

SR 302 Corridor Study

Elgin-Clifton Rd to SR 16

NEPA Environmental Scoping
Key Peninsula Light Conference Room
January 12, 2009

Paula Hammond
Secretary of Transportation

Kevin Dayton
Olympic Region Administrator

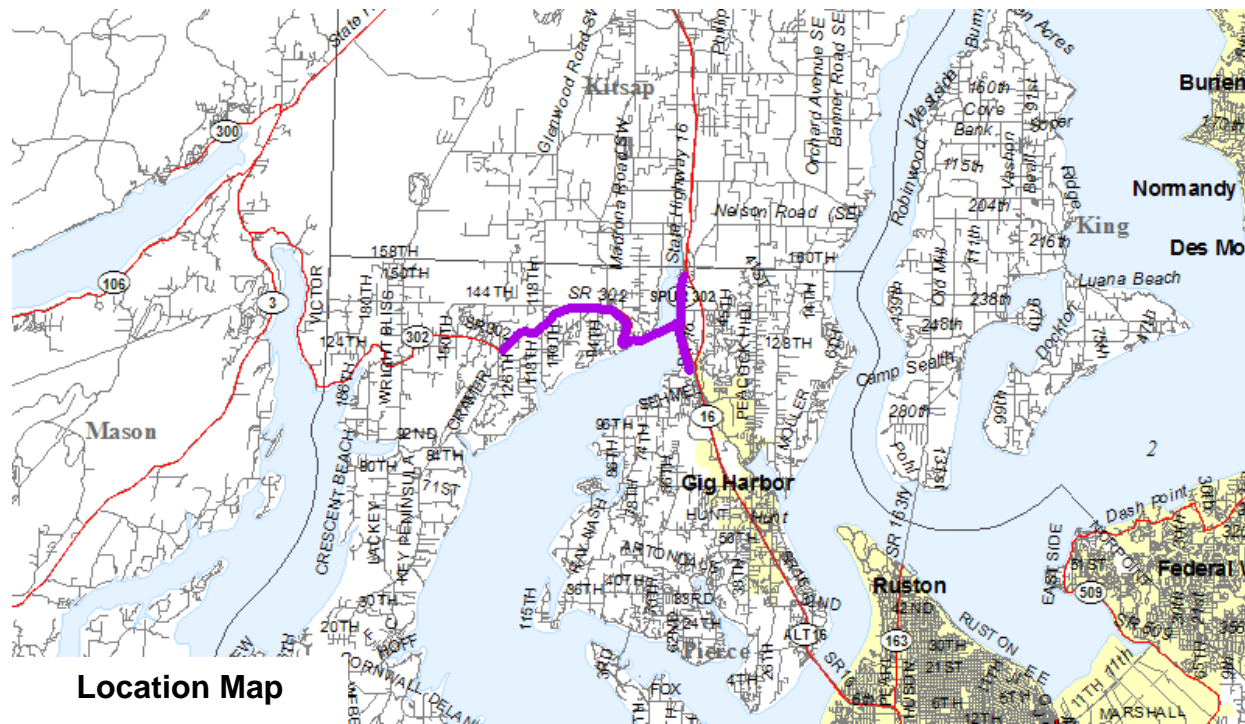
Olympic Region Planning Office

Study Background

Study Background

Study Area

- SR 302 Route – from SR 3 Mason County to SR 16 in Pierce County
- SR 302 Study – from Elgin Clifton Rd to SR 16 in Pierce/Kitsap County

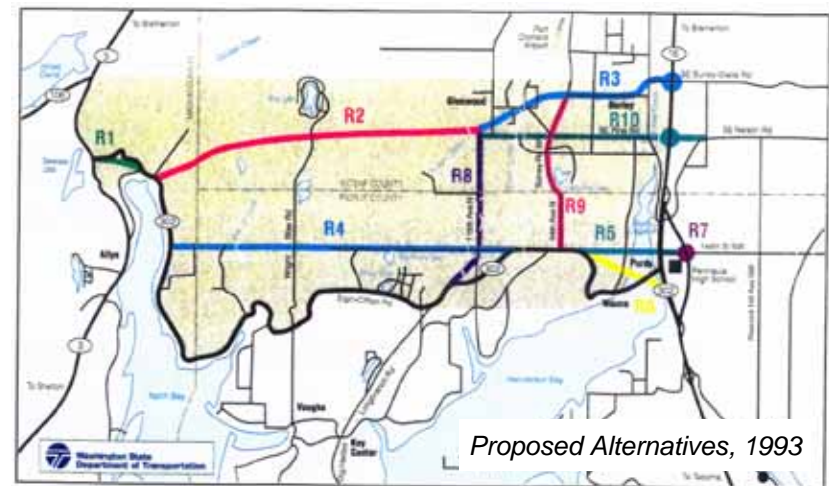
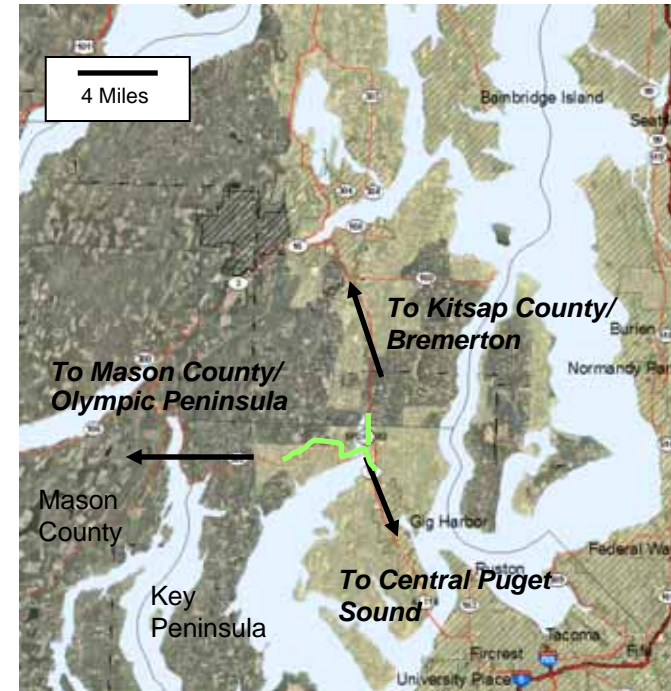


Location Map

Study Background

Study Area

- The SR 302 study corridor is an Urban Arterial serving Key Peninsula and making connections to Mason County and Puget Sound.
- A 1993 study identified a number of alternatives to consider in addressing long term needs on SR 302.




Study Background


Traffic Patterns

Most SR 302 traffic is bound for Gig Harbor, Tacoma Narrows, and beyond

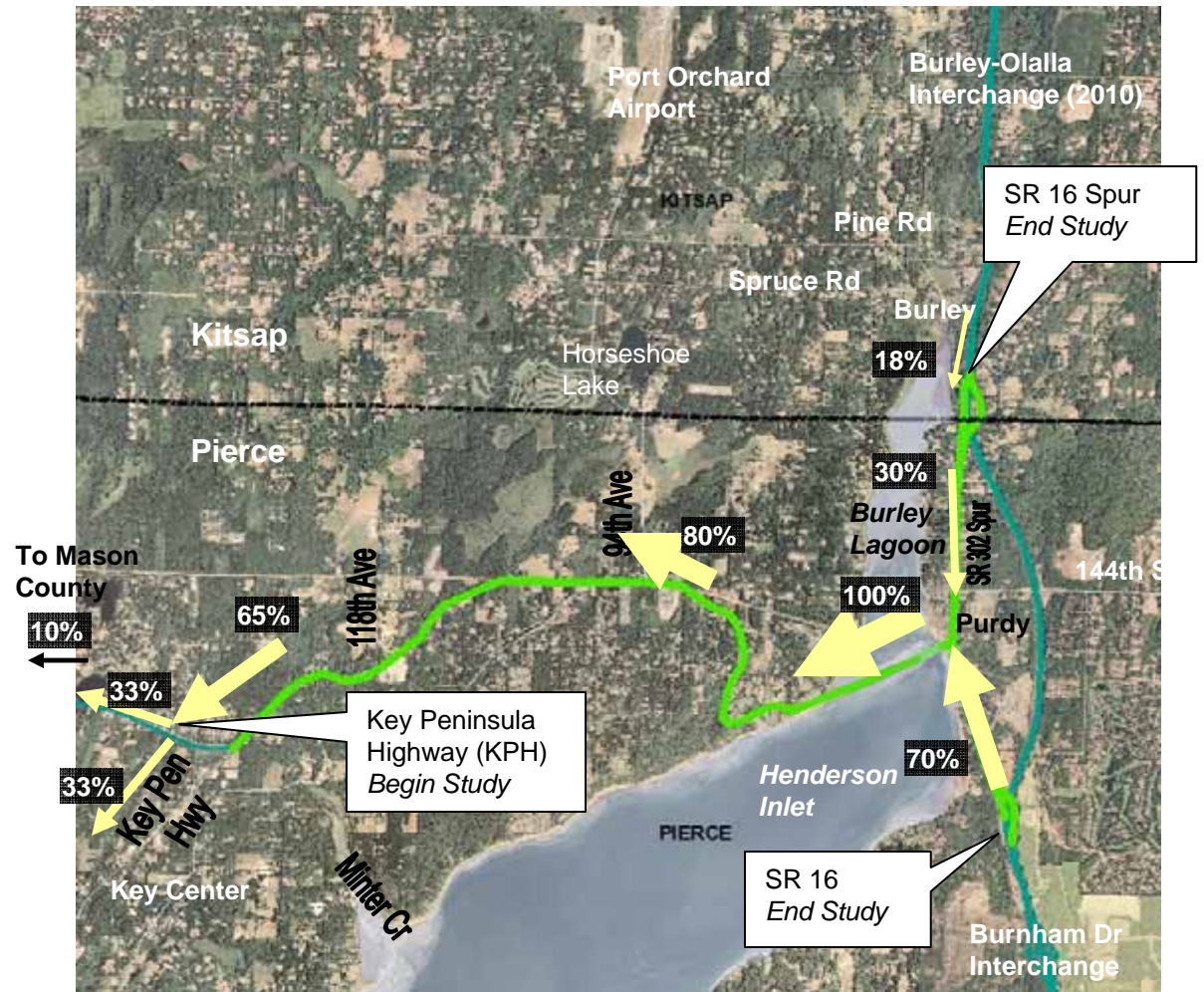
An Analysis of Origins and Destinations at Purdy Bridge

LEGEND

 Traffic flow location

 % of Purdy Bridge traffic

- PM peak period used for analysis
- Assume Purdy Bridge is 100% trips
- split 70/30 south/north at SR 16
- About 1/4 of trips cross the TNB
- split 50/50 west/south at KPH
- 2/3 of trips have destinations west and south of the KPH intersection
- About 1/10 of trips are based in Mason County

