Alaskan Way Viaduct Replacement Program

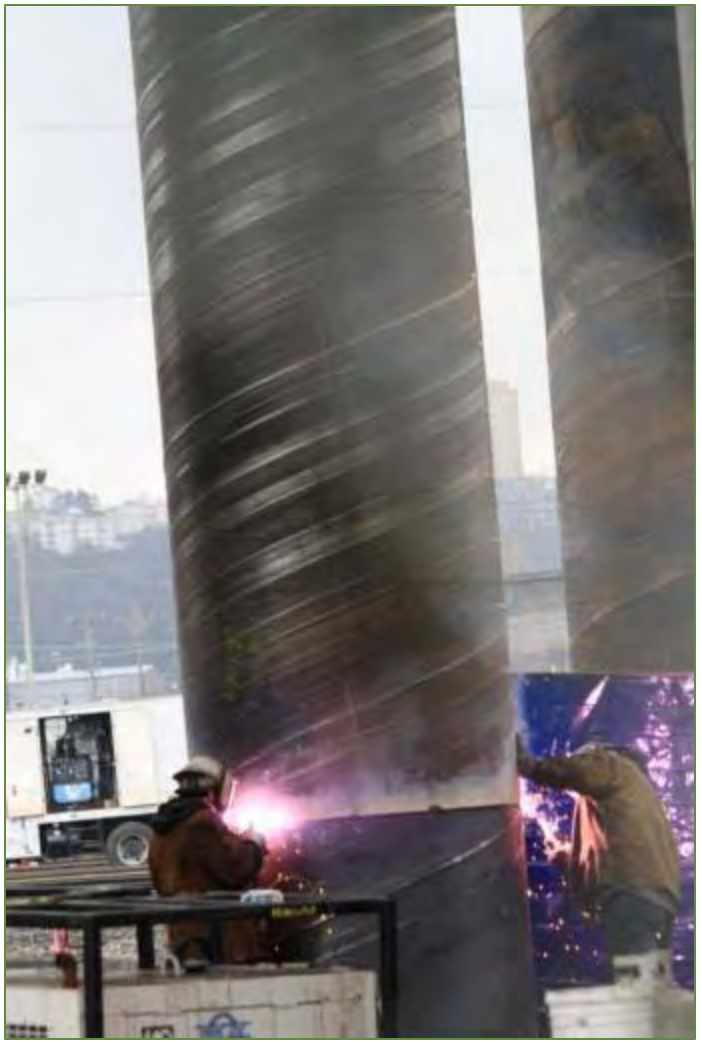
Advisory Committee on Tolling and Traffic Management
Meeting 3
Feb. 29, 2012

WSDOT

City of Seattle

Meeting Overview

- Legislative update.
- City of Seattle, Port of Seattle and King County policies and programs.
- Guiding principles.
- Evaluation framework.
- Work plan update.



ACTT Purpose

- The committee will make advisory recommendations on strategies for:
  - Minimizing traffic diversion from the tunnel due to tolling.
  - Tolling the SR 99 tunnel.
  - Mitigating traffic diversion effects on city streets and I-5.

Viaduct demolition, fall 2011.

Legislative Update

Expert Review Panel Overview

- Engrossed Substitute House Bill 1175 formed the panel.
- Purpose: To assess the viability and appropriateness of the AWV program's finance plan.
- Three panel members.
- Report and recommendations submitted in February 2012 to:
    - Senate and House Transportation Committees.
    - Transportation Commission.
    - Governor's Executive Oversight Committee.
- Report is available at www.alaskanwayviaduct.org.

Expert Review Panel Findings

- Program is proceeding on schedule and within budget.
- Well managed program with strong implementation practices.
- Work to secure planned funds including tolling and Port contributions.
- WSDOT and the City should complete a binding agreement regarding the management, design and construction of the Alaskan Way surface street.

City, Port and County Policies and Programs Related to Guiding Principles

Seattle Center City and Waterfront

Opportunity…

- Develop a truly great civic space on Seattle's waterfront
- Promote housing and economic growth
- Support sustainable development

Seattle Center City and Waterfront

…while replacing some transportation functions of the Alaskan Way Viaduct

Seattle Center City and Waterfront

Daily Traffic Volumes on Alaskan Way

Today: 11,000 – 12,000
2015, Tunnel No Tolls: 24,000 – 38,000
2015, Toll Scenario C: add 6,000 – 7,000

Daily Traffic Volumes on Downtown Streets

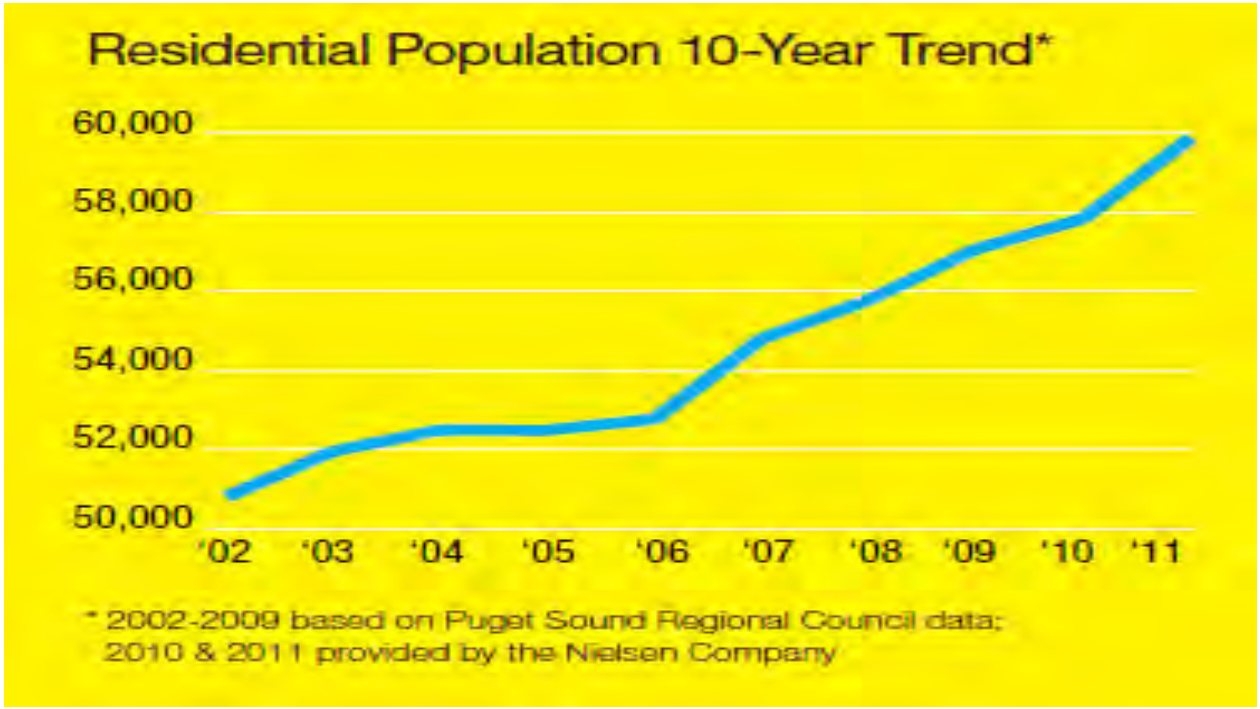
Today: 99,000
2015, Tunnel No Tolls: 111,000
2015, Toll Scenario C: add 16,000 - 18,000

Center City


SR 99 Tunnel
North Portal
Uptown
South Lake Union
Denny Triangle
Belltown
Capitol Hill
Pike/Pine
First Hill
Commercial Core
Pioneer Square
Chinatown/
International
District
UnionStation
"You are here"
SR 99 Tunnel
South Portal
Center City
Seattle
Center City neighborhoods, Seattle residents, businesses and government working together to create a vibrant core of 10 distinct neighborhoods, where thousands walk to work and where the entire region feels at home.

