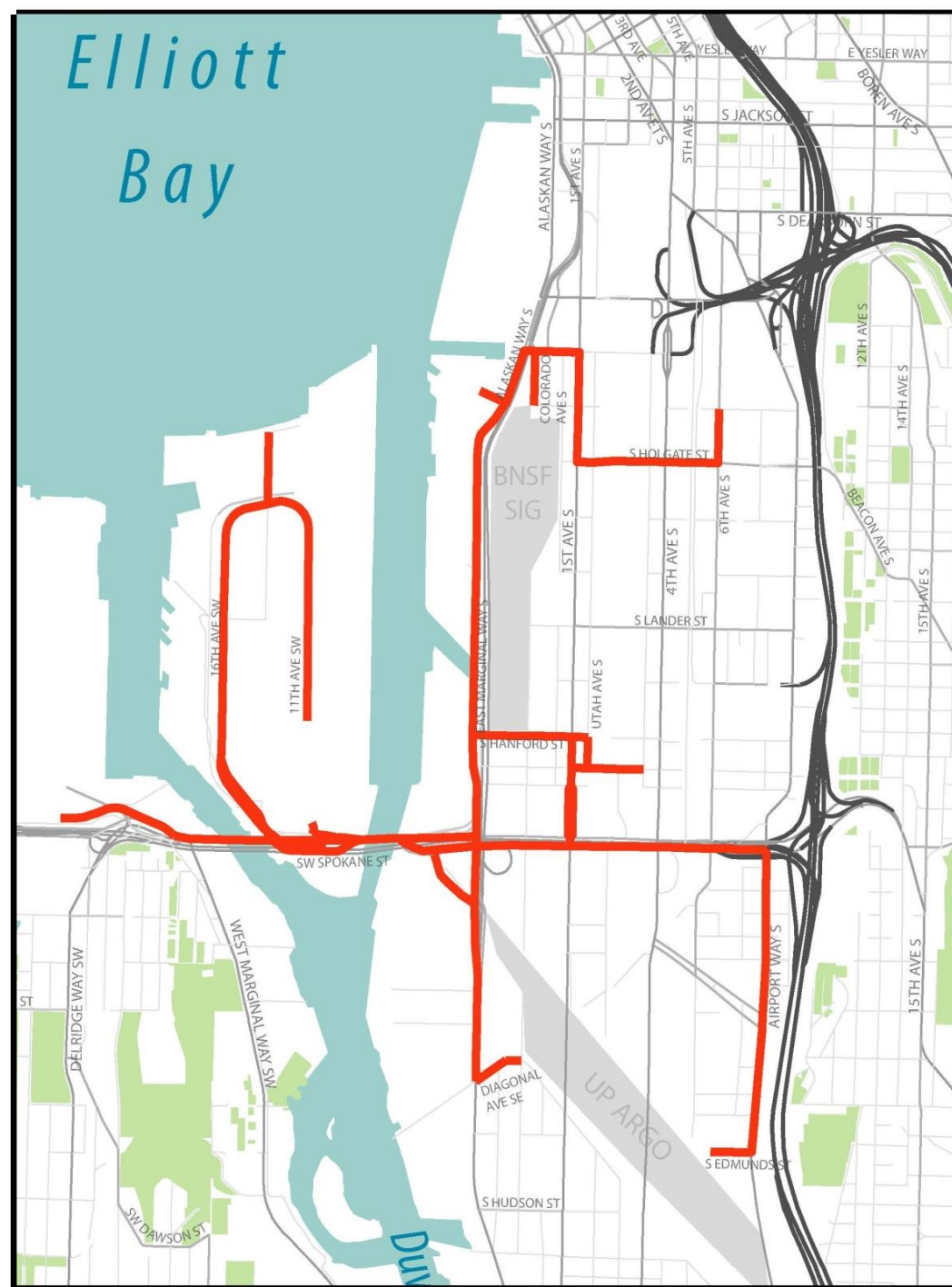
- Vehicles or loads exceeding the maximum height, width, and/or length designated by the City
- Over-legal loads traveling within the city are required to obtain a special permit



Heavy Haul network

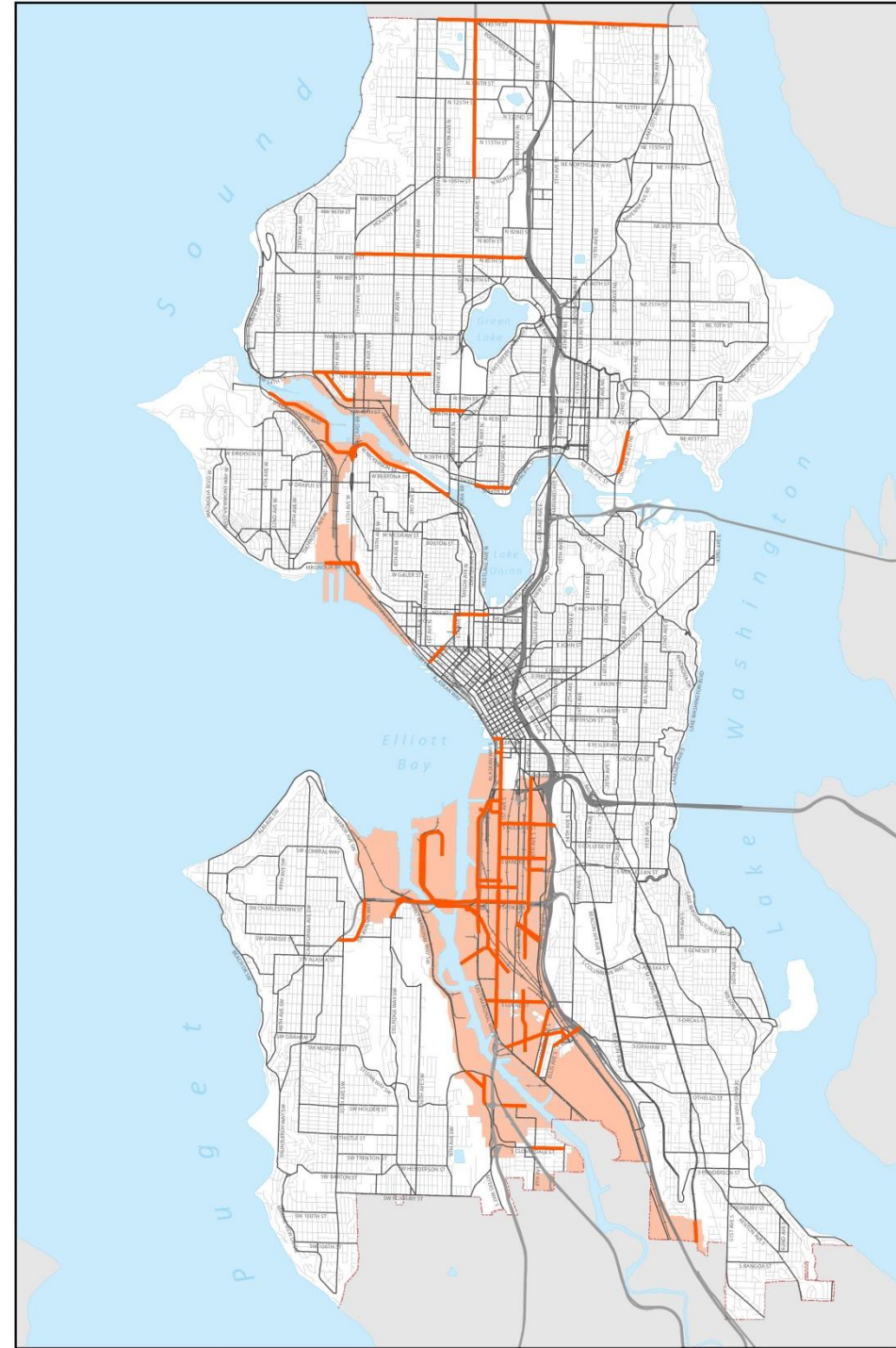
- Vehicles or loads exceeding a certain weight designated by the City
- Over-legal loads traveling within the city are required to obtain a special permit

