

6. What Improvements to I-5 Are Proposed?

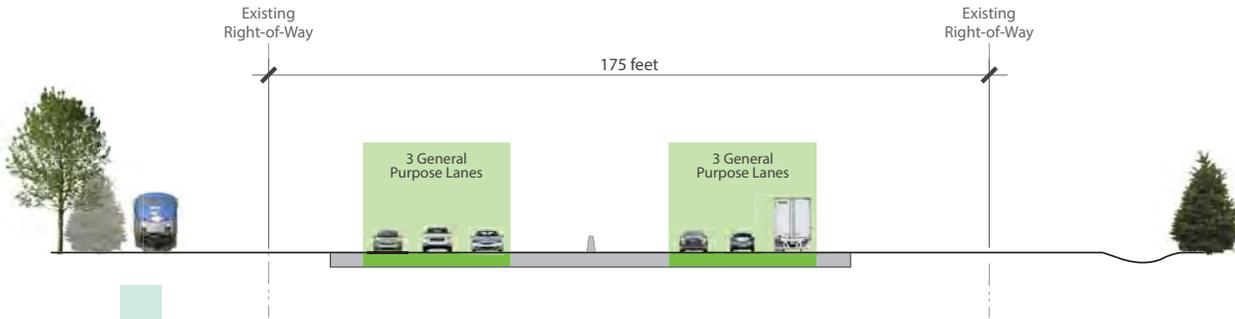
- I-5 Cross Section
- Transit and Vanpooling in Study Area



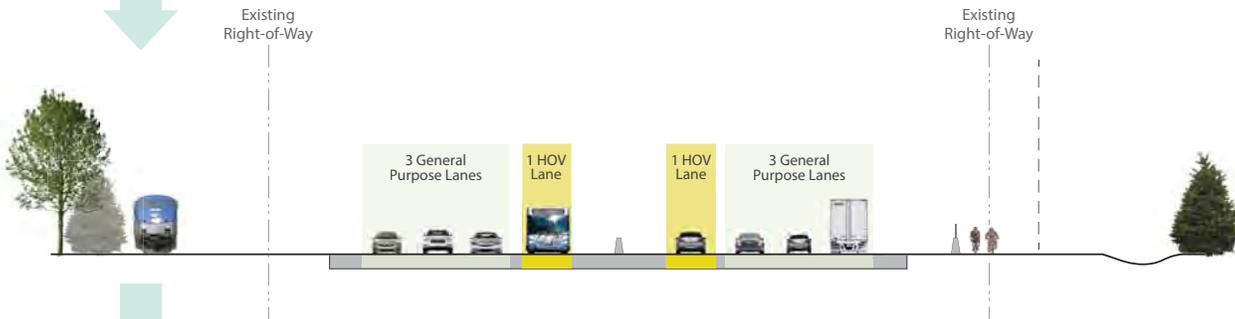
I-5 Cross Section

Phased Implementation Approach

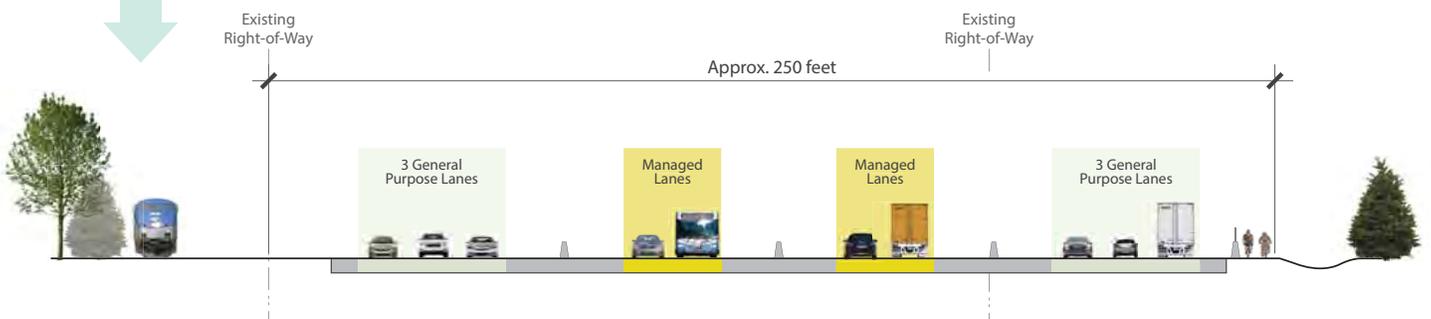
Existing ♦ 3 General Purpose (GP) Lanes each direction