Center City … is a success

- About 60,000 residents (Added 25,000 since 1990)
- Over 220,000 jobs

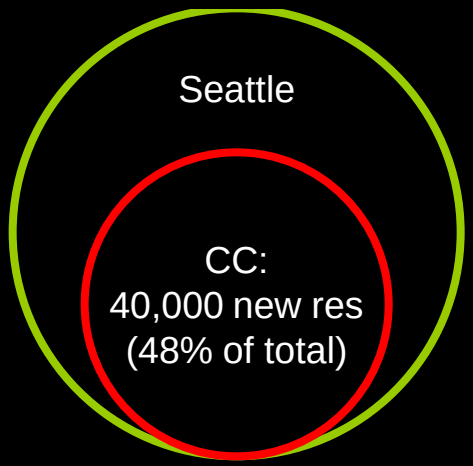


Source: State of Downtown Economic Report 2012, DSA & MID

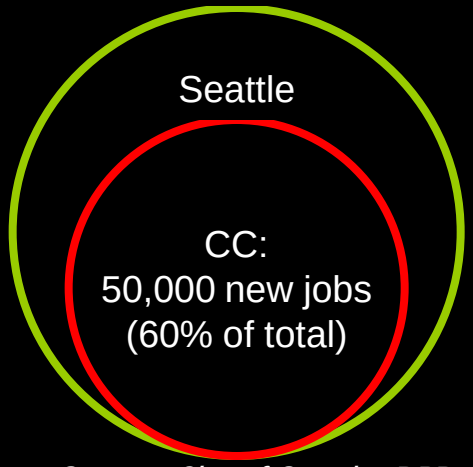
Center City … keeping it working

Growth Targets 2004 - 2024

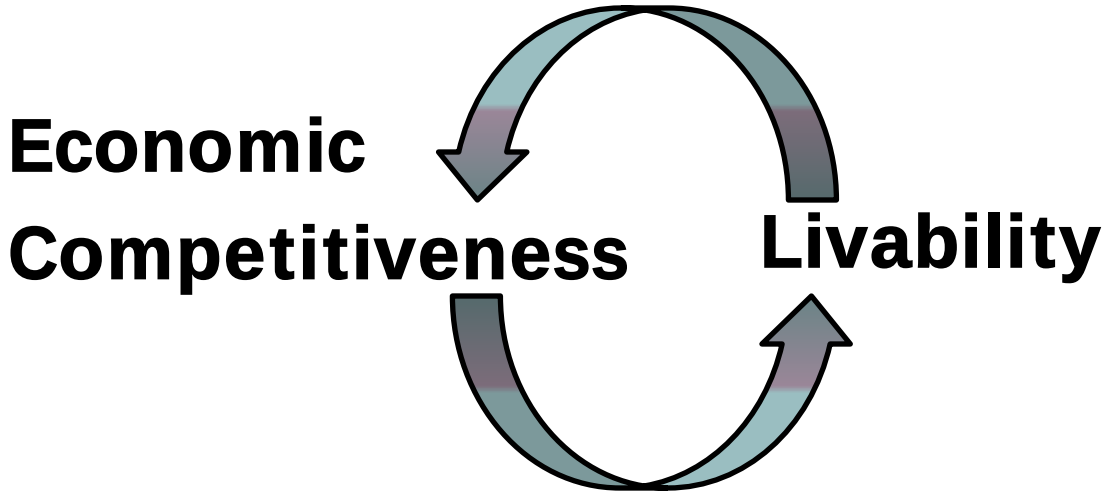
Population



Employment



Source: City of Seattle, DPD



Center City … Transit Access

Transit Corridors

- Reliable Access to Center City
- Reliable Service within Center City

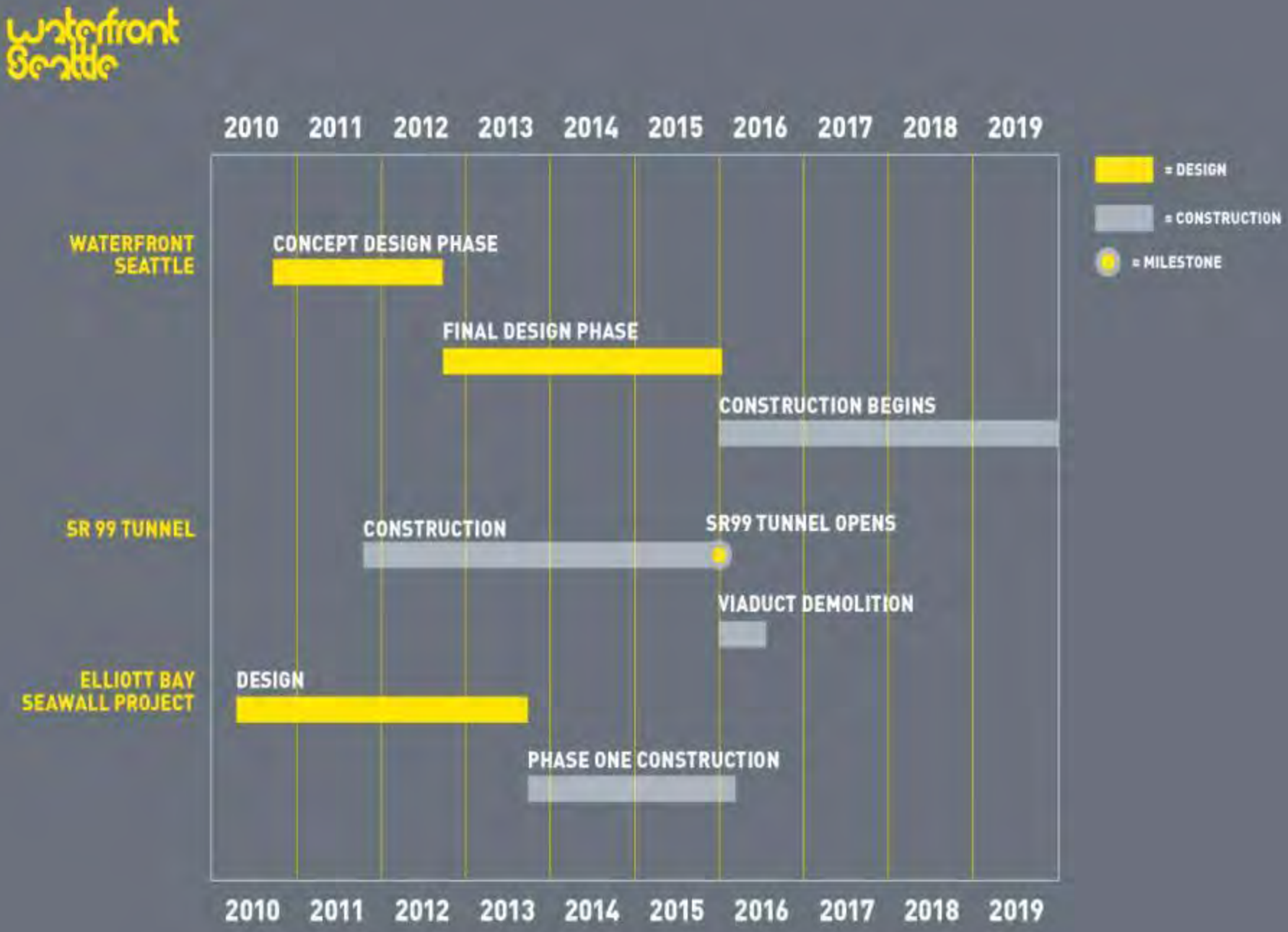
Draft Transit Master Plan

Center City … Walkability & Public Realm

- 10 million people visit Pike Place Market each year
- Over 8,000 pedestrians at 5th & Olive during am, lunch, and pm peaks (Aug 2011)
- 155 sidewalk cafes - 95 permits since 2005

Source: 2011 Urban Environment Report, DSA & MID

Waterfront Seattle.org


2010 2011 2012 2013 2014 2015 2016 2017 2018 2019
= DESIGN
= CONSTRUCTION
= MILESTONE
WATERFRONT SEATTLE
CONCEPT DESIGN PHASE
FINAL DESIGN PHASE
CONSTRUCTION BEGINS
SR 99 TUNNEL
CONSTRUCTION
SR99 TUNNEL OPENS
VIADUCT DEMOLITION
ELLIOTT BAY SEAWALL PROJECT
DESIGN
PHASE ONE CONSTRUCTION
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

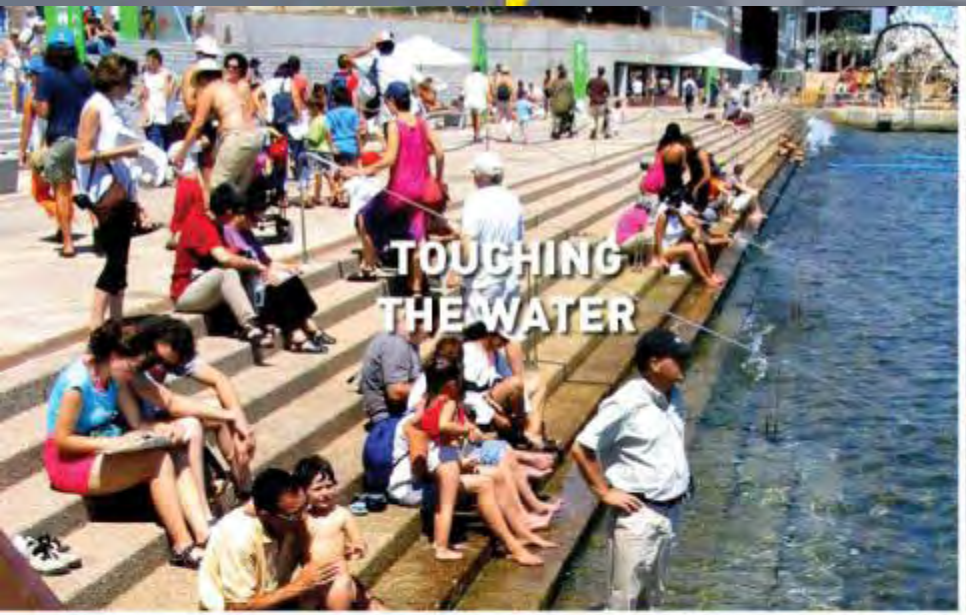
CITY-WATERFRONT CONNECTIONS

PIONEER SQUARE BEACH | FESTIVAL PIER | COLMAN DOCK | HISTORIC PIERS | UNION STREET OVERLOOK | AQUARIUM PLAZA | PIER 62/63 | OVERLOOK FOLD | BELLTOWN BLUFF | BELL HARBOR | THE NORTH END