- City Street Segements on the Heavy Haul Network
- Intermodal Facility



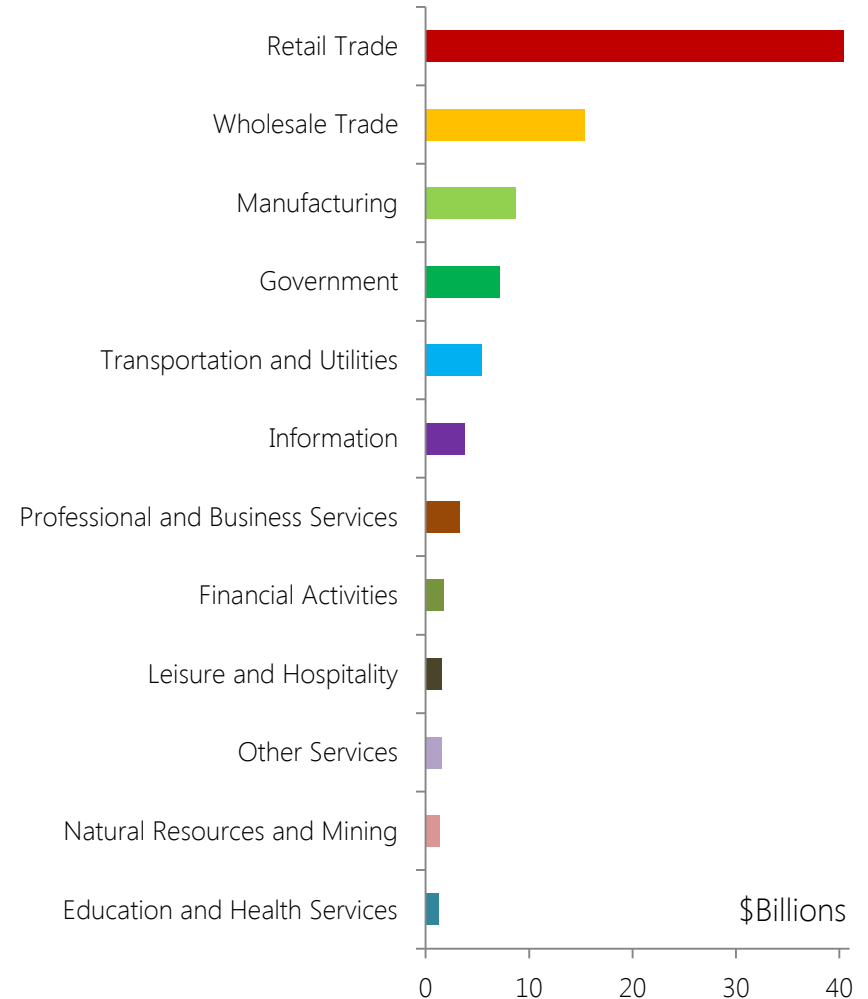
First and last mile connector routes

- Some segments included as part of the MTS



Why recommend a multi-tiered network?

- MTS focus on industry
- Retail generates freight
- Last mile to consumer



Source: US Bureau of Economic Analysis and Parsons Brinckerhoff Analysis

Why recommend a multi-tiered network?

- Freight goes everywhere
- Not all freight is equal
- Need for context sensitivity



Review of truck classification systems

- No federal guidance
- Many states have systems, some regions, few cities
- Reviewed cities with systems of two or more levels
 - Similar size western cities
 - Comparable MSAs nationwide
 - Logistics hubs
 - Port cities



Portland, Oregon

- Regional truck way
- Priority truck street
- Major truck street
- Freight district street
- Truck access street
- Local truck street (all streets not otherwise designated)



