

## Appendices

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# **C. Project Meeting Summary**

Project Advisory Committee Meeting #1

February 27, 2019



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## PROJECT ADVISORY COMMITTEE MEETING

Wednesday, February 27, 2019

11:30 AM – 1:30 PM

### AGENDA

#### Purpose of the Meeting:

Topic	Facilitator	Timing
1. Welcome & Introductions	Penny Mabie	10 min
2. PAC Charter & Project Overview	Kara Hall/ Penny Mabie	20 min
3. Balancing User Needs	Kara Hall/ Penny Mabie	40 min
4. Corridor Vision & Guiding Principles	Kendra Breiland/ Penny Mabie	40 min
5. Next Steps & Meetings	Kara Hall	10 min

## **Project Advisory Committee (PAC) Charter**

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### **Purpose**

The main purpose of the PAC is to help inform the development of the US 2 corridor plan to address broad community needs.

### **Term**

The PAC will meet up to five (5) times between February and November 2019.

### **PAC role**

The PAC will:

- Review materials, complete pre-meeting activities, and come prepared to discuss, listen, and learn at meetings
- Help inform the project team's understanding of the current needs and planning context of the planning area
- Provide input and advice on development of a corridor vision, evaluation criteria, and temporary and permanent solutions to address mobility needs along the corridor
- Communicate with member constituencies about the corridor planning process and seek input in order to reflect various community and perspectives throughout the PAC's work

### **CDTC staff role**

CDTC staff and consultants will:

- Provide information on options to the PAC
- Send draft materials to PAC members five calendar days before meetings
- Work collaboratively with the PAC to share information and solicit PAC input as the corridor study reaches milestones
- Take notes and develop summaries of each meeting
- Consider the input and advice of the PAC throughout the corridor study
- Reflect back to the PAC on how their input and advice has been considered

### **Neutral facilitator role**

The neutral facilitator will:

- Serve as an impartial individual who guides the process, including facilitating PAC meetings.
- Keep the group focused on the agreed-upon purpose and roles. Set protocol for each meeting, suggest alternative methods and procedures, and encourage participation by all group members.
- Works with CDTC to coordinate meeting logistics, prepare meeting agendas and materials (including meeting summaries). PAC members will be notified of what materials will be printed prior to each meeting. Summaries will be provided a week following each meeting.
- Assists in keeping communication open between the PAC and CDTC and consultant staff. The facilitator will work to assure relevant information is provided in a timely and effective manner.
- Will not offer substantive discussions about design elements.

### **Meeting ground rules**

- Start and end on time
- Silence electronics
- Ask questions of each other to gain clarity and understanding





- Express yourself in terms of the group you are representing, including the preferences, interests and the outcomes you wish to achieve
- Listen respectfully, and sincerely try to understand the needs and interests of others
- Have curiosity and willingness to learn

### **Meeting Schedule**

- Meeting #1 will be on February 27, 2019.
- Subsequent meetings will be scheduled in alignment with key project milestones and to best meet PAC member availability.



## Project Principles

### Vision Statement

*“...to reclaim our downtown as an economically healthy, people-friendly place, enhanced by the movement of pedestrians, bikes, cars, and a diversity of businesses...”*

### Guiding Principles

- **Circulation:** Streets should provide connectivity and circulation for all modes while maintaining a level of traffic flow consistent with an urban downtown
- **Parking:** Parking should be available for businesses, residents, visitors, and local deliveries and should support the pedestrian environment and the viability of transit
- **Travel Choices:** Facilities and services should be designed to support the goal of having transit, walking, bicycling, and carpooling comprise a significant share of the trips to and from Downtown
- **Parks and Open Spaces:** Streetscape, parks and open space should create a sense of place, be linked and serve a variety of purposes
- **Land Use:** Streets should accommodate and encourage the future land use vision
- **Great Streets:** Downtown streets should contribute to and reinforce this area as a destination and the heart of Downtown by creating economically vibrant and pedestrian supportive streets
- **Cleveland Street:** Cleveland Street should be a traditional “Main Street” promenade
- **Railroad Right-of-Way:** Any design should take full advantage of this asset, including high capacity transit, non motorized trail and other opportunities



## A Larger Effort for Coastal Mobility & Livability

The *RCVS* is the central component of the broader *Coastal Mobility and Livability Study (CMLS)*, a City-sponsored visioning process—partially funded by the California Department of Transportation (Caltrans)—that invites residents, businesses, and other community members to create a new, integrated vision for infrastructure, mobility, and quality of life in the coastal corridor.

The *CMLS* incorporates three complementary studies:

- *RCVS*
- *Active Transportation Plan (ATP)*
- *Coastal Business Districts Parking Study*

By linking these studies together, the *CMLS* creates efficiencies in project schedules and outreach activities, and ensures vital integration among the complementary planning efforts.

## Guiding Policies

At the study's kickoff, the project team developed the following policies to guide the study and inform its technical and engagement activities:

- **Increase East-West Connections:** Improve access across the rail corridor to beaches, schools, and commercial areas.
- **Improve Pedestrian & Bicycle Facilities:** Enhance the safety and desirability of these modes through facility design that provides separation from automobiles.
- **Provide Adequate Parking:** Ensure sufficient parking to enable access to the coast, Encinitas COASTER Station, and commercial areas.
- **Balance Mobility Improvements with Desired Community Character:** Focus on mobility improvements that minimize noise, respect community character (Figure 2), and preserve open space as much as possible.
- **Promote Health & Safety:** Create an environment where users of all ages and physical abilities can enjoy the coastal rail corridor.



Figure 2: At left, Old Encinitas, the city's historic center, exemplifies its unique community character. At right, the "Cardiff Kook" statue represents local surfing culture. (Wikimedia Commons; Flickr)



## Guiding Principles

### Overall Project

- Engage the community and respect neighborhoods
- Recognize each corridor's role in regional mobility and local mobility access
- Coordinate with state, regional entities, and neighboring cities to identify mutually beneficial solutions
- Create equitable corridors that provide safe and inviting travel for all people, regardless of mode, age, or ability

### SR 522

- Address safety for all modes
- Complete BAT lanes and sidewalks to support both regional BRT and local access
- Minimize impacts on neighboring properties (e.g. right-of-way, access, noise, visibility)
- Improve non-motorized access to transit and crossing opportunities to enhance local access
- Create a corridor identity/character and enhance the natural environment
- Be a leader in identifying innovative solutions, particularly at the Bothell Way/145<sup>th</sup> Street intersection

### SR 104

- Address safety for all modes
- Maintain the corridor's unique identity and natural landscape
- Take a phased approach that provides benefits over time
- Consider draw on city's financial resources in selecting design solutions; as well as positioning improvements well for regional, state and federal investment
- Protect natural environment and encourage low impact design approaches
- Plan corridor to discourage neighborhood cut-through traffic
- Minimize impacts on neighboring properties (e.g. right-of-way, access, noise, visibility)

# The following goals are proposed to help shape Chelan County's Transportation Future

## PROJECT GOALS

**Maintain what we have**



**Safety**



**Ensure financial viability**



**Supports land use**



**Environmental stewardship**



**Be an active partner**



# Five Key Strategies

The centerpiece of this framework approach is a set of five strategies that are embedded both in the vision narrative and throughout the TMP Document. Each strategy describes the core activities needed to achieve the desired outcomes. The dashboard measures will be used to evaluate progress on these strategies over time and will be explained in detail in Chapter 3. These five strategies provide the basis for the identification of projects and programs to be completed by 2030. It is important to remember that implementation activities needed to achieve each strategy will be guided by the sustainability principles of safety, maintenance, environmental stewardship and economic vitality. The five key strategies are:

1

## Prepare for Light Rail

This means increasing bus transit ridership to build the market for future light rail, building the infrastructure needed to support light rail in advance of its arrival, and encouraging transit-oriented development in areas surrounding future rail stations.

2

## Ensure Strong Support for Urban Centers

The completion of a well-designed network of streets and paths combined with a managed parking strategy will establish the transportation system needed to support the urban environment envisioned for both urban centers – Overlake and Downtown. This includes appropriately scaled streets, wide sidewalks, on-street parking, shared parking, reasonable access for delivery vehicles, interesting design features, bike facilities, and a network of walking paths.

3

## Improve Travel Choices and Mobility

This strategy calls for completing Redmond's networks for driving, bicycling, walking, bus transit, light rail, and freight movement. Managing transportation demand, network completion and careful integration of transit-oriented land use with transportation infrastructure will increase overall mobility options and support needed shifts in mode share.

4

## Increase Neighborhood Connections

This strategy seeks to ensure that Redmond's neighborhoods are connected to each other and are also internally well-connected by all modes of travel. Particular emphasis will be placed on improving modal corridors, providing safe local streets and safe, convenient walking and bicycling connections.

5

## Enhance Freight Mobility

This strategy focuses on direct and efficient delivery of goods and services within the city as well as continued vitality within the freight warehousing and distribution facilities sector.







# City of Tacoma TRANSPORTATION MASTER PLAN

Tacoma is a **sustainable** community with many diverse residents, businesses, and visitors who have various transportation priorities. The City is **strategic** in how it plans its transportation system with an emphasis on carrying the people and goods that foster Tacoma’s culture, character, and competitiveness. The transportation system offers **multimodal** travel options that provide safe **access** for all users and neighborhoods, encourage **healthy living**, and protect the **environment**.

This vision is supported by six key goals, which provide guidance for the priorities and recommendations embodied in this plan:

## Being a Partner

Proactively **develop partnerships** to best serve all users of the regional transportation system.



## Protecting Community

**Protect natural, as well as neighborhood, assets** to create and connect places where people can live, work, and play in a safe and healthy environment.



## Providing Mobility for All

Prioritize the movement of people and goods via modes that have the least environmental impact and greatest contribution to livability in order to build a **balanced transportation network** that provides mobility options, accessibility, equity, and economic vitality for all.



## Striving for Fiscal/ Environmental/ Social Sustainability

Design an **environmentally and fiscally sustainable transportation system** that serves its users through strategic planning efforts, funding, and projects.



## Leveraging Programs/Strategies

Develop and implement **transportation demand management strategies** and programs that contribute to the overall effectiveness of the multimodal transportation system.



## Linking to Land Use

Build a transportation network that **reinforces Tacoma’s land use vision, the region’s Vision 2040, and the Growth Management Act**.



# Potential Project & Scenario Evaluation



1

publicdomainpictures.net



The system should be **efficient**, maximizing its capacity by synchronizing traffic signals, staggering work and school schedules, and encouraging transit.

## Metric Description

## Ranking

Improves or eliminates a congestion choke point to LOS standard under current or future conditions

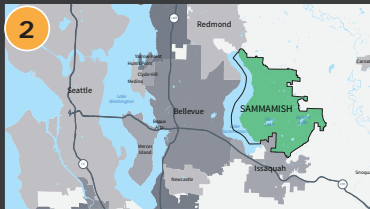
4 = Solves auto LOS deficiency  
2 = Improves auto operations but does not eliminate LOS deficiency  
0 = Does not improve LOS deficiency or no LOS deficiency in project vicinity

Project will have a positive impact on many users

2 = Impacts a high number of users  
1 = Impacts a medium number of users  
0 = Impacts a low number of users

2

Comprehensive Plan



Regional destinations should be **easier to access**, with more transit and less congestion on commute routes.

Improves connection to the regional transportation system (i.e., transit, trails, I90 and SR202)

2 = Yes  
0 = No

Encourages transit travel

2 = Infrastructure or access to transit improvement within 1/4 mile proximity  
1 = Infrastructure or access to transit improvement within 1/2 mile proximity  
0 = No transit improvement

Coordination with regional transit

2 = Coordinates with regional transportation  
0 = Does not coordinate with regional transportation

3

peasels.com



It should be **easier to get places** on foot, by bike or by car, with connected streets and trails, and improved bike connections.

Reduces distance between origins and destinations

2 = For all modes  
1 = For bike and ped only  
0 = Does not reduce distance of trips

Encourages pedestrian travel

2 = Exclusive facility (e.g., sidewalk, trail, RRFB/enhanced crosswalk)  
1 = Shared facility (e.g., sidewalk w/o buffer or one side, non-enhanced crosswalk, wayfinding, ADA improvements)  
0 = Other

Encourages bike travel

2 = Exclusive facility (e.g., buffered sidewalk, trail, separated bike lane, RRFB/enhanced crosswalk)  
1 = Shared facility (e.g., sidewalk w/o buffer or one side, bike lane, sharrow, non-enhanced crosswalk, wayfinding)  
0 = Other

4

pikabay.com



Transportation system management should be **fiscally sustainable**, controlling investment costs, finding grants, and increasing local ability to pay.

Project is feasible and achievable

2 = Under City control, can be done quickly (within 6 years)  
1 = May require some coordination, could take 7-20 years to implement  
0 = May take more than 20 years to implement, or the City is not in control

Project's costs are aligned with City budget constraints

2 = High (project is <\$100K)  
1 = Medium (project is between \$100K and \$1M)  
0 = Low (project is >\$1M)

Project is a strong match for grant opportunities or outside funding sources

2 = Yes  
0 = No

On-going maintenance costs

2 = Project will reduce ongoing maintenance (i.e., replacement of signal with roundabout, reduction in paved surface)  
1 = Project addresses near-term maintenance need (street overlay)  
0 = Project will increase maintenance costs

5

Ehr & Peers



Transportation should be **safe and welcoming**, with better street crossings, calmed traffic to slow speeds, and increased traffic enforcement.

Addresses location with a history of injury/fatal collisions

2 = Serious Injury/fatal collision  
1 = Not serious injury collision  
0 = No collision

Addresses location with a history of bike/ped injury collisions

2 = Serious Bike/Ped Injury  
1 = Not serious bike/ped collision  
0 = No bike/ped collision

Fixes an identified sight distance issue or identified modal conflict point

2 = Yes  
0 = No

6

Ehr & Peers



The rights of way and trails should look great, enhancing **the character that makes Sammamish unique**.

Supports beautification and sustainability (e.g., adds vegetation to reduce heat island effect, reduces street width, utilizes permeable surfaces, encourages mode shifts, etc.)

2 = Increases vegetation, reduces street width, and/or utilizes permeable surfaces/other stormwater treatments  
1 = Encourages mode shift, but doesn't make other sustainability improvements  
0 = Does not include sustainability improvements

Project enhances street character

2 = Yes  
0 = No





## WSDOT PRACTICAL SOLUTIONS OVERVIEW

### *What is Practical Solutions?*

WSDOT's Practical Solutions is a project delivery approach that aims to identify and solve problems as quickly and inexpensively as possible. This approach emphasizes a performance-based, data-driven decision-making process with early involvement from stakeholders and the community at-large. A Practical Solution's approach considers the following when developing project alternatives:

- Lowest life-cycle cost to preserve the system in a state of good repair;
- Support Target Zero goal of zero traffic fatalities and injuries by 2030;
- Transportation system management including ITS technology and managed lanes;
- Providing mobility via other travel modes to increase person capacity of the system; and,
- Travel demand management strategies to reduce the demand for travel via personal vehicles.

### *How are we applying Practical Solutions?*

#### **A) Informing the Process for this Project:**

1. Identify baseline and contextual needs
  - Performance based approach focused on addressing performance gaps and cost effective solutions
2. Apply a practical set of solutions (low cost, high value, capital investments as last option)
  - Operational or demand management strategies are identified first, with capital projects as a last resorts
3. Engage the community throughout
  - Collaborating and getting input from key stakeholders early and throughout the project development process

#### **B) Evaluating Solutions:**

Projects will be developed based on adherence to Project Guiding Principles then evaluated through a Practical Solutions lens using the Mobility Performance Framework.



*Mobility Performance Framework:*

- Supporting WSDOT's Practical Solutions approach
- Mobility measures that move past using only speed and delay
- Mobility measures that identify multimodal transportation problems and opportunities
- Practical Solutions is a performance-based approach to transportation decision-making
- Six Transportation System Policy Goals (RCW 47.04.280)
  - Economic Vitality – stimulate and enhance the movement of people and goods
  - Preservation – preserve prior investments in transportation systems and services
  - Safety – provide for and improve safety and security
  - Mobility – improve predictable mobility, congestion relief
  - Environment – investments that promote energy conservation
  - Stewardship – continuously improve the quality, effectiveness and efficiency of the transportation system
- Defines metrics of evaluation for Planning Level Studies

# US 2 Upper Wenatchee Valley Transportation Study Project Advisory Committee Meeting #1

February 27, 2019



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY



Chelan-Douglas  
TRANSPORTATION COUNCIL  
CDTC



## Meeting Agenda

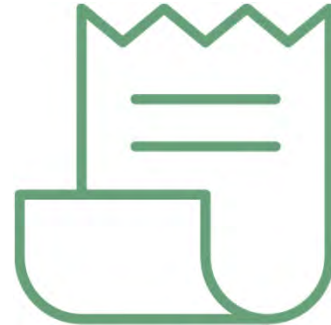
- Project Advisory Committee Charter
- Project Overview
- Balancing User Needs
- Corridor Vision & Guiding Principles
- Next Steps & Meetings



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## Our Charter

- Rules of the Road
  - Purpose
  - Guidelines for Working Together
  - Roles
  - Expectations



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## What is Your Role?