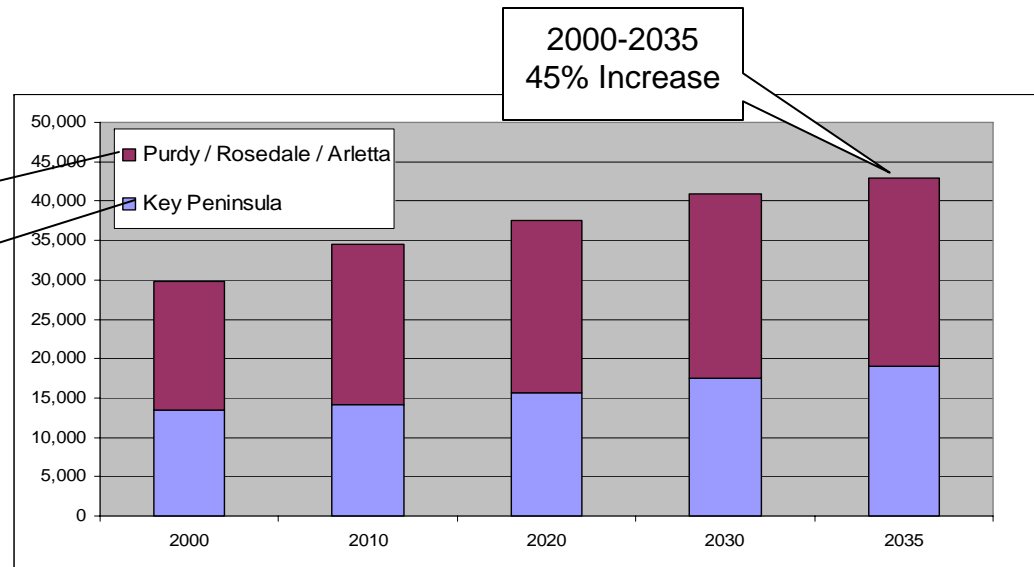


Source: SR 302 Corridor Travel Model

Study Background

Population Growth

The population will continue to increase in the area served by SR 302



PSRC Population Estimates
2000 – 2035

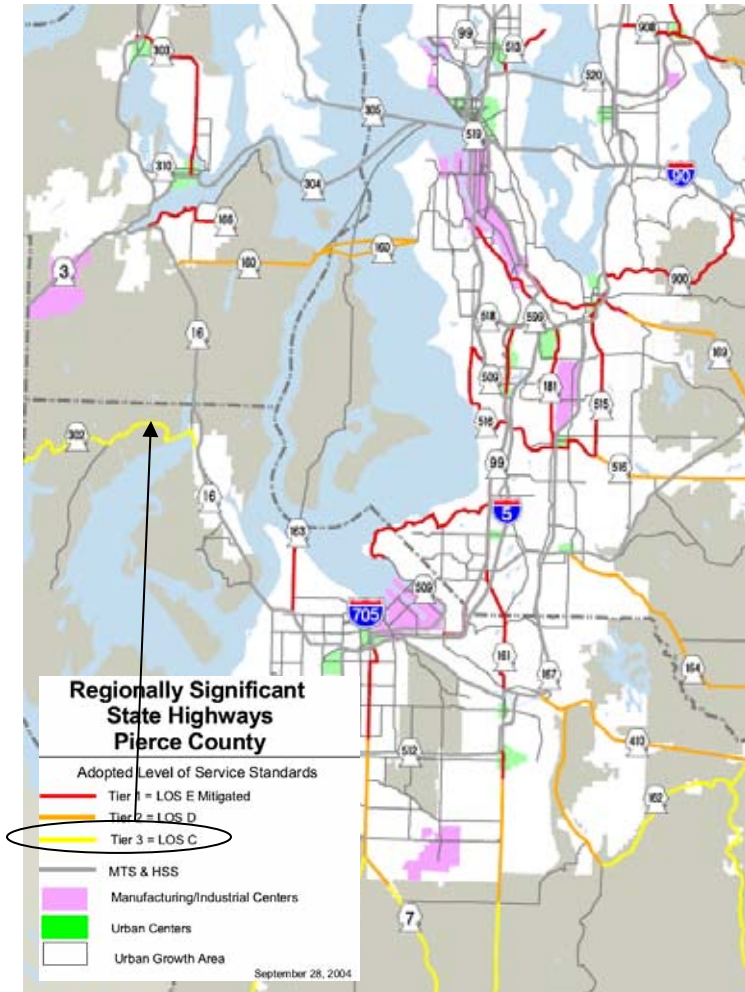
Source: PSRC - 2006 Forecasts of Population, Households, and Employment

Note: The most recent (2007) PSRC estimates in these FAZ 's already exceed 2010 forecast.

Study Background

Level of Service (LOS)

HCM Class I – arterial carrying daily commute trips (HCM Chap 12)



Source: PSRC – Adopted LOS Standards for non-NHS Regionally Significant Highways (October 30, 2003)

Along the **Highway** LOS is based on :
 % time spent following and avg. travel speed

LOS	PTSF	ATS
A	< 35	> 55
B	35 - 50	50 - 55
C	50 - 65	45 - 50
D	65 - 80	40 - 45
E	> 80	< 40

At **Intersections** the LOS is based on :

Average delay to vehicles

LOS	Delay (s)
A	< 10
B	10 - 20
C	20 - 35
D	35 - 55
E	55 - 80

Purpose and Need

- Improve safety
- Level of service
- Reduce travel time
- Accommodate non-motorized

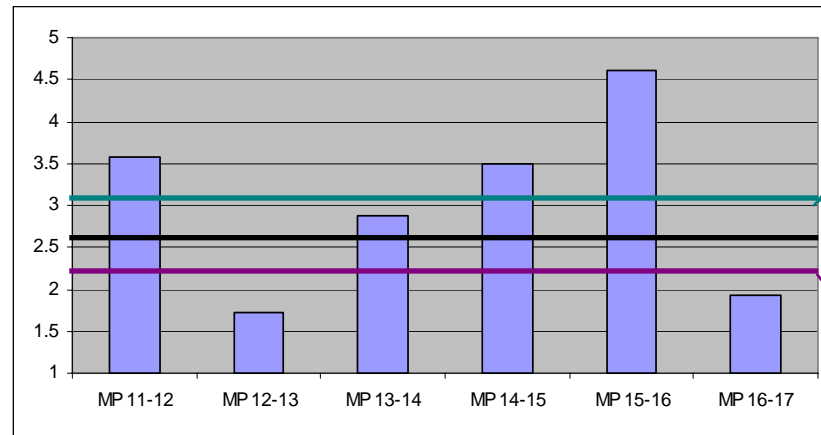
Purpose and Need

Improve Safety

To increase the level of safety for all travelers who use the route.

Need related to . . .

- Collision rate above statewide average
- Collisions are generally increasing over time
- Long waits at intersections during the peak hour
- Reduced shoulder widths restrict their usefulness

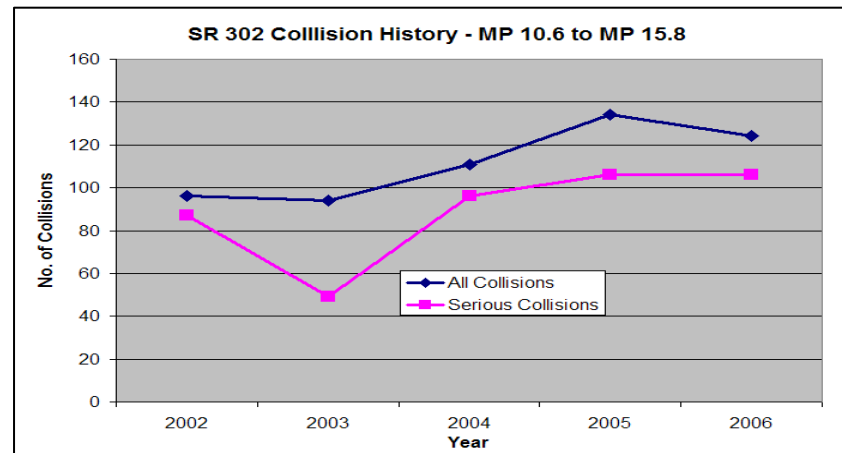


Annual collisions rate (per MVMT*) for 2002-2006.

SR 302 - Average for study corridor (MP 10.55 to MP 16.87)

Statewide Average (2006)

SR 302 - Average for entire route (MP 0.00 to MP 16.87)



Does not include Key Pen Hwy intersection

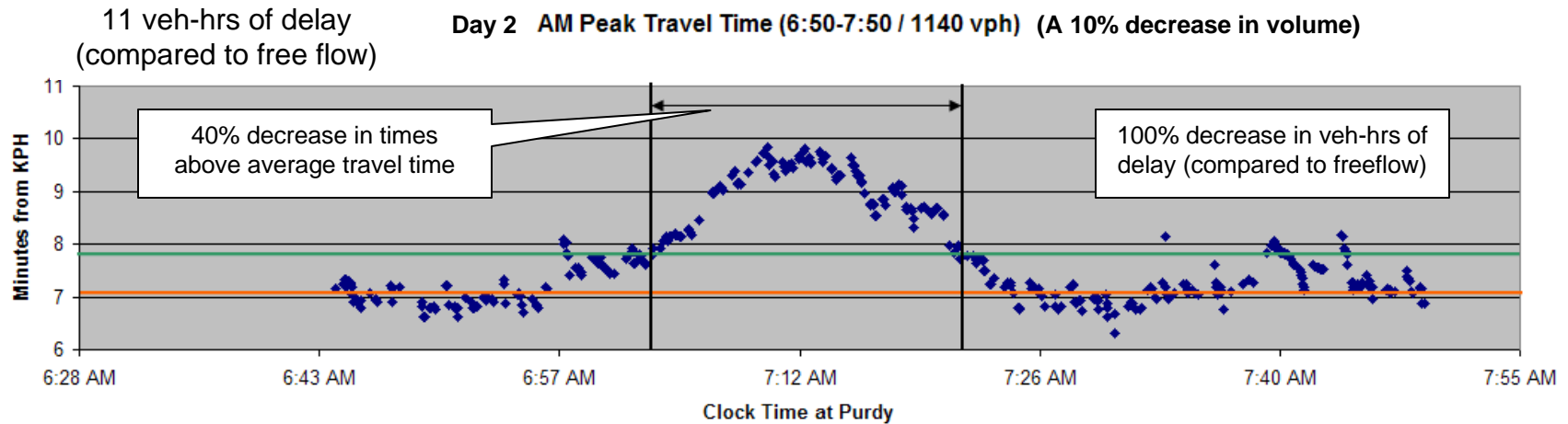
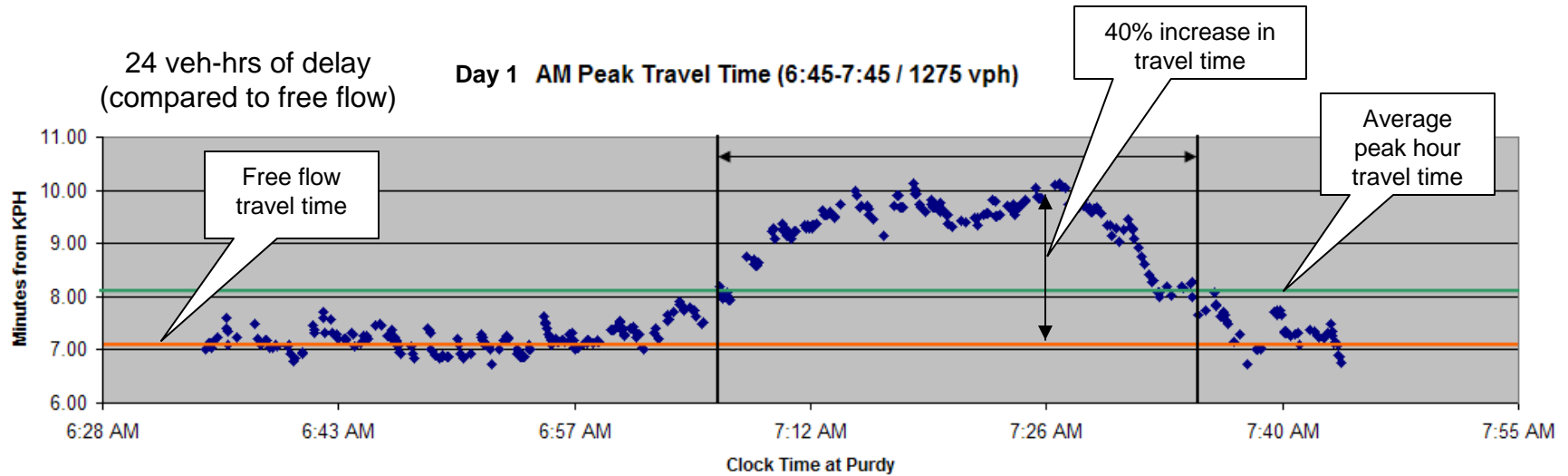
Serious collisions include injury and fatal only