ATM

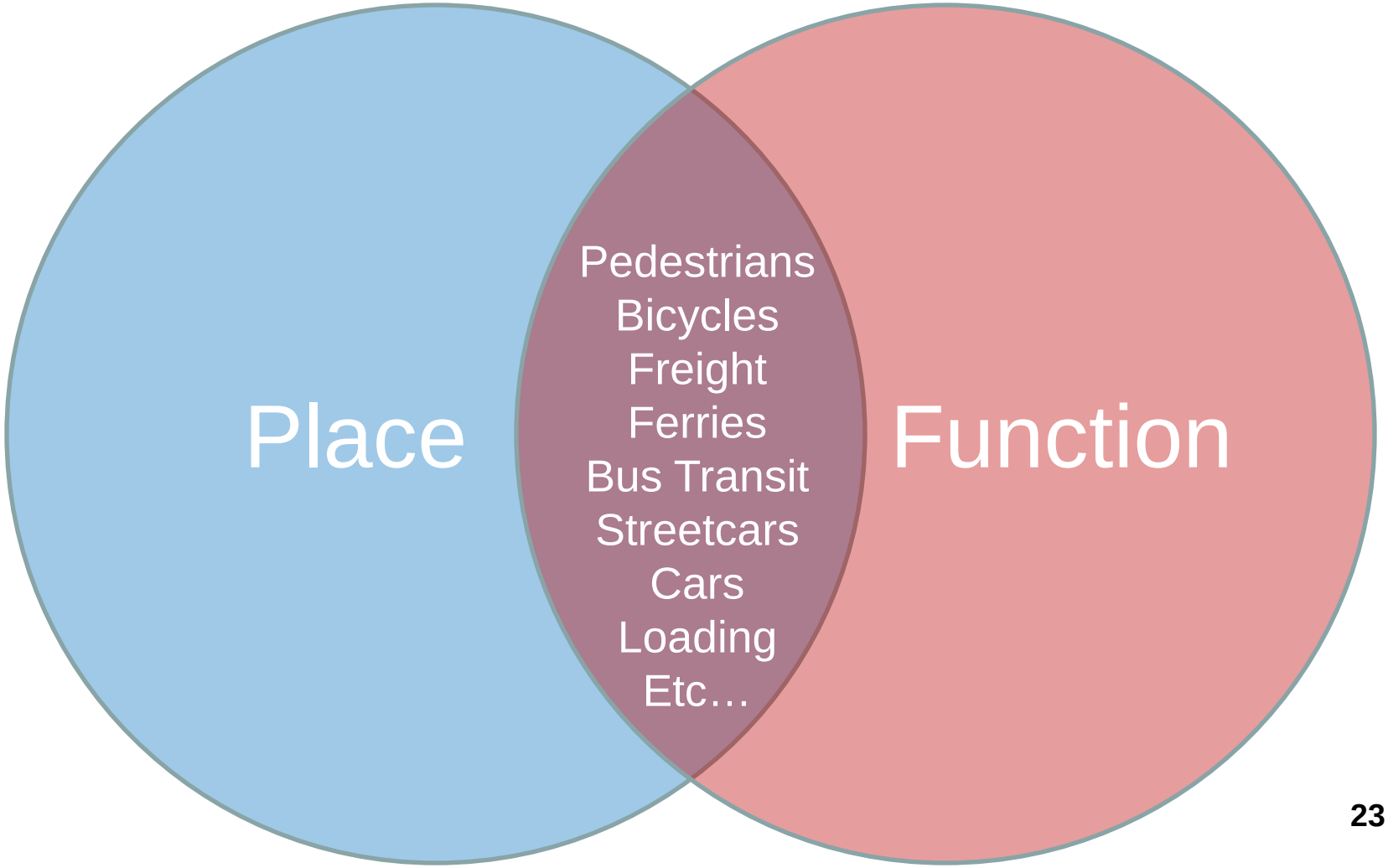
Waterfront Seattle.org

waterfront Seattle.org




STAFF

Great Street Design



LINEAR BIKEWAY

Recognize three functions (recreation, regional transportation and Center City circulation, tourism)

Pedicab, Japan


Bike path, NYC

INTERSECTIONS

Bike and pedestrian friendly intersection, Copenhagen

Bold pavement markings, Arizona

Generous intersections, Paris

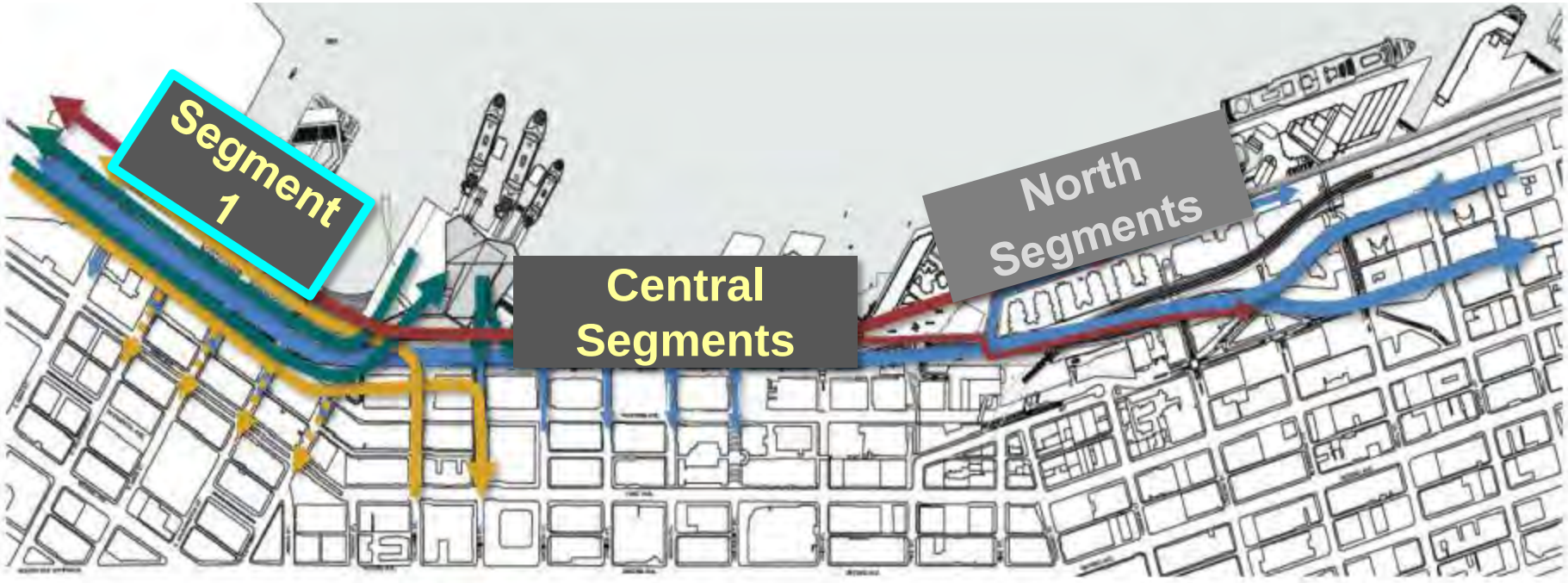
FREIGHT Access

Alaskan Way connects freight:

from I-5, I-90, and SR 99
to BINMIC
(Ballard/Interbay/Northend Manufacturing & Industrial Cente

from SR 99
to Downtown

STREET DESIGN



Waterfront Team Street Design Process:

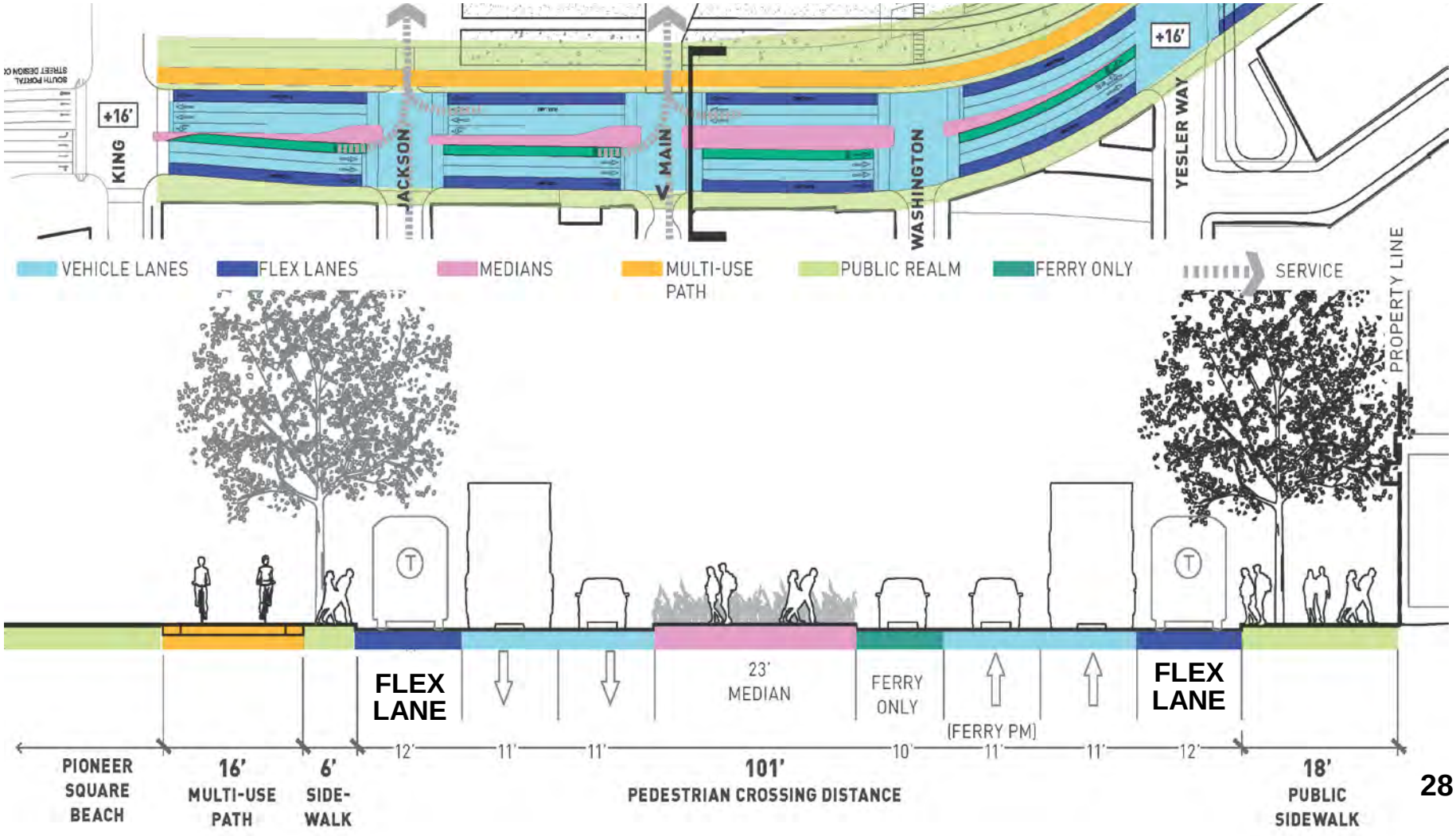
- How do we accommodate multiple modes and needs?
- How do we best maximize urban design opportunities?