- Project Advisory Committee Will:
  - Help Make Sure Voices are Heard
  - Serve as Sounding Board for Project Decisions
- Today:
  - Draft Guiding Principles
  - Inform Corridor Vision



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## The Project

- **Study Area:** US 2 from Coles Corner to Cashmere
- **Goal:** Improve safety, access, and mobility for all modes of travel on the US 2 corridor.
- **Unique Challenges:**
  - Balancing needs of local and regional traffic
  - Accommodating special events in Leavenworth
  - Limited connections due to rural nature and topography



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TRANSPORTATION STUDY

## The Project

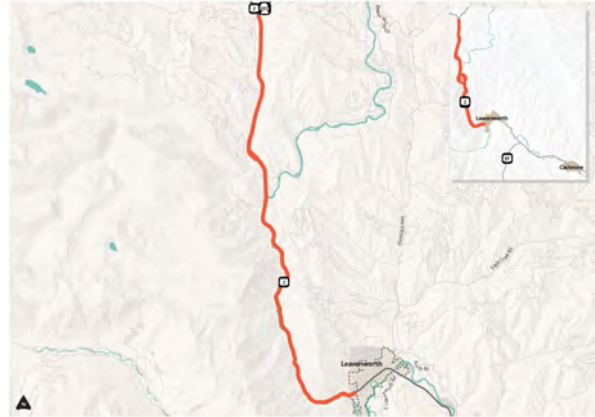
- **Results:** Toolbox of strategies to improve safety and mobility on US 2.
  - Short, Medium, and Long-Term Solutions
  - Temporary or Permanent
  - Identified based on adherence to Guiding Principles
  - Evaluated using WSDOT's Practical Solutions Approach



US 2 Upper Wenatchee Valley  
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## Segment 1 – Coles Corner to Icicle Road

- 14 Miles from Coles Corner to Icicle Road
- **Opportunities**
  - Lower Volumes Relative to Other Segments
  - Alternate Route for Regional Travel to from Seattle to Leavenworth
- **Constraints**
  - Narrow Without Consistently Paved Shoulders



## Segment 1 – Coles Corner to Icicle Road

- Generally Two-Lanes
  - Climbing Lanes Provide Some Three-Lane Sections
  - Paved Shoulders in Sections

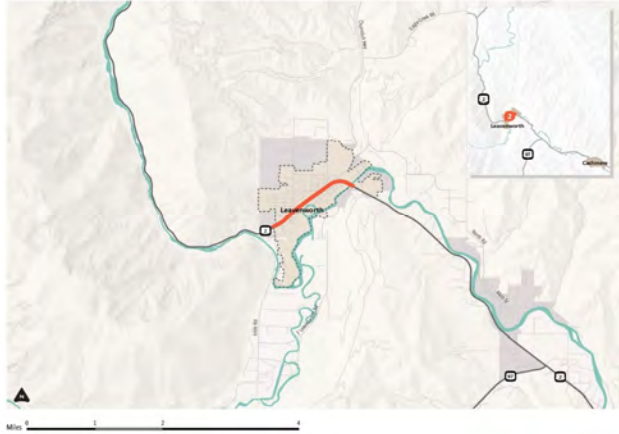


Source: Google Earth, 2019



## Segment 2 – Leavenworth

- 1.5 Miles from Icicle Road to E. Leavenworth Road
- **Opportunities:**
  - Improve Experience for All Users
  - Better Leverage Parallel Facilities
- **Constraints:**
  - High Interaction Between Modes
  - Multi-Modal Safety
  - Vehicle Delay



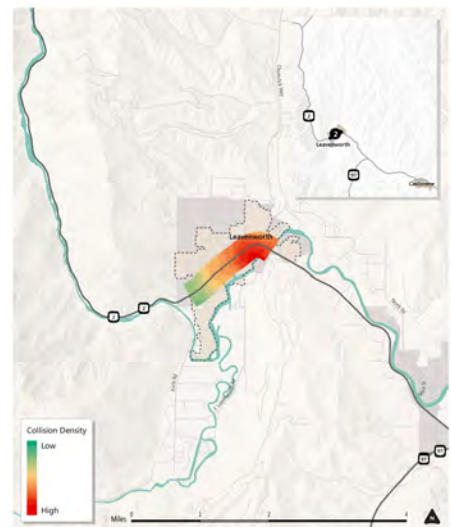
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## Segment 2 – Leavenworth

- Roadway Cross-Section Features:
  - Two-Way Left-Turn Lane
  - Street Parking on One Side
- Bus Stops & Crosswalks



Source: Google Earth, 2019



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TRANSPORTATION STUDY



## Segment 3: East of Leavenworth to US 97

- 4 Miles from E. Leavenworth Road to US 97
- **Opportunities:**
  - Less Constrained Geography
  - Served by Transit
- **Constraints:**
  - Heavy Queues During Events and Summer
  - Emergency Access
  - Provides Direct Access for Local Businesses



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## Segment 3: East of Leavenworth to US 97

- Two-Lane Road
  - Paved Shoulders
  - Two-Way Left-Turn Lane where Access to Businesses is Provided



Source: Google Earth, 2019



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## Segment 4: US 97 to Cashmere

- 6.5 Miles from US 97 to Aplets Way (Cashmere)
- **Opportunities**
  - More Safety Features
  - Local Access Provided by Frontage Roads
- **Constraints**
  - Heavy Traffic Traveling To and From Wenatchee



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## Segment 4: US 97 to Cashmere

- Four Lane Road
  - Median Barrier
  - Guardrails in Sections
  - Most Access Occurs at Intersections



Source: Google Earth, 2019



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## Meeting Agenda

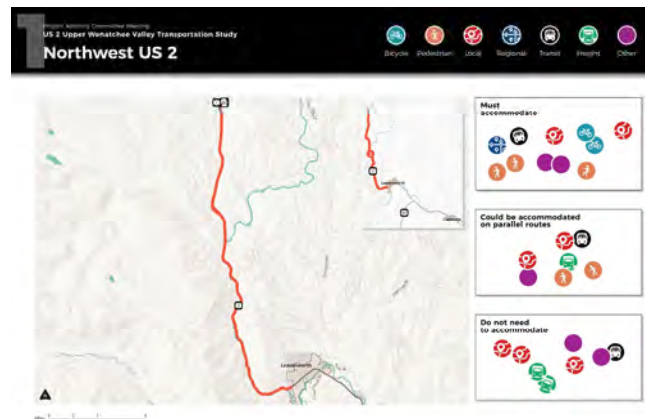
- Project Advisory Committee Charter
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- Balancing User Needs ←
- Corridor Vision & Guiding Principles
- Next Steps & Meetings



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## Balancing User Needs

- Goal: To understand priorities for modes along the corridor.
- How do we accommodate modes in each segment?
- Rank All Modes for Each Section



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# Meeting Agenda

- Project Advisory Committee Charter
- Project Overview
- Balancing User Needs
- Corridor Vision & Guiding Principles ←
- Next Steps & Meetings



# Next Steps

- March 2019
  - Online Component Live  
Late March
- April 2019
  - Existing Planning Context
  - Online Public Engagement
  - Next PAC Meeting

US 2 Upper Wenatchee Valley Transportation Study

## Schedule

Task	Description	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	Planning Context	█											
2	Corridor Vision			█									
3	Evaluating Options					█							
4	Community Conversation									█			
5	Final Plan										█		
	PAC Meetings			•		•		•		•			•
	Public Outreach/Events					•		•		•			•

★ Delivery of draft report. The remaining time will be set aside for comments/feedback and revisions to the final plan.





US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## Project Advisory Committee Meeting #1

Wednesday, February 27, 2019

11:30 AM – 1:30 PM

### AGENDA ITEM #1: WELCOME & INTRODUCTIONS

#### In-Person participants

- Penny Mabie, EnviroIssues
- Nancy Smith, Leavenworth Chamber of Commerce
- Duane Goehner, Citizen, Friends of Leavenworth
- Chantell Steiner, City Administrator
- Craig Christiansen, Independent Warehouse Inc.
- Chief Kelly O'Brien, Chelan County Fire District #3
- Lauren Loeb sack, Link Transit
- Kendra Breiland, Fehr & Peers
- Kara Hall, Fehr & Peers
- Jeff Wilkens, Chelan-Douglas Transportation Council
- Scott Bradshaw, Leavenworth Planning Commission
- Sergeant Jason Reinfeld, Chelan County Sheriff
- Nick Manzano, WSDOT
- Paula Cox, Chelan County

#### In-person observing

- Bianca Popescu, Fehr & Peers
- George Mazur, WSDOT
- Lisa Popoff, WSDOT

#### On the phone

- Jim Mahugh, WSDOT
- Richard Warren, WSDOT

#### Penny reviewed the purpose of the meeting:

- Provide an overview of the project
- Inform stakeholders about the process
- Solicit input on transportation priorities along the corridor

- Solicit input on a shared vision for the plan
- Help form the development of the plan.
- Will be meeting five times until November.
- Will receive materials and will need to do work after meetings.
- The PAC was asked to communicate with their constituents and get feedback

## AGENDA ITEM #2 – PAC CHARTER

Penny noted the charter serves as guidelines for how the team and the PAC will work together. She reviewed the draft.

- Ground rules to be productive
  - Start and end on time
  - Turn off phone
  - Your responsibility to ask questions when you don't understand
  - Listen respectfully and share air time
- Team will provide materials five days ahead of PAC meetings
- Intent is to make sure voices are heard

Question from PAC: Is there an expectation that PAC comments are being asked for within a five day turnaround? Response: No, if PAC comments are requested outside of meetings, a set comment period will be established.

## AGENDA ITEM #2 – PROJECT OVERVIEW

- Solutions will be based on guiding principals
- Divided the corridor into four different segments with associated challenges and opportunities

Segment 1 – Coles Corner to Icicle Creek - Narrow, but low volumes and lowest collision density.

Segment 2 – Leavenworth - There is an opportunity to improve experience for all users, and parallel facilities, high interaction between modes, and multimodal safety is important. Jeff noted local accessibility can also be talked about

Segment 3 - East of Leavenworth to US 97 - Less constrained geography, served by transit, heavy queues seen during events and summer months, local access to business is challenging

Segment 4 – US 97 to Cashmere - Local access frontage roads, heavy traffic, low access (at intersections only)

## AGENDA ITEM #3 – BALANCING USER NEEDS

The goal of this agenda item is to understand PAC member priorities as they pertain to each segment. An activity was conducted in which each PAC member used dots to signify user priorities for each segment and whether users (local, regional, bicyclists, pedestrians, transit, freight and others): 1) must

be accommodated on US2, 2) must be accommodated either on US 2 or on a parallel route in the segment, or 3) do not need accommodation. Following the exercise, a debrief discussion was held.

- Segment 1 discussion:
  - Must accommodate bicycles (comment from CDTC) – WSDOT is working on nationwide bike touring routes, and Steven’s Pass is one of them
  - Parallel routes stickers – bicycle, pedestrians, parking (CDTC and WSDOT comment – lots of recreational demand for parking along this area – must be accommodated on highway or parallel routes if they exist). Regional (comment from CDTC – an idea was the future of a Leavenworth bypass if Chumstick is improved. In this scenario, County would give it to WSDOT.)
  - Transit, pedestrian, bike, freight stickers were all under do not need to accommodate.
  - Bicycle safety concerns, so provide alternate routes (comment from Leavenworth Chamber of Commerce).
  - Freight is not as common on US 2, but agriculture needs are important.
  - Regarding someone’s priority to potentially put freight on parallel routes – it was because what’s existing is not conducive to trucks.
  - A question from the group: how aspirational is this exercise? Answer: this could guide future policy, i.e. bicycles in Tumwater Canyon.
  - There is a need to prioritize pedestrians in the canyon for pedestrians who cross and park far from where they go climbing. This corridor must accommodate crossing when accessing nature.



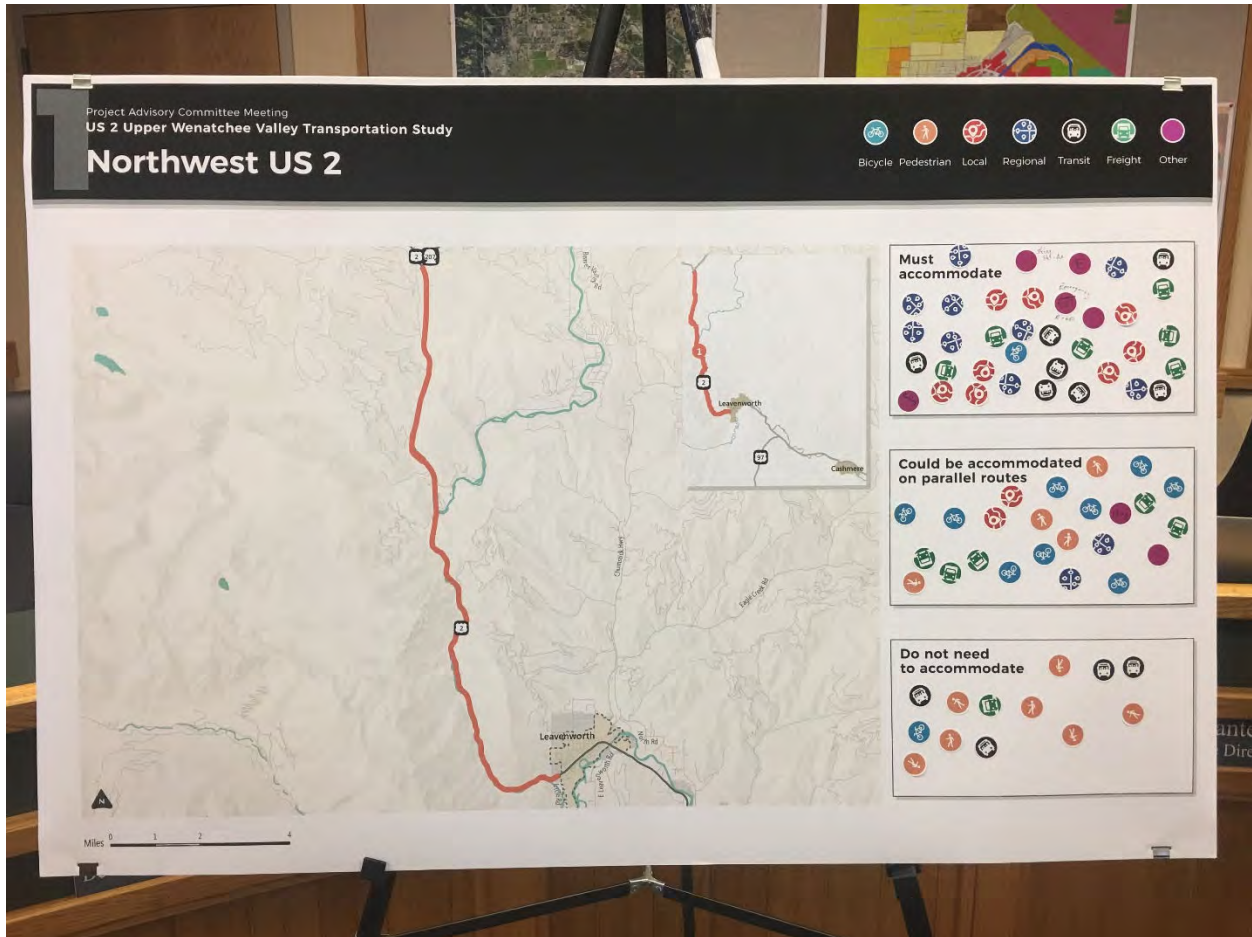


Figure 1 - Segment 1, Coles Corner to Icicle Creek

- Segment 2 discussion:
  - No stickers on “do not need to accommodate”
  - Regional is split between must accommodate and parallel routes
    - Parallel: segregate traffic that needs to get through or around Leavenworth
    - Some people don’t stop in Leavenworth because it’s too busy. If there were alternate routes people may do more business (comment from Friends of Leavenworth). Undefined of where the route would be, could be a tunnel.
  - Bicycles – why on US 2? – It’s critical for residents to cross the highway, park in bicycle racks. They’re already there, there is demand for cyclists so need to make sure it’s safe. US 2 acts as a main street.
  - WSDOT generally wants regional trips on highway and local trips on local streets.
  - Other concerns – emergency access must be accommodated
  - Parking – we are accommodating parking on the highway, is that the best use for US 2?
  - Pedestrians stickers are all in “must accommodate on US 2”
  - Freight stickers evenly split on “parallel routes” and “must accommodate on US 2”.
  - City’s perspective was to remove regional and transit off of US 2 to clear corridor.
  - Long distance freight has different needs than localized freight.

- Transit Link explored taking Route 22 off US 2, but local access streets are not navigable for commuter buses. Additionally, all ridership is on US 2. Amount of investment in transit means that Link will not pull buses from US 2. Shuttle daily through town may only run at peak hour west from a stop at the east side of Leavenworth. Peak impacts on the highway are also peak impacts for schools on local roads, so buses would still be impacted on local roads.
- It may be a good idea to take more local trips off the highway
- The Planning Commission has developed some ideas on how to get around Leavenworth by roads on the outside of the City (from City of Leavenworth).
- Ideas put into a plan will help us get money for ambitious ideas.
- Extend the segment to City limits

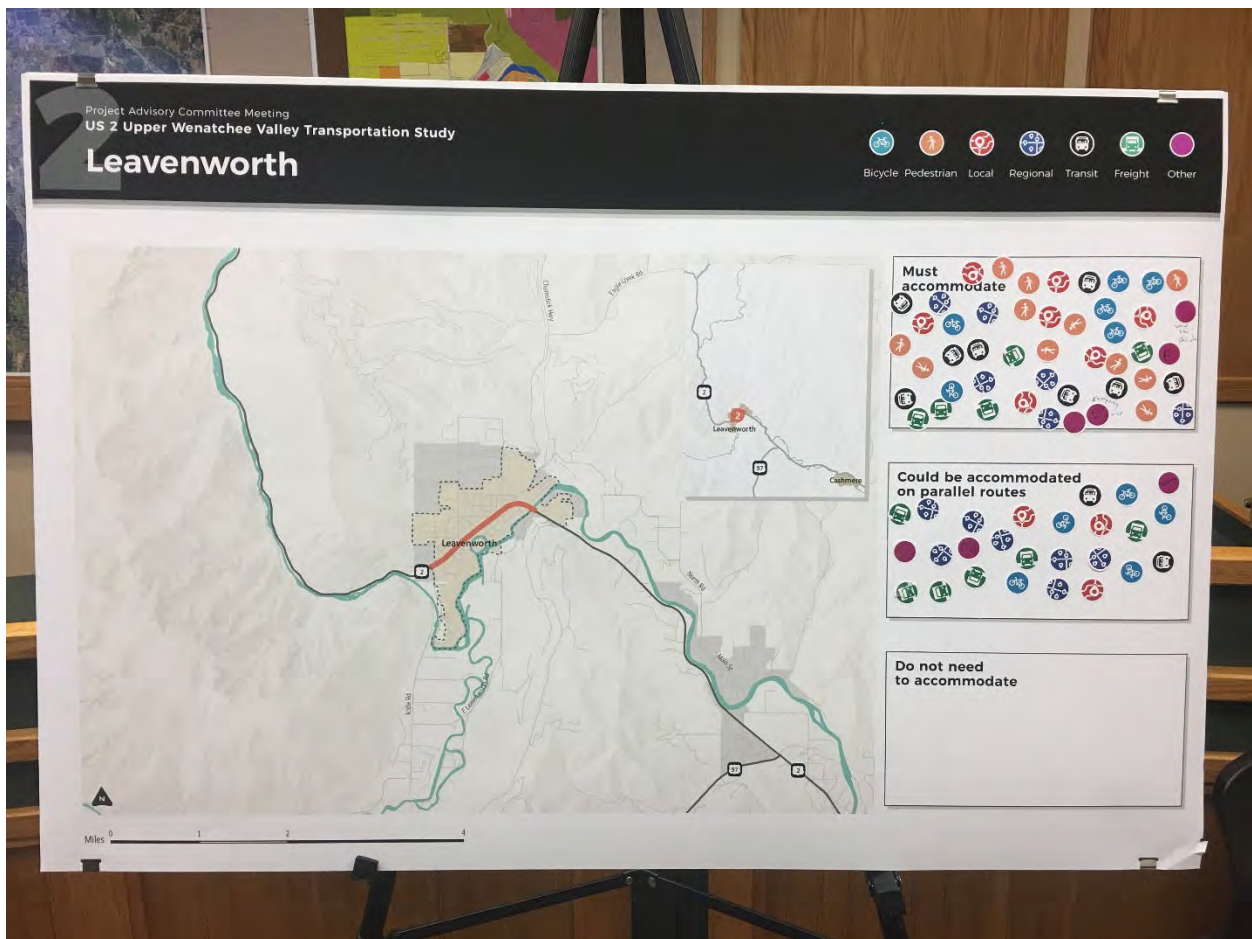


Figure 2 - Leavenworth

- Segment 3 discussion:
  - Pedestrians do not need to be accommodated because there are not many trip attractors or producers. There is confusion because the segment covers Safeway area where there are pedestrian needs
  - Cut the segment at City limits
  - From a planning perspective, look at the area as just past Safeway



- Transit
- Parking room for satellite parking or tour bus parking along this corridor.
- Local stickers are mostly “must accommodate”, because broader community of Leavenworth through to Peshastin (schools) needs to be connected
- Bicyclists onto parallel routes. Regional bike and pedestrian plan stops at Cashmere. There is already a fairly good network on the side of US 2 for bicyclists.