*million vehicles miles traveled

Purpose and Need

Improve Mobility

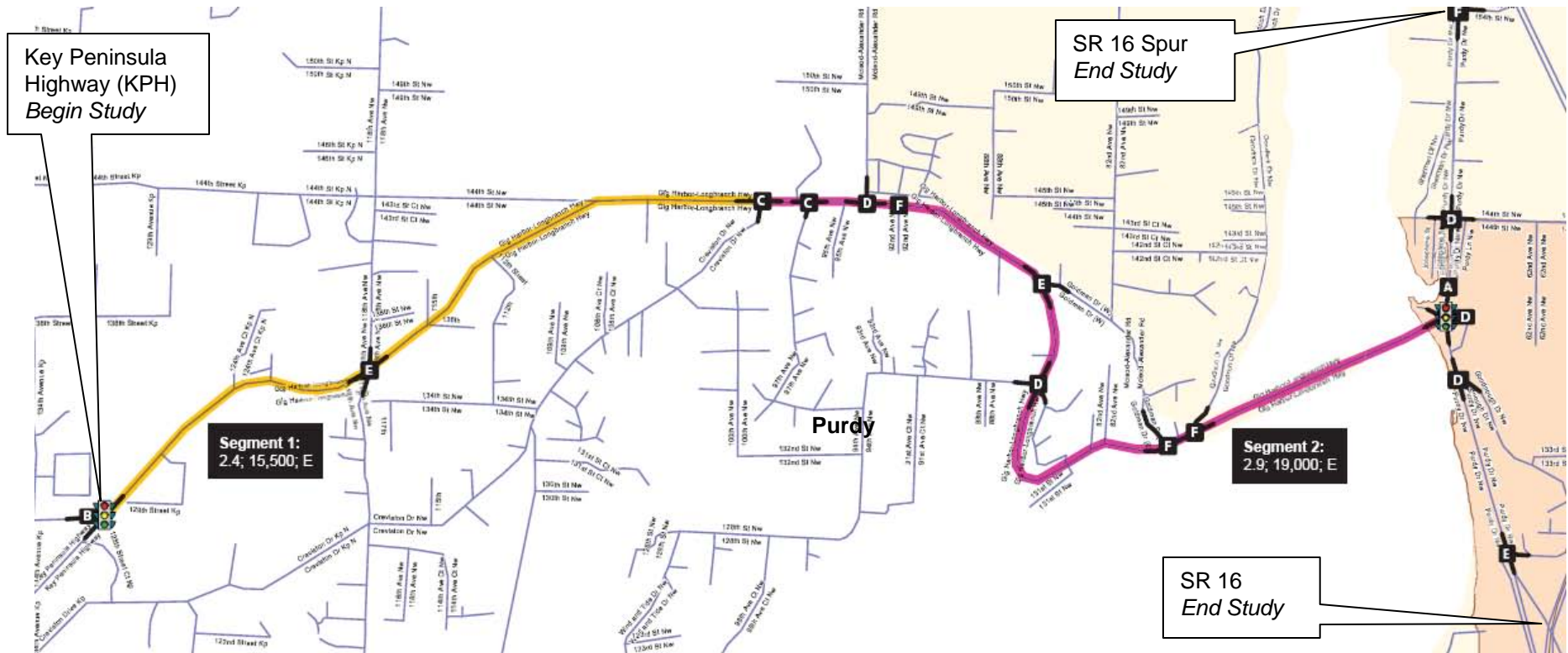
To improve peak hour travel time



Purpose and Need

Improve Mobility

To meet or exceed Level of Service standards in the design year.



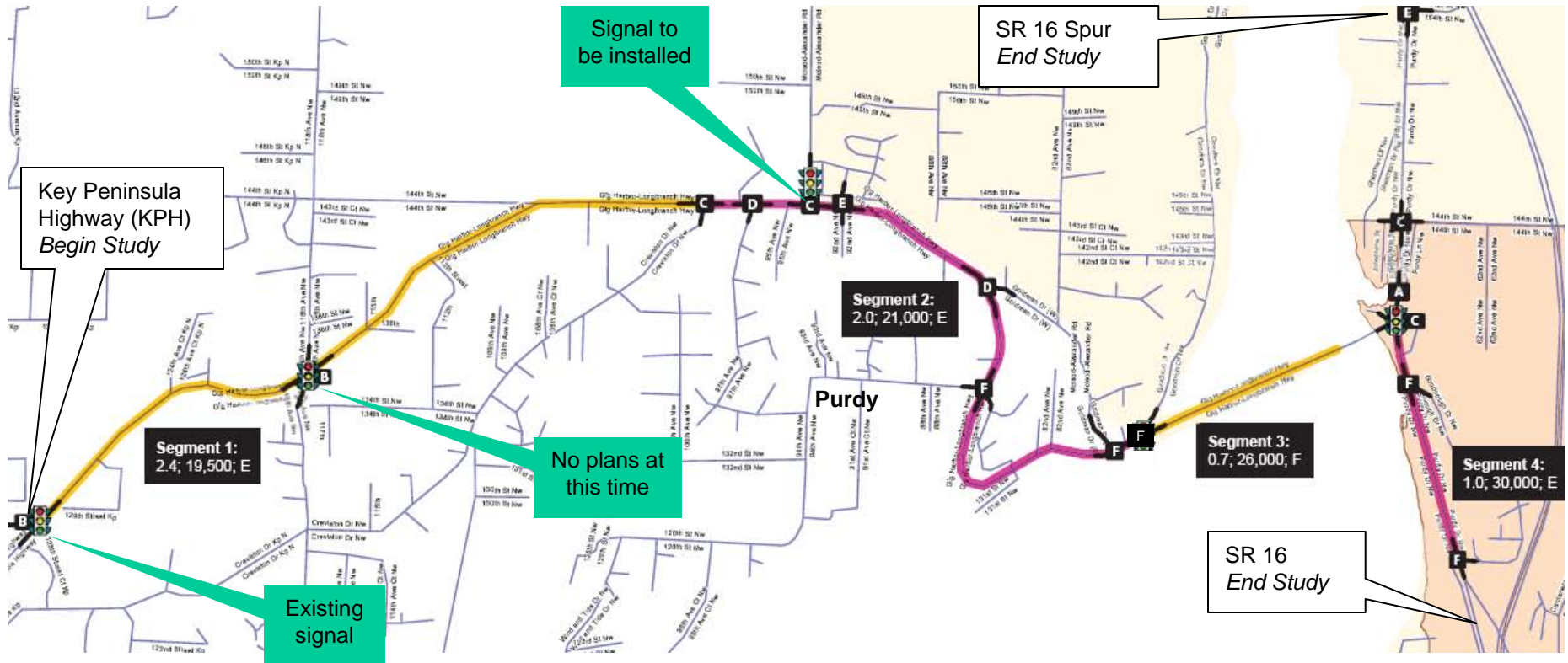
2007

Intersection and Highway LOS is already below the LOS D threshold throughout the corridor during the PM peak period

Purpose and Need

Improve Mobility

To meet or exceed Level of Service standards in the design year.



2035

Intersection and Highway LOS remains below the LOS D threshold throughout the corridor during the PM peak period.

Range of Alternatives

Range of Alternatives

Alternatives Development / Public Involvement

Date	Activity	Meeting Purpose
September 25, 2007	Public meeting on study goals and community concerns	To develop/verify the broad range of alternatives
December 4 and 6, 2007	Public meeting on alternatives and environment	Feedback on alternatives, purpose and need
February 19, 2008	Discussion about logical termini rationale with FHWA	To confirm logical termini at Key Pen Hwy and SR 16
September 26, 2008	WSDOT Level 1 screening	To weight criteria and score alternatives
October 20, 2008 (Level 1) December 9, 2008 (Level 2)	Advisory Committee Level 1 & Level 2 screening criteria	To provide weighting for criteria as part of analysis
October 27 and 29, 2008	Review results from Level 1 alternative screening	To provide input/confirm Level 1 decision
January 7, 2009	WSDOT Level 2 screening	To weight criteria and score alternatives

Range of Alternatives

Location and Description

Alt 4 (Bridge)
Direct route across Burley Lagoon

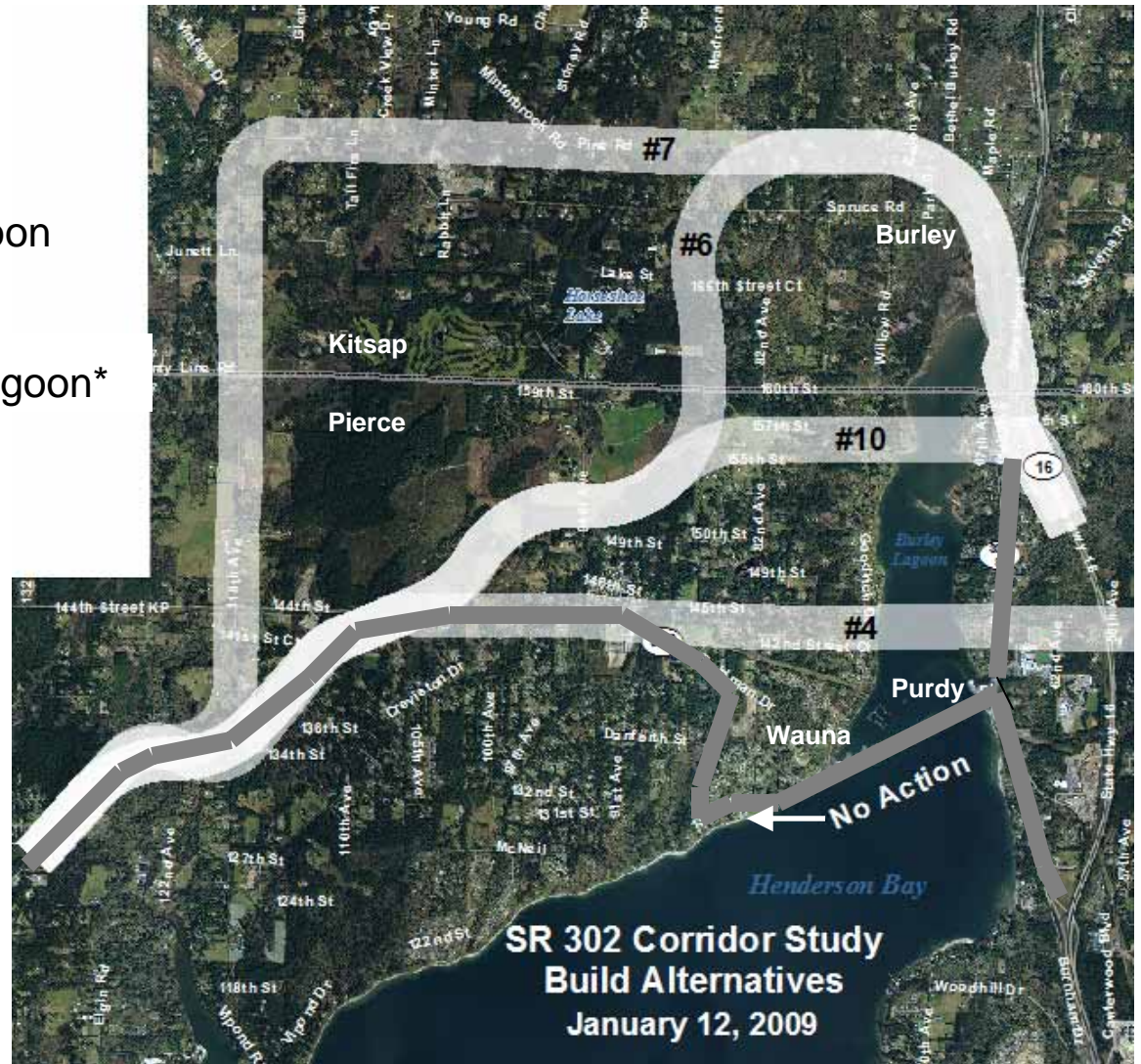
Alt 10 (Bridge)
Shortest span across Burley Lagoon*