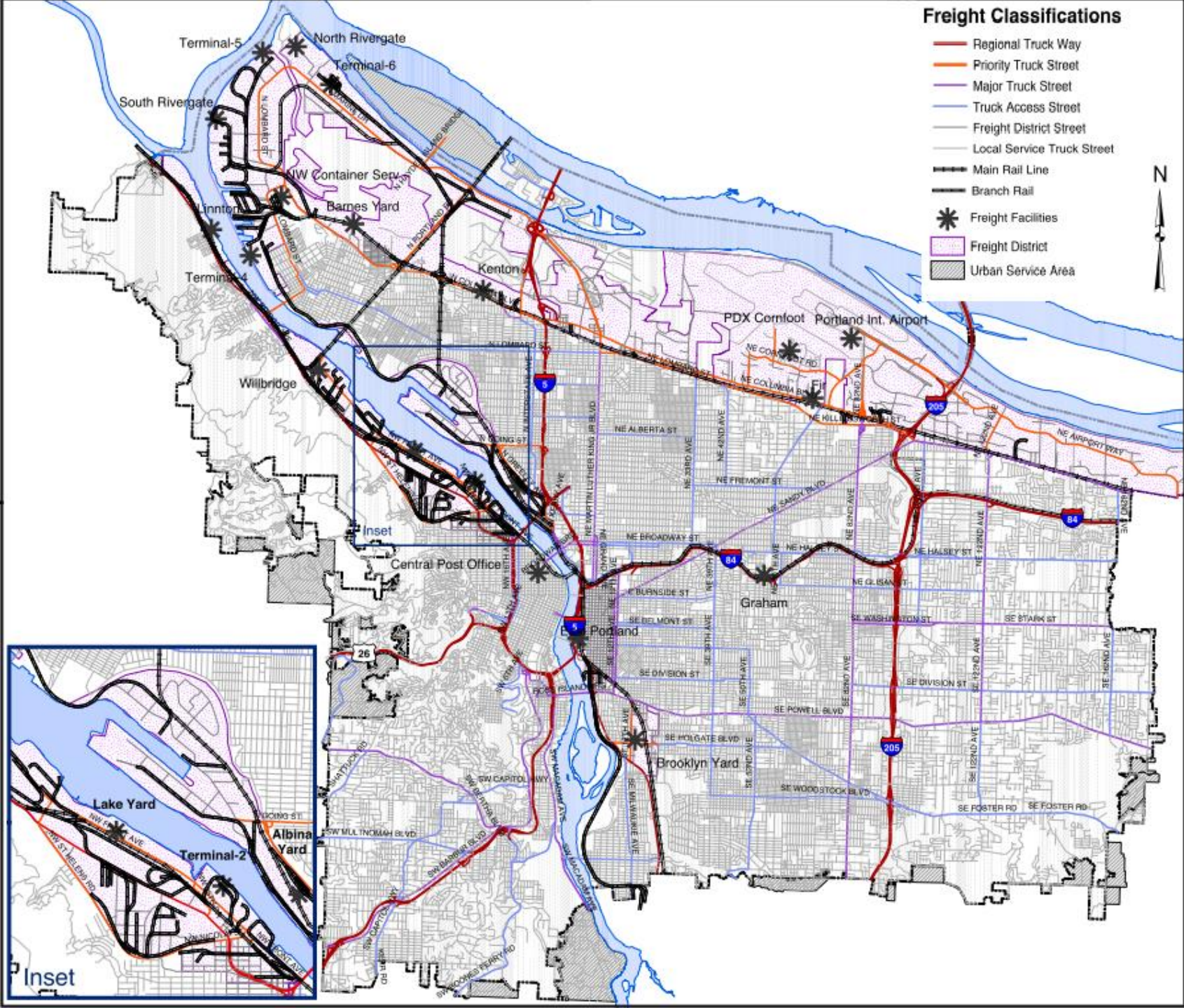
Portland, Oregon

- Land use – type of freight activity
- Function – volume and level or quality of mobility and access provided.
- Connections – which routes or destinations are connected.
- Design – how streets should be designed in future.



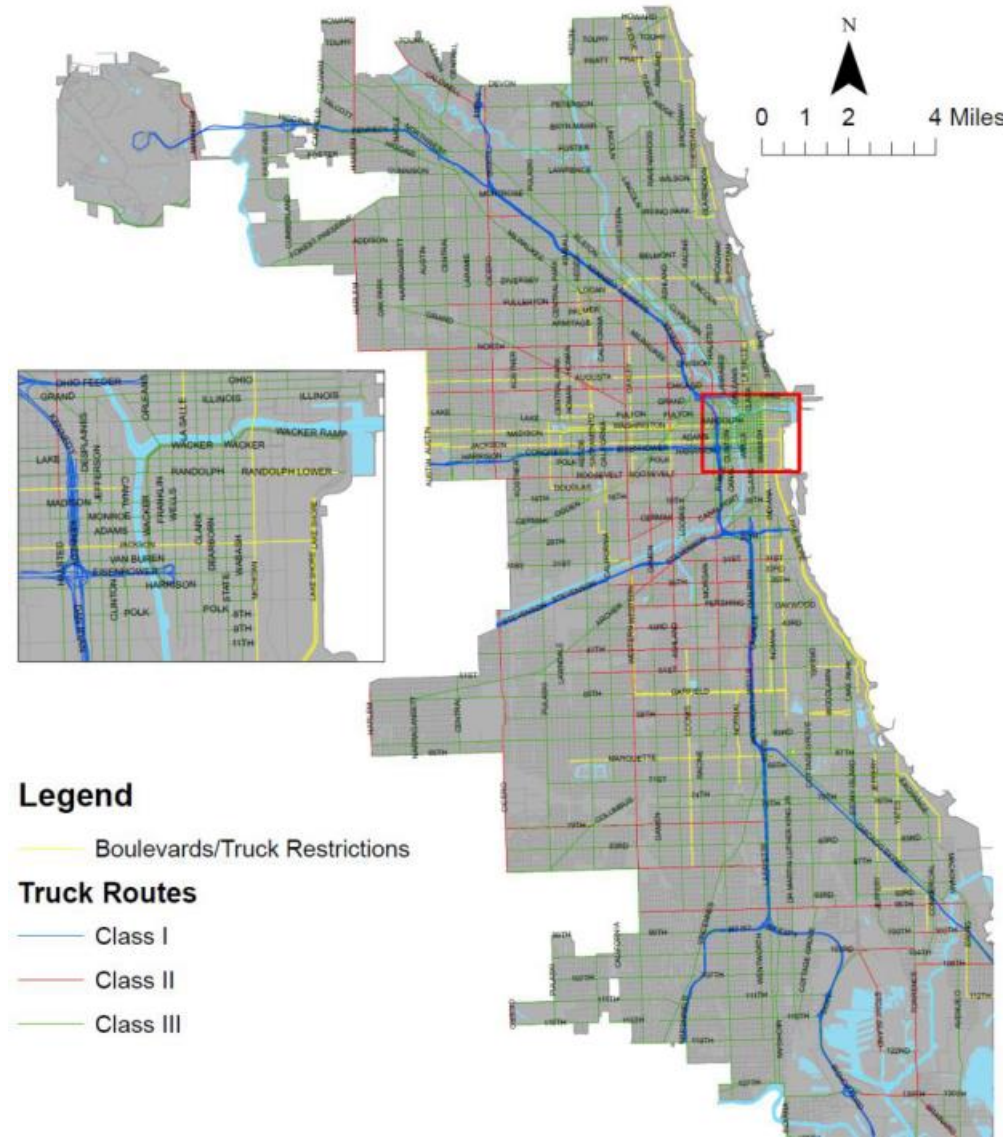
Freight Classifications

- Regional Truck Way
- Priority Truck Street
- Major Truck Street
- Truck Access Street
- Freight District Street
- Local Service Truck Street
- Main Rail Line
- Branch Rail
- Freight Facilities
- Freight District
- Urban Service Area



Chicago -proposed

- Class I
- Class II
- Class III
- Boulevards/Truck Restrictions



Chicago - screening criteria

- Truck AADT
- Vertical clearance restrictions
- Bridge weight limits
- Lane widths
- Adjacent land uses
- Local connectors
- Intermodal facilities
- Connectivity with roads and jurisdictions



Tampa, Florida

- Existing Truck Route
- Land Uses
- Bridge Locations
- Functional Classifications
- Speed Limits
- Number of Lanes
- Constrained Roads
- Truck Volume and %
- Truck Crash Data
- Truck Traffic Generators
- Continuity



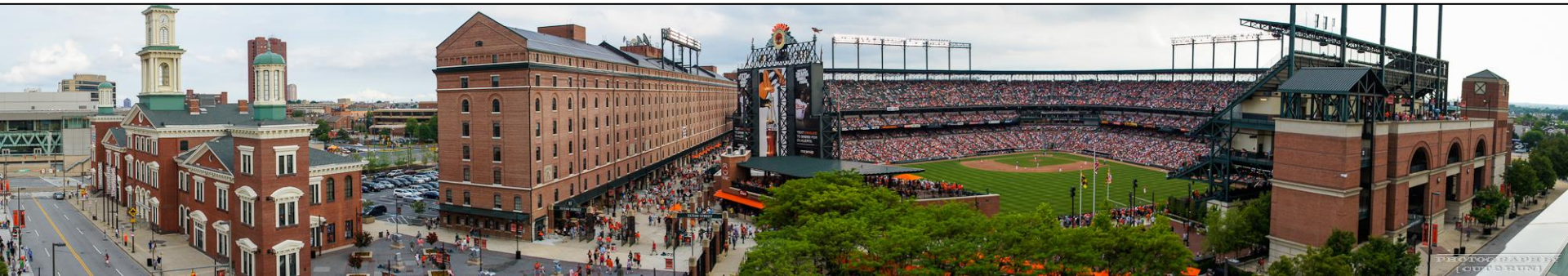
Tampa, Florida

- Sliding scale rather than pass/fail scoring
- Weighted assignments for roadway characteristics
- Most minor arterials and above included



Lesson Learned

- Tiered systems
- Avoid complexity
- Common Criteria
 - Functional Classification
 - Truck Volume/%
 - Physical Roadway Characteristics
 - Obstructions
 - Connectivity
 - Land use



Seattle FAP - Function

- Primary
 - Major corridors in MICs lined by industrial users or corridors that connect to interstate, highways or between major industrial areas
- Secondary
 - Corridors that provide access to industrial areas but where other nonindustrial uses are present
- Delivery network
 - Corridors providing access to local retail and commercial centers
- Specialized uses
 - Over dimensional, heavy hauls and hazardous materials routes.