INITIAL PHASE ♦ 3 General Purpose and 1 Managed Lane each direction
♦ + Gravelly-Thorne Connector
2020



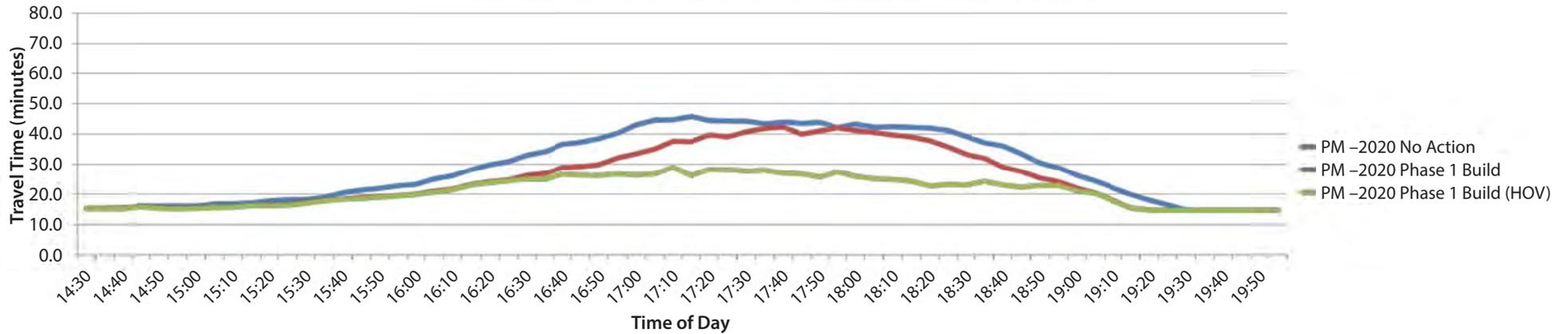
FUTURE PHASE ♦ 3 General Purpose and 2 Managed Lanes each direction
2040



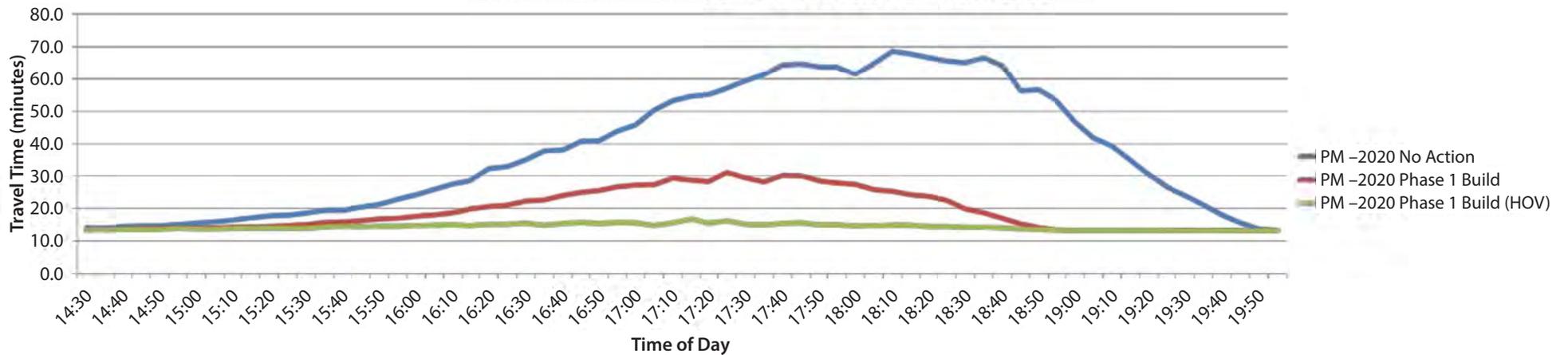
Travel Times

2020 No Action (P1) versus 2020 Phase 1 Build (Added HOV to Thorne Lane) I-5 Travel Time – SR 510 to SR 512 – PM Peak Period