Alt 6 (Land)
New route through Burley




Alt 7 (Land)
Existing county roads

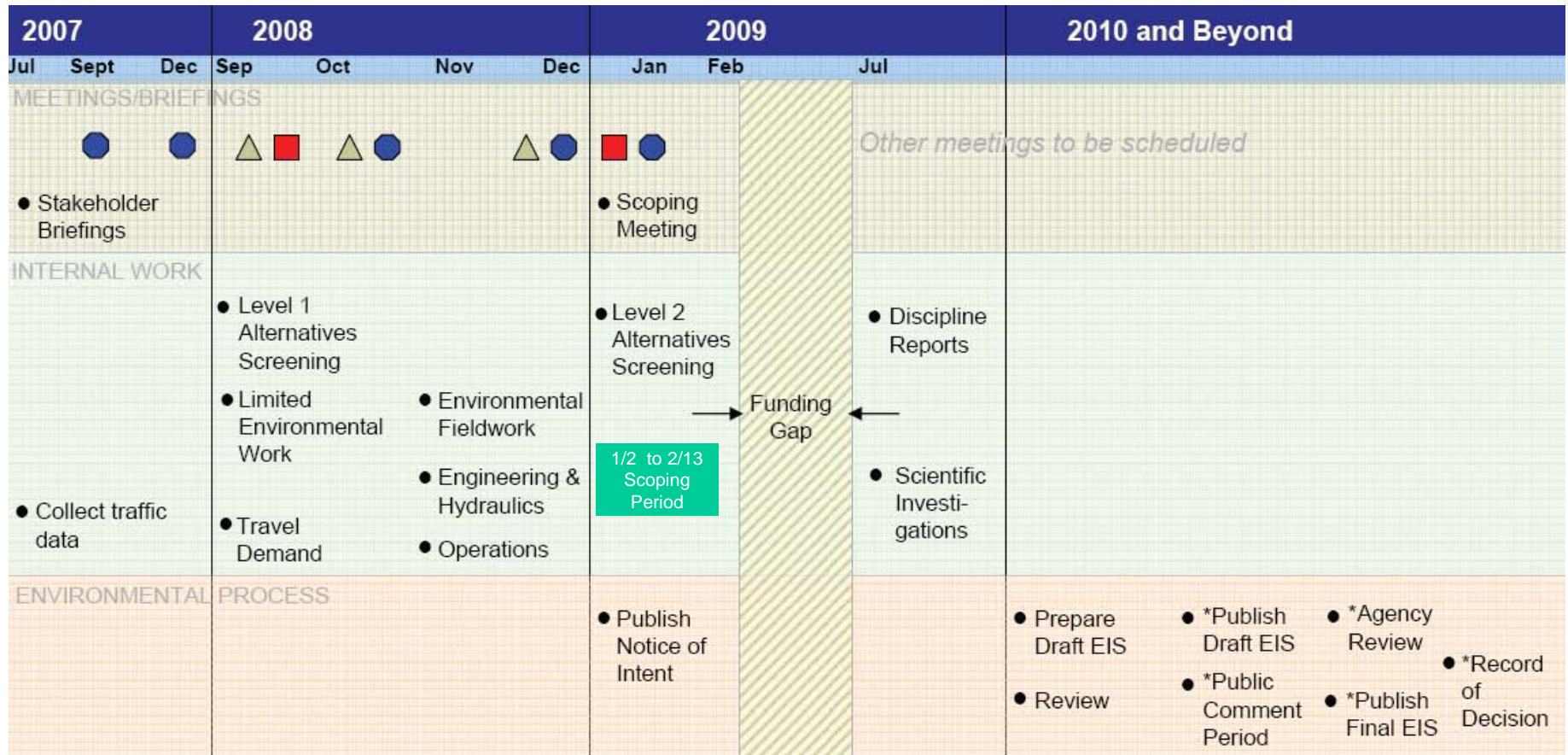
No Action
Use existing route throughout

*Besides existing bridge



Project Schedule

	Advisory Committee
	Alternatives Screening
	Public Meeting



Environmental Issues

Environmental Issues

- Archeology/Cultural
- Section 4(f)
- Agriculture/Land Use
- Relocation/Social/Environmental Justice
- Wetlands/Wildlife/Terrestrial Habitat
- Fish/Surface Water/Aquatic Habitat
- Traffic
- Community Input

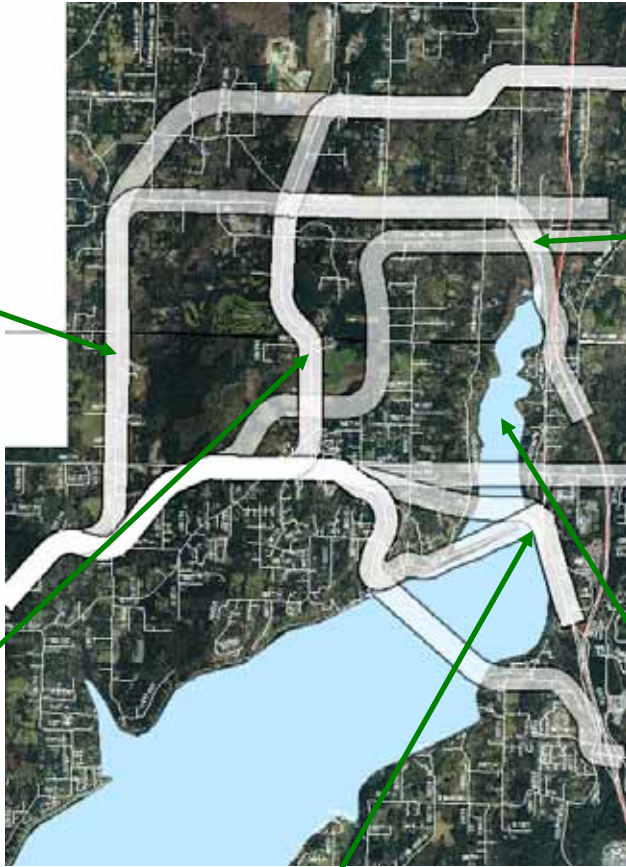
Historical/Cultural



118th Ave



94th Ave



Burley Village



Burley Lagoon



Purdy Br














Environmental Issues Parks

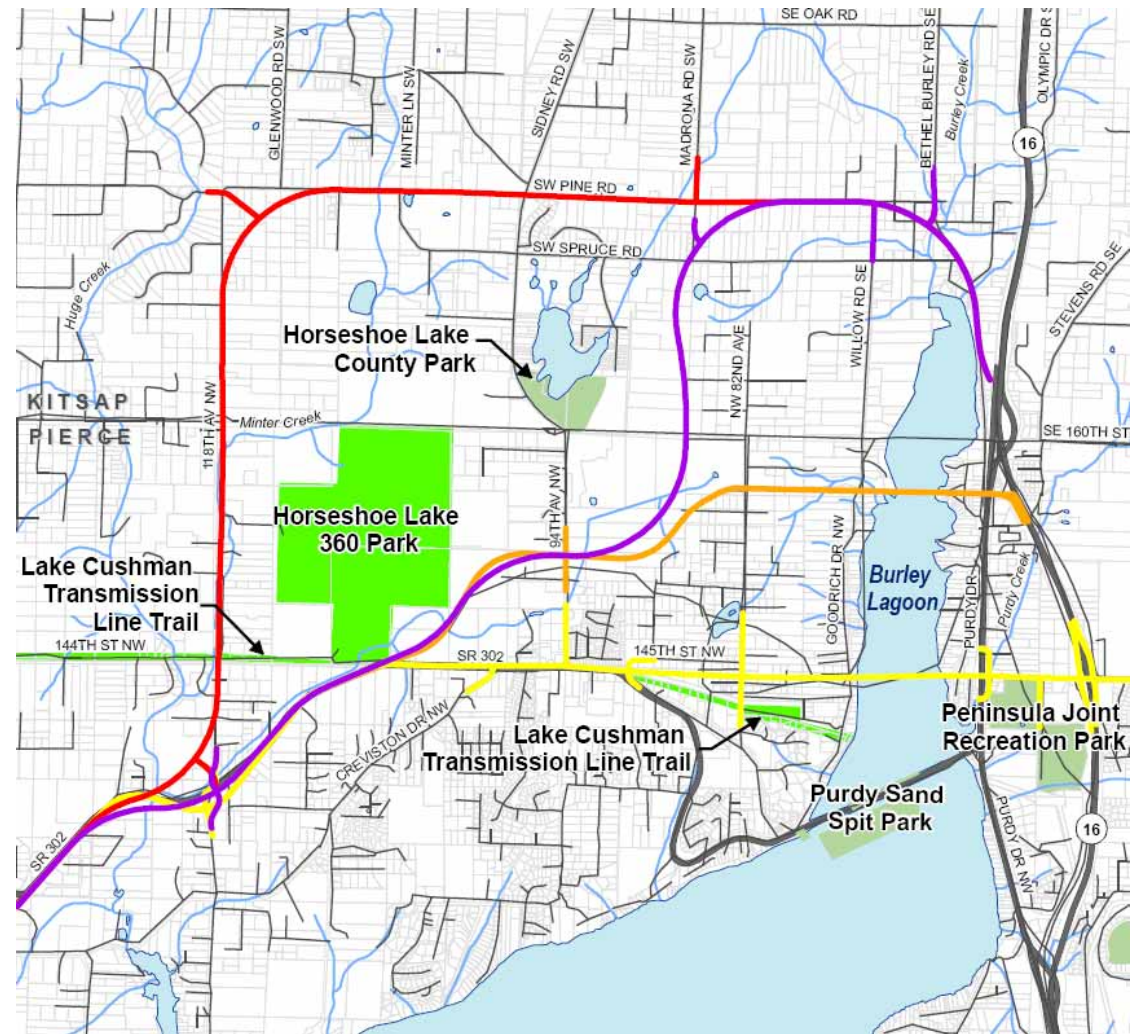
Potential Impacts

4(f) Resource	4	6	7	10
Horseshoe Lake	No	No	No	No
Purdy Spit Park	No	No	No	No
Peninsula Recreation	R/W	No	No	No
Lake Cushman Trl*	R/W	No	No	No
Horseshoe 360*	No	R/W	No	R/W

* Potential resources





Legend

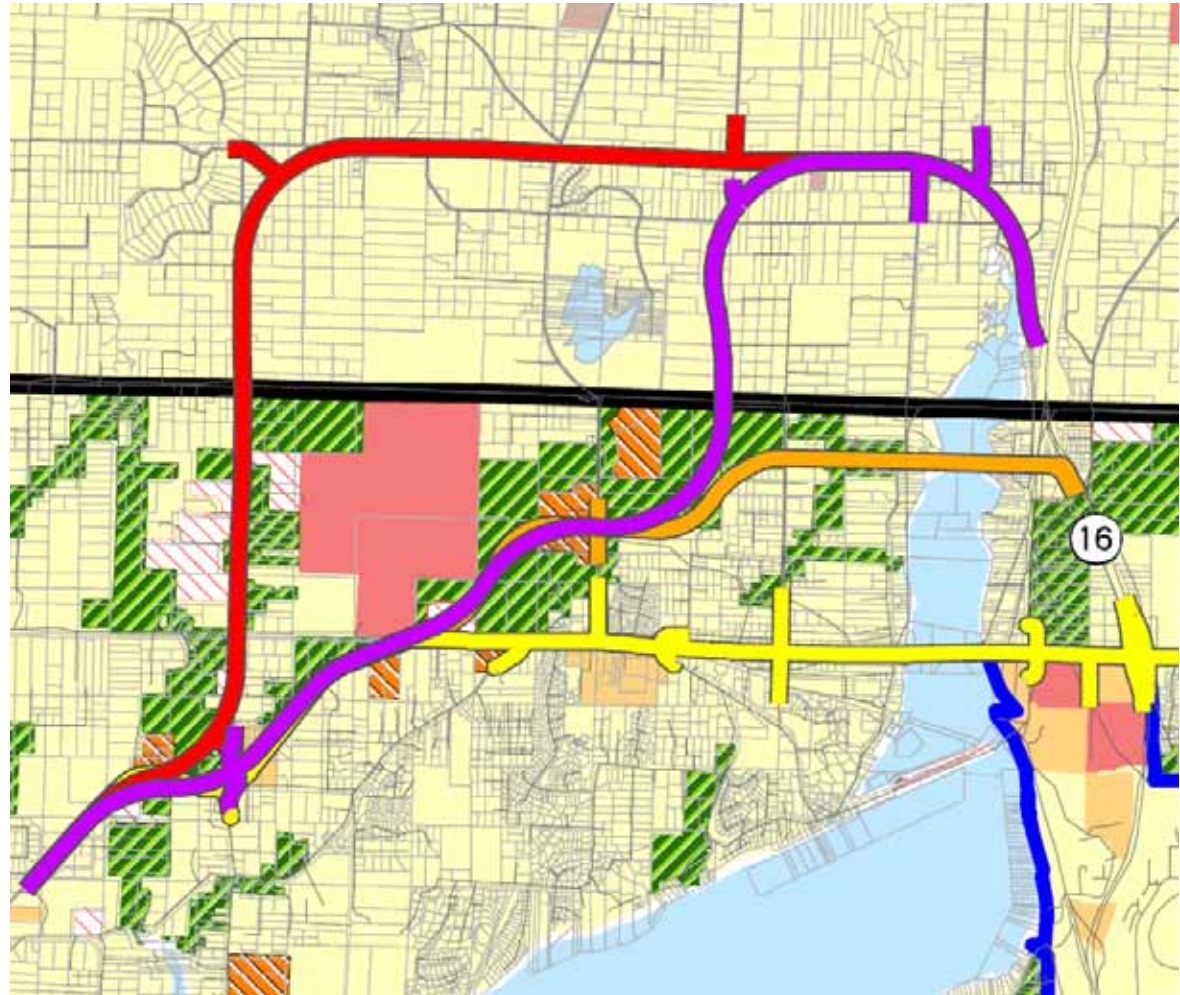
	Proposed Park	Alignment Alternatives
	Existing Park	 Alternative 4
	County	 Alternative 6
	Road	 Alternative 7
	Highway	 Alternative 10
	Watercourse	
	Waterbody	