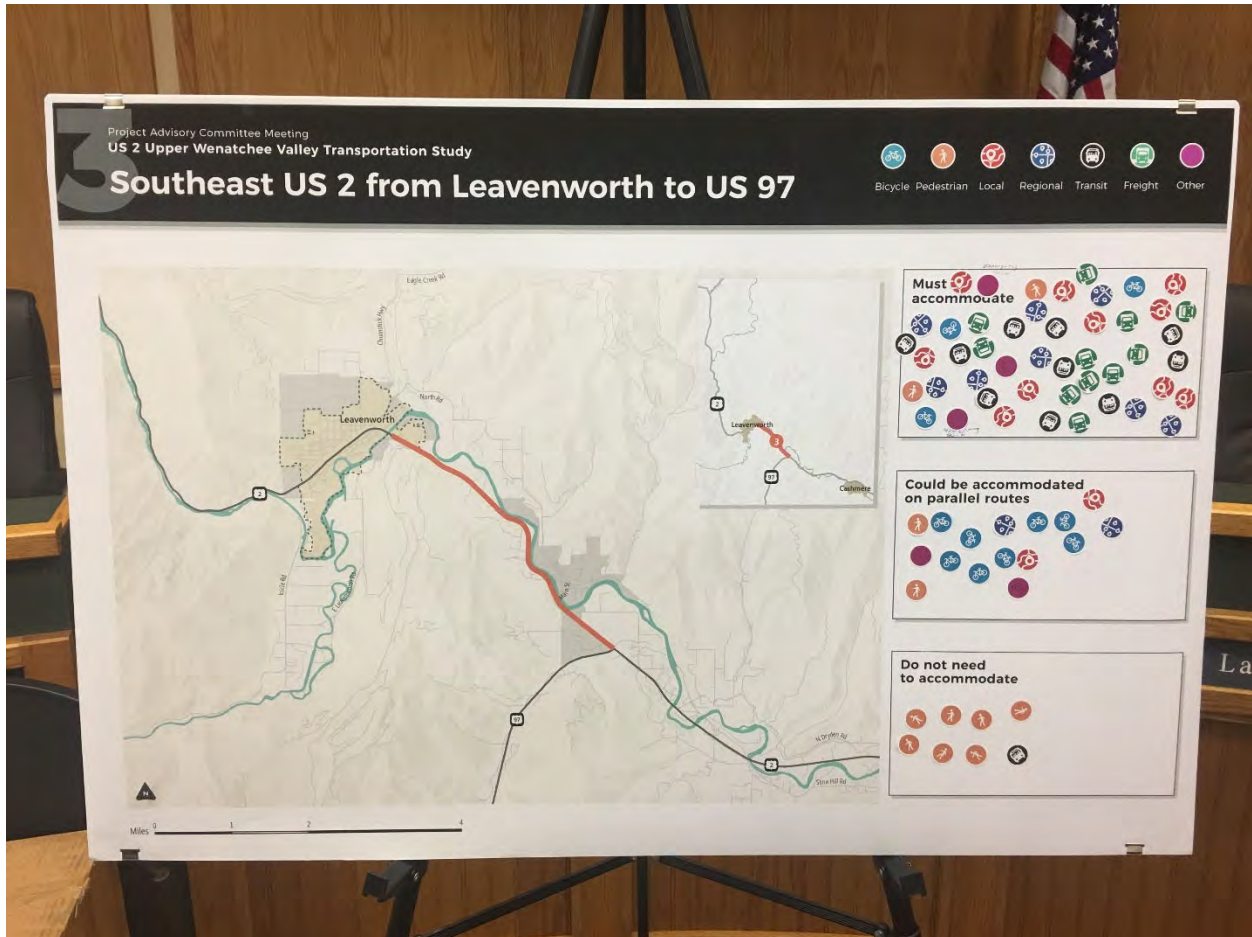


Figure 3- Southeast US 2 from Leavenworth to US 97

- Segment 4 discussion:
  - Keep the pedestrians off the road
  - Don't need to accommodate bicycles because there is a good parallel route – called “the Fruit Loop”

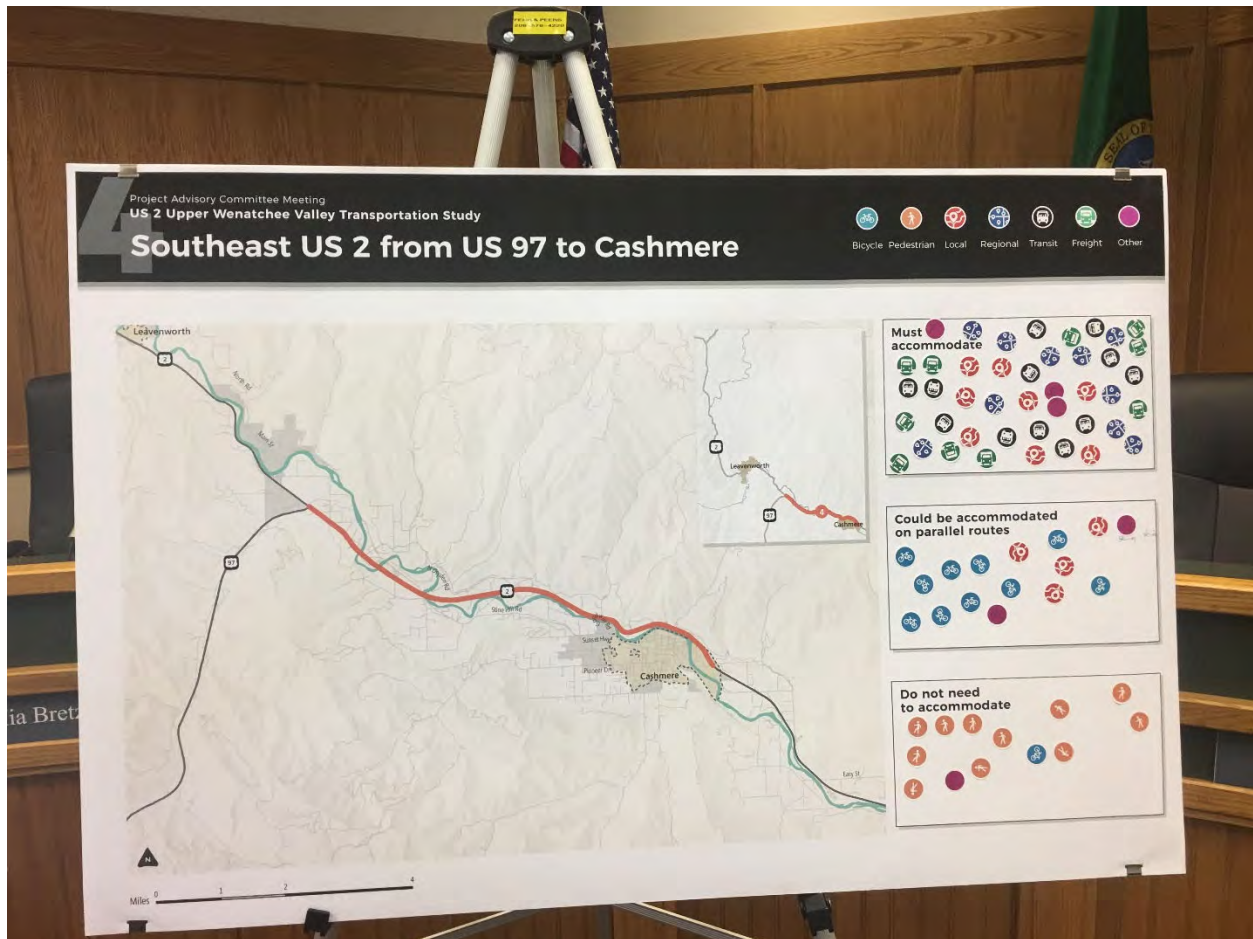


Figure 4- Southeast US 2 from US 97 to Cashmere

## AGENDA ITEM #4 – CORRIDOR VISION & GUIDING PRINCIPLES

The purpose of the vision and guiding principles will be to help determine how to choose investments. The PAC members were asked to jot down their vision for the corridor and then guiding principles were brainstormed.

- Sharing from PAC member's vision exercise. What should the corridor vision and guiding principles be?

Vision:

- Moving multimodal traffic effectively and safely through an economic and socially diverse area using a holistic approach
- Find creative ways to meet the transportation needs within a growing economy and constraints of limited funding

Guiding principles brainstorm:

- Solving the Leavenworth Effect
- Pedestrian safety while thinking about traffic flow

- Providing access to residents of their town
- Parking availability for residents, workers, visitors
- Improvements for alternative modes
- How can the corridor contribute to community character
- Safe and reliable
- Efficient access for emergency services
- Improve traffic in and out of Leavenworth
- Improve traffic at events and peak season
- Safety
- Improve multimodal connections
- What would be the impact on how Leavenworth develops or evolves
- Develop a coordinated plan that supports transit that enhance that is safe, useful for users and supportive for tourists travel
- Smooth traffic flow throughout
- Recognize agricultural users and needs (subareas 3 and 4)
- Reducing traffic backlog in subarea 3
- Safety access and mobility of US 2, alternate routes if possible, segregating visitors going directly through town and just passing through
- Look at data and get better sense of how we can improve mobility
- Improve public safety, esp. Coles Corner to US 97 interchange
- Improve first responder response times within the corridor
- Sync crosswalk with signal lights in Leavenworth to assist the vehicles passing through
- Safe pedestrian crossings
- Successful ingress and egress to town of Leavenworth
- Safe and connected pedestrian and bicycle routes on and off the highway
- Getting a better sense of who is using the corridors, not just passing through
- Parking

High level summary of PAC member's corridor vision and guiding principles:

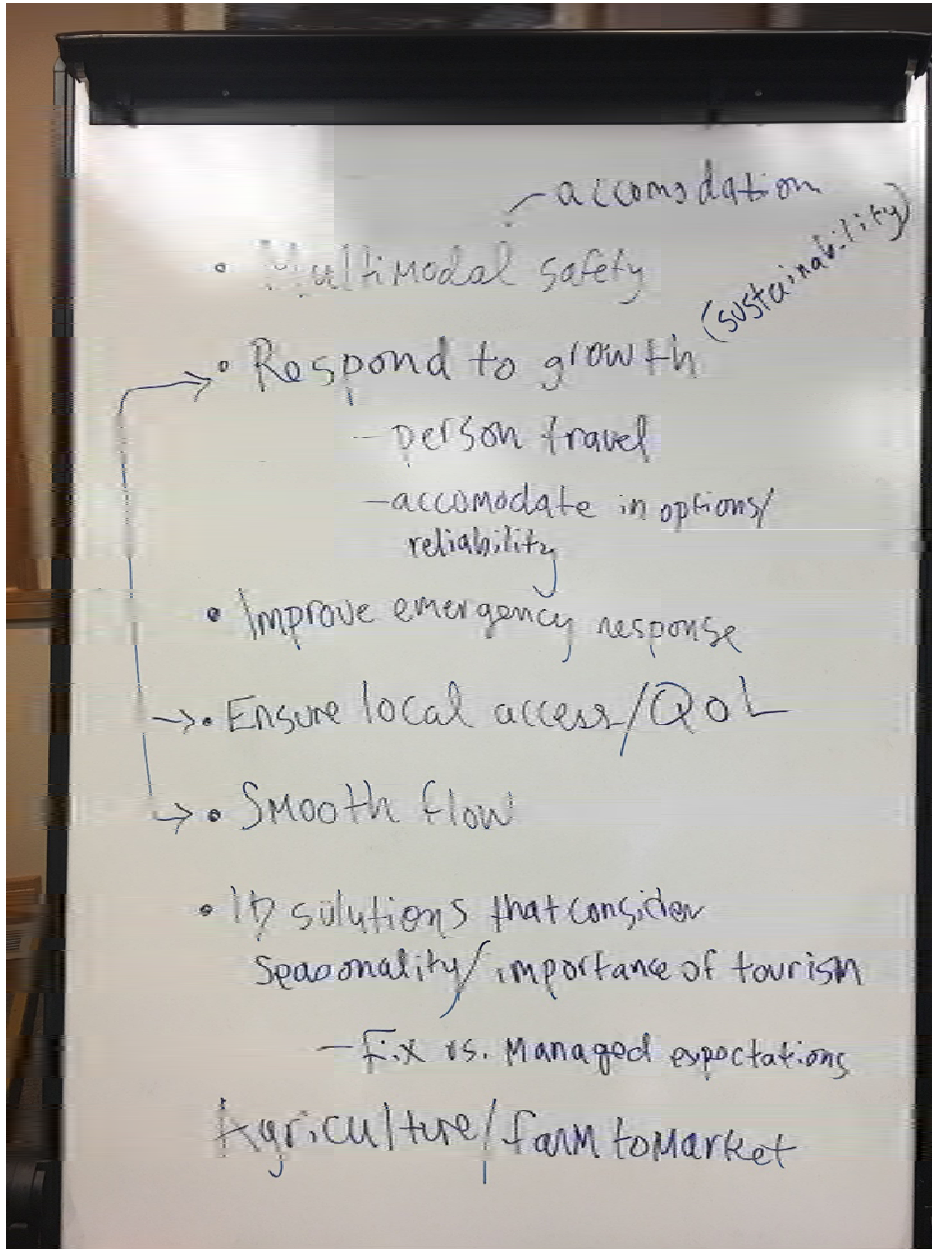
- Multimodal safety
- Smooth and improved traffic flow
- Respond to growth of person trips, accommodate travel time reliability
- Emergency response
- Local accessibility
- Holistic approach
- Identify solutions that consider seasonality (fixing it or managing expectations?)
- Tourism
- Agriculture
- Multimodal accommodation coordinated plan
- Sustainability
- Discussion:
  - Seasonality is what makes this a unique corridor – weekends – Thursday afternoon to Monday, summer, events

- Fehr and Peers discussed how Streetlight data is being incorporated into the project to better understand trips and road usage
- Add something about sustainability – ability to preserve and continue to do what we’re doing, or is the solution enduring (as the response to growth)
- Quality of life is an important principle
- Kendra noted the team will be creating metrics for each of the solutions
- Just because there aren’t any bicyclists now, “if we build it they will come”
- Talk about parallel routes – are they fiscally sustainable?

### AGENDA ITEM #5: NEXT STEPS

- Existing planning context memorandum March 2019
- Online public engagement late March
- Sharing our existing planning context April 2019
- Next PAC meeting in April 2019 – tentatively April 17
- Richard and Jim from Olympia comments: “Sounds like the group is on the right track.”

