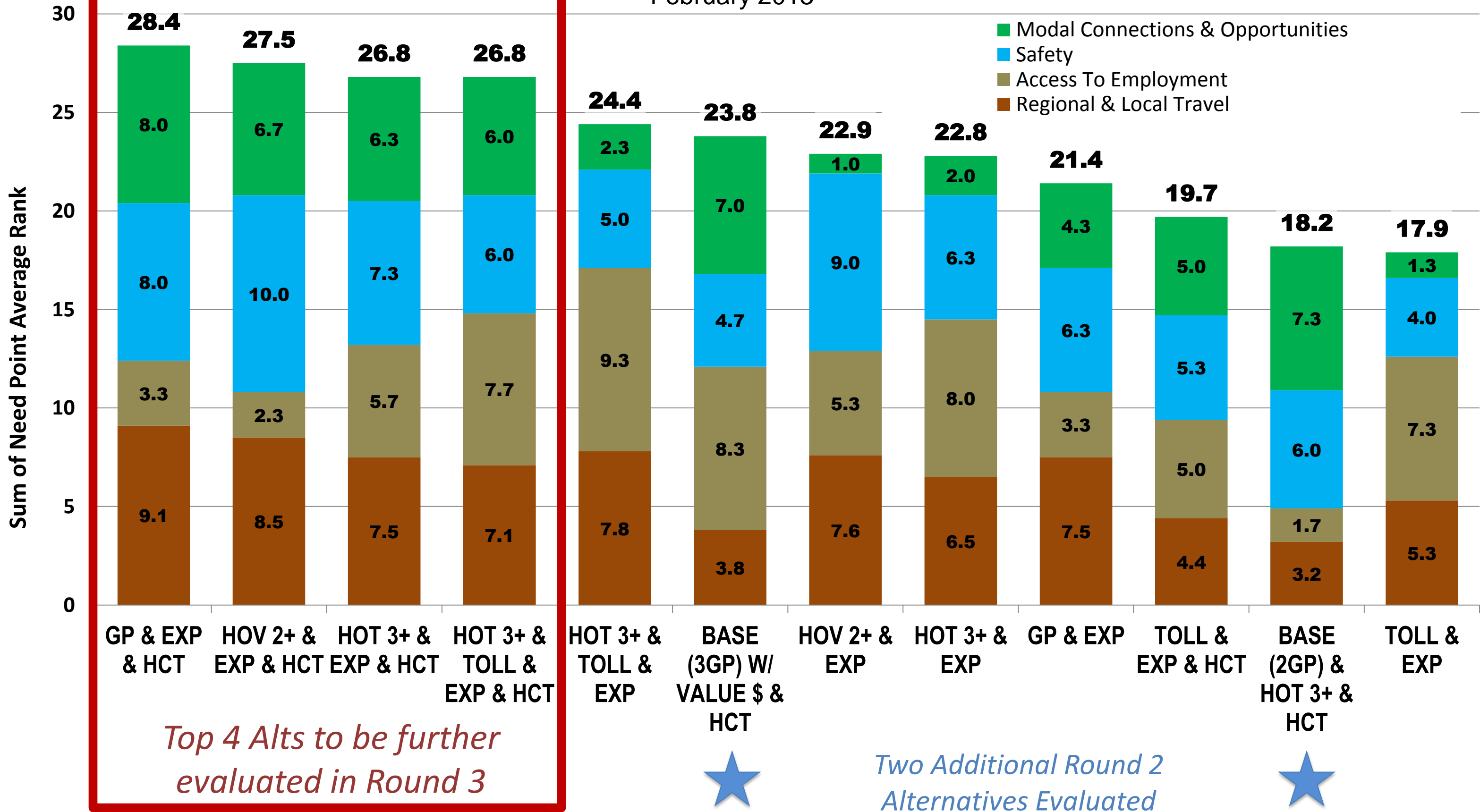


# I-290 Phase I Study

## Round 2 Alternatives Evaluation Results Summary

February 2013



**I-290 Phase I Study**  
**Round 2 - Combination Mode Alternatives**  
**Purpose and Need Evaluation Measures**  
**February 21, 2013**  
**DRAFT**  
*This is a draft document, and may be updated.*