Environmental Issues

Land Use

-  Alternative 4
-  Alternative 6
-  Alternative 7
-  Alternative 10
-  Commercial
-  Residential
-  Industrial
-  Public Institutional
-  Agriculture
-  Rural Farm
-  Rural Sensitive Resource
-  Agriculture Resource Land
-  No Zoning
-  Parcel
-  Gig Harbor City Limits
-  Gig Harbor UGA
-  Street
-  Water Body



Environmental Issues

Land Use

Rank by estimated acres impacted*

	Agriculture	Commercial	Public	Rural Farm	Rural Sensitive	Residential	Alternative Avg. < 2.4*
Alternative 4	1	4	4	2	1	3	
Alternative 6	4	3	1	4	3	2	
Alternative 7	3	1	1	1	2	4	<input checked="" type="checkbox"/>
Alternative 10	2	3	1	3	4	1	<input checked="" type="checkbox"/>

Rank by estimated acres impacted*

	Avg Rank	Total Area
Alternative 4	3	3
Alternative 6	4	2
Alternative 7	1	4
Alternative 10	2	1

* 2.4 is the average rank

Environmental Issues

Social

Relocations*

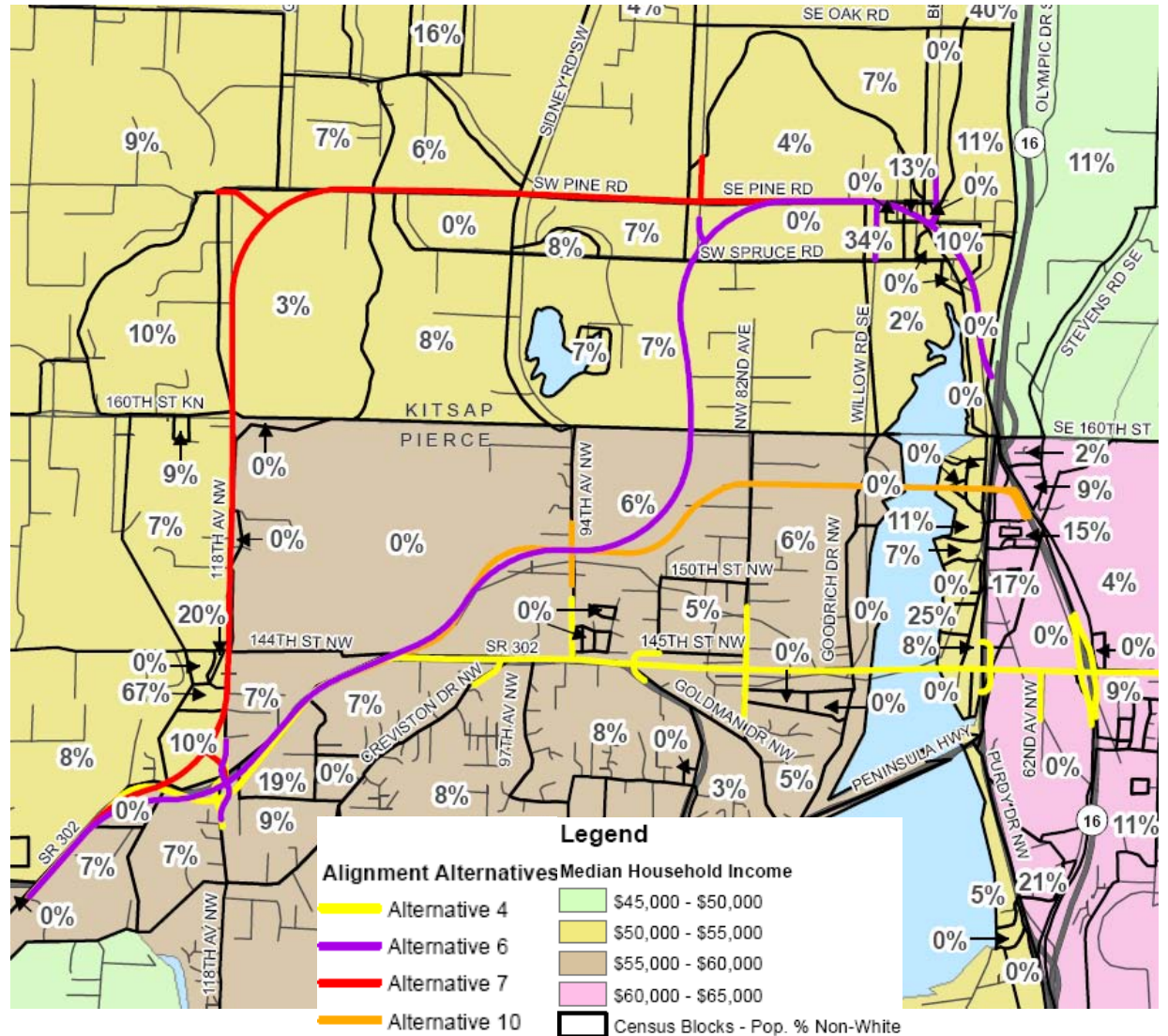
Estimated Relocations	<30	>30
Alternative 4	<input checked="" type="checkbox"/>	
Alternative 6	<input checked="" type="checkbox"/>	
Alternative 7		<input checked="" type="checkbox"/>
Alternative 10	<input checked="" type="checkbox"/>	

Income**

Est. Income by Tract	< 55K	> 55K
Alternative 4		<input checked="" type="checkbox"/>
Alternative 6	<input checked="" type="checkbox"/>	
Alternative 7	<input checked="" type="checkbox"/>	
Alternative 10		<input checked="" type="checkbox"/>