AGENDA ITEM #4 - CORRIDOR VISION & GUIDING PRINCIPLES PHOTOS



# Project Advisory Committee Meeting #2

April 27, 2019





US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## PROJECT ADVISORY COMMITTEE MEETING

Wednesday, April 17, 2019

12:00 PM – 2:00 PM

### AGENDA

#### Purpose of the Meeting:

Topic	Facilitator	Time
1. Welcome	Penny Mabie	5 min
2. Recap & Findings	Kara Hall/Bianca Popescu/ Penny Mabie	25 min
3. Project Evaluation Criteria Exercise & Report Back	Penny Mabie/Kendra Breiland	50 min
4. Next Steps & Project Overview	Penny Mabie/Kara Hall	20 min
5. PAC Member Interviews	Penny Mabie	20 min

**US 2 Upper Wenatchee Valley Corridor Transportation Study  
Draft 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.	4= Provides a major relief in corridor delay during peak usage periods (summer weekend and events) 2= Provides relief in corridor delay during some peak times (but not all) 0= Does not improve vehicle delay on corridor
		1.2: Improves emergency response times.	4= Yes 0= No
		1.3: Improves 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: Addresses location with a history of injury/fatal collisions.	6= Serious Injury/fatal collision 3= Not serious injury collision 0= No collision
		2.2: Fixes an identified sight distance issue or identified modal conflict point, including improving the frequency or quality of pedestrian crossings.	6= Yes 0= No
3	<b>Vibrant.</b> Study recommendations support the Leavenworth's tourism industry 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 is a strong match for grant opportunities or outside funding sources.	6= Yes 0= No
		4.2: Project costs are aligned with budget constraints.	6= Low Cost Improvement (\$0-100,000) 3= Moderate improvement cost (\$100,000-500,000) 0= High cost (\$500,000+)
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= Median 0= Low



# Project #1: Upgrade Pull-Outs Paired with Enhanced Pedestrian Crossings

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## PROJECT DESCRIPTION

From Coles Corner to Leavenworth there is a need to add or upgrade pull-outs for visitors to access hiking, rock climbing or to stop and take a photo. Some locations that currently have demand for pull-out upgrades include:

- Old Pipeline Bed Trailhead – has a small parking lot and pullout but no signage
- Castle Rock Trailhead (rock climbing) – has a small pullout
- Hatchery Creek Trailhead
- Tumwater Campground
- Swiftwater Picnic area – no signage
- Chiwaukum Creek Trailhead
- The Alps Fudge and Candy – in need of a crossing for their spillover parking on the other side of the highway
- Additional viewpoints along the corridor



*Pedestrian crossing*

There is also a need for improved wayfinding and signage, to let visitors know where upcoming viewpoint pullouts and hikes exist, and to reduce illegal parking and crossing.



*Castle Rock Trailhead (Google Maps, 2018)*



*Old Pipeline Bed Trailhead (Google Maps, 2018)*

## **PROJECT BENEFITS**

This project would provide safety benefits for vehicles turning and slowing down to stop in a constrained environment, as well as pedestrian safety and comfort improvements for US 2 crossings. Wayfinding and signage will also improve safety and reduce traffic impacts.

## **POTENTIAL CHALLENGES TO IMPLEMENTATION**

This segment of US 2 has a narrow geographically constrained cross-section. There are also vertical and horizontal curves that limit sight distance for both pedestrians and vehicles. However, a demand exists for pedestrian facilities driven by travelers stopping in scenic locations and wanting to access both sides of the corridor, as shown in the photo below.



*Pedestrian crossing illegally (Google Maps, 2018)*

## PROJECT SCORING

To assist in project scoring, the following metrics are given rankings or further described below.

- 2.1: Addresses location with a history of injury/fatal collisions.
  - **0 = No collisions have occurred for pedestrians along this segment.**
- 2.2: Fixes an identified sight distance issue or identified modal conflict point, including improving the frequency or quality of pedestrian crossings.
  - **6 = Yes, fixes identified modal conflict point by increasing the frequency of pedestrian crossings.**
- 4.1: Project is a strong match for grant opportunities or outside funding sources.
  - **6 = Yes**
- 4.2: Project costs are aligned with budget constraints.
  - **6 = Cost is under \$100,000**
- 5.1: Receives support from the community and stakeholders throughout this study.
  - This will be scored at a further stage of the study, after public engagement.



## Project #2: Grade Separated Pedestrian Crossings

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### PROJECT DESCRIPTION

Build one or multiple bridges for pedestrian crossings over US 2 throughout Leavenworth, at up to three locations.



*Pedestrian bridge at Mount Baker, Seattle, Washington*

### PROJECT BENEFITS

Due to the land use surrounding US 2 in this area, the highway splits the residential uses in the north from the commercial uses in the south. This results in frequent pedestrian demand to cross US 2, which currently backs up traffic on the highway. This project will ensure pedestrians can easily cross US 2 without increasing congestion and provides the opportunity for additional placemaking.

### POTENTIAL CHALLENGES TO IMPLEMENTATION

While the cost of a pedestrian bridge is lower than a pedestrian underpass, it is still high. In addition, pedestrian bridges visually alter the landscape, so further study on the bridge's effect on the corridor's unique character is necessary.

### PROJECT SCORING

To assist in project scoring, the following metrics are given rankings or further described below.

- 2.1: Addresses location with a history of injury/fatal collisions.

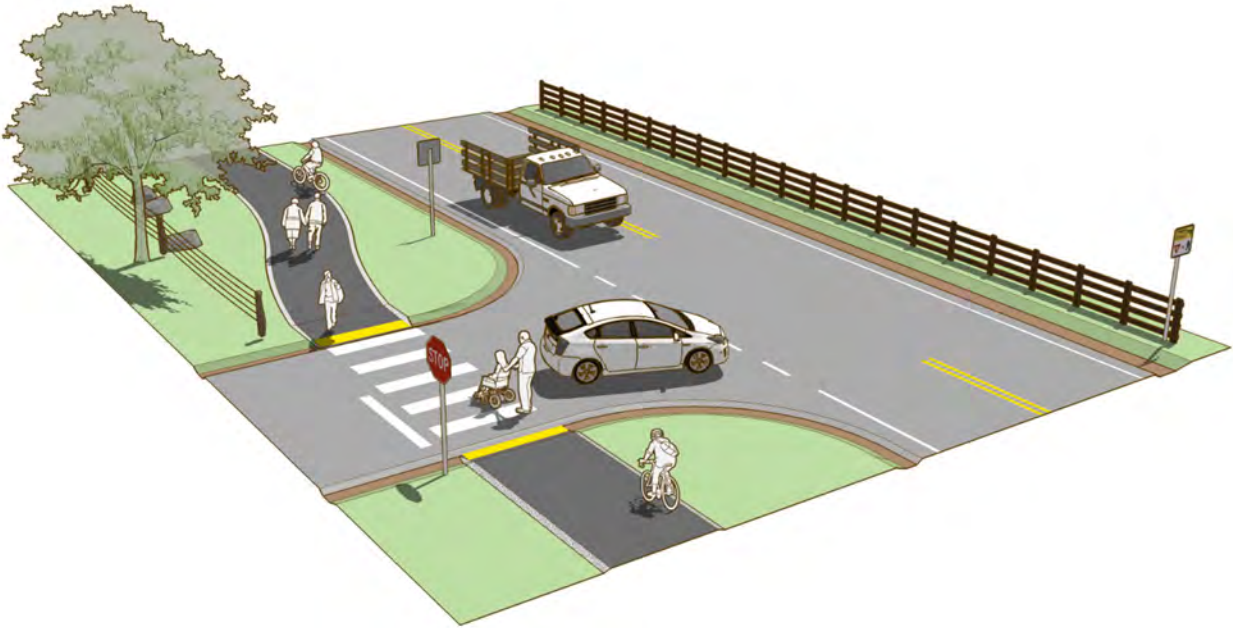
- **6 = Serious injury collisions have occurred for pedestrians along this segment.**
- 2.2: Fixes an identified sight distance issue or identified modal conflict point, including improving the frequency or quality of pedestrian crossings.
  - **6 = Yes, fixes identified modal conflict point by increasing the frequency of pedestrian crossings.**
- 4.1: Project is a strong match for grant opportunities or outside funding sources.
  - **6 = Yes**
- 4.2: Project costs are aligned with budget constraints.
  - **0 = Cost is over \$500,000**
- 5.1: Receives support from the community and stakeholders throughout this study.
  - This will be scored at a further stage of the study, after public engagement.

## Project #3: Parallel Facilities for All Modes

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### PROJECT DESCRIPTION

This project is to add a bidirectional shared use path for all modes immediately adjacent to North Road, from Chumstick Highway to Peshastin, as a parallel route pedestrians and bicyclists can choose instead of US 2. Installing a separated shared use path would increase safety and comfort for travelers of all modes, while maintaining the road's rural community character.



*A physically separated "Sidepath" from the Small Town and Rural Design Guide*

### PROJECT BENEFITS

This section of North Road is already designated as a "somewhat comfortable" bicycle route on the Wenatchee Valley Bike Map by the Chelan-Douglas Transportation Council. Currently, US 2 does not accommodate walking and biking due to vehicles speeds and right of way constraints. Designing a bidirectional shared use path parallel to US 2 on North Road would improve the safety and experience of multimodal travel, and meet the current demands for people visiting the corridor.

### POTENTIAL CHALLENGES TO IMPLEMENTATION

North Road is just under 4 miles, and a multimodal corridor this long would be expensive to implement. This would require multiple jurisdictions to work together, including Chelan County and local municipalities. Moreover, if a side running path design is selected, road crossings will need to be carefully designed to ensure safety for all.

### PROJECT SCORING

To assist in project scoring, the following metrics are given rankings or further described below.



- 2.1: Addresses location with a history of injury/fatal collisions.
  - **6 = Yes, there was a pedestrian collision along the US 2 portion of this segment, and this project would potentially move people off of US 2.**
- 2.2: Fixes an identified sight distance issue or identified modal conflict point, including improving the frequency or quality of pedestrian crossings.
  - **6 = Yes, fixes identified modal conflict point by improving the quality of multimodal amenities.**
- 4.1: Project is a strong match for grant opportunities or outside funding sources.
  - **6 = Yes**
- 4.2: Project costs are aligned with budget constraints.
  - **0 = Cost is over \$500,000**
- 5.1: Receives support from the community and stakeholders throughout this study.
  - This will be scored at a further stage of the study, after public engagement.

## Project #4: Bike Share in Leavenworth

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### PROJECT DESCRIPTION

This project is to incentivize the installation of a dockless bike share system in the City of Leavenworth. This would provide an alternate mode of transportation for visitors and residents to travel around the City, including adding a multimodal connection to the Amtrak Station one mile northeast of the City center.



*Dockless bike share (Curbed, 2018).*

### PROJECT BENEFITS

This project would give people more mobility options around the City of Leavenworth. The bike share would also incentivize more people to take the train to Leavenworth by offering a last mile connection from the City center to the station.

### POTENTIAL CHALLENGES TO IMPLEMENTATION

The City of Leavenworth would need to find creative ways to incentivize and collaborate with dockless bike share companies to set up their business in city limits.

### PROJECT SCORING

To assist in project scoring, the following metrics are given rankings or further described below.

- 2.1: Addresses location with a history of injury/fatal collisions.
  - **0 = No collisions have occurred for people on bicycles in the City of Leavenworth**
- 2.2: Fixes an identified sight distance issue or identified modal conflict point, including improving the frequency or quality of pedestrian crossings.
  - **0 = No**
- 4.1: Project is a strong match for grant opportunities or outside funding sources.
  - **6 = Yes**
- 4.2: Project costs are aligned with budget constraints.
  - **6 = Low cost improvement would be covered by the dockless bike share company.**
- 5.1: Receives support from the community and stakeholders throughout this study.
  - This will be scored at a further stage of the study, after public engagement.

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

Number	Metric Description	Ranking	Project			
			1	2	3	4
1	1.1: Improves corridor travel time under current or future conditions.	4= Provides a major relief in corridor delay during peak usage periods (summer weekend and events) 2= Provides relief in corridor delay during some peak times (but not all) 0= Does not improve vehicle delay on corridor				
	1.2: Improves emergency response times.	4= Yes 0= No				
	1.3: Improves 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	2.1: Addresses location with a history of injury/fatal collisions.	6= Serious Injury/fatal collision 3= No serious injury collision 0= No collision				
	2.2: Fixes an identified sight distance issue or identified modal conflict point, including improving the frequency or quality of pedestrian crossings.	6= Yes 0= No				
3	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	4.1: Project is a strong match for grant opportunities or outside funding sources.	6= Yes 0= No				
	4.2: Project costs are aligned with budget constraints.	6= Low Cost Improvement (\$0-100,000) 3= Moderate improvement cost (\$100,000-500,000) 0= High cost (\$500,000+)				
5	5.1: Receives support from the community and stakeholders throughout this study.	12= High 6= Median 0= Low				
<b>Project Total</b>						

# US 2 Upper Wenatchee Valley Transportation Study Project Advisory Committee Meeting #2

April 17, 2019




# Meeting Agenda

- Recap & Findings
- Project Evaluation Criteria Exercise & Report Back
- Next Steps & Project Overview
- PAC Member Interviews



# Meeting Agenda

- Recap & Findings 
- Project Evaluation Criteria Exercise & Report Back
- Next Steps & Project Overview
- PAC Member Interviews





# The Corridor Vision

## The US 2 Upper Wenatchee Valley Corridor:

- Provides reliable transportation options for all means of travel;
- Accommodates emergency access, local trips, US 2 highway travelers to and from other places, and freight movement;
- Enhances the region's unique character.



# The Guiding Principles

## Reliable.

Locals, regional commuters, freight, and emergency responders have options to maintain a reliable travel time between key destinations.

## Safe & Complete.

The corridor offers appropriate multimodal infrastructure to meet users' needs and enhance safety.

## Vibrant.

Study recommendations support Leavenworth's tourism industry and growing seasonal usage of the corridor.

## Realistic.

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.

## Supported.

Stakeholders and the community will be engaged to identify mutually beneficial solutions.



# Planning Context



**Land Use** context around each segment



**Pedestrian/Bike** conditions and needs along segment and parallel routes



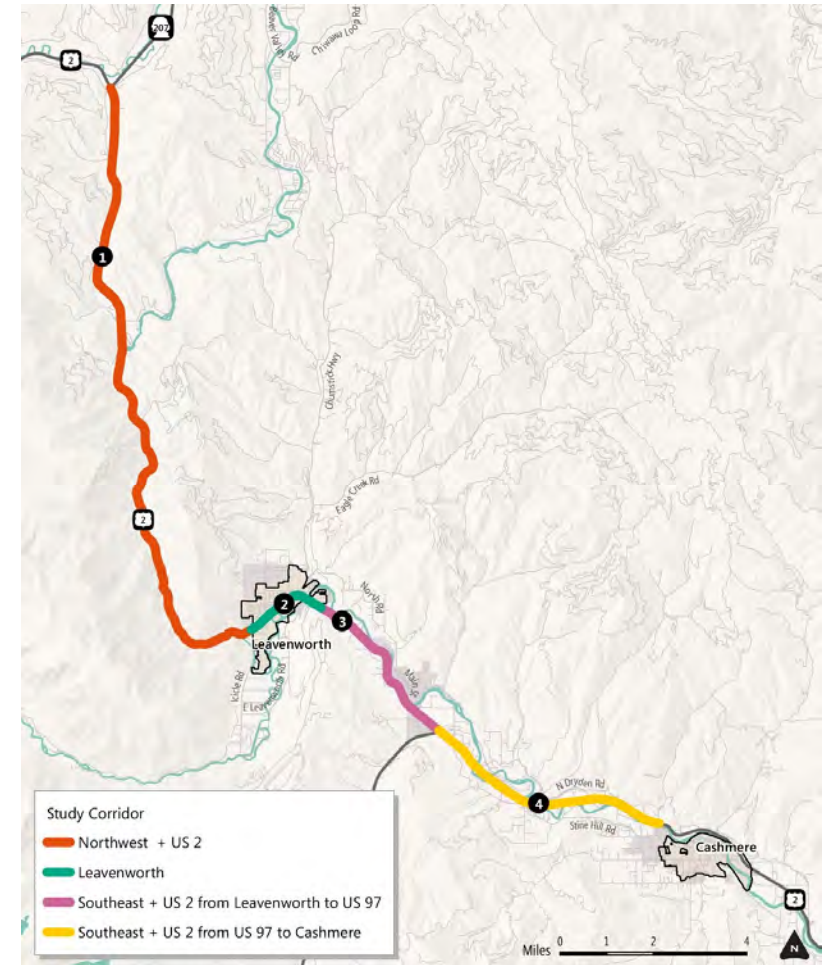
**Transit** operations and accessibility along the segment.



**Vehicle** operations, roadway configurations and trends in volume and origin-destination data along the corridor.



**Safety** collision data from WSDOT, for a three-year period (January 2015 – November 2018)



# Segment 1 – Coles Corner to Icicle Road



- Land use is **geographically constrained**



- No **accommodation for bicyclists or pedestrians**
- Pedestrian demand driven by access to trails and river



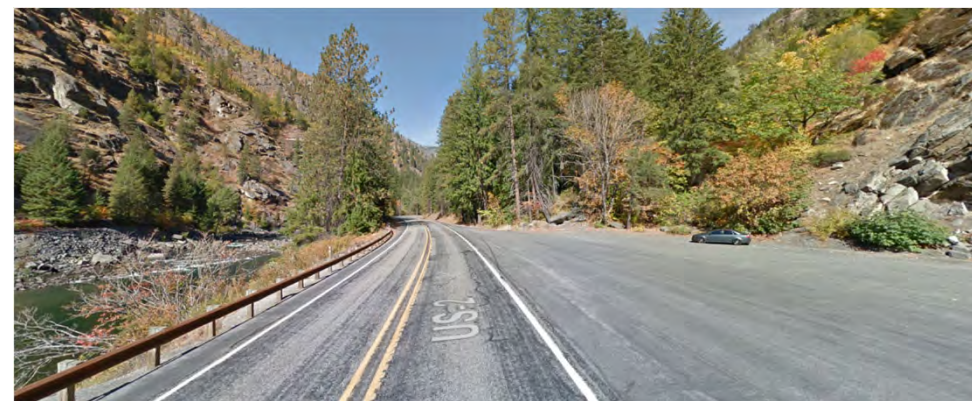
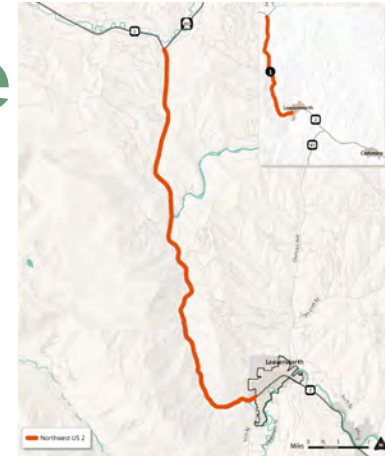
- Currently **no transit** operates along this segment of the corridor



- Traffic volumes are **highest on Saturday**, especially during the summer
- **Limited opportunity for widening** due to topography
- **Frequent seasonal closures** due to avalanches



- **Speeding and driver inattention** were the leading causes of collisions from 2015 to 2018.