Higher or Lower value of measure desired

2040 No Build + EXP

P&N Point	Measure	Score by Sum Need Point Average Rank->	GP Lane		HOV 2+		HOT 3+		Toll		HOT 3+ & Toll		Base w/ Toll & HCT		
			GP & EXP	GP & EXP & HCT	HOV 2+ & EXP	HOV 2+ & EXP & HCT	HOT 3+ & EXP	HOT 3+ & EXP & HCT	TOLL & EXP	TOLL & EXP & HCT	HOT 3+ & TOLL & EXP	HOT 3+ & TOLL & EXP & HCT	BASE (3GP) W/ VALUE \$ & HCT	BASE (2GP) & HOT 3+ & HCT	
			21.4	28.4	22.9	27.5	22.8	26.8	17.9	19.7	24.4	26.8	23.8	18.2	
Regional Travel	1.3 I-290 Average Travel Time Changes (Peak Periods)	All Lanes % ↓	17.2 min	-5.4%	-7.9%	-11.8%	-10.8%	-12.4%	-11.8%	-12.0%	-8.9%	-34.6%	-34.5%	-40.5%	-4.7%
		HOV/HOT % ↓	-	-	-40.6%	-40.2%	-25.3%	-17.1%	-40.1%	-39.9%	-16.7%	-22.1%	-	-27.8%	
	1.4 Daily Hours of Congestion (I-290 in Study Area)	GP Lanes hrs ↓	18.0	-1.00	-0.50	-0.75	-0.75	-0.50	-0.50	-0.25	-0.25	-8.50	-8.25	-3.00	-4.00
		HOV/HOT * hrs ↓	-	0.0	0.0	-14.5	-14.0	-12.5	-12.5	-12.0	-12.0	-12.0	-11.5	0.0	0.0
	1.5 Daily Person Throughput (Daily thru Study Area)	# ↑	423,953	17,482	22,810	28,150	31,895	34,406	38,137	35,463	40,022	26,824	30,592	10,672	22,957
	1.6 Vehicle Miles of Travel (Daily VMT)	miles ↓	233,263,703	31,249	68,884	42,619	24,144	105,057	113,918	148,191	155,759	81,709	107,482	122,800	38,192
	1.7 Vehicle Hours of Travel (Daily VHT)	hours ↓	10,319,255	-19,415	-28,554	-20,250	-23,232	-8,970	-12,886	-5,795	-1,225	-17,613	-11,715	8,247	9,684
	1.8 Congested VMT (Daily)	miles ↓	17,937,393	-56,395	-76,738	-67,995	-59,370	-62,872	-59,812	-62,468	-41,955	-95,328	-88,684	-47,249	23,414
	1.9 Hours of Delay (Daily)	hours ↓	5,237,381	-17,454	-26,852	-19,713	-22,163	-8,916	-12,816	-6,897	-2,346	-21,298	-16,115	-831	8,247
Trucks	1.10 Truck Miles of Travel (TMT)	miles ↓	44,488,408	2,528	6,303	-3,358	-2,209	-2,739	-2,980	-5,016	-3,256	-11,082	-10,314	-13,814	-6,480
	1.11 Truck Hours of Travel (THT)	hours ↓	1,746,489	-3,636	-4,483	-1,942	-2,395	-893	-1,726	183	934	-4,582	-2,986	29	3,912
	1.12 Congested TMT	miles ↓	2,353,496	-9,612	-12,389	-7,894	-7,662	-9,335	-11,809	-5,526	-4,936	-21,456	-18,410	-7,999	5,745
	1.13 Truck Hours of Delay	hours ↓	856,318	-3,312	-4,220	-1,851	-2,368	-812	-1,693	195	922	-5,236	-3,646	-1,309	3,503
Local Travel	1.16 Peak Period Speed	East-West Arterials mph ↑	18.49	0.47	0.47	0.37	0.36	0.21	0.20	0.10	0.09	-0.33	-0.32	-1.25	-0.39
		North-South Arterials mph ↑	17.20	0.01	0.05	-0.01	0.14	0.01	0.11	0.06	0.01	-0.06	0.03	-0.21	-0.08
	1.18 Vehicle Miles of Travel (VMT)	miles ↓	3,381,655	-67,378	-77,451	-36,511	-43,604	-40,146	-43,110	-22,289	-25,257	73,639	74,412	196,323	43,270
	1.19 Vehicle Hours of Travel (VHT)	hours ↓	211,807	-6,267	-7,650	-5,271	-6,061	-5,191	-5,548	-3,389	-3,819	2,080	2,256	15,171	2,980
	1.20 Congested VMT	miles ↓	239,165	-15,193	-19,481	-15,354	-17,393	-15,935	-16,437	-11,529	-12,346	-3,468	-3,659	30,009	3,599