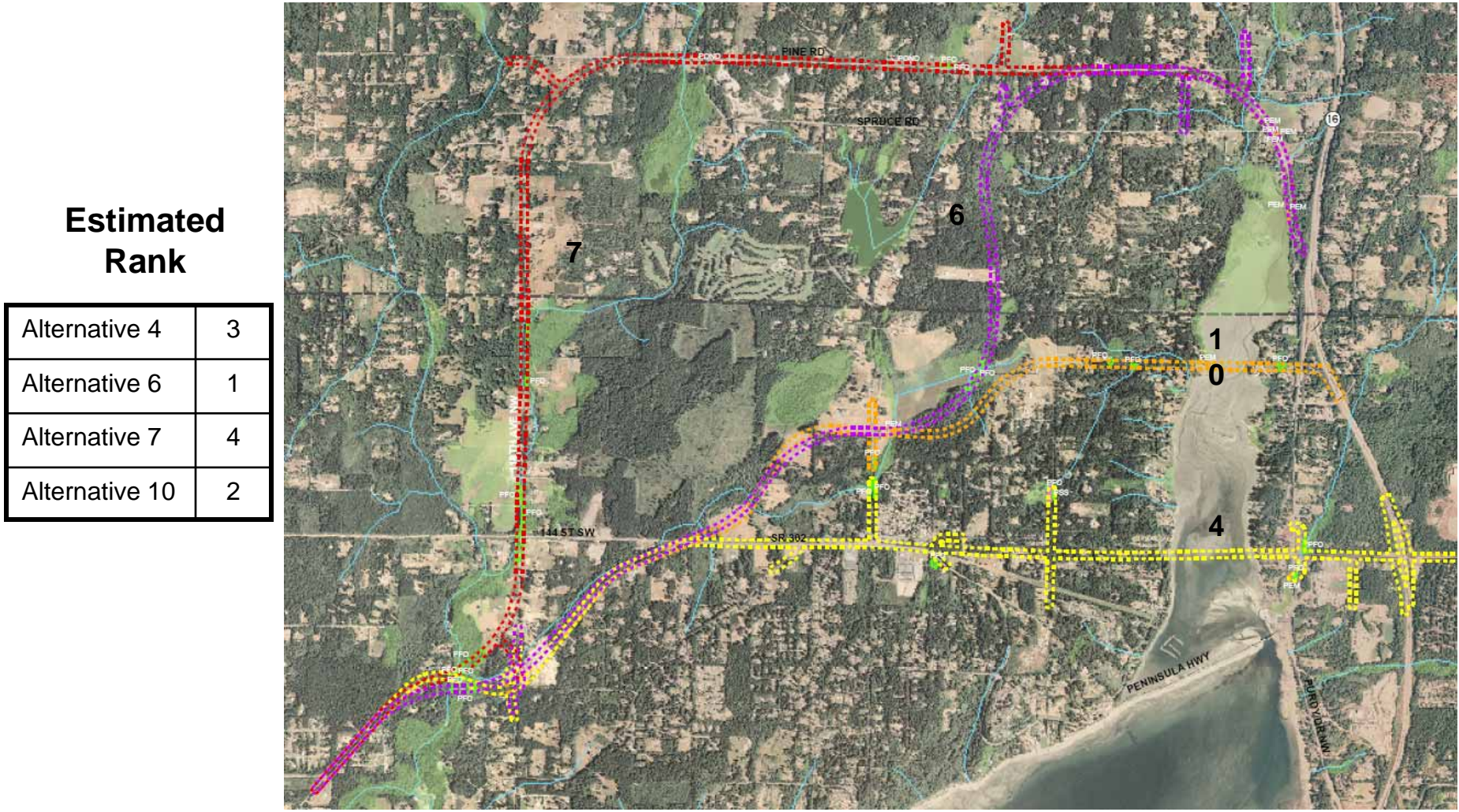
* 30 is average alt. estimate

**55K is weighted avg. estimate



Environmental Issues

Wetlands



Environmental Issues

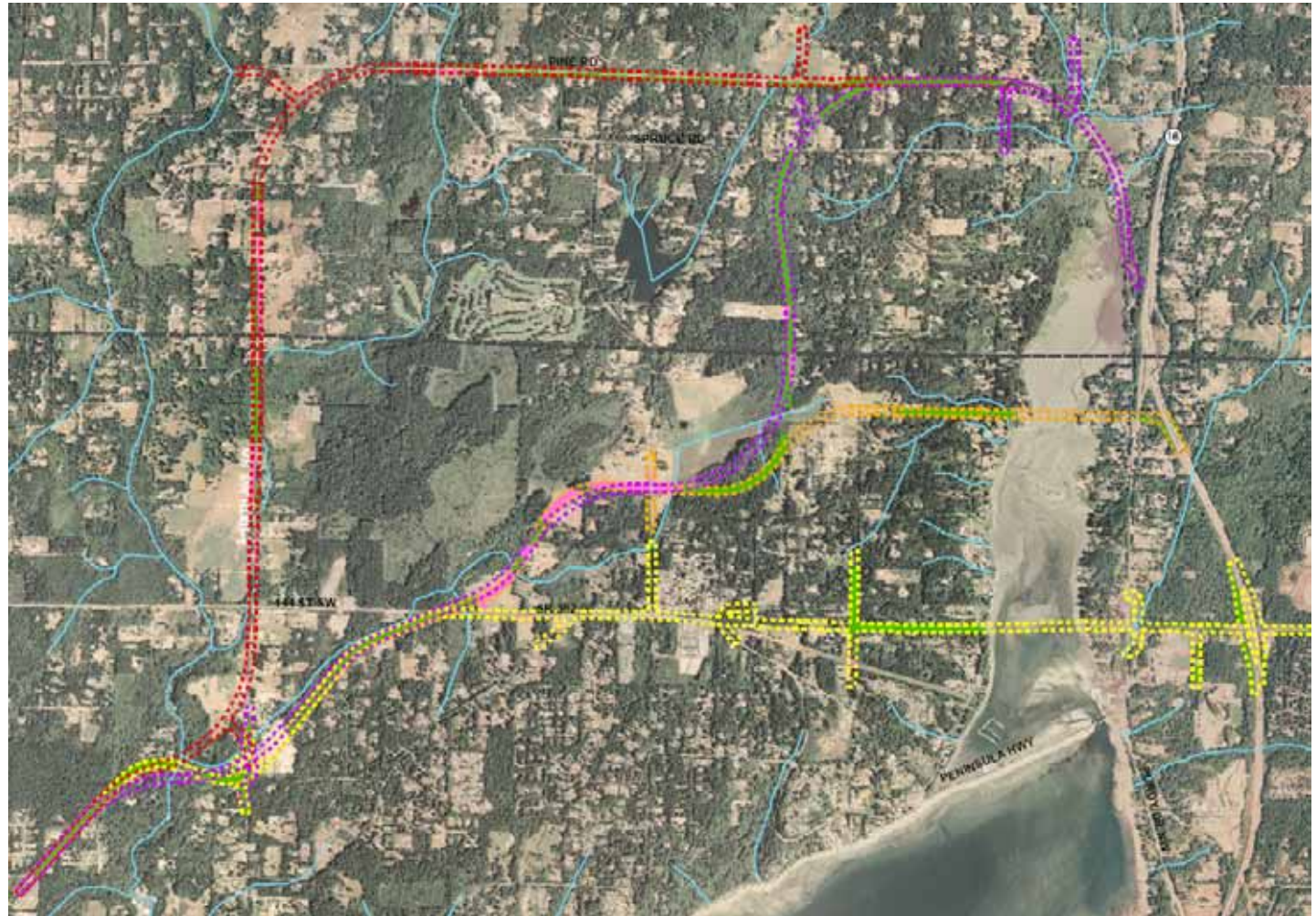
Wildlife and Terrestrial Habitat

Habitat Impact Estimated Rank

Alternative 4	1
Alternative 6	3
Alternative 7	4
Alternative 10	2

Wildlife

Species of Concern
Bald Eagle
WA Priority Species
Great Blue Heron
Mountain Quail



Environmental Issues

Surface Water

Est. Impervious (acre)*

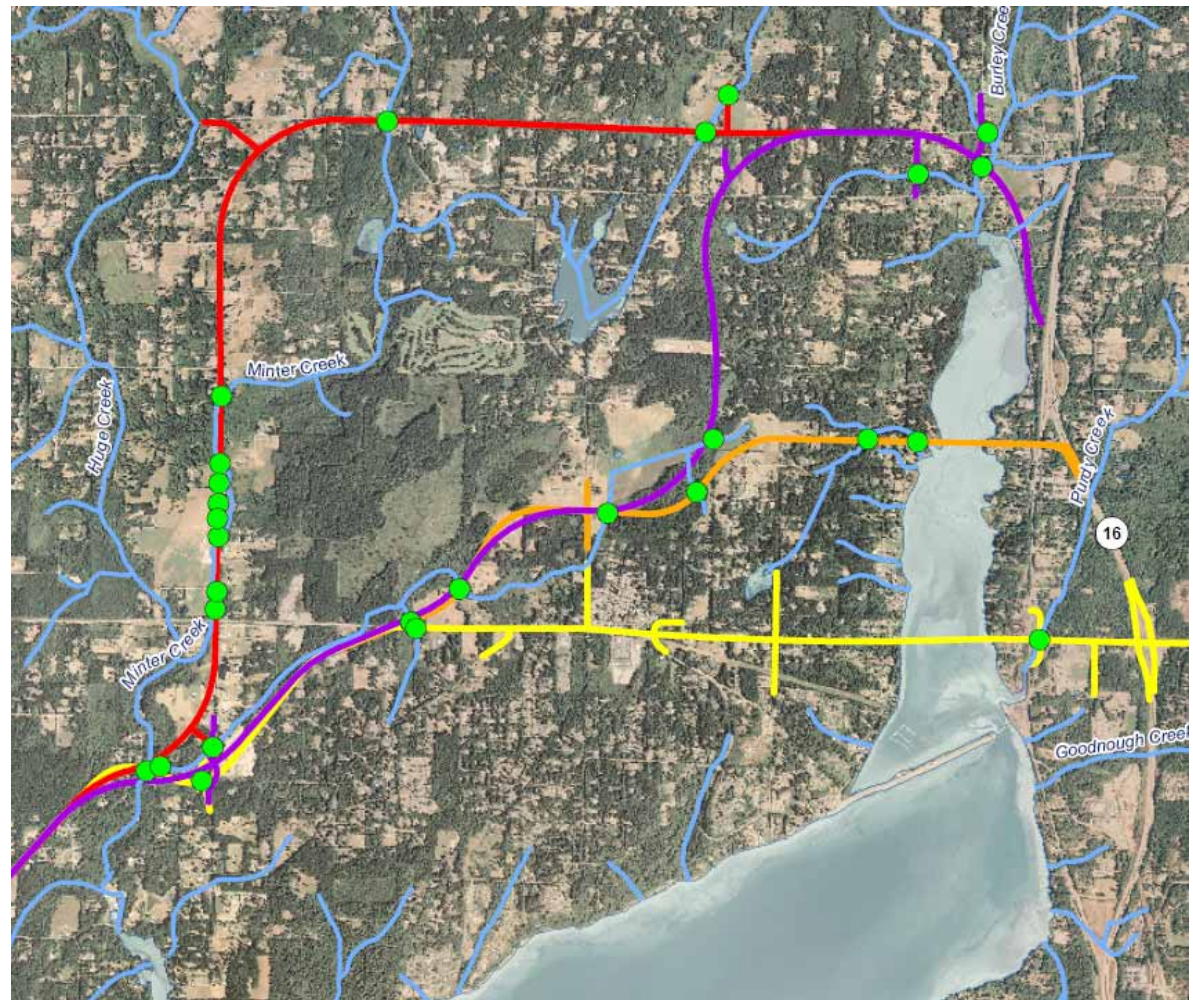
	<55	>55
Alternative 4	<input checked="" type="checkbox"/>	
Alternative 6		<input checked="" type="checkbox"/>
Alternative 7		<input checked="" type="checkbox"/>
Alternative 10	<input checked="" type="checkbox"/>	

* 55 is average est. acreage

Est. Stream crossings**

	<9	>9
Alternative 4	<input checked="" type="checkbox"/>	
Alternative 6	Exactly 9	
Alternative 7		<input checked="" type="checkbox"/>
Alternative 10	<input checked="" type="checkbox"/>	

** 9 is average # of crossings



Environmental Issues

Marine Resources

Bridge Impact

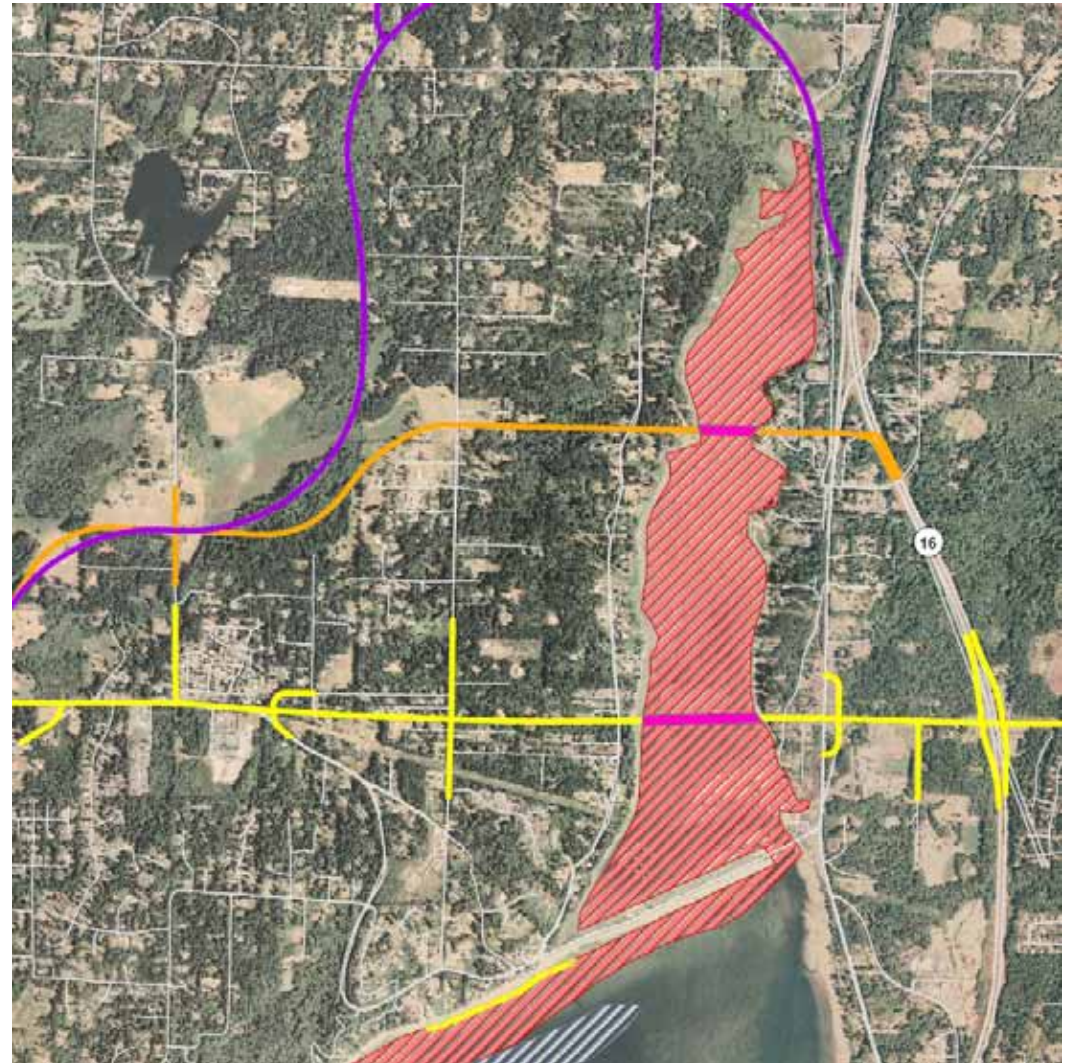
	Mi*	Ac
Alternative 4	0.35	7.2
Alternative 6	0.0	0.0
Alternative 7	0.0	0.0
Alternative 10	0.15	2.8

* to the nearest 0.05 mi.

