

## Appendices

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# **E. Project Evaluation Matrix**

**US 2 Upper Wenatchee Valley Corridor Transportation Study  
Project Evaluation Criteria**

Number	Guiding Principles	Metric Description	Ranking
1	<b>Reliable.</b> Locals, regional commuters, freight, and emergency responders have options to maintain a reliable travel time between key destinations.	1.1: Improves corridor travel time under current or future conditions.	8= Reduces difference in travel times experienced along corridor between summer weekends and event times and typical conditions for both summer weekends and events 4= Reduces the difference in travel times between typical conditions and summer weekends or events (but not both) 2= Minimal improvement expected as a result of a planning or programmatic solution. 0= Does not improve the difference in travel times on the corridor between summer/event times and typical conditions
		1.2: Creates more reliable transportation connections in the region.	4= Major Connection (Serves large number of users or multiple modes) 2= Minor Connection (Serves primarily local trips or only one mode of travel) 0= No
2	<b>Safe &amp; Complete.</b> The corridor offers appropriate multimodal infrastructure to meet users' needs and enhance safety.	2.1: Improves emergency response times and access to the corridor.	6= Yes 0= No
		2.2: Fixes a known sight distance issue or identified modal conflict point, including improving the frequency or comfort of pedestrian crossings, and access to more complete bicycle and pedestrian facilities along the corridor.	6= Yes 0= No
3	<b>Vibrant.</b> Study recommendations supporting the region's economy and growing seasonal usage of the corridor.	3.1: Provides for a unique and welcoming travel experience.	6= Major amenity or enhancement 3= Minor amenity or enhancement 0= None
		3.2: Project encourages more efficient use of the corridor, in terms of the times when people travel, the modes they use, and how vehicles are stored.	6= Project encourages shifting of trips by mode, to other peak times and improves parking management 0= No
4	<b>Realistic.</b> Study recommendations are practical, fundable and implementable within a reasonable timeframe and include creative solutions to better manage traffic impacts from seasonal and special event travel.	4.1: Project can be completed within available Right-of-Way.	6= No Right of Way Acquisition Required 3= Minimal Right of Way Acquisition Required 0= Significant Right of Way Acquisition Required
		4.2: Project costs are aligned with budget constraints.	6= Low Cost Improvement (\$0-\$400,000) 3= Moderate improvement cost (\$400,000-\$3M) 0= High cost (\$3M+)
5	<b>Supported.</b> Stakeholders and the community will be engaged to identify mutually beneficial solutions.	5.1: Receives support from the community and stakeholders throughout this study.	12= High 6= Medium 0= Low