I-5 Southbound Travel Time – SR 512 to SR 510 – PM Peak Period



I-5 Northbound Travel Time – SR 510 to SR 512 – PM Peak Period



Transit and Vanpooling in Study Area

Weekday PM Transit Ridership in Study Area

Agency	Route	Number of Buses		Ridership	
		NB	SB	NB	SB
Intercity Transit	Route 603	5		159	
	Route 605		3		79
	Route 609	4	4	27	22
	Route 612	1		28	
Pierce Transit	Route 206	5	5	100	160
	Route 300	6	6	126	139
Sound Transit	Route 592		8		232
Totals		21	26	440	632

Source: Intercity and Pierce Transit, 2013.



Weekday PM Vanpool Ridership in Study Area

Agency	Begin Trip	End Trip	Number of Vanpools		Ridership	
			NB	SB	NB	SB
Intercity Transit	King County	Thurston County		20		160
	Thurston County	King County	23		201	
	Thurston County	Pierce County	33		292	
	Kitsap County	Thurston County		2		18
	Thurston County	Kitsap County	2		12	
	Pierce County	Thurston County		27		207
	JBLM/Camp Murray	Thurston County		26		174
	<i>Sub-Totals</i>			58	75	505
Pierce Transit	Pierce County	Pierce County	6	1	46	5
	Pierce County	King County	4		44	
	King County	Pierce County		3		24
	Pierce County	Kitsap County	3		24	
	Kitsap County	Pierce County		1		7
	Pierce County	Thurston County		6		58
	Thurston County	Pierce County	1		5	
	Pierce County	Mason County		1		7
	JBLM/Camp Murray	Pierce County	18		123	
	JBLM/Camp Murray	King County	1		12	
	JBLM/Camp Murray	Kitsap County	2		16	
	JBLM/Camp Murray	Thurston County		3		25
JBLM/Camp Murray	Lewis County		1		6	
<i>Sub-Totals</i>			35	16	270	132
King County Metro	King County	Thurston County		6		51
	King County	Pierce County		1		9
	<i>Sub-Totals</i>			7		60
Totals			93	98	775	751

Weekday PM Benefits of Transit and Vanpooling

Agency	Mode	Ridership		Number of Cars Taken off I-5 ⁽¹⁾	
		NB	SB	NB	SB
Intercity Transit	Bus	89	83	73	68
	Vanpool	205	367	168	301
Pierce Transit	Bus	100	96	82	79
	Vanpool	129	24	106	20
Sound Transit	Bus	11	107	9	88
Totals		534	677	438	555

⁽¹⁾ Assumes average vehicle occupancy of 1.22 in general purpose lanes without HOV lanes.



Why HOV Lanes?



HOV lanes **increase freeway efficiency** by moving more people in fewer vehicles than the full lane next to them. They **save time** for bus riders and carpoolers by enabling them to bypass areas of congestion. They enable commuters to get to work more quickly and **provide an incentive** to take the

bus, carpool, or vanpool anytime during the day. They **help buses stay on schedule** and **provide access** for emergency vehicles when needed.

How Well is the Freeway HOV System Working?

HOV lanes move about 35 percent of the people who use this area's freeways in only 19 percent of the vehicles. The average HOV lane carries more than 1½ times as many people as the average "regular" lane, and is saving users time on each freeway.

Benefits of Freeway HOV Lanes

- **Efficiency.** HOV lanes increase freeway efficiency by moving more people in fewer vehicles than the full lane next to them.
- **Travel Time Reliability.** HOV lanes help express buses stick to their schedules. Carpools, vanpools, motorcycles, and emergency vehicles also receive a quicker trip.
- **Speed, Ease & Money.** Users cite saving time and money, reduced stress, and convenience as the main reasons they use the HOV system.
- **Freeway Demand.** HOV lanes reduce competition for a limited amount of space on the freeway during rush hours.
- **Fewer Cars Area-Wide.** HOV lanes add fewer car trips to the transportation system than new general purpose lanes.
- **Greenhouse Gas Emissions.** If we add fewer car trips, we help to decrease new greenhouse gas emissions and place less of a burden on the environment.
- **Sustainability.** HOV lanes play a crucial role in helping to support more sustainable transportation choices by providing an incentive to carpool, vanpool, or take the bus.