Seattle FAP - form and conflict management

- Horizontal and vertical clearances
- Weight restrictions
- Lane widths
- Turning radii
- Signal spacing
- On and off street loading
- Sensitive receptors
- Points of conflict with other modal systems
- Ability to physically separate users within right of way
- Ability to manage conflicts through time of day restrictions
- Potential for alternative routing to separate modal uses

Concept for Seattle

- Three designations
 - Primary
 - Secondary
 - Local
 - Note special designations
- Criteria
 - Function
 - Form
- Details in design guidelines
- Multimodal Corridor Program
- Multimodal Decision Process
- ROW Improvement Manual

Potential criteria

- Truck Volume
- Functional Class
- Supports Freight Generating Land Uses
- Time Efficient Connectivity to Network
- System Redundancy/ Performance Risk
- Height Clearances
- Weight Restrictions
- Turn Radii
- Lane Width

Discussion questions

- Should we develop a tiered system?
- What are the most important considerations for a truck network?
- Any changes to the general criteria?
- Are there other suggestions with respect to truck network?



Neighborhood Case Studies

Study Participants

- Ballard
 - Ballard Market
 - Hi-Life Restaurant
 - East Ballard Community Council
 - Central Ballard Residents Association



Study Participants

- South Lake Union
 - Brave Horse Tavern (Tom Douglas Company)
 - Operations Manager, Tom Douglas Company
 - Glazer's Camera Store
 - South Lake Union Community Council