VEHICLES, PARKING AND LOADING
FERRIES: LOADING AND UNLOADING
TRANSIT LINKAGE
NORTH/SOUTH BICYCLE AND PEDESTRIAN MOVEMENT

SOUTH SEGMENT

Working Draft, December 15, 2011

King to Yesler, Section @ Main



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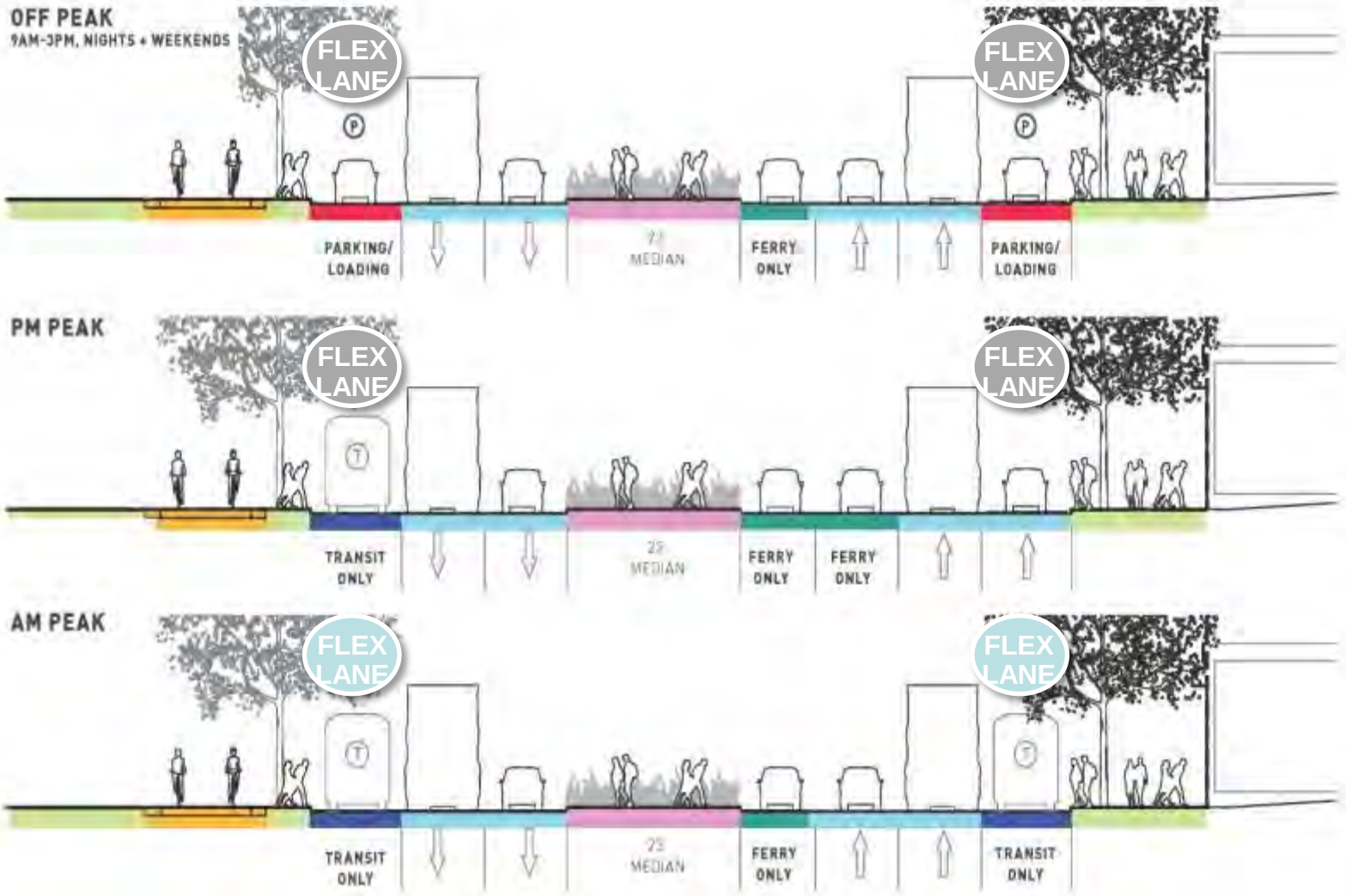

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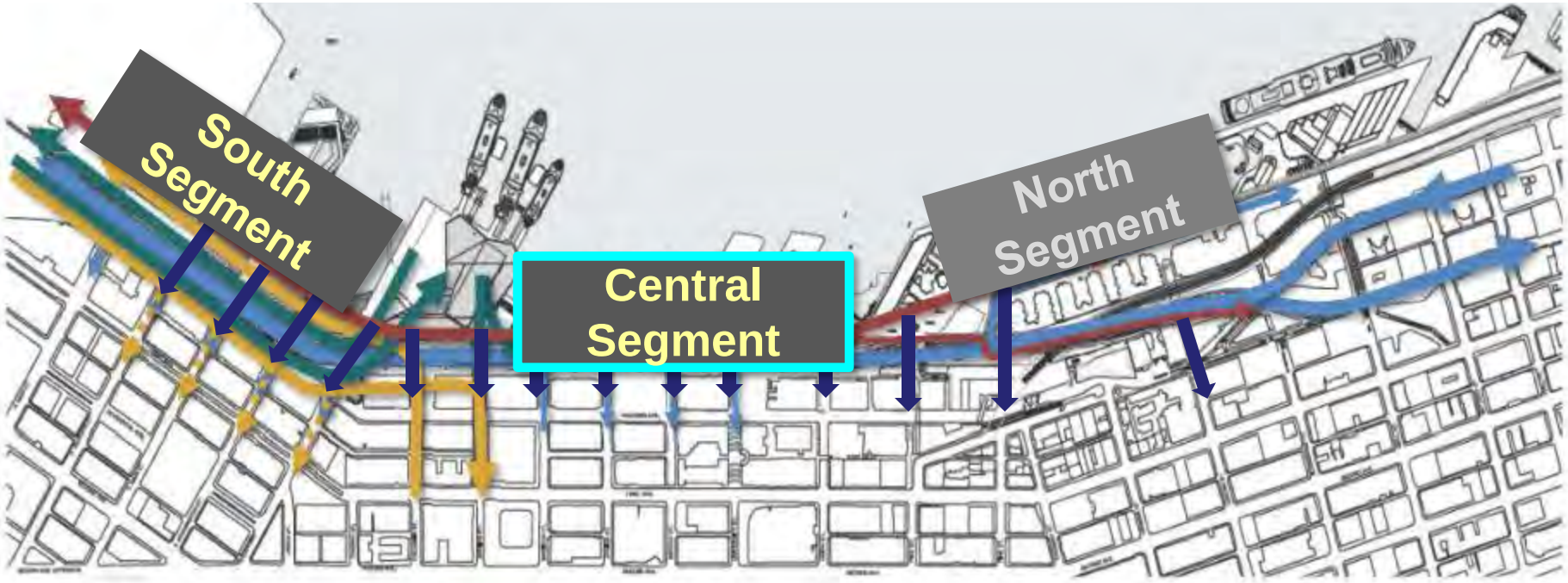