	1.21 Hours of Delay	hours ↓	101,880	-4,014	-5,093	-4,018	-4,581	-3,865	-4,126	-2,647	-2,996	-196	-50	8,827	1,544
<b>Improve Regional And Local Travel</b>			<b>Need Point Average Rank</b>	7.5	9.1	7.6	8.5	6.5	7.5	5.3	4.4	7.8	7.1	3.8	3.2
Access to Employment	# of Jobs Accessible within 60 min.:														
	2.1 Auto	# ↑	5,219,479	-60,229	6,141	-4,371	-4,371	14,167	21,257	13,846	15,603	75,626	90,099	199,772	-18,158
	2.2 Transit	# ↑	4,006,033	66,783	55,805	66,783	55,805	66,783	55,805	66,783	55,805	66,783	55,805	55,805	55,805
	2.3 Transit & Auto	# ↑	9,225,512	6,554	61,946	62,412	51,434	80,950	77,062	80,629	71,408	142,409	145,904	255,577	37,647
<b>Improve Access to Employment</b>			<b>Need Point Average Rank</b>	3.3	3.3	5.3	2.3	8.0	5.7	7.3	5.0	9.3	7.7	8.3	1.7
Safety	Injuries and Fatality Rates % Change:														
	3.1 Arterial	million vehicle miles/year ↓	0.496	0.07%	-0.09%	0.08%	-0.08%	0.14%	0.06%	0.19%	0.12%	0.31%	0.21%	0.60%	0.14%
	3.2 Expressway	million vehicle miles/year ↓	0.206	-9.14%	-8.56%	-10.14%	-9.91%	-8.30%	-8.05%	-8.15%	-7.80%	-12.14%	-11.88%	-16.17%	-12.44%
	3.3 Overall (Arterial, Highway, Transit)	million person miles/year ↓	0.247	-5.40%	-5.94%	-7.32%	-8.11%	-6.23%	-6.86%	-5.55%	-6.11%	-5.17%	-5.58%	-1.50%	-4.95%
<b>Improve Safety for All Users</b>			<b>Need Point Average Rank</b>	6.3	8.0	9.0	10.0	6.3	7.3	4.0	5.3	5.0	6.0	4.7	6.0
Modal Connections & Opportunities	4.1 New Transit Trips (Regional)	# ↑	2,009,178	-178	1,302	-6,080	-2,390	-3,706	-2,400	-5,221	-3,765	-3,125	-2,580	-1,652	-1,478
	4.2 0.5 Mile Transit Access	Households # ↑	-	0	4,585	0	4,585	0	4,585	0	4,585	0	4,585	4,585	4,585
		Employment # ↑	-	0	19,397	0	19,397	0	19,397	0	19,397	0	19,397	19,397	19,397
	4.3 Non-motorized Connections	(qualitative) ↑	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4.4 Multimodal Opportunities	(qualitative) ↑	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	<b>Improve Modal Connections &amp; Opportunities</b>			<b>Need Point Average Rank</b>	4.3	8.0	1.0	6.7	2.0	6.3	1.3	5.0	2.3	6.0	7.0
Facility Condition & Design	5.1 Address Pavement Age	(qualitative) ↑	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5.2 Address Structure Deficiencies	(qualitative) ↑	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5.3 Address Geometric Deficiencies	(qualitative) ↑	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5.4 Address ADA Deficiencies	(qualitative) ↑	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5.5 Address Drainage Deficiencies	(qualitative) ↑	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	<b>Improve Facility Condition and Design</b>			<b>Need Point Average Rank</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Color Legend:			
1st	2nd	3rd	4th
Rank 12	Rank 11	Rank 10	Rank 9

\* Provided for information only, not included in scoring.  
 \*\*For information