Legend

- Alternative 3
- Alternative 4
- Alternative 6
- Alternative 7
- Alternative 10
- Road
- Alignment Buffer
- Oyster
- Geoduck Clam
- Hardshell Clam
- Water Column Dwelling Shrimp

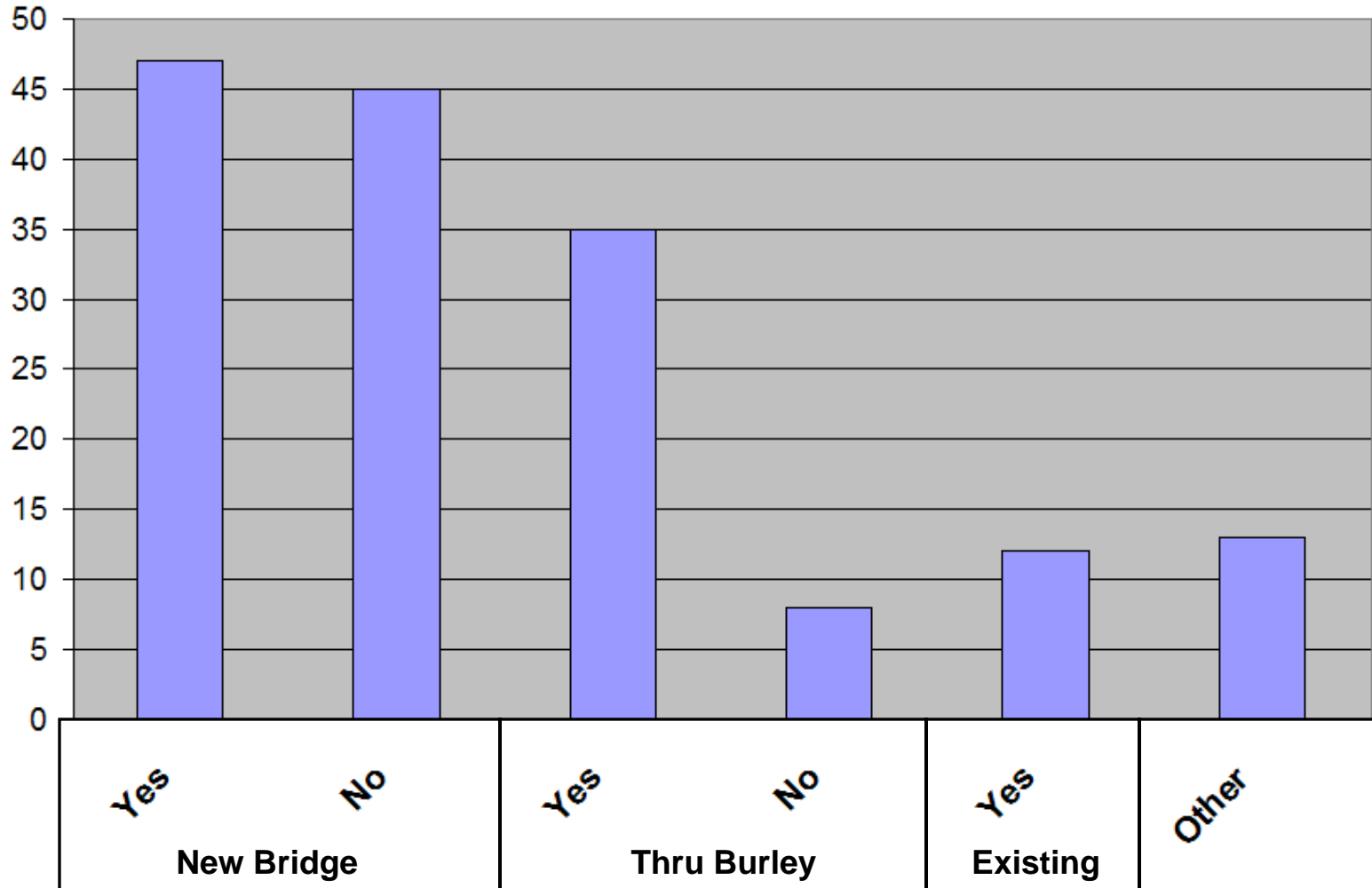
0 1,000 2,000 Feet



Environmental Issues

Community Involvement

Public Comments 2008

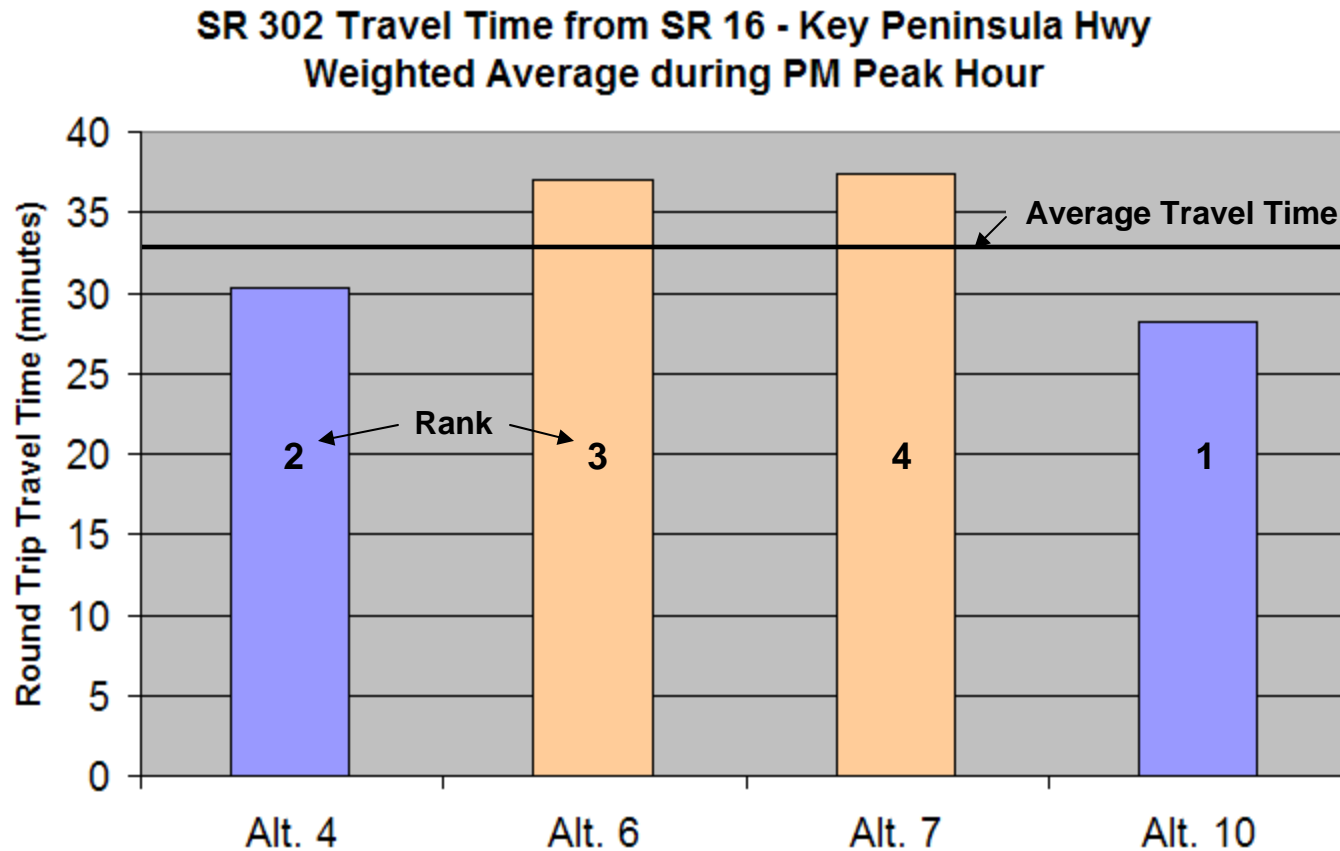


Traffic

- Travel Time
- Level of Service

Environmental Issues

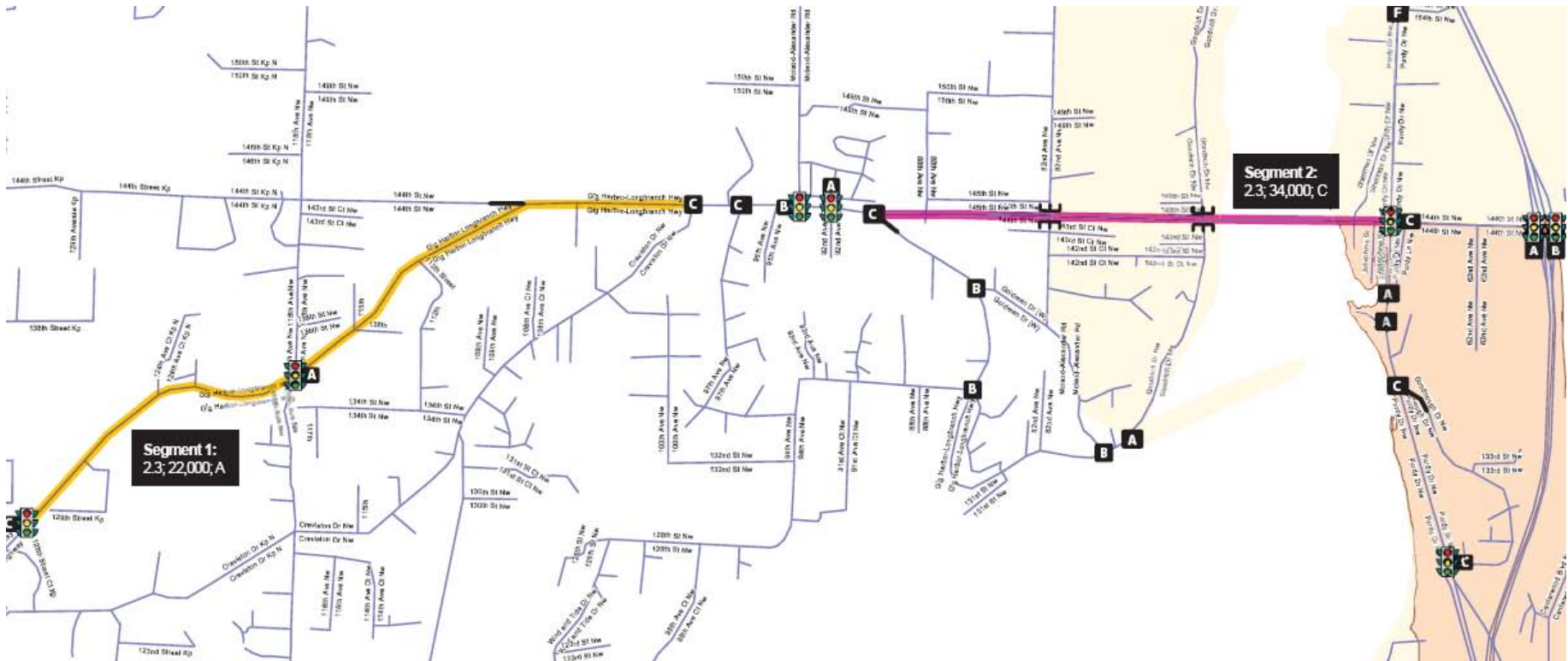
Traffic – Travel Time



* Times estimated using non-simulation models

Environmental Issues

Traffic – Level of Service (LOS)