Source: Google Earth, 2019



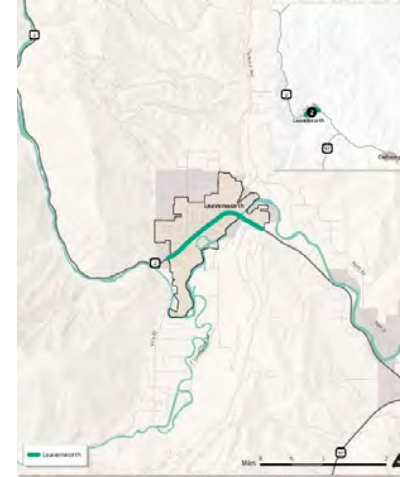
# Segment 2 – Leavenworth



- **Land use** context is urban/developed with limited projected growth except for planned development at the corner of US 2 and Icicle Road and behind Safeway at the east end.



- **Bicycle lanes** are provided on US 2.
- **Sidewalks are provided on both sides** of US 2.
- In some areas, **pedestrian crossings are a quarter mile apart**.
- In the center of Leavenworth, crossings are provided more frequently, with **only one flashing beacon**.
- The City of Leavenworth **plans for more enhanced crossings**, including a stop signals and additional flashing beacons



Source: Google Earth, 2019



# Segment 2 – Leavenworth



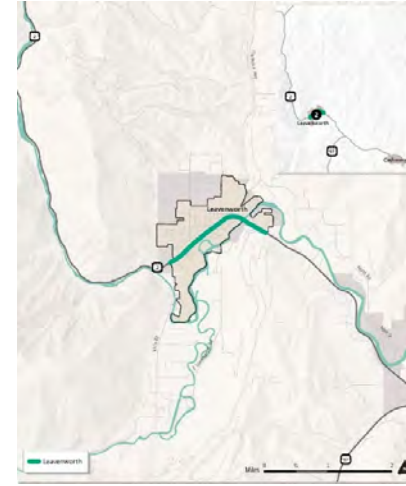
- Link Transit operates **Route 22** and park and ride lot
- **Dial-A-Ride Transit** operates within Leavenworth on weekdays between 7:30 AM and 5:30 PM.



- The **majority of trips** beginning and ending in Leavenworth on a typical weekday **stay in the Leavenworth area**.
- Areas to the east of Leavenworth, including Wenatchee, make up the majority of remaining origins and destinations.



- Over the last three years, **no collisions with bicyclists were reported** within the City of Leavenworth.
- All three **pedestrian collisions occurred on Front Street**.
- The main contributors to collisions on US 2 were **driver inattention and following too closely**.



Source: Google Earth, 2019

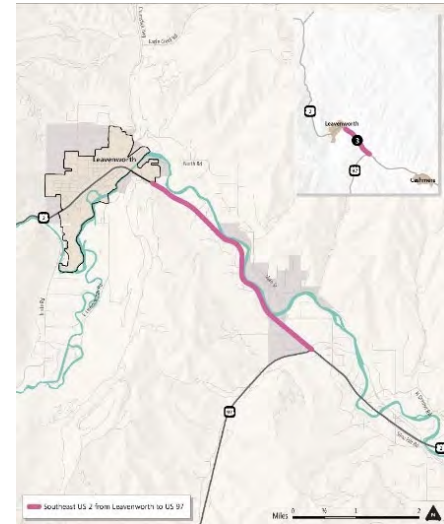








# Segment 3: East of Leavenworth to US 97



- **Rural land use** includes agricultural and agricultural tourism uses that have direct access to US 2 and Peshastin Mill Site development area without direct access to US 2
- Bicycle and pedestrian **facilities are not provided** along US 2.
- **North Road** is classified as a somewhat comfortable alternative for bicycles in the area.
- **Route 22** serves five stops along this segment of the corridor and connects to the community of Peshastin.



Source: Google Earth, 2019



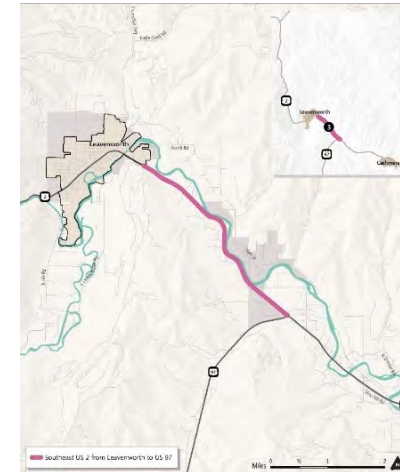
# Segment 3: East of Leavenworth to US 97



- The majority of trips traveling west **originate in Wenatchee and areas farther east.**
- ADT counts on this segment indicate **higher weekend and summer usage**
- **December is almost as high** as the summer peak.
- This segment sees less peaking, given its role as a **regional commuter route.**



- The highest density area for collisions along this segment are where the majority of **local access driveways** occur.
- **Driver inattention and following too closely** were the leading contributors to accidents along this segment of the corridor.
- Opportunities to **minimize conflicts** at local driveway access should be considered.



Source: Google Earth, 2019



# Segment 4: US 97 to Cashmere



- **No major changes** to land use expected.



- Bicycle and pedestrian **facilities not on US 2.**
- **Alternative routes** exist on county roads with no pedestrian or bike accommodation but lower traffic and slower vehicle speeds.



- **Route 22** serves both directions and detours onto local city streets through Cashmere.



- Vehicle capacity along this segment is **less constrained.**
- Limited access, divided directional travel, and more **consistent safety features**



- **Speed** was the largest contributor to collisions



Source: Google Earth, 2019



# Community Engagement

- Online site now live!
- URL: [us2upperwenatchee.participate.online](https://us2upperwenatchee.participate.online)
- Please link and share!
- Will be updated at key points and as new information is available



# Meeting Agenda

- Recap & Findings
- Project Evaluation Criteria Exercise & Report Back
- Next Steps & Project Overview
- PAC Member Interviews





# Draft Project Evaluation Criteria

Number	Guiding Principle	Metric Description
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.
		1.2: Improves emergency response times.
		1.3: Improves transportation connections in the region.
2	<b>Safe &amp; Complete.</b> The corridor offers appropriate multimodal infrastructure to meet users' needs and enhance safety.	2.1: Addresses location with a history of injury/fatal collisions.
		2.2: Fixes an identified sight distance issue or identified modal conflict point, including improving the frequency or quality of pedestrian crossings.
3	<b>Vibrant.</b> Study recommendations support the Leavenworth's tourism industry and growing seasonal usage of the corridor.	3.1: Provides for a unique and welcoming travel experience. 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.
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 is a strong match for grant opportunities or outside funding sources.
		4.2: Project costs are aligned with budget constraints.
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.



# Meeting Agenda

- Recap & Findings
- Project Evaluation Criteria Exercise & Report Back
- Next Steps & Project Overview ←
- PAC Member Interviews



# Next Steps

- May 2019
  - Project Team Developing Project List
  - Online Open House
- June 2019
  - Project Evaluation
  - Next PAC Meeting

US 2 Upper Wenatchee Valley Transportation Study

## Schedule

Task	Description	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
1	Planning Context	█												
2	Corridor Vision			█			█							
3	Evaluating Options						█							
4	Community Conversation									█				
5	Final Plan										█★			
	PAC Meetings			●		●		●		●			●	
	Public Outreach/Events					●		●		●			●	

★ Delivery of draft report. The remaining time will be set aside for comments/feedback and revisions to the final plan.



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

# Community Engagement

- Flier – April, shareable PDF announcing study and directing to online site
- Folio – June/July, more detailed brochure
- Briefings: June/July timeframe
  - Targets - under-served users?
- Local outreach – early June tabling at Farmers Market
- Community mtg – mid-September (postcard & posters)
- Visitor outreach – Sept 28 tabling at Autumn Leaf festival



# Meeting Agenda

- Recap & Findings
- Project Evaluation Criteria Exercise & Report Back
- Next Steps & Project Overview
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US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## Project Advisory Committee Meeting #2

Wednesday, April 17, 2019

12:00 PM – 2:00 PM

### AGENDA ITEM #1: WELCOME

#### In-Person Participants

- Penny Maibie, EnviroIssues
- Nancy Smith, Leavenworth Chamber of Commerce
- Duane Goehner, Citizen, Friends of Leavenworth
- Joel Walinski, City of Leavenworth
- Craig Christiansen, Independent Warehouse Inc.
- Chief Kelly O'Brien, Chelan County Fire District #3
- Lauren Loeb sack, Link Transit
- Kendra Breiland, Fehr & Peers
- Kara Hall, Fehr & Peers
- Bianca Popescu, Fehr & Peers
- Jeff Wilkens, Chelan-Douglas Transportation Council
- Scott Bradshaw, Leavenworth Planning Commission
- Segeant Jason Reinfeld, Chelan County Sheriff
- Nick Manzano, WSDOT
- Katherin with WSDOT

#### In-Person observing

- George Mazur, WSDOT
- Lisa Popoff, WSDOT

#### On the phone

- Jim Mahugh, WSDOT
- Richard Warren, WSDOT

#### Purpose of the meeting

- Went through agenda and video interview



## AGENDA ITEM #2 – RECAP & FINDINGS

- Corridor Vision and Principles exercise
  - Vision and Goals has a functional purpose
- Guiding Principles
  - Reliable – helping maintain a reliable travel time between key destinations
  - Safe & Complete – appropriate multimodal infrastructure to enhance safety
  - Vibrant – supporting tourism and growing seasonal usage
  - Realistic – come up with projects and recommendations that can be practically implemented
  - Supported – process of the project
- Planning context – Kendra
- Public Engagement – Website Online
  - Website is live – 58 users with 65 sessions
  - People are looking at 3.4 pages per session, 3 min and 30 s on average on the site – as of this morning
  - 34% Wenatchee 12% Leavenworth 10% Seattle 39% other places – as of this morning
  - Half desktop half mobile
  - Getting to the site: almost half is coming directly from URL, almost half Facebook, 8% WSDOT
  - 38 people have taken the survey so far
  - Duaine mentions there isn't the amount of data people are looking for
  - Jeff request to do 30 seconds of each video on website – if there is something key we want people to see
  - Jeff says the website feels usable
  - Chamber sent it to board and not membership (600 people) – Penny asked for a link on Chamber's website
  - Community should start weighing in on guiding principles (Kendra's comment)

## AGENDA ITEM #3 – PROJECT EVALUATION CRITERIA EXERCISE & REPORT BACK

- Talk about capital recommendations at next meeting
- Kendra is orienting us on table and chart
  - Input on number two: use target zero language – reduce crash potential instead of enhancing safety – use crash analysis to compare locations
  - 2.1 – depends on long term or short term on how to measure
  - To get the federal funding need to meet certain criteria
  - 1.2 maybe should go into the safety category?
  - 2.2 – replace the word “quality” with the word “comfort” – response from Kendra is that we use pedestrian crossing guidelines
  - Safe should be referencing infrastructure/construction in the guiding principles
  - 1.1 – change to “seeks to maintain” travel times – don't want to design for peak corridor season. This could be addressed through the rankings
- Report back

- Overall:
  - Cumbersome – certain categories were, some thought it was fine
  - Criteria may not address a particular issue on a segment, so it shouldn't be scored
  - 2.1 – frame for a proactive approach instead of a reactive approach
- Report back:
  - Difficulty if project wasn't dealing with traffic, to applying criteria to that project (i.e. bike share)
  - Felt like the project's impact on the criteria is minimal – Kendra's response is some of the projects won't address all of those issues
  - 1.3 – improves transportation connections in the region needs definitions – Joel took that to mean something different than explained
  - May want to consider a halfway point for improves emergency response times
  - Criteria 3.2 needs a halfway point
  - Project definitions were so broad they couldn't be scored effectively – i.e. pedestrian crossings – if don't know location and have details some times wouldn't work
- Question is who is doing the scoring. Answer is consulting team. We have the ability to look at emphasize certain goals
- With the tweaks that we said it can work well
- Should we weight the principals equally? The Sheriff think the EMS times should be highest, Chamber will want vibrancy to be highest.
- Reliable doesn't always mean improved – do we want better travel times? Important to define what you mean. Maybe need reliable and improved. Kendra suggests reliably preforms.
- 1.1, 1.2, 1.3 all say improves, so discount the word reliable when scoring
- Double count between 1.1 and 1.2 (it's okay because inside the same group) – should keep things even to ensure no double counting

#### AGENDA ITEM #4 – NEXT STEPS & PROJECT OVERVIEW

- Develop project list to get to apply this criteria
- Online website “open house” – with survey
- Project evaluation in June with next PAC meeting
- Who is generating the list of project?
  - Workshop a list and engaging with community to narrow down the list
  - The process is modifiable if projects come up during the process
  - Make sure the process is open to benefit from public
- Important how it's presented – don't just share “list of ideas” – ensure people think outside the box and share
- Flier will draw people to the online site
- June/July full brochure with Vision, Guiding Principles and projects being considered, include invite are there other projects? Ensuring we don't give a blank slate
- June/July targeted briefings – underserved users and unengaged people. i.e. go to growing community workforce and we go out to that group.
  - Largest employer group in Leavenworth is the hospital with highest potential transit ridership – have difficult shifts to work with

- 1<sup>st</sup> or 2<sup>nd</sup> farmers market to hit locals – survey on site
- Community meeting in September will be pushed at draft plan – did we get it right approach?
- Transit – situation is changing. Park and Ride is opening June 28, with shuttle starting to operate. Adding 8% operating increase in 22 and 6 days of week 8 hours of shuttle service. Board is going to ballot to double transit service all day Saturday and Sunday – election is August 6.
- DOT changed the flashing yellow left turns, adding crosswalks – changes in the area
- Ensure that this is reflected – don't assume transit improvements will happen, they need to be listed as projects because they are part of what's on the table but may not go through
- Add into initial survey what transportation improvements come to your mind
  - Want to ensure that open brainstorming happens for community
  - Open question to be added to the survey – action item for Penny
- How to target the visitors? September 28<sup>th</sup> at the Autumn Leaf Festival
  - Issue is that that's more of a local festival
  - Following weekend is 1<sup>st</sup> weekend of Oktoberfest and the marathon
  - Electronic e-blast and website and Facebook and Instagram that reaches visitors
  - August or early September Saturday will have more visitors in town than the Autumn Leaf Festival
- WSDOT – Twitter and Facebook can share the survey

# Project Advisory Committee Meeting #3

June 19, 2019



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## PROJECT ADVISORY COMMITTEE MEETING

Wednesday, June 19, 2019

11:30 AM – 1:30 PM

### AGENDA

#### Purpose of the Meeting:

Topic	Facilitator	Time
1. Welcome	Penny Mabie	10 min
2. Public Engagement: What We've Heard so Far	Penny Mabie/Bianca Popescu/Kara Hall	30 min
3. Project Evaluation Exercise & Report Back	Penny Mabie/Kara Hall	50 min
4. Project Selection Overview	Kendra Breiland/Kara Hall	15 min
5. Next Steps & Project Overview	Kara Hall	15 min



**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 reliability of 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= Minor improvement in travel times between typical conditions and/or summer weekends and events as a result of planning or programmatic improvement. 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= Only minor 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-\$3.5M) 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

## US 2 Upper Wenatchee Valley Corridor Transportation Study Project List

Project #	Project Description	Project Type	Notes
<b>Segment 1 - Coles Corner to Leavenworth</b>			
1	Affordable seasonal shuttle to Stevens Pass available for skiers and employees.	Planning	Current shuttle is not public transit - \$45/person: <a href="http://www.leavenworthshuttle.com/Stevens-Pass.html">http://www.leavenworthshuttle.com/Stevens-Pass.html</a>
2	Enhance Chumstick Highway to also accommodate freight detours.	Design	Could require significant reconstruction of some portions of roadway
3	Add signage with wayfinding to designated areas for parking/crossing US 2.	Parking	
4	Upgrade existing pull-outs, or create new pull-outs where demand exists, to include dedicated parking areas and crossing treatments for pedestrians.	Design	Would also want to work with rafting companies/recreational users to ensure optimal use of pull-outs along US 2
5	6" fog lines or narrower lanes may be effective for speed control and/or increased shoulder size for bikes.	Design	Visually narrowing the roadway causes vehicles to travel at lower speeds; wider shoulders are more comfortable for cyclists
6	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	Narrow canyon with environmental concerns (river, native plants). Surrounded by USFS land, so ROW purchase would be a lengthy process if needed.
7	Improve sight distance in areas where pedestrians are known to cross	Design	Treatments for improving sight distance range in cost and effort from trimming vegetation to reconstructing portions of roadway
8	No Parking Signs	Design	Preventing parking from specific locations can improve safety and reduce unexpected conflicts for through traffic
9	No Pedestrian Crossing Signs	Design	Preventing pedestrian crossings at certain locations can improve safety and reduce unexpected conflicts for through traffic
10	Speed enforcement campaign – high traffic impact timeframes	Programming	
11	High Friction Surface Treatments	Design	
12	Variable Speed Area	Planning	Ability to slow speeds along the corridor in areas with high recreational use and during high demand periods.
<b>Segment 2 - Leavenworth</b>			
13	Create a cordon surrounding festival areas that autos are prohibited from entering.	Planning	Allow transit, emergency vehicles, golf carts, micro-mobility options
14	Temporary One-Way System through Leavenworth on US 2, which could shift direction as needed.	Design	ITS enabled signals
15	Rechannelize US 2 to create a multi-use trail parallel to US 2	Design	Use existing pavement/channelization revision only
16	Center running Transit/Emergency Only Lanes During Events/High Demand Periods	Design	Use existing pavement/channelization revision only
17	Grade Separated Pedestrian Crossings – 3 bridges or a pedestrian underpass	Design	
18	Create a direct connection to US 2 from Pine Street to improve local connectivity	Planning	Opportunities to identify other locations to provide more connectivity in Leavenworth.
19	Create better parallel route capacity: Icicle Road to E Leavenworth Rd (more complete facility)	Planning	Includes improved bicycle and pedestrian options as well as ability to manage route during high demand times.