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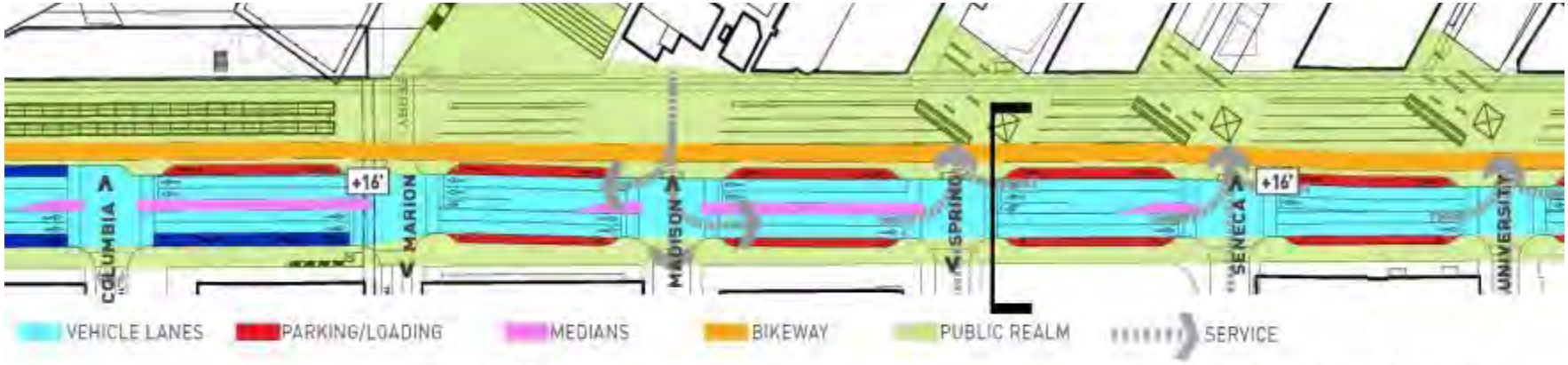
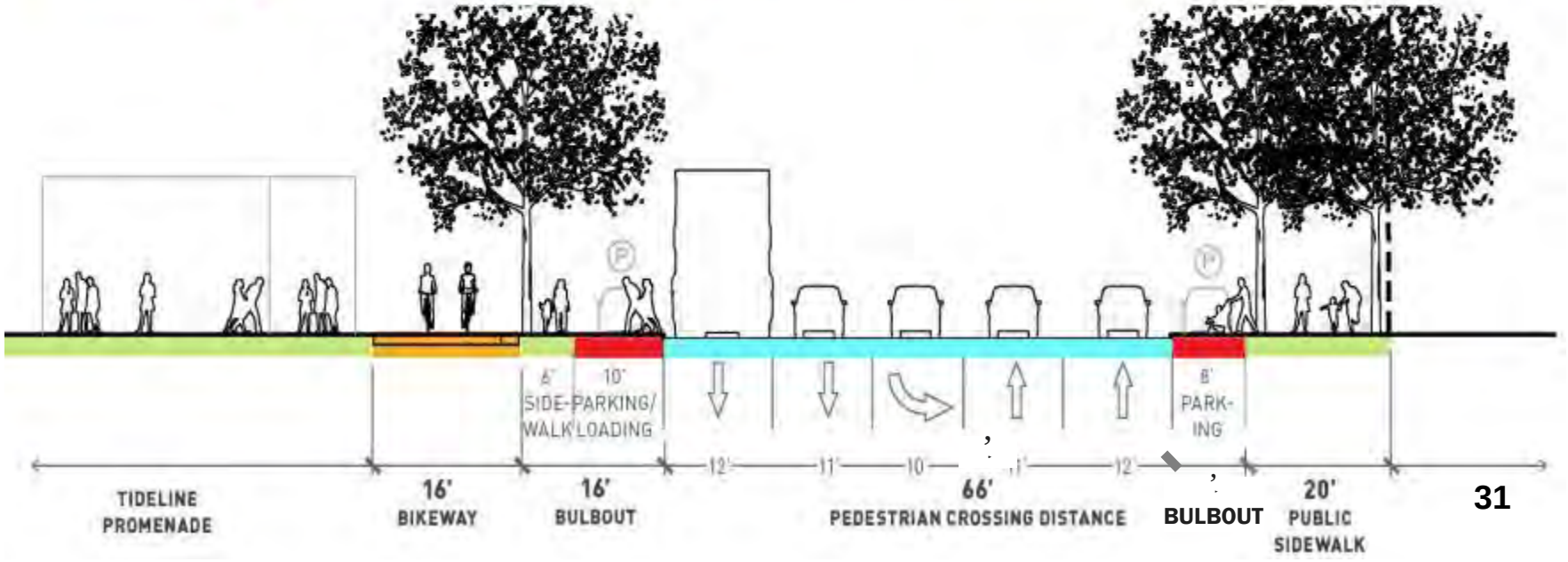
CENTRAL SEGMENT

Working Draft, December 15, 2011

Marion to Seneca, Section @ Spring





Seattle Center City and Waterfront

- Access and Mobility
- Livability
- Economic Competitiveness

COLOR KEY

- Container Terminals
- Cruise Facilities
- Industrial & Commercial Properties
- General Purpose Marine/Cargo Terminals
- Fishing/Workboat, Commercial & Recreational Moorage

LEGEND OF MAP SYMBOLS

- Interstate
- State Highway
- Recreational Moorage
- Public Shoreline Access & Parks
- Freeway
- Primary Road
- Secondary Road
- Railroad

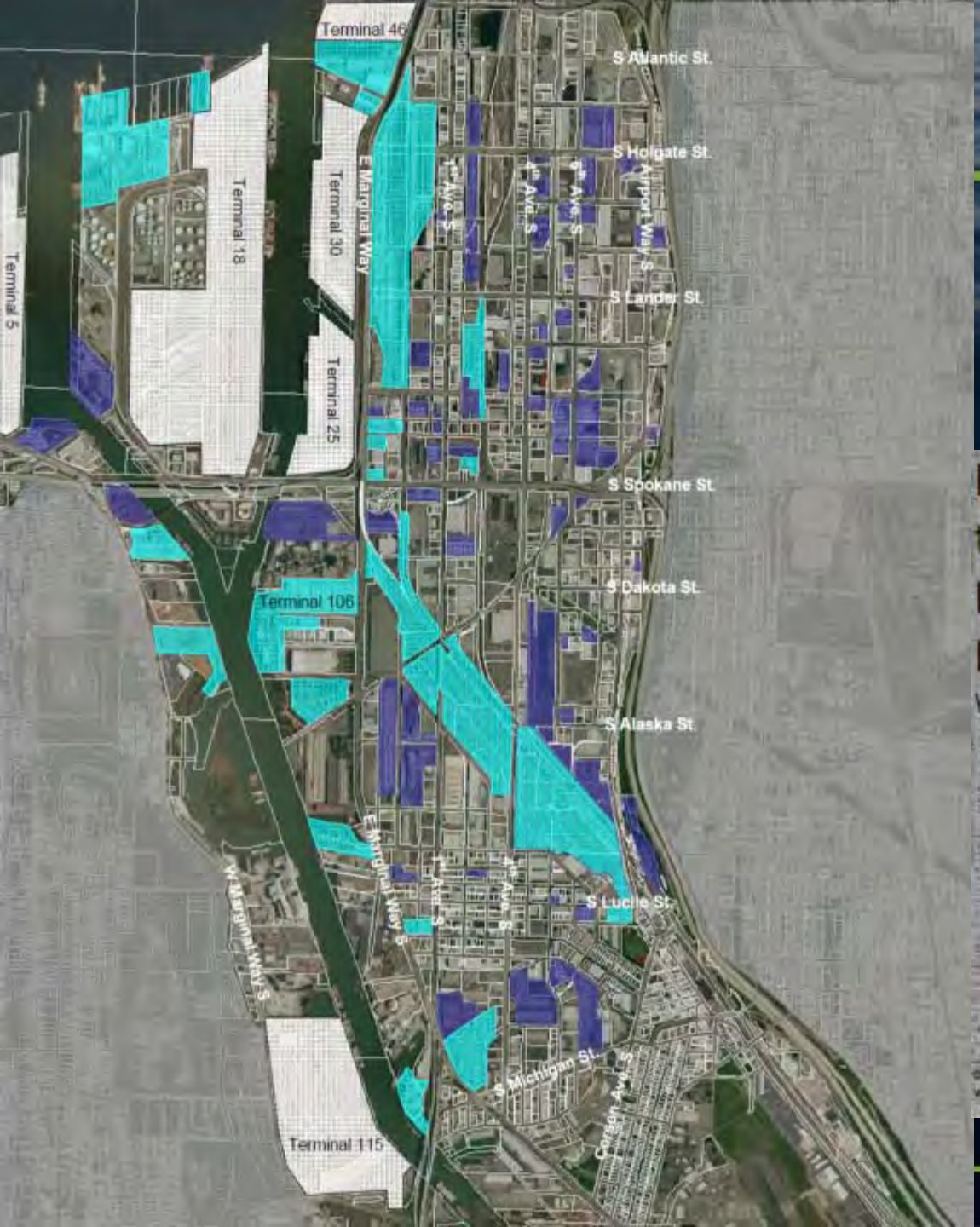
Port of Seattle

Freight Flows: Supporting Waterfront and Industrial Business

Source: Actual Truck Counts from multiple studies

Port of Seattle

Manufacturing Industrial Center



Inventory of Businesses Linked to the Port of Seattle in the Duwamish Manufacturing / Industrial Center

WORKING DRAFT July 26, 2010

- Businesses Engaged in Importing or Exporting
- Services to Operation of the Port
- Port of Seattle Cargo Terminals


Pier 90/91
Pier 86
Pier 66
Terminal 46
BNSF (SIG - North)
T-18 On-Dock Rail
T- 5 On-Dock Rail
Terminal 18
Terminal 30
BNSF (SIG - South)
Terminal 5
UPRR (ARGO)

Port Investments in Harbor Area Infrastructure

EMW: $18m

SR519: $5.5m

Spokane St Viaduct: $3.4m

Duwamish ITS: $500k

FAST: $12.3m

AWV: $300 million

Cargo Flow to Regional Warehouses

Port of Seattle

3 routes south out of terminal area:

- West Marginal Way
- East Marginal Way
- I-5

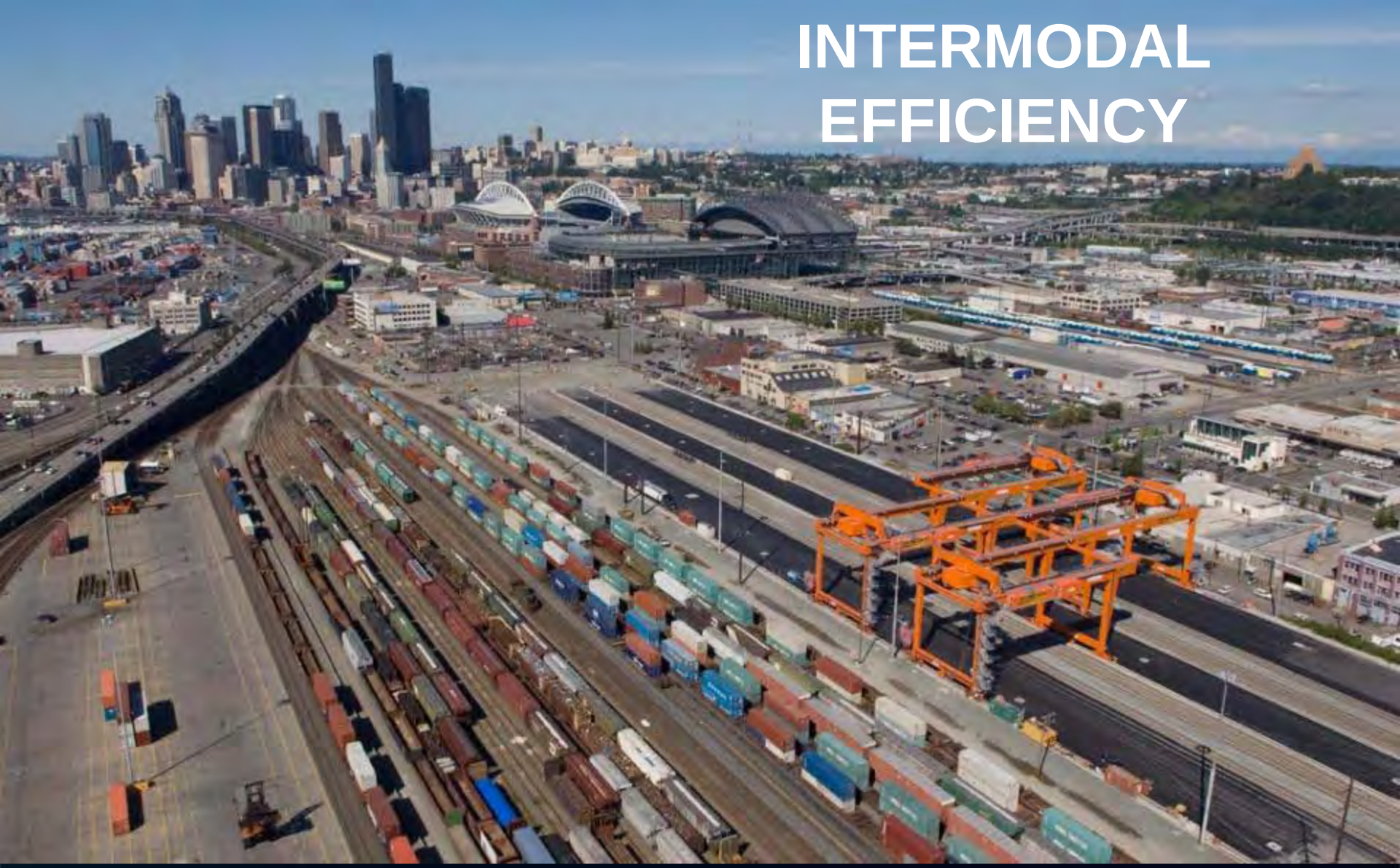
Ample and reliable port trucking resources

Upgraded road infrastructure

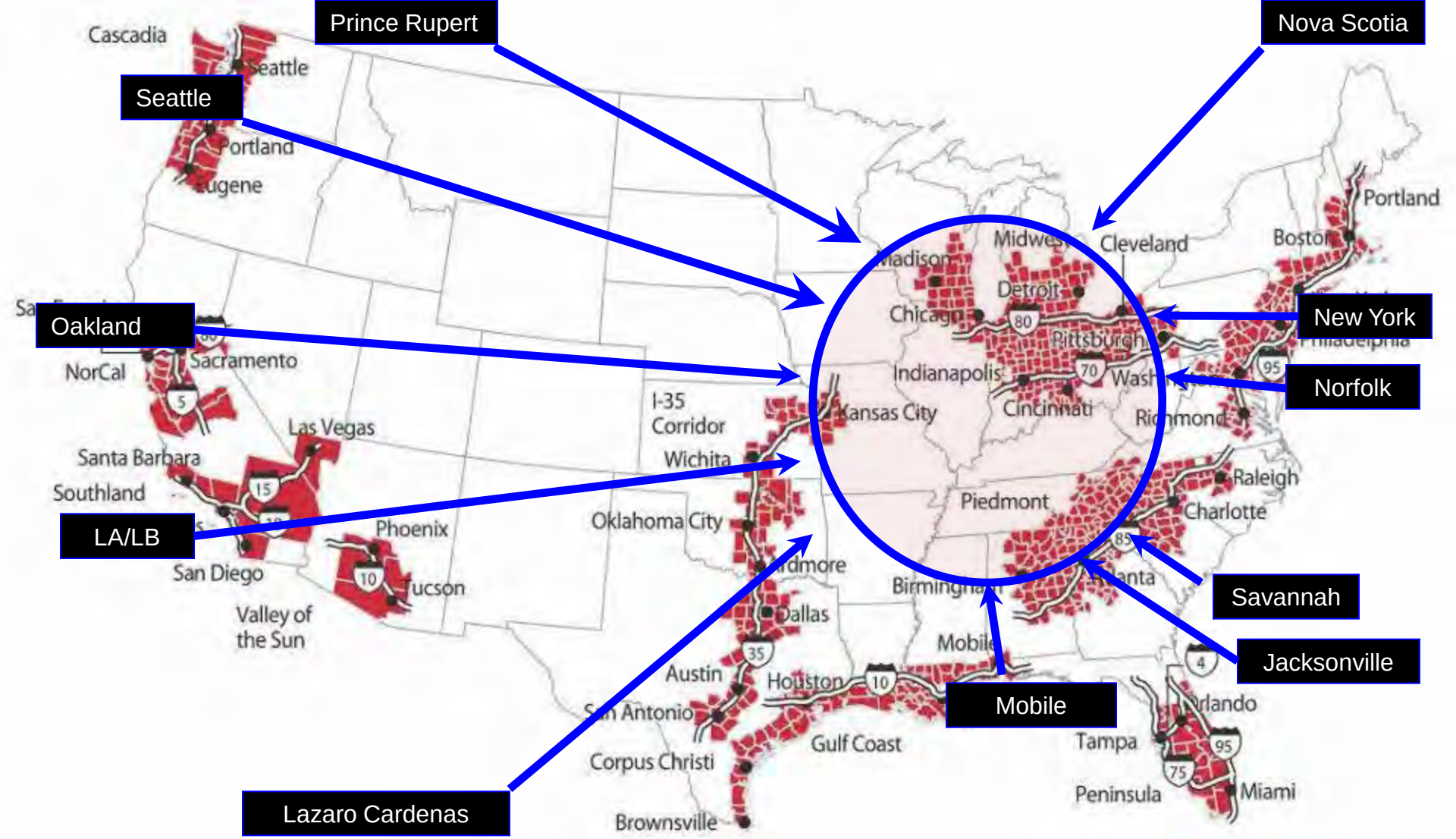
Upgraded traffic signal timing & cameras

City	Miles/km	Time
Kent	16/26	25 mins
Auburn	24/39	25 mins
Sumner	31/49	45 mins

INTERMODAL EFFICIENCY



A combination of on-dock and near-dock rail yards provide service for rail cargo but a challenge if competing with commuter traffic.



70% of our cargo moves inland. We face fierce competition for this market.

Economic Impact to the Region

Port of Seattle	Jobs	Personal Income
Direct	112,411	$3.81 Billion
Induced/Re-spend	63,359	$5.21 Billion
Indirect	21,219	$727 Million
Total	**196,988**	**$9.74 Billion**

$3,244 per Container

$1.9M per Cruise Ship

**Martin Associates, 2007 Economic Impact Study of Port of Seattle

Transit Service and SR 99

Alaskan Way Viaduct Replacement Program
Advisory Committee on Tolling and Traffic Management
February 29, 2012

Transit Supports Growth in Downtown Seattle

- 54.8 million annual rides in Seattle CBD
- Transit - 40% commute mode split to downtown
- Expected growth in travel to and from downtown to be provided by transit
- Expert Review Panel (2012) stated importance of transit to meet AWV Program's mobility goals

Transit Operates in a Constrained Network in Downtown Seattle

Tolling Impacts on Transit

- Increased travel times with diversion
- Increased costs to operate
- Ridership Impacts

Transit Operations Improvements Needed in Downtown Seattle

- All-day priority treatments in and out of downtown
- All-day transit corridors through downtown
- Optimize trolleybus pathways
- Improve transit way-finding
- Additional transit service
  - Bored Tunnel Letter of Agreement: $15 million/year and $190 million capital

Transit Service on SR 99 Columbia and Seneca Ramps

- 19,000 daily riders on 11 routes
- 45 to 50 Metro buses per peak hour
- RapidRide C Line – September 2012
- 7% of daily bus trips to and from downtown Seattle
- One-half of people moving on Columbia ramp in the peak hour

Southend Transit Project

Project Description:

- Determine dedicated transit pathways to connect SR 99/AWV to Seattle's Third Avenue transit spine