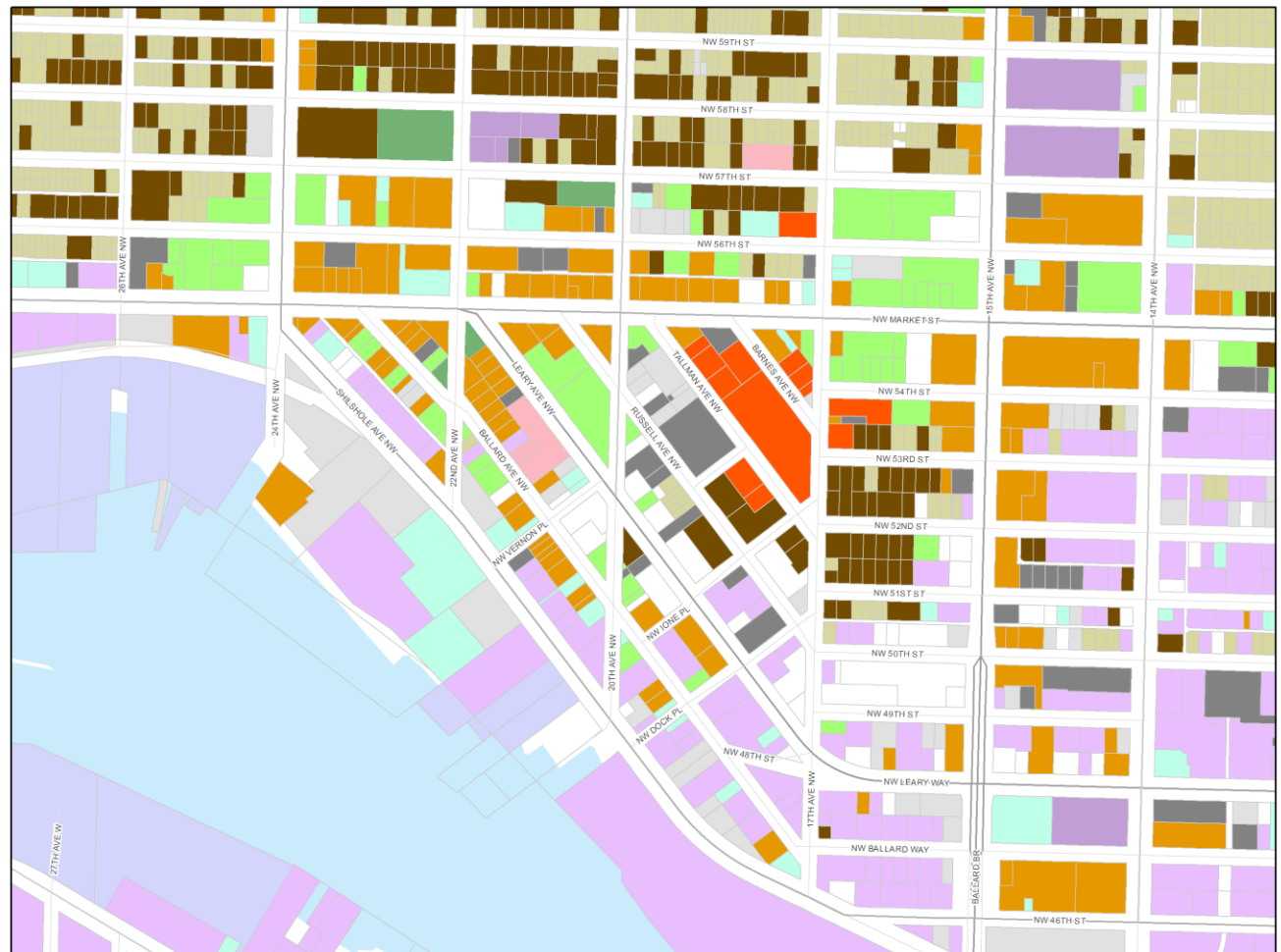
Ballard: Existing Uses

City Streets

- Principal Arterial
- Minor Arterial
- Collector Arterial
- Not Designated





Existing Land Use

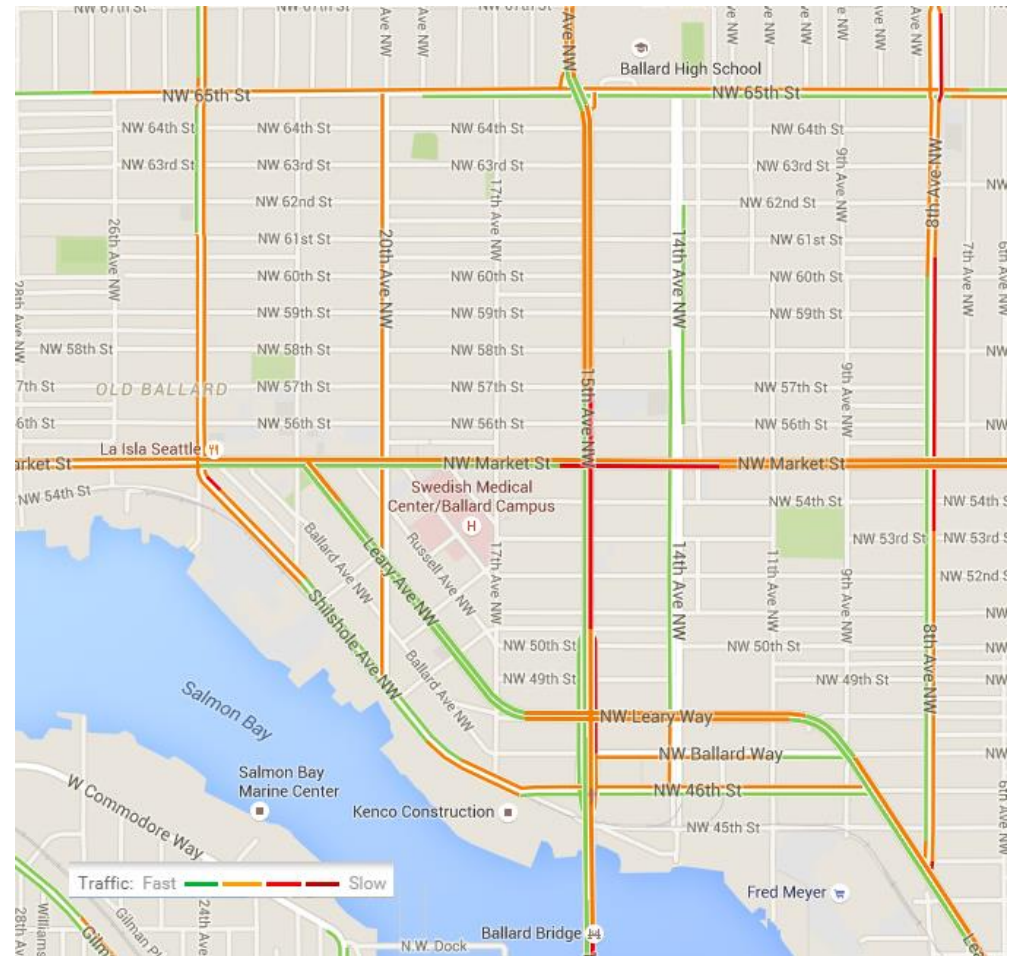
- Other Parcels
- Terminal
- Church
- Medical / Hospital
- Retirement Facility
- Park / Open Space
- Offices
- Vacant
- Single Family Residential
- Mixed-Use Residential
- Multi-Family Residential
- Industrial / Warehouse
- Shopping / Retail
- Parking Lot



Ballard: Traffic Congestion

- Google travel time data collected from cell phone recorded speeds
- Speeds recorded @ 5:30 p.m.

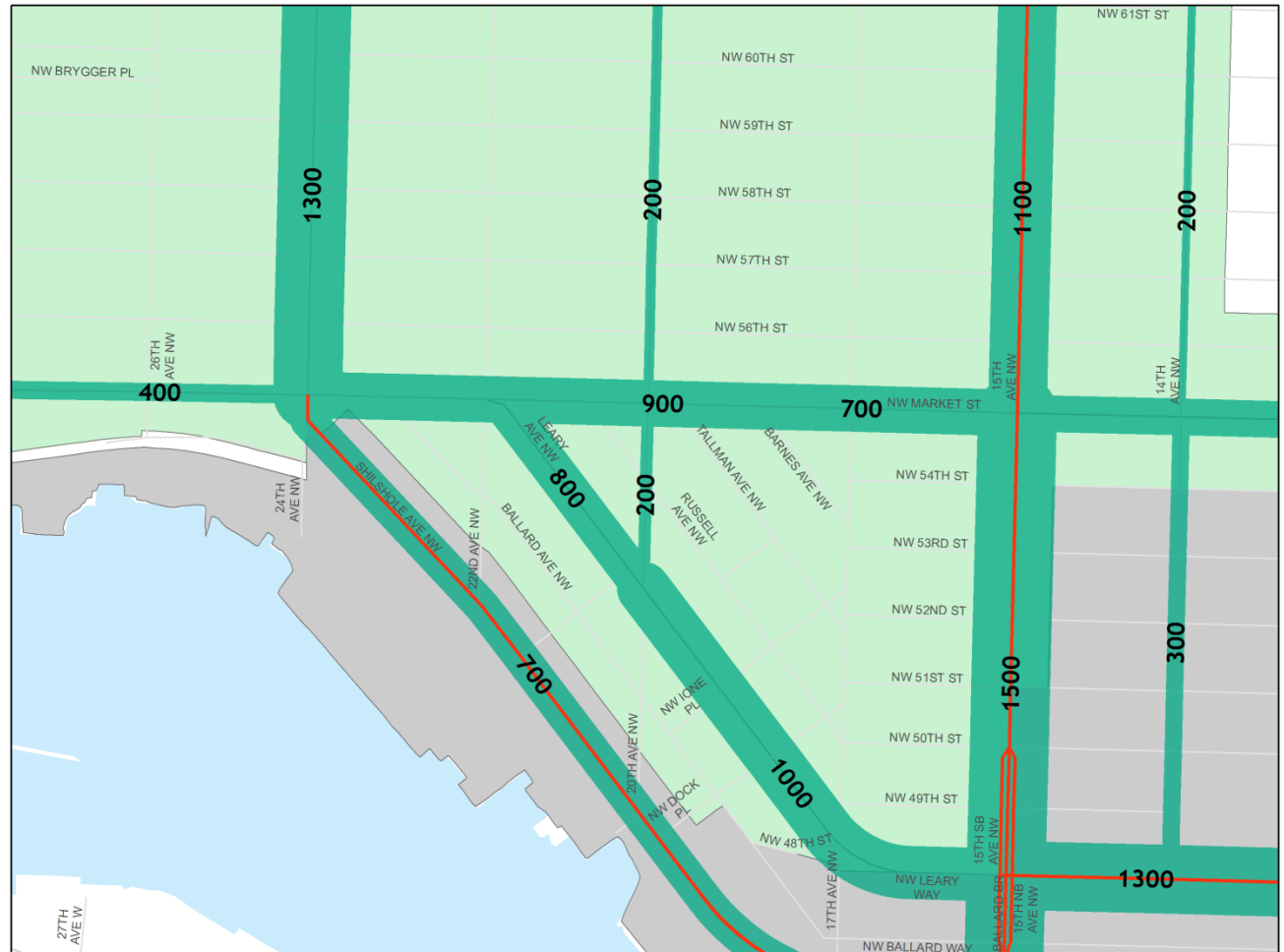
-  No traffic delays
-  Medium amount of traffic
-  Traffic delays
-  Slower vehicle speeds