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ID #	Project Description	Project Type	Priority Mode	Goal 1.1	Goal 1.2	Goal 2.1	Goal 2.2	Goal 3.1	Goal 3.2	Goal 4.1	Goal 4.2	Goal 5	Total Score	Project Ranking	Project Tier	Fatal Flaw?	Fatal Flaw Notes	Selected for Evaluation	Quick Wins & Small Steps	Vision Projects	Project Not Advancing
1	Park & Ride to Stevens Pass with interim stops for employees and skiers.	Planning/Parking	Transit	4	2	0	0	3	6	6	6	12	39	9	2						X
2	Chumstick Highway is identified as an alternate route for emergency needs. Upgrade Chumstick to be a viable detour route for freight use	Design	Auto	4	4	6	6	6	0	0	0	0	26	25	2	Yes	Identified as too costly and not supported.				X
3	Signage and wayfinding to designated areas for parking/crossing	Parking	Parking	2	2	0	6	3	0	6	6	0	25	31	2				X		
4	Upgrade existing pull-outs paired with enhanced pedestrian crossings.	Design	Pedestrian	0	2	0	6	3	0	6	6	0	23	36	2				X		
5	Create new pull-outs with enhanced pedestrian crossings near known desire lines across US 2.	Design	Pedestrian	0	2	0	6	3	0	0	0	0	11	73	3						X
6	6" fog lines or narrower lanes may be effective for speed control and/or increased shoulder size for bikes.	Design	Bicycle	0	0	0	6	3	0	6	6	0	21	41	2				X		
7	Improve existing shoulders and add shoulders where none exist, such that bicycles could be accommodated on the shoulder as this is identified as a US bike route.	Design	Bicycle	0	2	0	6	3	6	0	3	6	26	25	2					X	
8	Improve sight distance in areas where pedestrians are known to cross	Design	Pedestrian	0	0	0	6	0	0	6	3	0	15	60	3						X
9	No Parking Signs	Parking	Parking	2	0	0	0	0	0	6	6	0	14	62	3				X		
10	No Pedestrian Crossing Signs	Design	Safety Improvement	0	0	0	0	0	0	6	6	0	12	65	3				X		
11	Speed enforcement campaign – high traffic impact timeframes	Programming	Safety Improvement	0	0	0	0	0	0	6	6	6	18	49	3						X
12	High Friction Surface Treatments	Design	Safety Improvement	0	0	6	0	0	0	6		0	12	65	3				X		
13	Create variable speed area using ITS.	Design	Safety Improvement	0	0	0	0	0	0	6	3	0	9	74	3				X		
14	Create a cordon surrounding festival areas that autos are prohibited from entering.	Programming	Transit/Emergency/Bicycle /Pedestrian	4	0	6	6	6	6	6	3	6	43	2	1	Yes	Not supported on US 2 and already implemented on some parallel routes.				X
15	Temporary peak direction center-thru lane through Leavenworth on US 2, which could shift direction as needed.	Design/Programming	Auto	4	4	6	6	0	6	6	3	12	47	1	1						X
16	Rechannelize US 2 to create a separated multi-use trail parallel to US 2.	Design	Bicycle/Pedestrian	0	4	0	6	6	6	6	3	12	43	2	1			X			
17	Center running Transit/Emergency Only Lanes During Events/High Demand Periods	Programming	Transit/Emergency	4	2	6	0	3	6	6	3	0	30	16	2						X
18	Grade Separated Pedestrian Crossings – 3 bridges or a pedestrian underpass	Design	Pedestrian	4	2	6	6	6	6	0	0	12	42	4	1			X			
19	Construct a bridge over the Wenatchee River connecting Chumstick Highway to River Bend Road, creating a parallel route over the river in Leavenworth.	Design/Planning	Auto	8	4	6	6	6	0	0	0	0	30	16	2			X			
20	Improve Icicle Road to provide better bicycle facilities as an alternate bicycle route - could include 6" or narrower fog lines or advisory shoulders.	Design/Planning	Bicycle/Pedestrian	8	4	6	6	6	0	0	0	12	42	4	1	Yes	Identified as too costly and not supported.				X
21	Create better parallel route capacity: Chumstick Hwy to train station (more complete facility)	Design/Planning	Bicycle/Pedestrian	8	4	6	6	6	0	0	0	12	42	4	1	Yes	Not a realistic option for bypassing the corridor.				X
22	Enhanced Modal Separation	Design	Pedestrian	0	2	0	6	6	6	6	3	12	41	8	1			X			
23	Flagger Training	Programming	Auto	4	0	6	6	0	0	6	6	0	28	20	2	Yes	City has already hired traffic management firm.				X