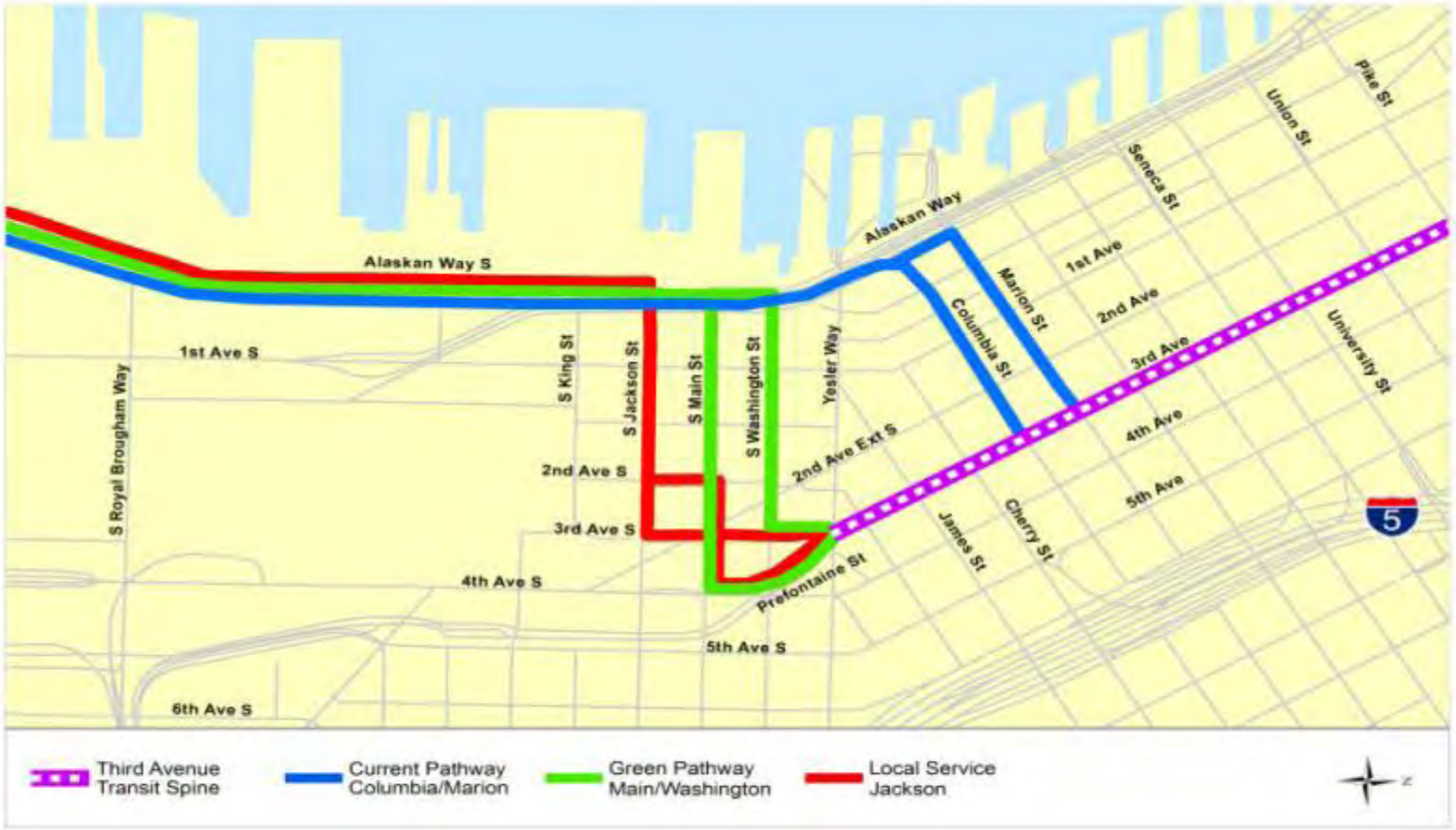
Project Objectives:

- Faster and more reliable travel time for bus riders
- Increased use of transit
- Direct connection to Third Avenue transit spine
- Accessibility for transit riders

Southend Transit Pathway Challenges

- Analyzed 13 pathways
  - SODO pathways: 1st and 4th Avenues
  - I-5
- Increased travel times and impacts to reliability
  - SODO pathways: 5-15 minutes longer
  - I-5 pathways: 3-6 minutes longer and less reliable
- Three SR 99 pathways identified for further consideration

Further Analysis



- All 3 pathway options have significant trade-offs

Moving Ahead

- Transit must accommodate growth in travel to and from downtown Seattle
- Travel times need to remain similar, if not better, than pre-construction conditions.
- Trade-offs and tough decisions ahead about how transit service operates on SR 99 and Alaskan Way.

Guiding Principles

Guiding Principles

- Minimize diversion from the tunnel onto city streets.
- Minimize diversion from the tunnel onto I-5.
- Mitigate the anticipated adverse effects of traffic diversion.
- Meet the State's funding obligation for the AWV Replacement Program.
- Identify funding for mitigation of diversion impacts.
- Support Seattle's "Complete Streets" policy goals to make City streets function for bicycles, pedestrians, freight, transit and automobiles in strategies that are proposed to mitigate and minimize diversion impacts.

Guiding Principles

- Support Seattle's waterfront and Center City policy goals to make the waterfront and downtown an enjoyable place for people to live, work, shop and play.
- Support and maintain efficient use of city streets and I-5 for transit access into, within, out of and through downtown.
- Support a vibrant maritime and industrial sector by maintaining efficient use of city streets and I-5 for freight access into, within, out of and through downtown.

Evaluation Framework

Parameters and Opportunities for 2012

ACTT outputs needed this year:

- Initial tolling strategy.
- Initial diversion strategy.
- Possible funding ideas.

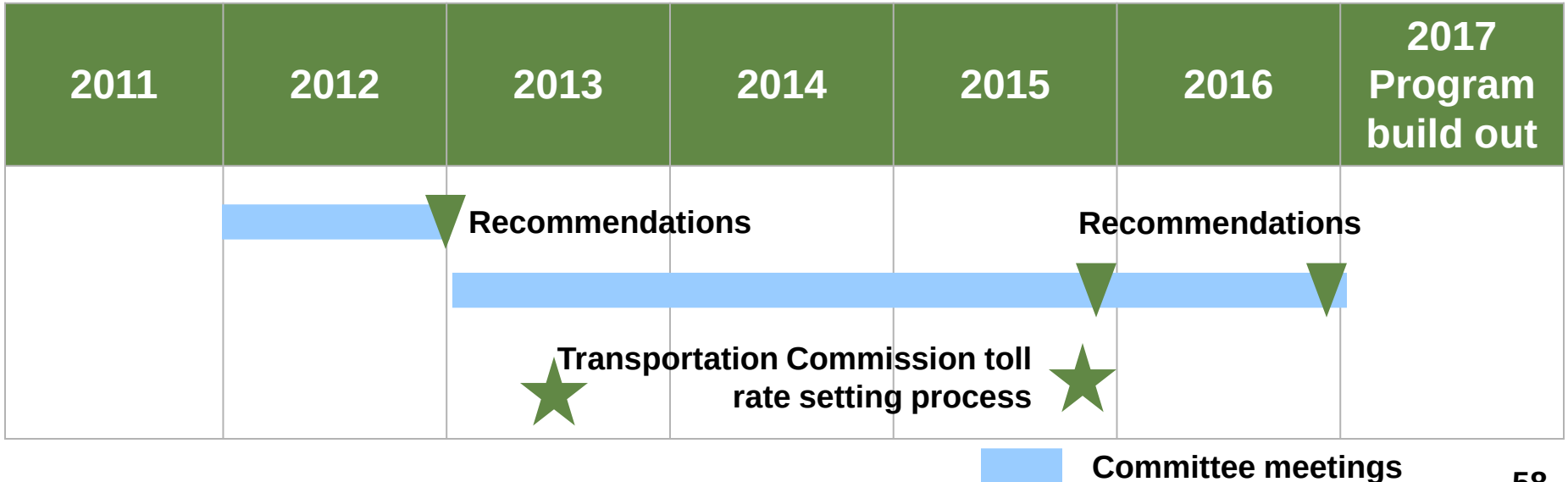
Parameters and Opportunities for ACTT Effort

- **Modeling assumptions and inputs:**
  - ACTT input: Tolling options, geography, times of day, days of week.
  - Fixed: Modeling schedule, number of runs, standard inputs.

- **Tool kit options:**
  - ACTT input: Focus is on actions that address both revenue and diversion goals.

Parameters and Opportunities for ACTT Effort

- **Recommendations:**
  - Staff will comment on practical and policy limitations.
    - 2012 recommendations that can be implemented by 2017.
    - Subsequent recommendations may look beyond 2017.
    - Budget or implementation issues.
    - Approval authority.
    - Changes to legislation.



ACTT Recommendations and Decision Making

Share advisory recommendations in late 2012 with:

- WSDOT
- FHWA
- Governor
- Legislature
- Transportation Commission
- Seattle City Council
- Seattle Mayor

Potential implementation agencies:

- Transportation Commission
- WSDOT
- City of Seattle
- King County
- Port of Seattle

Recommendations and Decision-Making Examples

Action	By 2017?	Responsible Agency(ies)	ACTT action(s) to achieve
Extend tolling area	Likely	Legislature, WA State Transportation Commission	Change legislation; seek WSTC support
Prioritize ABC Street for freight from midnight to noon, M-F	Likely	Mayor, City Council, SDOT	Port resolution City Council approval
Fund Transportation Demand Management measures	?	Metro, City, WSDOT Legislature, Governor	

Definitions

- Diversion: Extra vehicles on city streets or I-5 driven by people who are avoiding paying the tunnel toll.
- Minimize diversion: Actions to reduce the number of vehicles diverting to city streets or I-5.
- Mitigate diversion: Take additional actions to address effects from remaining diversion.