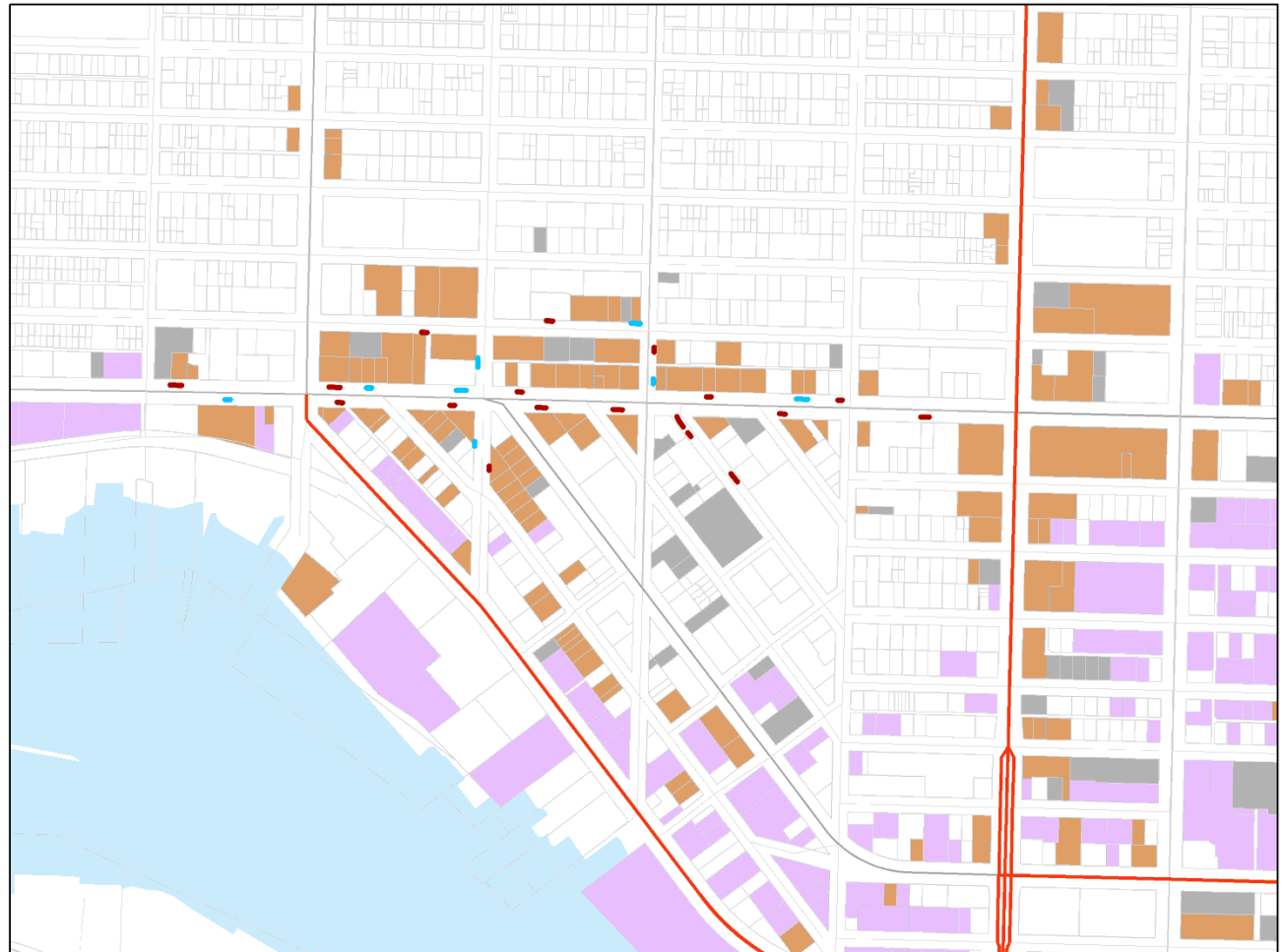
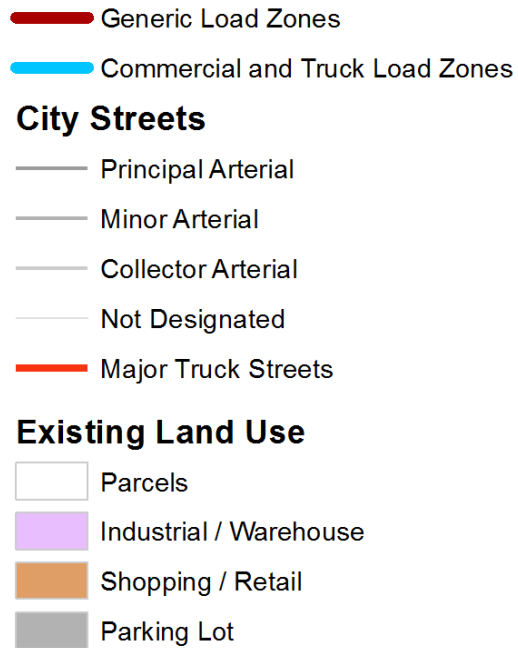
Ballard: Truck Volumes & Major Truck Streets

City Streets

- Principal Arterial
- Minor Arterial
- Collector Arterial
- Local
- Ballard
- BINMIC



Ballard: Load Zones



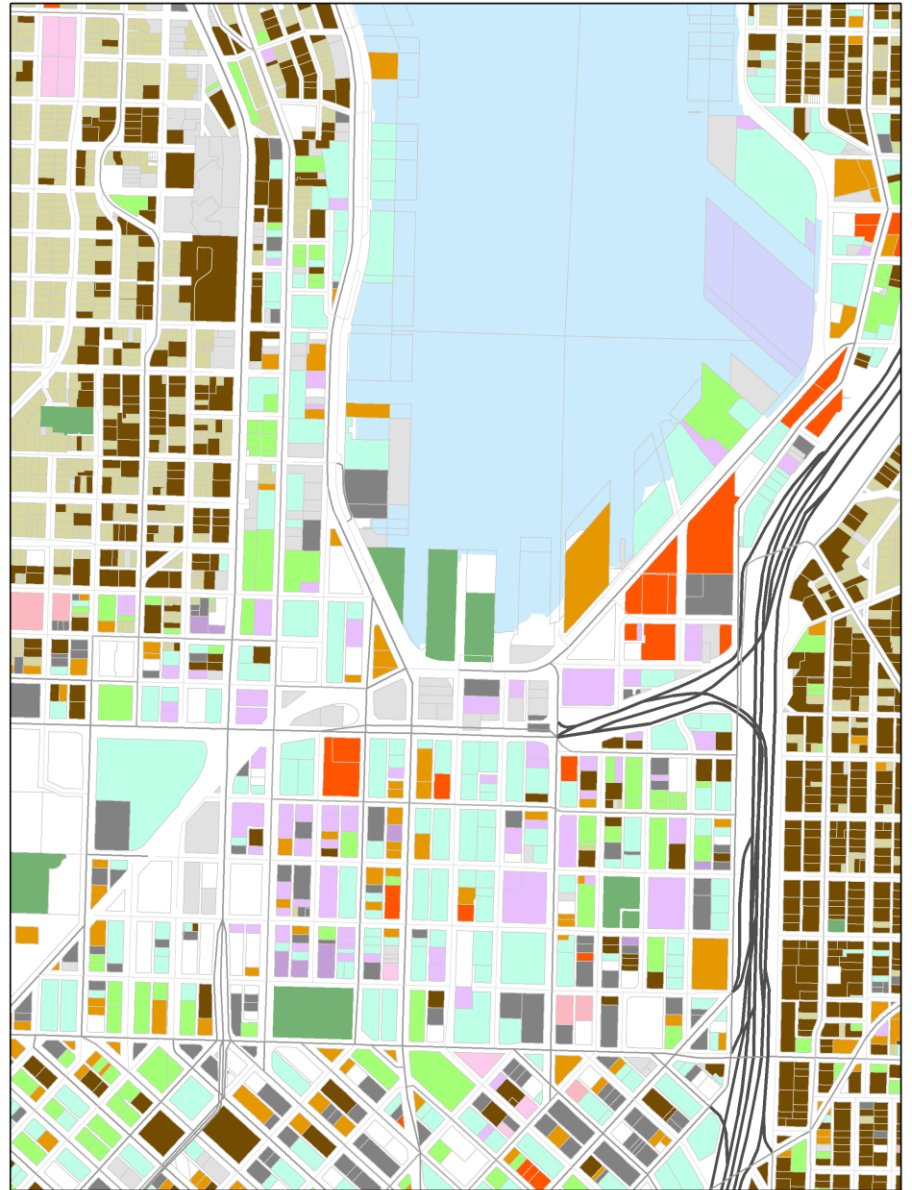
South Lake Union: Existing Uses

City Streets

- Interstate/Freeway
- Principal Arterial
- Minor Arterial
- Collector Arterial
- Not Designated