## US 2 Upper Wenatchee Valley Corridor Transportation Study Project List

Project #	Project Description	Project Type	Notes
20	Create better parallel route capacity: Chumstick Hwy to North Rd (more complete facility)	Planning	Includes improved bicycle and pedestrian options as well as ability to manage route during high demand times.
21	Add sidewalk enhancements with buffer	Design	Creates a more comfortable pedestrian environment; buffer could consist of a planter strip between sidewalk and curb
22	Flagger Training	Programming	
23	Festival parking at east/west end of Leavenworth – Park & Ride paired with shuttle or tramway.	Parking	Locations: Park & Ride at Safeway, High School, Fields on west side
24	Reconsider transit service times/headways	Planning	
25	Transit shuttle service	Planning	Private/Public Partnership with hotels to increase seat capacity
26	Scooters/bike share – micro-mobility for connections to Amtrak station	Planning	
27	Neighborhood Electric Vehicles as Modes	Planning	
28	Remove on-street parking to connect bicycle lane	Parking	
29	Parking Management	Parking	Time limited parking year round in downtown, Phased addition of pay-to-park both on-street and off-street, Seasonal Rates, Active management and coordination of available supply, Enforcement as appropriate with implementation of strategies
30	Electronic Counter Systems for Parking tied to Dynamic Wayfinding	Parking	
31	Parking app	Parking	
32	Build roundabouts at each primary intersection	Design	Traffic analysis is required to determine operational effectiveness. Single-lane roundabouts have better safety performance than traffic signals.
33	More/better bike parking	Parking	Covered, corrals, artful
34	Re-introduce the shuttle train from Wenatchee and Everett into Leavenworth (the old "Snow Train")	Planning	
35	Car share with thought given to changing curb space management	Planning	
36	Delivery zone/parking/drop-off	Parking	
37	Transit/Emergency Preemption for signals	Design	Causes traffic signals to change to give transit/emergency the right of way through the intersection
38	Bicycle facility south of river	Design	
39	Daily service on trailways	Programming	
40	Aerial Tramways integrated with parking strategy	Parking	
41	Emergency Routes/Staging	Programming	
42	Enforcement for pedestrian crossings – vehicles at crosswalks, and j-walking between crosswalks.	Programming	
43	Employee TDM strategies	Programming	
44	Delivery hours/permits	Planning	
45	Create combination zone with On-Street Parking or Tour Bus Drop-Off	Parking	

## US 2 Upper Wenatchee Valley Corridor Transportation Study Project List

Project #	Project Description	Project Type	Notes
<b>Segment 3 - Leavenworth to SR 97</b>			
46	Improved parallel facilities for all modes on or near North Road	Planning	Is there an opportunity to use additional ROW around Railroad for more direct bicycle/pedestrian trail?
47	Spot treatments at local access points	Design	For example, add turn pockets in River Riders/Fruit Stand area
48	Adaptive management strategies, such as transit on shoulders	Planning	
49	Park & Ride at 97 interchange paired with shuttle	Parking	Would benefit from expanded shoulders to accommodate operations on the shoulder
50	Pedestrian and bicycle improvements along US 2 based on land use	Design	
51	Improve Peshastin bridge	Design	
52	Snow removal for bus stops	Programming	
53	Aerial tramway	Planning	
54	Improvements for bus stops along US 2, keeping them on the highway	Planning	
55	Enforcement campaign for speed	Programming	
56	Additional red light/warning signs	Planning	
57	High Friction Surface Treatments	Design	
<b>Segment 4 - SR 97 to Cashmere</b>			
58	Invest in parallel routes for bikes	Design	
59	Route 22 opportunities with W. Cashmere Bridge Project	Planning	Park & Ride? Limit Circulation through Cashmere?
60	Speed feedback signs	Planning	
61	Enforcement campaign for speed	Programming	
62	Additional red light/warning signs	Planning	
63	High Friction Surface Treatments	Design	

# US 2 Upper Wenatchee Valley Transportation Study Project Advisory Committee Meeting #3

June 19, 2019



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY



Chelan-Douglas  
TRANSPORTATION COUNCIL  
CDTC





# Meeting Agenda

- Public Engagement: What We've Heard so Far
- Project Evaluation Exercise & Report Back
- Project Selection Overview
- Project Next Steps & Overview



# Meeting Agenda

- Public Engagement: What We've Heard so Far
- Project Evaluation Exercise & Report Back
- Project Selection Overview
- Project Next Steps & Overview



# What We've Heard So Far

- Online survey
  - Opened on April 12
  - Closed on May 17

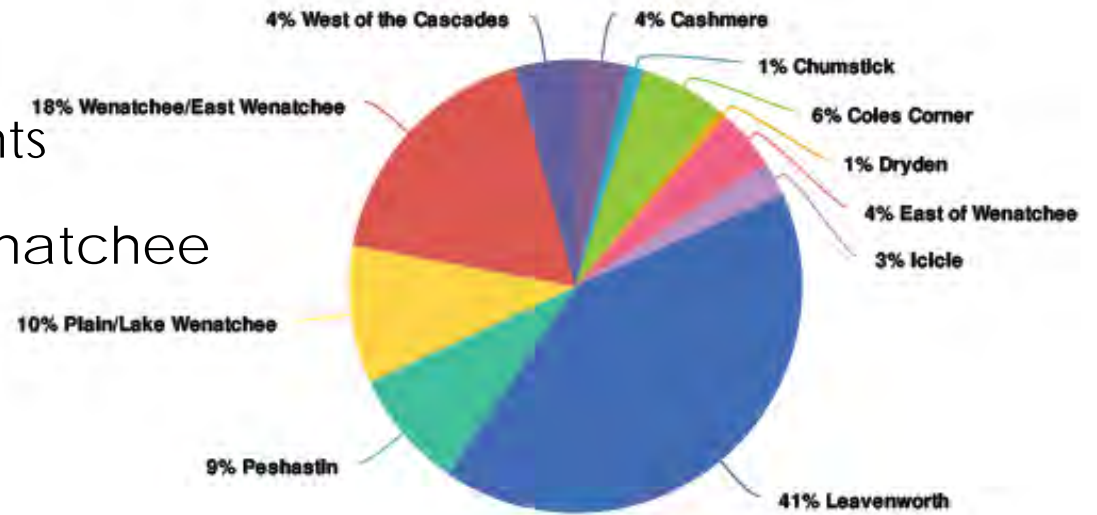


Sessions	Users	Pages/Sess.	Avg Time	Shares
977	786	2.9	03:17	10
		2.9 Avg	03:18 Avg	



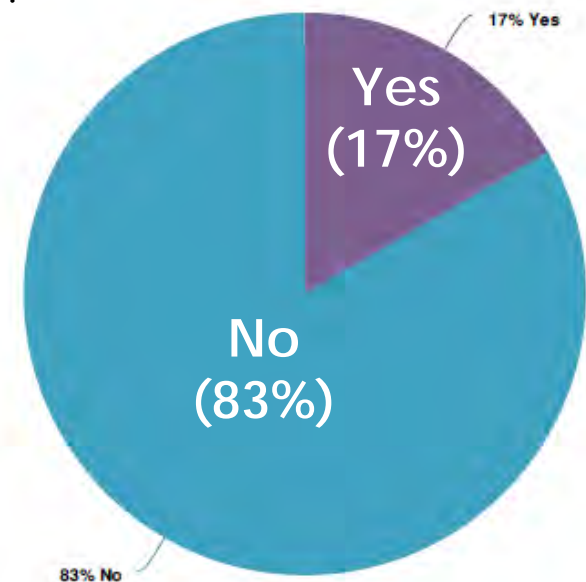
# Who Participated?

- **166** responses received
  - 67 from Leavenworth Residents
  - 29 from Wenatchee/East Wenatchee
  - 7 from West of the Cascades



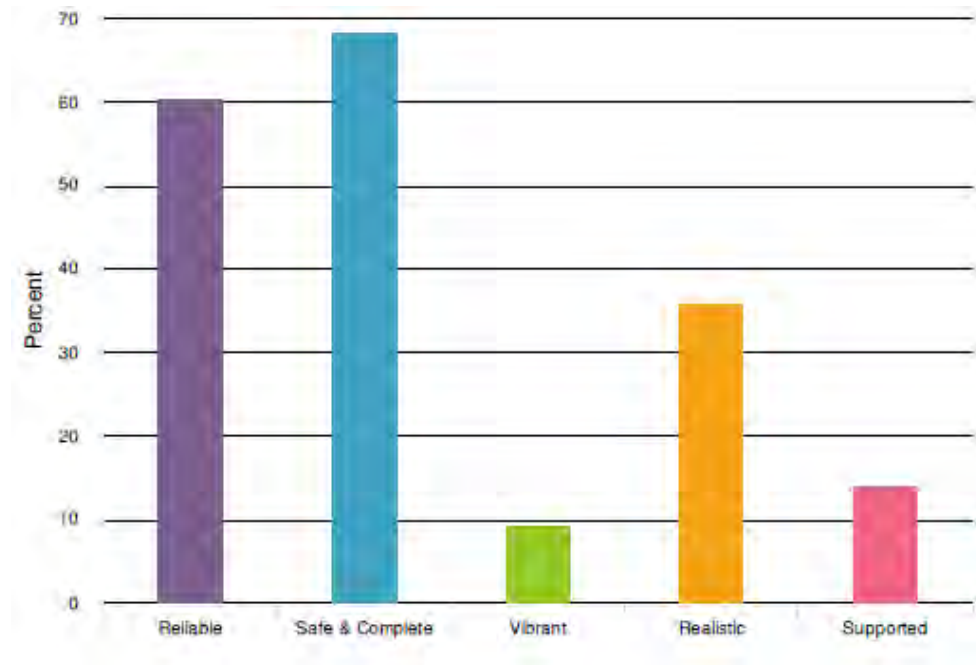
# Vision & Guiding Principles

- Are we missing any important principles?
- What we heard.....
  - Protecting natural resources
  - Consideration for public transportation
  - Economy doesn't equal tourism
  - Parking for Leavenworth residents
  - Consideration for cost



# The Guiding Principles

- What are the two most important principles to you?
  - 98 responders chose **Reliable**
  - 111 responders chose **Safe & Complete**





# Your Ideas

- Messaging boards with current travel times
- Weekend and holiday tolls to enter Leavenworth
- Roundabouts
- Overhead pedestrian crossings in Leavenworth
- Bicycle and pedestrian facilities
- Extend transit service
- Coordinate signals
- Split traffic flow within Leavenworth by direction
- Tunnels
- Decrease speed limits near SR 97
- More parking lots and a garage near downtown Leavenworth
- Bypass for Leavenworth



# What Else Should We Consider?

- Changing transportation choices
- Safety for cyclists
- Wildlife
- Long range planning
- Emergency access



# The Leavenworth Farmers Market

- Attended on Thursday, June 13<sup>th</sup>
  - Engage **local** residents
  - Kick-off the next phase opportunity for input
- Key Feedback
  - Improved **bicycle facilities** from Coles Corner to SR 97
    - Both on US-2 and parallel routes
  - Mixed feedback on **roundabouts** on US-2
  - Extend **transit** service to Coles Corner



# How Did We Incorporate Feedback?

- The Guiding Principle
  - **Vibrant**. Study recommendations supporting the region's economy ~~Leavenworth's tourism industry~~ and growing seasonal usage of the corridor.
- Project Ideas
  - Incorporated into project list
  - Beginning of **supported evaluation**.
    - What does the community want to see?

# What's Next?

- Our Project Map is **live**, help us promote it!
  - Opportunity to provide feedback on projects and add your own
  - Available through July

<https://us2upperwenatchee.participate.online/talk-to-us>

# Meeting Agenda

- Public Engagement: What We've Heard so Far
- Project Evaluation Exercise & Report Back
- Project Selection Overview
- Project Next Steps & Overview





# Meeting Agenda

- Public Engagement: What We've Heard so Far
- Project Evaluation Exercise & Report Back
- Project Selection Overview ←
- Project Next Steps & Overview



# Matrix Overview

## Matrix Scoring

Project #	Project Description	Project Type
<b>Segment 1 - Coles Corner to Leavenworth</b>		
1	Affordable seasonal shuttle to Stevens Pass available for skiers and employees.	Planning
6	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
<b>Segment 2 - Leavenworth</b>		
13	Create a cordon surrounding festival areas that autos are prohibited from entering.	Planning
14	Temporary One-Way System through Leavenworth on US 2, which could shift direction as needed.	Design
15	Rechannelize US 2 to create a multi-use trail parallel to US 2	Design
16	Center running Transit/Emergency Only Lanes During Events/High Demand Periods	Design
17	Grade Separated Pedestrian Crossings - 3 bridges or a pedestrian underpass	Design
18	Create a direct connection to US 2 from Pine Street to improve local connectivity	Planning
23	Festival parking at east/west end of Leavenworth - Park & Ride paired with shuttle or tramway.	Parking
29	Parking Management	Parking
<b>Segment 3 - Leavenworth to SR 97</b>		
46	Improved parallel facilities for all modes on or near North Road	Planning
<b>Segment 4 - SR 97 to Cashmere</b>		
58	Invest in parallel routes for bikes	Design

## Top 2 Guiding Principles

Project #	Project Description	Project Type
<b>Segment 1 - Coles Corner to Leavenworth</b>		
3	Add signage with wayfinding to designated areas for parking/crossing US 2.	Parking
6	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
<b>Segment 2 - Leavenworth</b>		
14	Temporary One-Way System through Leavenworth on US 2, which could shift direction as needed.	Design
15	Rechannelize US 2 to create a multi-use trail parallel to US 2	Design
18	Create a direct connection to US 2 from Pine Street to improve local connectivity	Planning
19	Create better parallel route capacity: Icicle Road to E Leavenworth Rd (more complete facility)	Planning
20	Create better parallel route capacity: Chumstick Hwy to North Rd (more complete facility)	Planning
21	Add sidewalk enhancements with buffer	Design
22	Flagger Training	Programming
32	Build roundabouts at each primary intersection	Design
<b>Segment 3 - Leavenworth to SR 97</b>		
46	Improved parallel facilities for all modes on or near North Road	Planning
<b>Segment 4 - SR 97 to Cashmere</b>		
58	Invest in parallel routes for bikes	Design

# Next Steps

- **July 2019**
  - Online Map up for feedback
  - Project Selection
- **August 2019**
  - Next PAC Meeting
  - Project Team Evaluating Options

## US 2 Upper Wenatchee Valley Transportation Study

### Schedule

Task	Description	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
1	Planning Context	█												
2	Corridor Vision			█			█							
3	Evaluating Options						█							
4	Community Conversation									█				
5	Final Plan										█★			
	PAC Meetings			●		●		●		●			●	
	Public Outreach/Events					●		●		●			●	

★ Delivery of draft report. The remaining time will be set aside for comments/feedback and revisions to the final plan.





US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## Project Advisory Committee Meeting #3

Wednesday, June 19, 2019

11:30 AM – 1:30 PM

### AGENDA ITEM #1: WELCOME

#### In-Person Participants

- Penny Mabie, EnviroIssues
- Nancy Smith, Leavenworth Chamber of Commerce
- Duane Goehner, Citizen, Friends of Leavenworth
- Joel Walinski, City of Leavenworth
- Kendra Breiland, Fehr & Peers
- Kara Hall, Fehr & Peers
- Bianca Popescu, Fehr & Peers
- Sergeant Scott Lawrence, Chelan County Sheriff
- Nick Manzano, WSDOT

#### In-Person observing

- Richard Warren, WSDOT
- Lilith Vespier, City of Leavenworth

#### Purpose of the meeting

- Covered agenda for meeting
  - What We've Heard So Far
  - Project Evaluation Exercise & Report Back
  - Project Selection Criteria
  - Next Steps

### AGENDA ITEM #2 – WHAT WE'VE HEARD SO FAR

- Online Survey
  - Trends for Pages per Session & Average Time are consistent with industry average.
  - Spike with promotion following previous PAC meeting – hope to see similar trends following today's meeting.
- Who Participated

- Most responses from Leavenworth residents and surrounding area, some participation from other residents in the area.
- Vision & Guiding Principles
  - Generally, feedback indicates that we've captured important principles.
  - Question was asked regarding consideration for cost – Kara noted that feedback mentioned considering value for residents in expensive improvements.
- The Guiding Principles
  - Safe & Complete and Reliable were identified as most important.
- The Leavenworth Farmers Market
  - Bianca noted that the community was positive about outcomes of the project.
  - Bicycle facilities both on US 2 and parallel routes received interest from residents.
- How Did We Incorporate Feedback?
  - Removed vibrant from guiding principles, focused on region's economy
  - Supported guiding principle will be factored into consideration based on the feedback we receive
  - Revised rankings on guiding principles 1, 3, 4.1 (ROW)
  - Paula noted we should consider reordering Principles to align with feedback. "Safe and complete" – since it was the most important thing for the public
  - Paula noted that Parking & Way – Finding should likely have more explicit ranking.
- What's Next
  - People are adding ideas and commenting on our project ideas
  - Penny requested that PAC members share website.
  - Only as effective as how many people can access it – so please share!
  - Website is live through the end of July to capture feedback and input during seasonal travel periods.
  - WSDOT will use VMS to promote project feedback during busy months.
  - Richard from WSDOT (multimodal planning) thinks this is fantastic – internal review team is very impressed
  - Peshastin community briefing in order to reach the Spanish and growing community

### AGENDA ITEM #3 – PROJECT EVALUATION EXERCISE

- Goal is to get feedback from PAC on project list.
- PAC members were divided into two groups and asked to identify a) Projects you like and why, b) Projects you don't like and why, c) short term projects, d) long term projects
- "Short Term" defined to mean 5 years or less for implementation, 5-10 years – long term, 10 years > potential Vision Project
- Report Back:
  - Group A (City of Leavenworth, Friends of Leavenworth, Chamber):
    - Like #3, #4 in segment 1
    - Segment 2: #14, 16, 19, 18, [17 – Dwane], 20, 23, 24, 25, 28, 29, 32 [can only fund them if there is a collision history –WSDOT says], 33, 34, 36, 37, 38, 40, 43, 44
    - Segment 2 already has 39 and 41
    - Segment 3: 46, 47, 48, 49, 50, 51, 54, (52 already happening), 57

- Segment 4: 59
- Group B liked (WSDOT, County, Sheriff)
  - Segment 1 – liked 1 -4, 6 – 12
  - Segment 2 – liked #13, 16-18, 21, 23-31, 33, 35-41, 43-44,
  - Segment 3 – liked #47-57
  - Segment 4 – liked all #58 – 63
- Segment 1 discussion
  - Shuttle would be great, but has nothing to do with our project
  - #2 is a really long term project “vision project” – can’t see it happening
    - Inappropriate for residential community to have freight
  - #4 should separate out – upgrading existing is very different than creating new pull-outs
- Segment 2 discussion
  - #13 – what does it look like? Front Street is already being closed. Okay with this as long as it’s not blocking US 2.
  - #14 – center lane goes one way, alternating the direction based on the congestion? Evacuation route style – lots of comments made about no plan for massive evacuation or emergencies. Needs to be restated.
  - #17 – Some against pedestrian bridges – people will still j-walk, cost is high, location is not known, fence needed
    - For: nice to separate
    - Underpass: has safety concerns – have to be well designed, well-lit, safe to be used
  - #19 – County disagrees with this unless only looking at multimodal facilities
  - #20 same thing as #19
  - #21 is this the best priority of funds?
    - Was noted as visual enhancement and opportunity to prevent jay-walking.
  - #22 coordinated plan for flagger training
  - #26/27 bike share low priority because low density, some liked the idea.
  - #30 dynamic counting for parking – cost issue because such a small area. Some counting system are weather dependent in snow conditions. Other group liked to have better parking management. Leavenworth group like this idea if we build a parking structure
  - #32 roundabout – depends on WSDOT, if it fits criteria. WSDOT noted the intersections aren’t prioritized from a collision perspective, but if the City wants to go after a grant they would.
  - #35 didn’t like it because population density isn’t high enough
  - #39 – daily service of trailways – already have it (“Northwestern”)
  - #42 – officers unlikely to prioritize
- Segment #3
  - #46 –okay with North Rd if active modes
  - #53 – aerial tramway is very “visionary”
- Segment #4 –
  - Creating a bicycle route via irrigation ditch would be better effort spent than creating a safe lane on US 2



- Each group provided documentation for Short Term/Long Term projects
- Kendra noted that this discussion will be used to identify fatal flaws in projects and understand priorities as we move into developing Project Packages for evaluation of final report.
- Feedback from the groups indicated that there were some projects needing more explanation and details.
  - Kara noted that final project descriptions, locations, and improvements will be refined as we move through the process.