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24	Expanded visitor parking at east/west end of Leavenworth – Park & Ride paired with shuttle options, including a potential center running transit-lane, or Ariel tramway with connections to Downtown Leavenworth.	Parking	Parking/Transit	4	2	0	0	6	6	6	3	0	27	22	2						X
25	Reconsider transit service times/headways to include more frequent service, specifically during off-peak travel times to better accommodate service industry employees	Planning	Transit	4	2	0	0	3	6	6	6	0	27	22	2						X
26	Transit shuttle service	Planning	Transit	4	2	0	0	3	6	6	6	6	33	12	2				X		
27	Micro-mobility options including bike share/scooters, neighborhood electric vehicles or other modes that could be used to serve the Leavenworth area.	Planning	Bicycle	0	2	0	0	6	6	6	6	0	26	25	2			X			
28	Neighborhood Electric Vehicles as Modes	Planning		0	2	0	0	6	6	6	6	0	26	25	2						X
29	Remove on-street parking to connect bicycle lane paired with delivery zone/parking/drop off	Parking/Design	Bicycle	0	2	0	6	3	6	6	3	0	26	25	2			X			
30	Parking Management	Parking	Parking	2	2	0	0	3	6	6	6	12	37	10	2			X			
31	Electronic Counter Systems for Parking tied to Dynamic Wayfinding	Parking	Parking/Auto	2	2	0	0	6	6	6	3	0	25	31	2						X
32	Parking app	Parking	Parking	2	2	0	0	3	6	6	6	0	25	31	2				X		
33	Build roundabouts at each primary intersection	Design	Auto	8	4	6	0	6	0	0	0	12	36	11	2	Yes	Traffic analysis indicated significant failures and	X			
34	More/better bike parking	Parking	Bicycle	0	2	0	0	3	6	6	6	0	23	36	2				X		
35	Re-introduce the shuttle train from Wenatchee and Everett into Leavenworth (the old "Snow Train")	Planning	Transit	0	2	0	0	6	6	6	3	0	23	36	2	Yes	Costly and limited by access to railroads.				X
36	Car share with thought given to changing curb space management	Planning	Auto	0	0	0	6	3	0	6	6	0	21	41	2						X
37	Delivery zone/parking/drop-off	Parking	Parking/Safety	0	0	0	6	3	0	6	6	0	21	41	2						X
38	Transit/Emergency Preemption	Design	Transit/Emergency	0	2	6	0	0	0	6	6	0	20	44	3				X		
39	Bicycle facility south of river	Design	Bicycle	0	2	0	6	6	6	0	0	0	20	44	3	Yes	Project identified as costly and not supported.				X
40	Daily service on trailways	Programming	Transit	0	2	0	0	3	6	6	3	0	20	44	3						X
41	Aerial Tramways integrated with parking strategy	Parking	Parking	4	2	0	0	6	6	0	0	0	18	49	3	Yes	Project already captured by project #24 and will be considered as parking strategy rather than a stand-alone project.				X