Existing Land Use

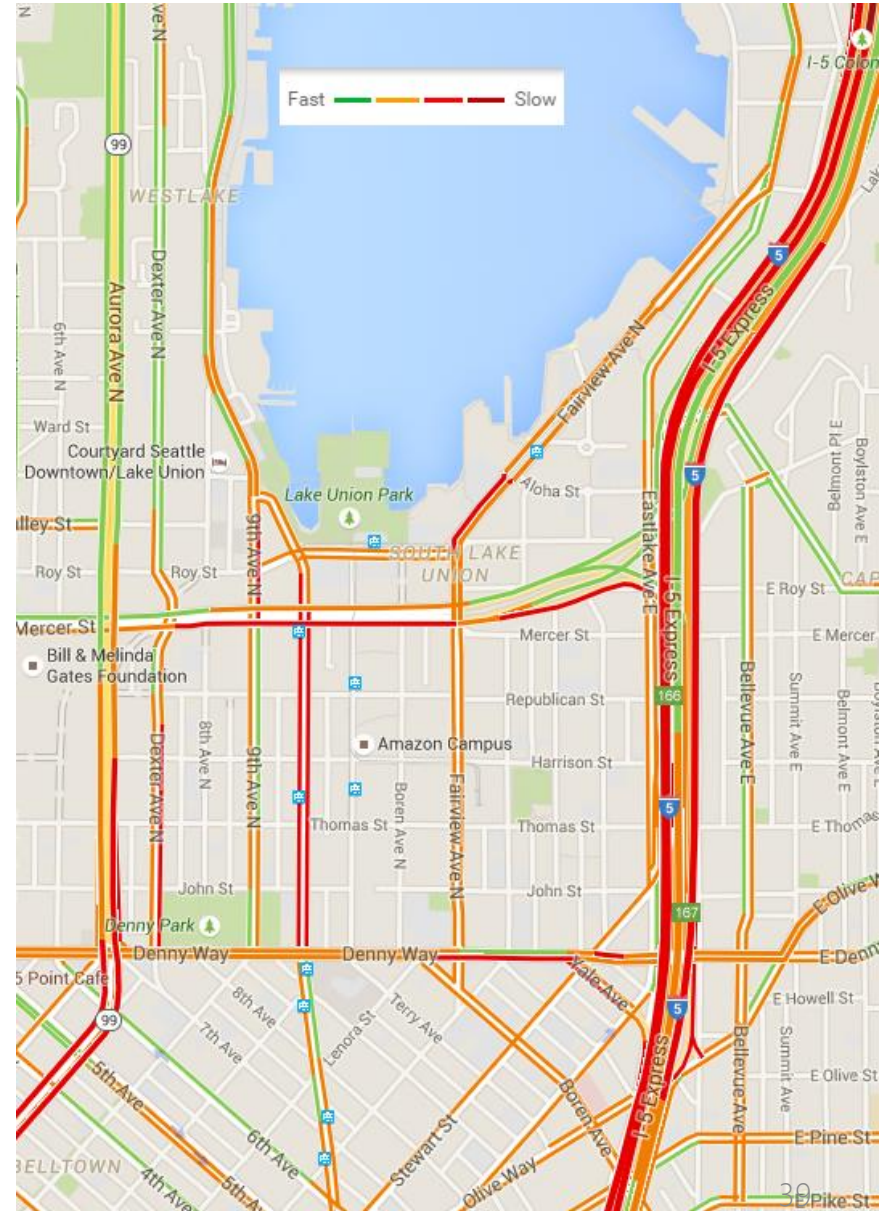
- Other Parcels
- Terminal
- Church
- Medical / Hospital
- Retirement Facility
- Park / Open Space
- Offices
- Vacant
- School
- Single Family Residential
- Mixed-Use Residential
- Multi-Family Residential
- Industrial / Warehouse
- Shopping / Retail
- Parking Lot