Definitions – Modeling Benchmarks

Benchmarks:

- First output from Dynamic Traffic Assignment model to provide benchmarks for future analysis.

Years that will be modeled:

- 2017: Transportation program build out.
- 2030: Long-range planning to understand future traffic patterns.

Definitions – Actions and Categories

Actions:

- Individual actions that can be taken to address revenue goals, minimize diversion or mitigate diversion.
- Examples:
  - Change toll rates.
  - Prioritize street use for freight or transit.
  - Install curb extensions for pedestrian safety.

Categories:

- Groups of actions grouped by function:
- Examples:
  - Tolling actions.
  - Operational actions.
  - Bike or pedestrian actions.

Definitions – Tool Kit and Scenario

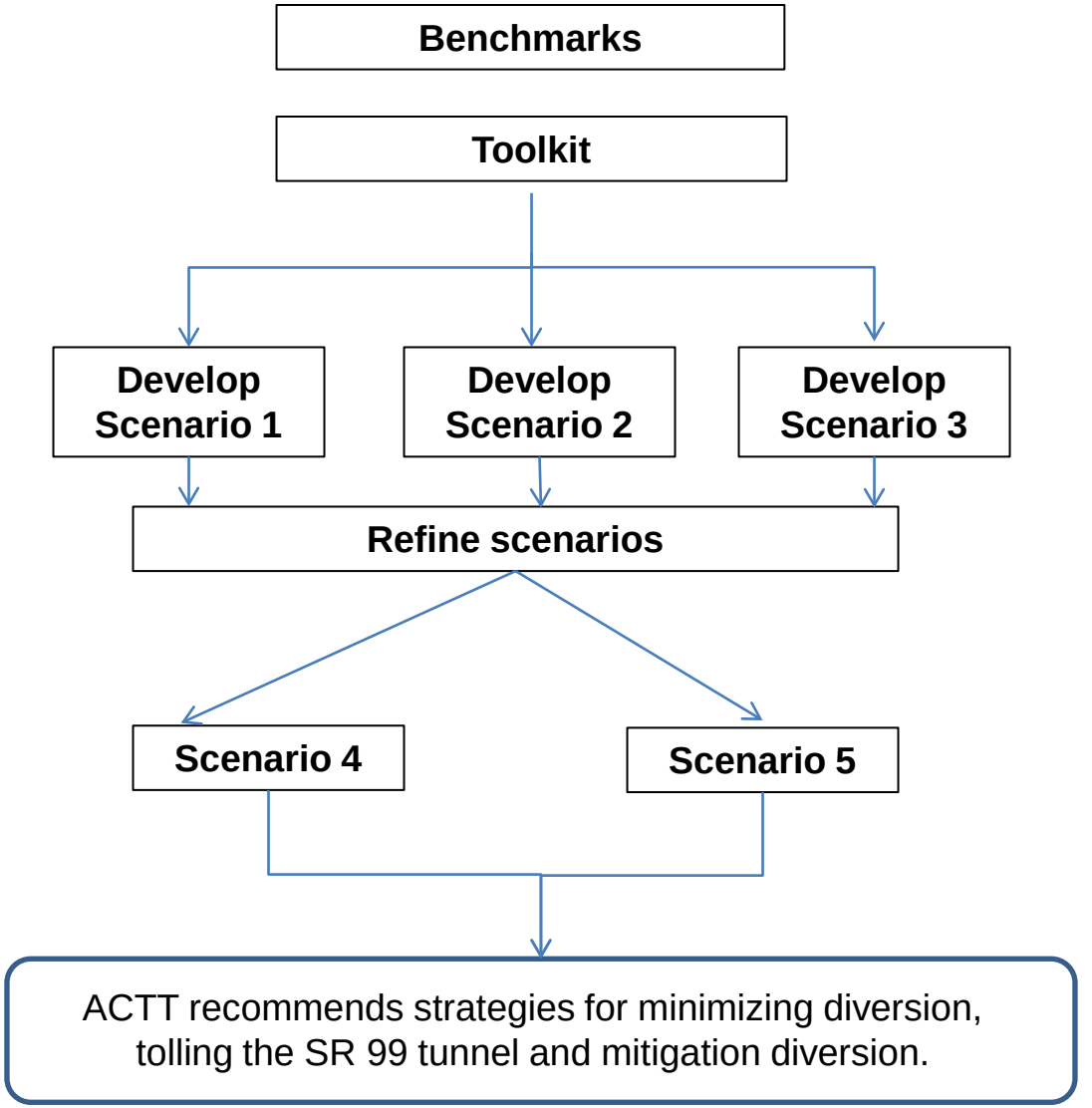
Tool kit:

- The full suite of actions available for consideration.

Scenario:

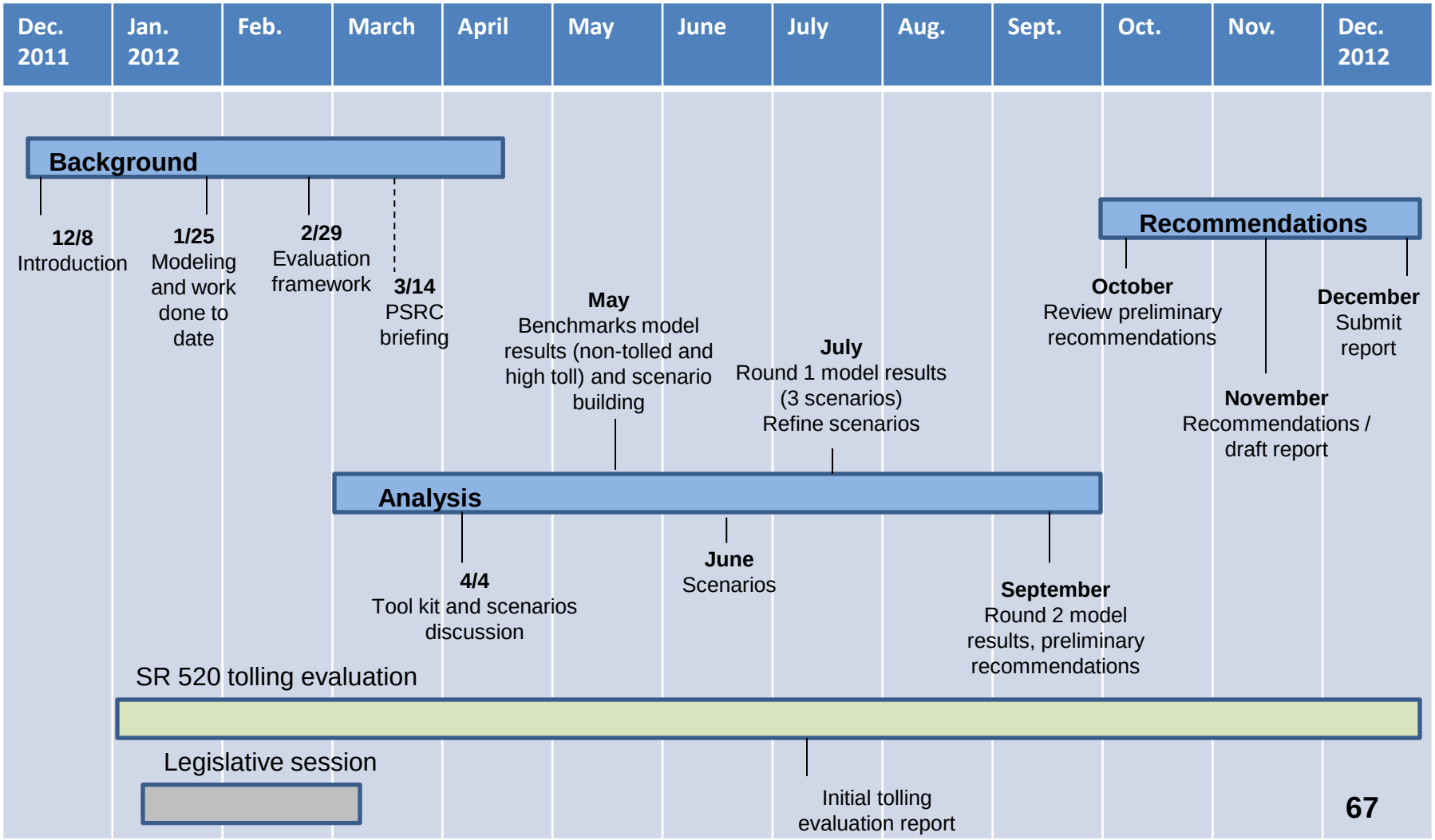
- A collection of actions from different tool kit categories put together into a package for evaluation.

Evaluation Framework



Work Plan Update

DRAFT Work Plan



Public Input

- Process would complement the ACTT's work and provide input at key milestones.
- Ways to gather input would include:
  - City Council and Transportation Commission meetings.
  - Open houses tied to preliminary recommendations.
  - Comments received from members of the public.

Roll Out of ACTT Recommendations

- News release.
- Media briefings.
- Meetings with editorial boards.
- Make recommendations available on program website.
- Email updates to program distribution list.
- Share with program stakeholders including north/south portal working groups.

Upcoming Meetings and Discussion Topics

- March 14: Optional briefing on modeling.
    - 3 – 5 p.m.
      999 Third Ave., Seattle
- April 4: In-depth look at tool kit and scenarios.

Closing: Questions and Next Steps

Website:
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1-888-AWV-LINE