#### AGENDA ITEM #4 – PROJECT SELECTION OVERVIEW

- Overview of use of Evaluation Matrix – noted the conversation today as helpful in informing how projects are evaluated.
- Overview of top projects evaluated using the matrix scoring and prioritizing Safe & Complete and Reliable (doubling points associated with those principles).
- Matrix is a tool, not a decision making device – we heard what is considered a “no-go” today and that feedback will be considered.
- We will be creating a package of projects – likely to be some top tier projects and some middle tier projects to ensure we have short term and long term solutions that align with project goals and principles.
- Joel has a question whether the public will have an opportunity to respond to the packages – answer is yes, in September when we have a more complete plan.
  - Follow up from Nick: is approach to put the project packages on the interactive map?
    - This will be considered but needs to be straight-forward and easy to understand.
- CDTC will give an update in August to the board.

#### AGENDA ITEM #5 – NEXT STEPS

- Online Map will be live through July
- Consultant team will be completing matrix, incorporating community feedback and narrowing project list and beginning of evaluation.
- Project Package will be presented at next PAC meeting.
- Next PAC meeting is August 21<sup>st</sup>.

Project Advisory Committee  
Project Status Report  
August 30, 2019



# Memorandum

Date: August 30, 2019  
To: Project Advisory Committee  
From: Kara Hall – Fehr & Peers  
Subject: **US 2 Upper Wenatchee Valley Project Status Update**

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This memorandum provides an update on the status of the US 2 Upper Wenatchee Valley Corridor Study for all Project Advisory Committee Members (PAC). A project status overview is provided below, followed by a more detailed discussion on data collection, project selection, project evaluation, and project website/community engagement updates.

## Project Status Overview

- In mid-August the project team collected data including vehicle counts, bicycle counts, pedestrian counts, and travel time along US 2 through Leavenworth. Travel time was collected from Icicle Road to River Bend Drive. Count information was collected at six intersections on US 2 and at both High-Intensity Activated Crosswalk (HAWK) beacons.
- Project ideas have been sorted into the following categories, which describe how projects will be considered in the US 2 Upper Wenatchee Valley Corridor Plan:
  - **Selected for Evaluation** – Projects will be evaluated and documented in the final report with conceptual layouts, cost estimates, and photo renderings as appropriate.
    - These projects are being evaluated with consideration for travel time improvements, safety benefits, the number of potential users that will benefit, Right-of-Way, and cost. Findings of project evaluation and recommendations for final project selection will be presented at the September PAC meeting.
  - **Quick Wins & Small Steps** – Projects will be included in the report with a project description as well as considerations for implementation, such as coordination needs, Right-of-Way, and technical challenges.
  - **Vision Project/Recommended for Future Consideration** – Large projects that extend beyond the scope of this study due to extended timeline (decades to

implementation) and/or extreme funding needs. These projects will be included in the report with a project description as well as considerations for implementation, such as coordination needs Right-of-Way, and technical challenges.

- **Not Selected for Evaluation** – Projects identified, but not advancing the within the study due to inconsistency with the Guiding Principles. Projects will be included in the appendix of the final report only.
- Nearly 1,000 users visited the project map portion of the project website. Input from the community has been summarized and used to evaluate the 5<sup>th</sup> Guiding Principle, **Supported**. The next project website update will feature the final project selection following the September PAC meeting.

## Data Collection

To supplement the data collected during the Tree Lighting Festival, the Project Team has collected additional data to document and analyze conditions during the summer travel season.

### Progress (June-August)

The data, described below, was collected in mid-August to capture summer travel conditions.

Data collected included vehicle counts, vehicle classification (vehicle type by axel), bicycle counts and pedestrian counts. Counts were collected at the intersections and crossings listed below. Data was collected on a Friday between 2 PM and 5 PM and on a Sunday between 11 AM and 2 PM.

- Icicle Road / US 2
- 9th Street / US 2
- Front Street / US 2 (location includes pedestrian crossing)
- Pedestrian crossing at City Hall
- Chumstick Highway / US 2
- Ski Hill Drive / US 2
- River Bend Drive / US 2

Travel time between the Icicle Road intersection and River Bend Drive on US 2 was also collected during the time periods noted above.

### On-Going/Next Steps

- Data collected is being post-processed and utilized in project evaluation.
- The Existing Planning & Context Memorandum will be updated to include data collected during the summer and included in the final project report as an appendix.

## Project Selection

Progress on Project Selection since the June PAC meeting and well as ongoing items, and next steps are summarized below.

### Progress (June-August)

Based on input from the PAC, Project Management Committee, and community input, the project team has grouped the nearly 90 projects ideas developed into four categories. These categories, described below, identify how potential investments will be evaluated and documented in the final report. The four categories are:

#### Selected for Evaluation

Projects in this category are currently being evaluated. A final list of projects selected for evaluation will be determined based on information to be presented at the September PAC meeting. These projects will be documented in the final project report with a project fact sheet, which could evaluation information, conceptual layouts, photo renderings, and potential grant information as appropriate.

#### Quick Wins & Small Steps

Projects for which further evaluation and implementation could be completed outside the scope of this study. This is due to either the programmatic nature of the projects or the level of analysis required to develop the information needed to obtain funding for the project. A description of the project as well as considerations for implementation, such as coordination needs Right-of-Way, and technical challenges will be included in the final project report.

#### Vision Project / Recommended for Future Consideration

This category includes projects identified as part of the process but that extend beyond the scope of this study due to extended timeline and/or extreme funding needs. Projects in this category also include projects that may be beneficial to multi-modal travel in the area but could be evaluated as part of other studies or transportation plans. A description of the project as well as considerations for implementation, such as coordination needs Right-of-Way, and technical challenges will be included in the final project report.

#### Project Not Advancing

This category includes projects identified, but that do not advance more than two of the Guiding Principles. This also includes projects identified as having a fatal flaw that would make implementation unachievable. These projects will be included in the Project Evaluation Matrix and included as a technical appendix to the final project report.

The **DRAFT** Project Evaluation Matrix is included as **Attachment A**. It is important to note that the projects identified as “Selected for Evaluation” will be refined based on information presented during the September PAC meeting.

### On-Going/Next Steps

- Recommendations for final project groups are being developed based on project evaluation, discussed below.
- Final project groups will be refined after the presentation of analysis at the September PAC meeting.

### Project Evaluation

Prior to inclusion in the final project report projects will be evaluated with regard for safety improvements, traffic operations improvements (i.e. travel time along the corridor), infrastructure requirements, improved emergency access, and parking benefits. Progress on project evaluation as well as on-going items and next steps are summarized below.

### Progress (June – August)

The project team has begun evaluating projects currently identified as “Selected for Evaluation.” Metrics being evaluated include:

- Corridor travel time
- The number of users likely to benefit from the proposed project
- Safety benefits
- Route reliability improvements (both for local users, regional users, and emergency access)
- Right-of-Way needs
- Changes to transit usage
- Benefit to parking utilization and access to parking
- Cost

### On-Going/Next Steps

- The project team is continuing evaluation of selected projects for presentation of applicable findings at the September PAC meeting.
- Pending input from the PAC, final project evaluation will be completed including cost estimates, conceptual layouts, and photo renderings as appropriate.



## Project Website

Updates to the project website since the June PAC meeting, as well as on-going items and next steps are identified below.

### Progress (June-August)

The project map allowing users to vote on and comment on projects developed by the project team as well as add their ideas for improvements along the corridor was available from June 13<sup>th</sup> to August 1<sup>st</sup>. The opportunity to provide input was promoted on multiple partner agency sites, featured in an article in the Wenatchee World and promoted on variable messaging signs in Leavenworth from July 18<sup>th</sup>- 21<sup>st</sup>. Nearly 1,000 users visited the project map. An overview of the results from the Social PinPoint is included as **Attachment B**.

The project team has also received many inquiries and comments regarding the recently installed pedestrian signals in Leavenworth. As a result, the project website has been updated to direct community members to the appropriate agency with feedback regarding the pedestrian signal installation.

### On-Going/Next Steps

- Following the September PAC meeting, the selected projects will be shared with the community via the project website with an opportunity for the community to provide feedback.
- The project team is working to schedule a community briefing with the agricultural community, a presentation with the Chelan-Douglas Transportation Council Board, and a Leavenworth City Council Workshop.

**Attachment A. Project Evaluation Matrix**

ID #	Project Description	Segment	Evaluation Considerations	Selected for Evaluation	Quick Wins & Small Steps	Vision Projects/Recommended for Future Consideration	Project Not Advancing	Project Notes
15	Temporary One-Way system through Leavenworth on US 2, which could shift direction as needed.	2 - Leavenworth	Can provide preliminary channelization/temporary traffic control planning. If intended as permanent installation, can provide channelization recommendations. Could also complete operations analysis for One-Way condition including transitions to/from one-way as well as delay/travel time/queueing.	X				
16	Rechannelize US 2 to create a separated multi-use trail parallel to US 2.	2 - Leavenworth	Can provide preliminary layout and planning level cost estimate and photo rendering. Can also provide operations analysis for modifications needed for US 2, including delay/travel time/queueing.	X				Will be evaluated as part of US 2 analysis.
17	Center running Transit/Emergency Only Lanes During Events/High Demand Periods	2 - Leavenworth	Can provide preliminary channelization/temporary traffic control planning. Can also provide travel time/delay through traffic operations assessment.	X				
18	Grade Separated Pedestrian Crossings – 3 bridges or a pedestrian underpass	2 - Leavenworth	Can provide location recommendations and planning level costs. Could analyze improvements to signal timing along US 2 with removal of pad phase for crossing US 2.	X				Will be evaluated as part of US 2 analysis.
19	Extend Pine Street to include a bridge over the Wenatchee River and connection to River Bend Road, creating a parallel route over the river in Leavenworth.	2 - Leavenworth	Can provide preliminary layout and planning level cost estimate.	X				Project being completed by City of Leavenworth.
22	Add sidewalk enhancements with buffer	2 - Leavenworth	Can provide preliminary layout and planning level cost estimate.	X				Will be evaluated as part of US 2 analysis.
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.	2 - Leavenworth	Parking management strategies outlined in the Strategic Parking Management Plan need to be implemented first.	X				
29	Remove on-street parking to connect bicycle lane	2 - Leavenworth		X				Will be evaluated as part of US 2 analysis.
30	Parking Management	2 - Leavenworth	Preliminary cost estimates and action items needed to expand recommendations in the Leavenworth Downtown Parking Plan to include US 2 through Leavenworth.	X				
33	Build roundabouts at each primary intersection	2 - Leavenworth	Can provide preliminary layout and planning level cost estimate.	X				Likely to be considered as part of US 2 Evaluation
37	Delivery zone/parking/drop-off	2 - Leavenworth	Recommend first implementing Parking Management Strategy #5: Hire Parking Manager. Management of specific parking management strategies needs active involvement by a single point of contact.	X				
49	Adaptive management strategies, such as transit on shoulders paired with Park & Ride at 97 interchange.	3 - Southeast Segment A	Could complete operations analysis to determine benefits to transit utilizing shoulders.	X				Project 49/50 will be grouped for evaluation
52	Improve Peshastin bridge to better accommodate bicycles and pedestrian connections from US 2 to Peshastin	3 - Southeast Segment A	Could complete operations analysis to test different intersection/access configurations. Could develop high level cost-estimate based on results of traffic modeling.	X				
3	Signage and wayfinding to designated areas for parking/crossing	1 - Northwest Segment	Could identify key areas for signage based on existing recreation and desire lines.		X			
4	Upgrade existing pull-outs paired with enhanced pedestrian crossings.	1 - Northwest Segment	Ties to Projects 5 and 8. Can choose a few known locations to do planning level design and cost estimates that may then be used as a baseline for other areas.		X			

**Attachment A. Project Evaluation Matrix**

ID #	Project Description	Segment	Evaluation Considerations	Selected for Evaluation	Quick Wins & Small Steps	Vision Projects/Recommended for Future Consideration	Project Not Advancing	Project Notes
6	6" fog lines or narrower lanes may be effective for speed control and/or increased shoulder size for bikes.	1 - Northwest Segment	Would need design eval to confirm any lane width changes with WSDOT if shoulders were widened the lanes narrowed. Channelization changes should be covered under MOU with USFS. Cost estimate for re-striping can be put together as well as timeline of "next steps".		X			
9	No Parking Signs	1 - Northwest Segment	Identify locations with history of collisions or known sight distance issue for parking on the shoulder.		X			
10	No Pedestrian Crossing Signs	1 - Northwest Segment	Low cost enhancement that could be rolled into City, WSDOT, or County's maintenance program. Could spend time identifying specific areas that would be most effective.		X			
12	High Friction Surface Treatments	1 - Northwest Segment	If location is identified, can provide planning level cost estimate for this safety treatment.		X			
13	Create variable speed area using ITS.	1 - Northwest Segment	Can provide recommendation for location and planning level cost estimates.		X			
26	Transit shuttle service	2 - Leavenworth			X			
32	Parking app	2 - Leavenworth	Strategy #20 from the Parking Management Plan (Website) should be implemented first, along with other parking management recommendations. Engage vendor to develop cost estimates.		X			
34	More/better bike parking	2 - Leavenworth	See Strategy #21 within Strategic Parking Management Plan for overview of costs of Bike Parking. Cost Estimate: \$15,000-\$20,000.		X			
38	Transit/Emergency Preemption	2 - Leavenworth	Can research pre-emption equipment/costs/installation/maintenance to provide to WSDOT for consideration. Can provide improvements to travel time/delay along the corridor.		X			
44	Employee TDM strategies	2 - Leavenworth	Could make recommendations for Employee TDM strategies.		X			
45	Delivery hours/permits	2 - Leavenworth	Could make recommendations for delivery hours/permits guidelines.		X			
103	Install additional crosswalks/pedestrian signage	2 - Leavenworth			X			
53	Snow removal for bus stops	3 - Southeast Segment A			X			
58	High Friction Surface Treatments	3 - Southeast Segment A			X			
66	Shoulder Treatments to better accommodate bicyclists on US 2 (Edge line rumble strips, striping, etc.)	3 - Southeast Segment A			X			
65	High Friction Surface Treatments	4 - Southeast Segment B	If locations are identified, could provide planning level cost estimates.		X			
67	Shoulder Treatments to better accommodate bicyclists on US 2 (Edge line rumble strips, striping, etc.)	4 - Southeast Segment B			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.	1 - Northwest Segment	WSDOT has varying widths of ROW on the north (uphill) side of the highway and most are steep hillside. Can put together preliminary costs for widening some sections, assuming retaining walls for any major widening into steep hillsides. Would use GIS layers and aerial photos for base mapping.			X		
105	Roundabout at intersection of US-2/SR-207	1 - Northwest Segment	Can provide preliminary layout and planning level cost estimate and traffic operations analysis to identify project benefits for travel along the corridor.			X		

**Attachment A. Project Evaluation Matrix**

ID #	Project Description	Segment	Evaluation Considerations	Selected for Evaluation	Quick Wins & Small Steps	Vision Projects/Recommended for Future Consideration	Project Not Advancing	Project Notes
27	Micro-mobility options including bike share/scooters, neighborhood electric vehicles or other modes that could be used to serve the Leavenworth area.	2 - Leavenworth				X		
47	Improved parallel facilities for all modes	3 - Southeast Segment A	If locations/improvements are identified, can provide planning level design and cost estimates for projects. High demand traffic time periods would concentrate issues at intersections with US2.			X		
48	Spot treatments at local access points	3 - Southeast Segment A	Could complete operations analysis to test different intersection/access configurations. Could develop high level cost-estimate based on results of traffic modeling.			X		
51	Pedestrian and bicycle improvements along US 2 based on land use	3 - Southeast Segment A	If locations/improvements are identified, can provide planning level design and cost estimates for projects.			X		
55	Improvements for bus stops along US 2, keeping them on the highway and improving bicycle and pedestrian connections to stops.	3 - Southeast Segment A	Identify opportunities to connect bus stops to existing bicycle/pedestrian network and provide high-level cost estimate.			X		
59	Invest in parallel routes for bikes	4 - Southeast Segment B	If locations/improvements are identified, can provide planning level design and cost estimates for projects.			X		
60	Route 22 opportunities with W. Cashmere Bridge Project	4 - Southeast Segment B				X		
68	Improve bicycle and pedestrian connections to transit stops	4 - Southeast Segment B	Identify opportunities to connect bus stops to existing bicycle/pedestrian network and provide high-level cost estimate.			X		
1	Park & Ride to Stevens Pass with interim stops for employees and skiers.	1 - Northwest Segment	Could identify potential stops and parking locations to better serve Coles Corner area, would need data on number of employees at Stevens Pass Ski area.				X	
2	Chumstick Highway is identified as an alternate route for emergency needs. Upgrade Chumstick to be a viable detour route for freight use	1 - Northwest Segment	Can put together a very preliminary cost estimate for the work, on lane-mile scale, including ROW purchase. May help to show the fatal flaw to proponents of a bypass.				X	Identified as too costly and not supported.
5	Create new pull-outs with enhanced pedestrian crossings near known desire lines across US 2.	1 - Northwest Segment	May need several meetings with rafting companies to determine patterns of use. Once standard routes are identified, could look at RI/RO and channelization to ensure turns across traffic are minimized and pedestrians planned for. Costs will be hard to determine without knowing project				X	
8	Improve sight distance in areas where pedestrians are known to cross	1 - Northwest Segment	Ties to Projects 4 and 5. Can choose a few known locations to do planning level design and cost estimates that may then be used as a baseline for other areas.				X	
11	Speed enforcement campaign – high traffic impact timeframes	1 - Northwest Segment	Could identify locations based on known desire lines for pedestrians and collision data.				X	
14	Create a cordon surrounding festival areas that autos are prohibited from entering.	2 - Leavenworth					X	Not supported on US 2 and already implemented on some parallel routes.
20	Improve Icicle Road to provide better bicycle facilities as an alternate bicycle route - could include 6" or narrower fog lines or advisory shoulders.	2 - Leavenworth	If locations/improvements are identified, can provide planning level design and cost estimates for projects. High demand traffic time periods would concentrate issues at intersections with US2.				X	Identified as too costly and not supported.
21	Create better parallel route capacity: Chumstick Hwy to train station (more complete facility)	2 - Leavenworth	If locations/improvements are identified, can provide planning level design and cost estimates for projects. High demand traffic time periods would concentrate issues at intersections with US2.				X	Not a realistic option for bypassing the corridor.