South Lake Union: Traffic Congestion







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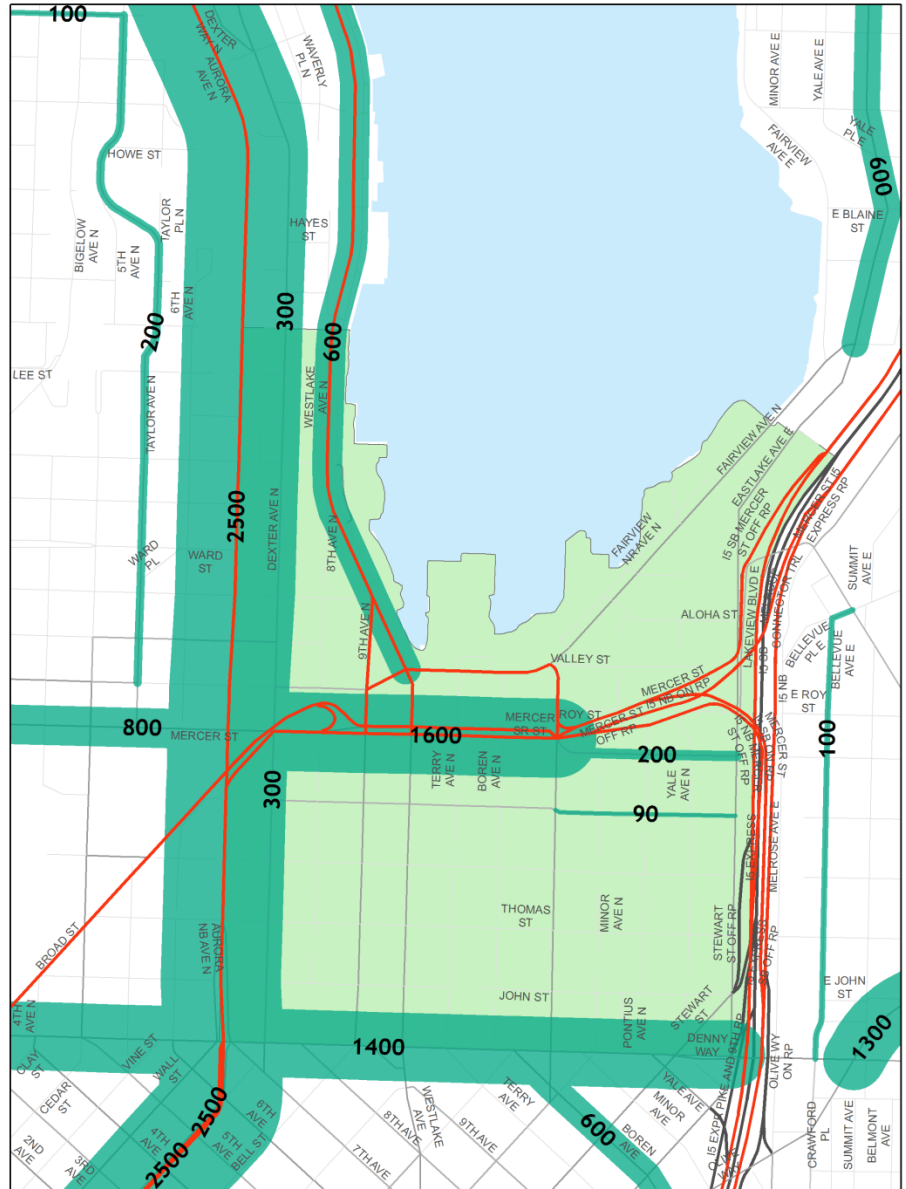
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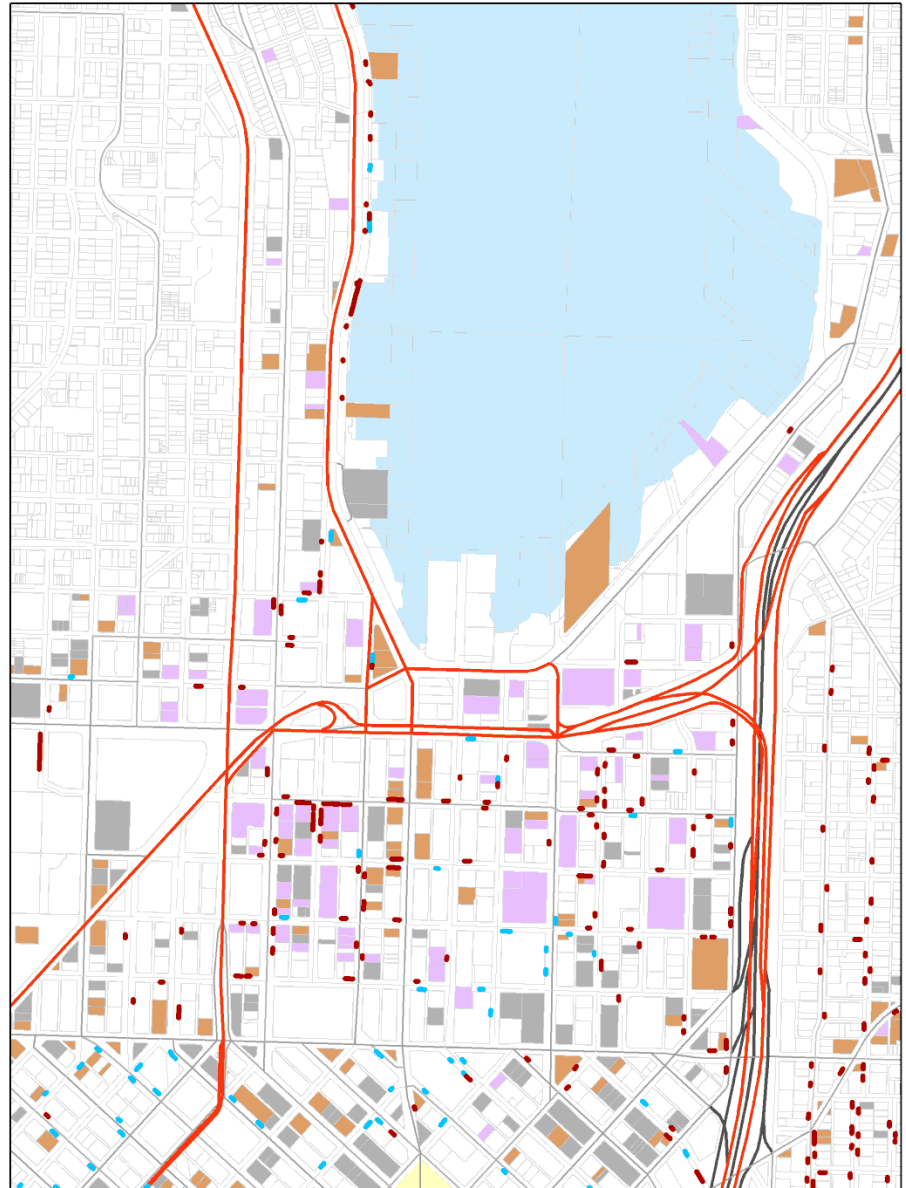
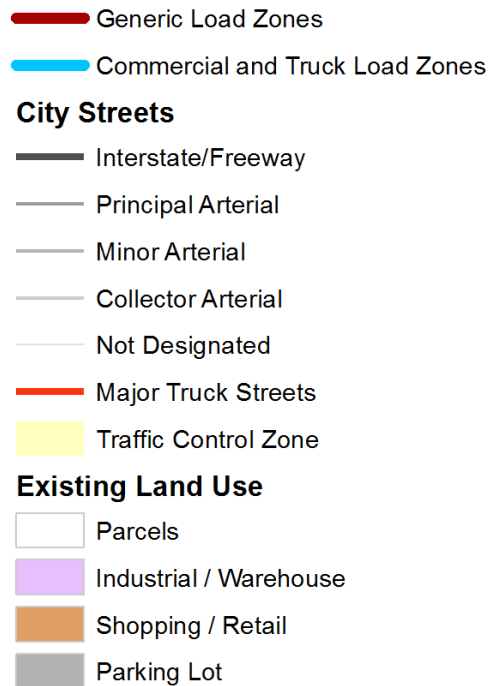
South Lake Union: Truck Volumes & Major Truck Streets

City Streets

-  Interstate/Freeway
-  Principal Arterial
-  Minor Arterial
-  Collector Arterial
-  Local
-  South Lake Union



South Lake Union: Load Zones



Key findings

- Neighborhoods are growing
- On-street parking can be scarce
- Concerns that additional truck loading zones or loading docks are needed
- Predominate delivery mode: box trucks
- Congestion has affected business practices


Key findings (continued)

- Evening noise ordinances limit nighttime deliveries
- Evening/nighttime deliveries already happening where possible (especially restaurants)
- Geometric constraints with the arterial street system are not a major factor
- Neighborhood residents are concerned about trucks:
 - Volumes
 - Speeds (safety)
 - Noise

Recommendations

- Study parking and loading zones
 - On-going load zone monitoring program
- Re-evaluate truck street designations
 - NW Market Street near 24th Avenue NW and east of 15th Avenue NW
 - Leary Avenue NW south of NW Market Street
 - 24th Avenue NW north of NW Market Street (minor arterial)
 - Westlake Avenue North near Denny Way
 - Dexter Avenue North (minor arterial)

Next steps



April - May	Evaluate Future Conditions
May - June	Update Freight Network
Summer	Identify Needs, Improvements and Design Guidelines
Fall	Develop Implementation Strategy
Fall	Draft Plan
Winter	Recommended Freight Master Plan

↑
STAKEHOLDER ENGAGEMENT AND PUBLIC
OUTREACH
↓

Questions?

gabriela.vega@seattle.gov | (206) 733-9029

ian.macek@seattle.gov | (206) 684-7576

wieghart@pbworld.com | (503) 478-2812

<http://www.seattle.gov/transportation/freight.htm>

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