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42	Emergency Routes/Staging	Programming	Emergency	0	0	6	0	0	0	6	6	0	18	49	3	Yes	Already happening				X
43	Enforcement for pedestrian crossings – vehicles at crosswalks, and j-walking between crosswalks.	Programming	Safety	0	0	0	6	0	0	6	6	0	18	49	3	Yes	Resources for implementation are likely infeasible.				X
44	Employee TDM strategies	Programming	Programming	0	0	0	0	0	6	6	6	0	18	49	3			X			
45	Delivery hours/permits	Planning	Programming	4	0	0	0	0	0	6	6	0	16	59	3			X			
46	Create combination zone with On-Street Parking or Tour Bus Drop-Off	Parking	Parking/Transit	0	0	0	0	3	0	6	6	0	15	60	3		Combined with Project #37.				X
47	Improved parallel facilities for all modes	Planning/Design	Bicycle/Pedestrian	8	4	6	6	6	6	0	0	6	42	4	1				X		
48	Spot treatments at local access points	Design	Auto	4	2	0	6	3	0	6	6	0	27	22	2				X		
49	Adaptive management strategies, such as transit on shoulders paired with Park & Ride at 97 interchange.	Planning	Transit	4	2	6	0	6	6	0	0	0	24	34	2		X				
50	Park & Ride at 97 interchange paired with shuttle	Parking	Parking	4	2	0	0	6	6	6	0	6	30	16	2						X
51	Pedestrian and bicycle improvements along US 2 based on land use	Design	Bicycle/Pedestrian	0	2	0	6	6	6	0	0	12	32	13	2				X		
52	Improve Peshastin bridge to better accommodate bicycles and pedestrian connections from US 2 to Peshastin	Design	Bicycle/Pedestrian	0	4	6	6	3	0	0	0	0	19	48	3		X				
53	Snow removal for bus stops	Programming	Transit	0	2	0	0	3	0	6	6	0	17	56	3			X			
54	Aerial tramway	Planning	Transit	0	2	0	0	6	6	0	0	0	14	62	3		Length needed for tramway to reach potential parking areas in Segment 3 likely to make project infeasible.				X
55	Improvements for bus stops along US 2, keeping them on the highway and improving bicycle and pedestrian connections to stops.	Planning	Transit/Bicycle/Pedestrian	0	2	0	0	3	0	6	3	0	14	62	3				X		
56	Enforcement campaign for speed	Programming	Safety Improvement	0	0	0	0	0	0	6	6	0	12	65	3						X
57	Additional red light/warning signs	Design	Safety Improvement	0	0	0	0	0	0	6	6	6	18	49	3						X
58	High Friction Surface Treatments	Design	Safety Improvement	0	0	6	0	0	0	6	6	0	18	49	3			X			
59	Invest in parallel routes for bikes	Design/Planning	Bicycle	0	2	0	6	6	6	0	0	12	32	13	2				X		
60	Route 22 opportunities with W. Cashmere Bridge Project	Planning	Transit	0	2	0	0	3	6	0	6	0	17	56	3				X		
61	Improve safety around icy spots on the road (variable message signs?)	Planning	Safety Improvement	0	0	0	0	0	0	6	6	0	12	65	3	Yes	Project infeasible due to liability associated with project.				X
62	Speed feedback signs	Planning	Safety Improvement	0	0	0	0	0	0	6	6	0	12	65	3						X
63	Enforcement campaign for speed	Programming	Safety Improvement	0	0	0	0	0	0	6	6	0	12	65	3						X
64	Additional red light/warning signs	Design	Safety Improvement	0	0	0	0	0	0	6	6	0	12	65	3						X
65	High Friction Surface Treatments	Design	Safety Improvement	0	0	6	0	0	0	6		0	12	65	3			X			
66	Shoulder Treatments to better accommodate bicyclists on US 2 (Edge line rumble strips, striping, etc.)	Design	Bicycle	0	2	0	6	3	6	6	3	6	32	13	2			X			
67	Shoulder Treatments to better accommodate bicyclists on US 2	Design/Planning	Bicycle	0	2	0	6	3	6	6	3	0	26	25	2			X			
68	Improve bicycle and pedestrian connections to transit stops	Design/Planning	Transit/Bicycle/Pedestrian	2	4	0	6	3	6	0	3	0	24	34	2				X		

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100	Measures to prevent vehicles occupying motorcycle parking locations.	Parking	Parking	0	2	0	0	3	0	6	6	0	17	56	3						X
101	Leavenworth At-Grade Bypass	Design	Auto	8	2	6	0	6	0	0	0	6	28	20	2	Yes	Limited access concepts tested, result in significant impacts to local residents				X
102	Add an additional lane to US-2 in both directions	Design	Auto	8	4	6	0	6	0	0	0	6	30	16	2	Yes	Cost due to ROW do not align with project Guiding Principles.				X
103	Install additional crosswalks/pedestrian signage	Design	Pedestrian	0	2	0	6	3	0	3	3	6	23	36	2				X		
104	Remove parking spaces between 13th and 14th on Front St to allow	Design	Auto	0	2	0	0	0	0	6	6	6	20	44	3						X
105	Roundabout at intersection of US-2/SR-207	Design/Planning	Auto	0	2	0	6	3	0	3	3	6	23	36	2					X	
108	Sign visibility enhancements	Design	Auto	0	0	0	6	0	0	6	6	0	18	49	3						X

Additional Notes: Projects with ID greater than 100 were added based on community input.

Segment 1

Segment 2

Segment 3

Segment 4