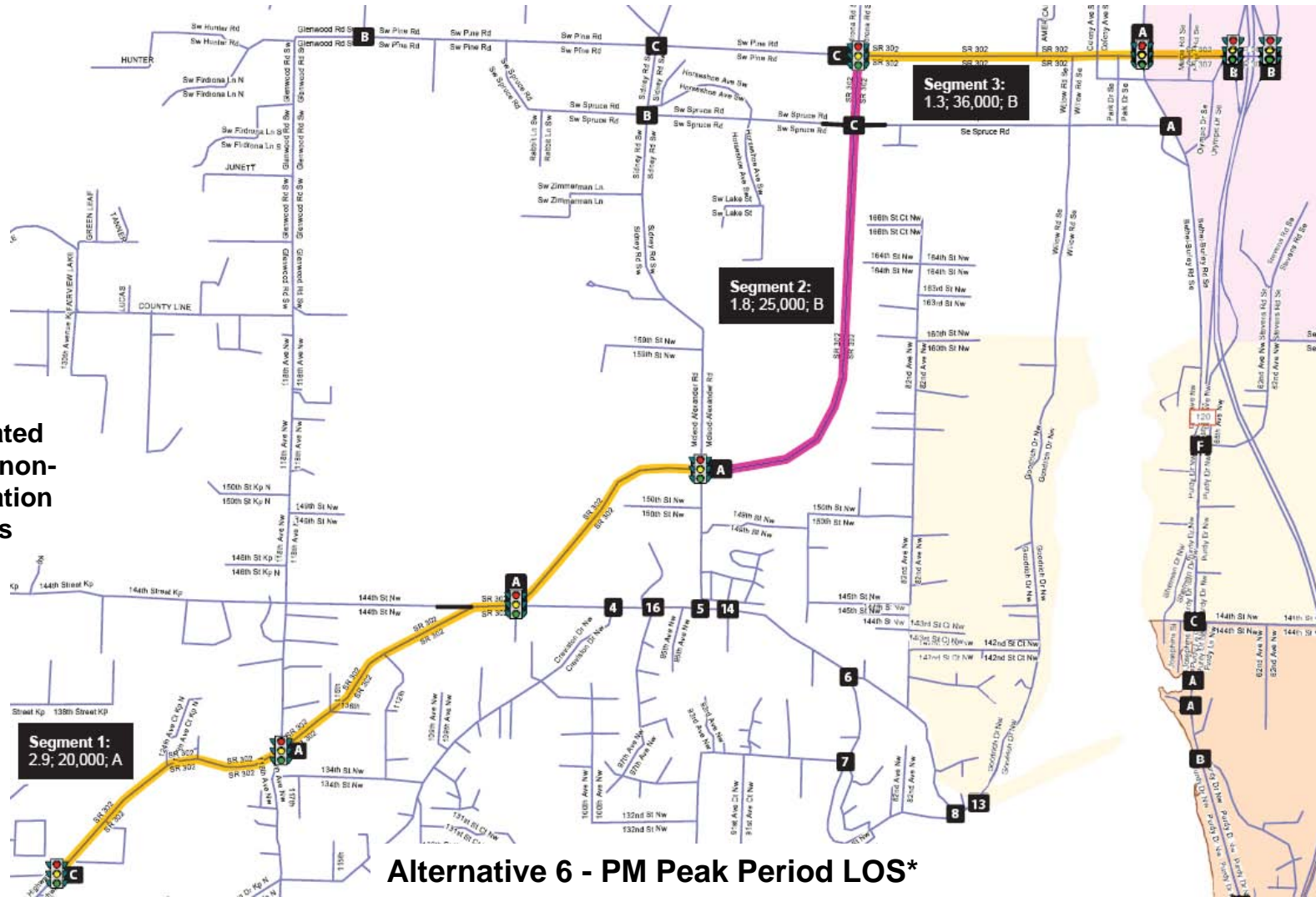
Alternative 4 – PM Peak Period LOS*

* LOS estimated using non-simulation models

Environmental Issues

Traffic – Level of Service (LOS)

* LOS estimated using non-simulation models

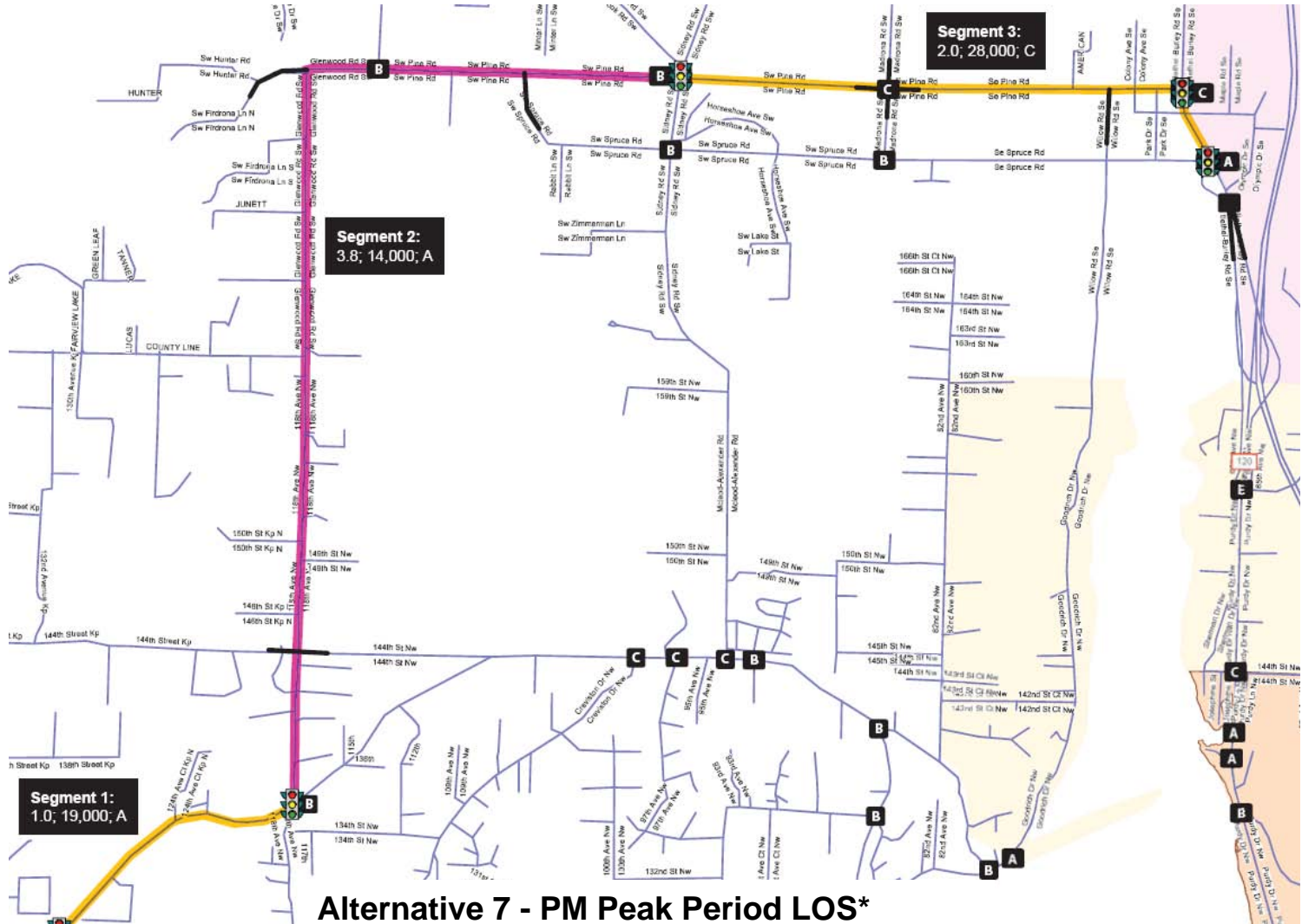


Alternative 6 - PM Peak Period LOS*

Environmental Issues

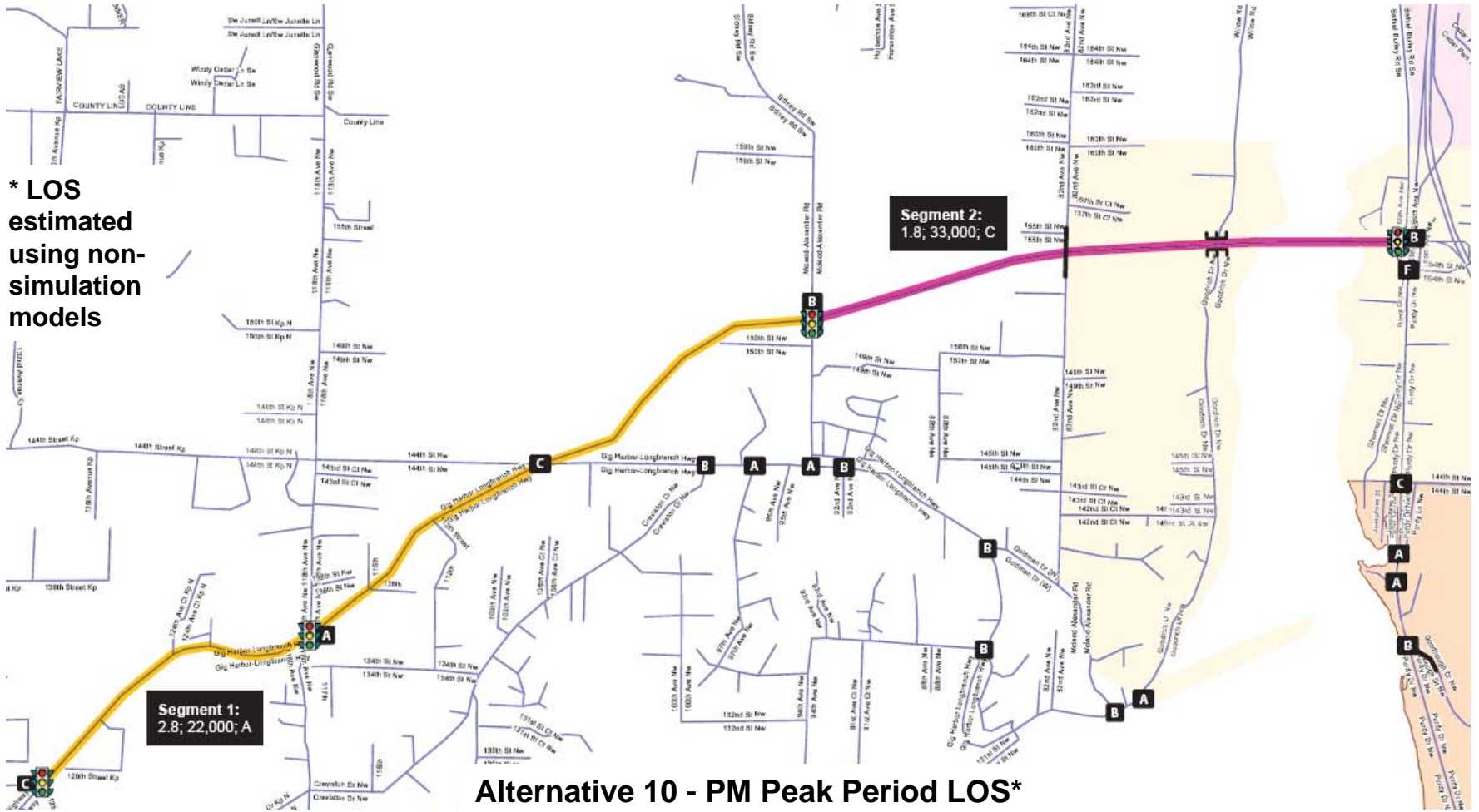
Traffic – Level of Service (LOS)

* LOS estimated using non-simulation models



Environmental Issues

Traffic – Level of Service (LOS)



Agency Coordination

Project Coordination Plan

Lead Agencies

- *FHWA and WSDOT*

Cooperating Agencies

- *Department of Arch and Historic Preservation*
- *Pierce and Kitsap Counties*
- *USCOE, Fish & Wildlife, NMFS – in process*

Participating Agencies

- *WDFW, Key Pen Parks, Pierce County Parks*
- *City of Gig Harbor*
- *Nisqually, Puyallup, Skokomish, Squaxin – in process (Jamestown, Lower Elwha will defer)*
- *US EPA – in process*

Cooperating Agencies . . .

. . . (have) jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed project or project alternative.

Cooperating Agencies . . .

. . . have a higher degree of authority, responsibility, and involvement in the environmental review process.

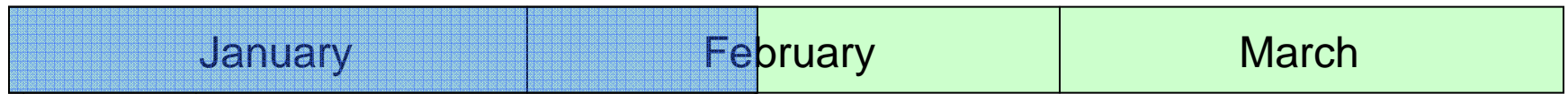
Cooperating Agencies . . .

. . . assume on request of the lead agency responsibility for developing information and preparing environmental analyses including portions of the environmental impact statement.

Participating Agencies . . .

. . . participate at the earliest possible time, identify issues of concern, provide timely input, and participate in scoping

NEPA Scoping 2009



Scoping report March 2009

Scoping period ends Feb 13

Agency and public meeting Jan 12

NOI published Jan 2

- Phase 2 scope of work due Feb 15
- Confirm Phase 2 budget and schedule
- Assuming budget and schedule . . .
 - Phase 2 (DEIS) begins July 2009*
 - DEIS summer 2010*