**Attachment A. Project Evaluation Matrix**

ID #	Project Description	Segment	Evaluation Considerations	Selected for Evaluation	Quick Wins & Small Steps	Vision Projects/Recommended for Future Consideration	Project Not Advancing	Project Notes
23	Flagger Training	2 - Leavenworth					X	City has already hired traffic management firm.
25	Reconsider transit service times/headways to include more frequent service, specifically during off-peak travel times to better accommodate service industry employees	2 - Leavenworth					X	Improved service will be designed and implemented over the next 2 years as a result of a recent ballot measure.
28	Neighborhood Electric Vehicles as Modes	2 - Leavenworth					X	Project combined with #27
31	Electronic Counter Systems for Parking tied to Dynamic Wayfinding	2 - Leavenworth	Strategy #18 from the Parking Management Plan (Parking Signage) should be implemented first. Engage vendor to develop cost estimates.				X	
35	Re-introduce the shuttle train from Wenatchee and Everett into Leavenworth (the old "Snow Train")	2 - Leavenworth					X	Costly and limited by access to railroads.
36	Car share with thought given to changing curb space management	2 - Leavenworth					X	Not in line with mode-split occurring in Leavenworth.
39	Bicycle facility south of river	2 - Leavenworth	Could study different possible routes based on topography and connection points, along with planning level cost estimate. Likely very time consuming as it's several miles of bike trail.				X	Project identified as costly and not supported.
40	Daily service on trailways	2 - Leavenworth					X	
41	Aerial Tramways integrated with parking strategy	2 - Leavenworth					X	Project already captured by project #24 and will be considered as parking strategy rather than a stand-alone project.
42	Emergency Routes/Staging	2 - Leavenworth					X	Already happening
43	Enforcement for pedestrian crossings – vehicles at crosswalks, and j-walking between crosswalks.	2 - Leavenworth					X	Resources for implementation are likely infeasible.
100	Measures to prevent vehicles occupying motorcycle parking locations.	2 - Leavenworth					X	
104	Remove parking spaces between 13th and 14th on Front St to allow	2 - Leavenworth					X	
108	Sign visibility enhancements	2 - Leavenworth					X	
101	Leavenworth At-Grade Bypass	2 - Leavenworth	If no ROW purchased, would require channelization changes along with				X	
54	Aerial tramway	3 - Southeast Segment A					X	Length needed for tramway to reach potential parking areas in Segment 3 likely to make project infeasible.
56	Enforcement campaign for speed	3 - Southeast Segment A					X	

**Attachment A. Project Evaluation Matrix**

ID #	Project Description	Segment	Evaluation Considerations	Selected for Evaluation	Quick Wins & Small Steps	Vision Projects/Recommended for Future Consideration	Project Not Advancing	Project Notes
57	Additional red light/warning signs	3 - Southeast Segment A					X	
102	Add an additional lane to US-2 in both directions	3 - Southeast Segment A	ROW costs likely a fatal flaw, but could estimate planning level costs.				X	Cost due to ROW do not align with project Guiding Principles.
61	Improve safety around icy spots on the road (variable message signs?)	4 - Southeast Segment B					X	Project infeasible due to liability associated with project.
62	Speed feedback signs	4 - Southeast Segment B	Very low cost and could be completed quickly. Could provide list of possible locations.				X	
63	Enforcement campaign for speed	4 - Southeast Segment B					X	
64	Additional red light/warning signs	4 - Southeast Segment B					X	





## Attachment B. Social Pinpoint Results Summary

August 19, 2019

### Overview

From June 13th to August 1st, 953 unique users visited the US 2 Upper Wenatchee Transportation Study's Social Pinpoint map. 90 unique users submitted a total of 219 comments. Of the 219 comments or ideas, 151 were new ideas submitted by the public and 104 comments focused on projects and ideas in Leavenworth.

### Results

The three projects in the corridor that received the most upvotes were also all new ideas.

<i># Upvotes</i>	<i>Segment</i>	<i>Idea</i>
139	Leavenworth	Add a roundabout or traffic signal at US 2 and 3rd St/Ski Hill Dr.
59	Leavenworth	Put an underground parking garage where the current City Parking Lot P1 is located.
48	Cashmere	Reconfigure the southwest side of the intersection between Tichenal Way and US 2/97.

Of the proposed projects, the ones that received the most upvotes were:

<i># Upvotes</i>	<i>Segment</i>	<i>Idea</i>
25	Tumwater Canyon	Add shoulders along US 2 through Tumwater Canyon to accommodate bicycle lanes.
25	Tumwater Canyon	Add parking spaces, wayfinding signage, and pedestrian crosswalks to pull-outs near scenic and recreational areas.
14	East to US 97	Improve US 2 between US 97 and Leavenworth so that transit can operate on the shoulder during periods of high traffic

The proposed project ideas that received the most comments were:

<i># Comments</i>	<i>Segment</i>	<i>Idea</i>	<i>Comment Summary</i>
12	Tumwater Canyon	Freight Use	All commenters opposed enabling freight to travel on the Chumstick Highway.
8	Tumwater Canyon	No Pedestrian Crossing	Most commenters thought pedestrians would continue to cross US 2 and that reducing the speed limit and creating a pedestrian bridge or crosswalk would increase safety.
8	Tumwater Canyon	Bicycle Lanes	Most commenters were curious about a feasibility study between adding bicycle lanes in Tumwater Canyon vs Chumstick Highway.

Project Advisory Committee Meeting #4  
September 26, 2019



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## PROJECT ADVISORY COMMITTEE MEETING

Thursday, September 26, 2019

11:00 AM – 1:00 PM

### AGENDA

**Purpose of the Meeting:** Presentation of proposed project grouping, project evaluation findings, and project feedback exercise by Project Advisory Committee.

Topic	Facilitator	Time
1. Welcome	Penny Mabie	10 min
2. Project Grouping: Process & Recommendations	Kara Hall	15 min
3. Project Evaluation Findings	Bianca Popescu/Jennifer Saugen/Pete Collins	30 min
4. Project Feedback Exercise	Penny Mabie/Kendra Breiland	50 min
5. Next Steps & Project Overview	Penny Mabie/ Kara Hall	15 min

## Project Evaluation Matrix

ID #	Project Description	Selected for Evaluation	Quick Wins & Small Steps <sup>1</sup>	Vision Project	Project Not Advancing
16	Reallocate US 2 Right-of-Way to accommodate dedicated facilities for bicyclists and/or transit.	X			
17	Center running Transit/Emergency Only Lanes During Events/High Demand Periods	X			
18	Grade Separated Pedestrian Crossings – 3 bridges or a pedestrian underpass	X			
19	Extend Pine Street to include a bridge over the Wenatchee River and connection to River Bend Road, creating a parallel route over the river in Leavenworth.	X			
22	Enhanced modal separation for pedestrians via fences and/or vertical elements	X			
30	Parking Management - 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.	X			
33	Build roundabouts at Chumstick Highway, 9th Street, and Front Street.	X			
37	Parking Flex Space on US 2 and connection of on-street bicycle lane.	X			
49	Transit-on-Shoulders paired with Park & Ride at 97 interchange.	X			
52	Establish better access to transit stops on US 2 for bicyclists and pedestrians from Peshastin through a separate structure parallel to Peshastin Bridge	X			
3	Signage and wayfinding to designated areas for parking/crossing		X		
4	Upgrade existing pull-outs paired with enhanced pedestrian crossings.		X		
6	6" fog lines or narrower lanes may be effective for speed control and/or increased shoulder size for bikes.		X		
9	No Parking Signs		X		
10	No Pedestrian Crossing Signs		X		
12	High Friction Surface Treatments		X		
13	Create variable speed area using ITS.		X		
26	Transit shuttle service		X		
32	Parking app		X		
34	More/better bike parking		X		

<sup>1</sup>Projects that could be implemented within a six year timeline.

### Project Evaluation Matrix

ID #	Project Description	Selected for Evaluation	Quick Wins & Small Steps <sup>1</sup>	Vision Project	Project Not Advancing
	Segment 1 - Coles Corner to Leavenworth				
	Segment 2 - Leavenworth				
	Segment 3 - Leavenworth to SR 97				
	Segment 4 - SR 97 to Cashmere				
38	Transit/Emergency Signal Preemption		X		
44	Employee TDM strategies		X		
45	Delivery hours/permits		X		
103	Install additional crosswalks/pedestrian signage		X		
53	Snow removal for bus stops		X		
58	High Friction Surface Treatments		X		
66	Shoulder Treatments to better accommodate bicyclists on US 2 (Edge line rumble strips, striping, etc.)		X		
65	High Friction Surface Treatments		X		
67	Shoulder Treatments to better accommodate bicyclists on US 2 (Edge line rumble strips, striping, etc.)		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.			X	
105	Roundabout at intersection of US-2/SR-207			X	
27	Micro-mobility options including bike share/scooters, neighborhood electric vehicles or other modes that could be used to serve the Leavenworth area.			X	
47	Improved parallel facilities for all modes			X	
48	Spot treatments at local access points			X	
51	Pedestrian and bicycle improvements along US 2 based on land use			X	
55	Improvements for bus stops along US 2, keeping them on the highway and improving bicycle and pedestrian connections to stops.			X	
59	Invest in parallel routes for bikes			X	
60	Route 22 opportunities with W. Cashmere Bridge Project			X	
68	Improve bicycle and pedestrian connections to transit stops			X	
50	Park & Ride at 97 interchange paired with shuttle				X
29	Remove on-street parking to connect bicycle lane				X

<sup>1</sup>Projects that could be implemented within a six year timeline.

## Project Evaluation Matrix

ID #	Project Description	Selected for Evaluation	Quick Wins & Small Steps <sup>1</sup>	Vision Project	Project Not Advancing
15	Temporary peak direction center-thru lane through Leavenworth on US 2, which could shift direction as needed.				X
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				X
1	Park & Ride to Stevens Pass with interim stops for employees and skiers.				X
2	Chumstick Highway is identified as an alternate route for emergency needs. Upgrade Chumstick to be a viable detour route for freight use				X
5	Create new pull-outs with enhanced pedestrian crossings near known desire lines across US 2.				X
8	Improve sight distance in areas where pedestrians are known to cross				X
46	Create combination zone with On-Street Parking or Tour Bus Drop-Off				X
11	Speed enforcement campaign – high traffic impact timeframes				X
14	Create a cordon surrounding festival areas that autos are prohibited from entering.				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.				X
21	Create better parallel route capacity: Chumstick Hwy to train station (more complete facility)				X
23	Flagger Training				X
25	Reconsider transit service times/headways to include more frequent service, specifically during off-peak travel times to better accommodate service industry employees				X
28	Neighborhood Electric Vehicles as Modes				X
31	Electronic Counter Systems for Parking tied to Dynamic Wayfinding				X
35	Re-introduce the shuttle train from Wenatchee and Everett into Leavenworth (the old "Snow Train")				X
36	Car share with thought given to changing curb space management				X
39	Bicycle facility south of river				X
40	Daily service on trailways				X
41	Aerial Tramways integrated with parking strategy				X
42	Emergency Routes/Staging				X

<sup>1</sup>Projects that could be implemented within a six year timeline.



## Project Evaluation Matrix

- Segment 1 - Coles Corner to Leavenworth
- Segment 2 - Leavenworth
- Segment 3 - Leavenworth to SR 97
- Segment 4 - SR 97 to Cashmere

ID #	Project Description	Selected for Evaluation	Quick Wins & Small Steps <sup>1</sup>	Vision Project	Project Not Advancing
43	Enforcement for pedestrian crossings – vehicles at crosswalks, and j-walking between crosswalks.				X
100	Measures to prevent vehicles occupying motorcycle parking locations.				X
104	Remove parking spaces between 13th and 14th on Front St to allow for extended right turn lane onto US-2				X
108	Sign visibility enhancements				X
101	Leavenworth At-Grade Bypass				X
54	Aerial tramway				X
56	Enforcement campaign for speed				X
57	Additional red light/warning signs				X
102	Add an additional lane to US-2 in both directions				X
61	Improve safety around icy spots on the road (variable message signs?)				X
62	Speed feedback signs				X
63	Enforcement campaign for speed				X
64	Additional red light/warning signs				X

<sup>1</sup>Projects that could be implemented within a six year timeline.

## US 2 Upper Wenatchee Valley Assessment and Comparison of Highest Performing Projects

Project	Regional Traffic (Through Traffic)	Local Circulation & Access	Transit	Emergency Services	Bicycles	Pedestrians
16. Reallocate US 2 ROW (Alternative A)	○	●	●	●	●	◐
17. Temporary Center Running Transit/ Emergency Lane	○	●	◐	◐	○	○
18. Grade-Separated Pedestrian Crossings	◐	◐	◐	◐	○	●
19. Pine Street Connection	●	●	◐	◐	●	◐
22. Enhance Modal Separation	◐	◐	◐	◐	○	◐
30. Parking Management	◐	◐	●	◐	◐	○
33. Roundabouts @ Front Street, 9 <sup>th</sup> Street, Chumstick Highway	◐	◐	◐	◐	○	◐
37. US 2 Parking Flex Space & Bicycle Lane Connection	○	○	○	○	◐	○
49. Transit on Shoulders	○	○	●	●	○	○
52. Bicycle & Pedestrian Bridge in Peshastin	○	○	●	○	●	●



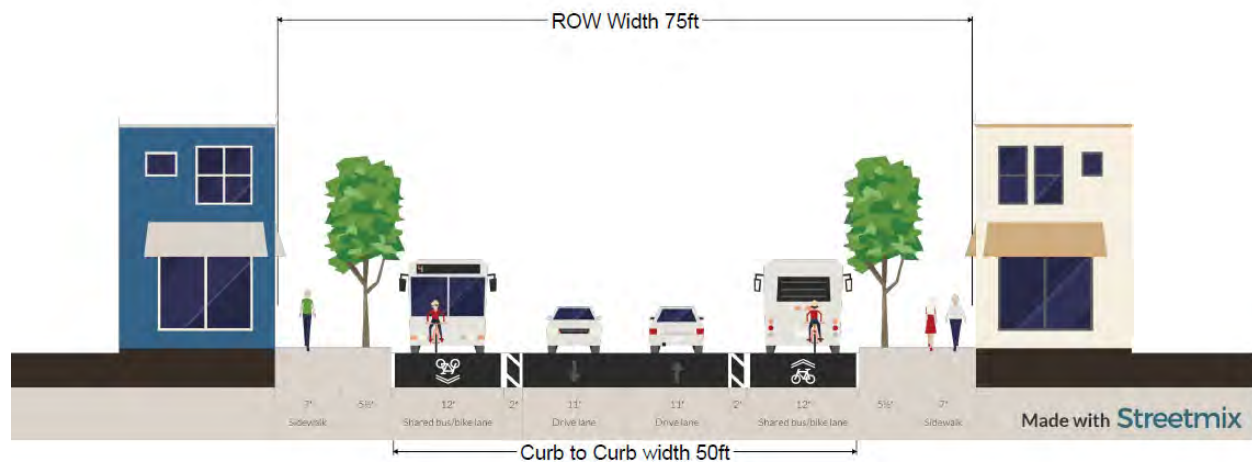
●
◐
○
●

Excellent
Good
No Change
Poor

## 16. Reallocation of US 2 Right-of-Way

### Alternative A – Dedicated Transit/Bike Lane

Project Description: Reallocate existing US 2 Right-of-Way to include one general purpose travel lane in each direction along with one lane in each direction for dedicated use by emergency access, transit, and bicyclists in Leavenworth. At intersections and selected local access points, right-turning vehicles would be allowed to access the lane in order to maintain existing dedicated turn-pockets at intersections.

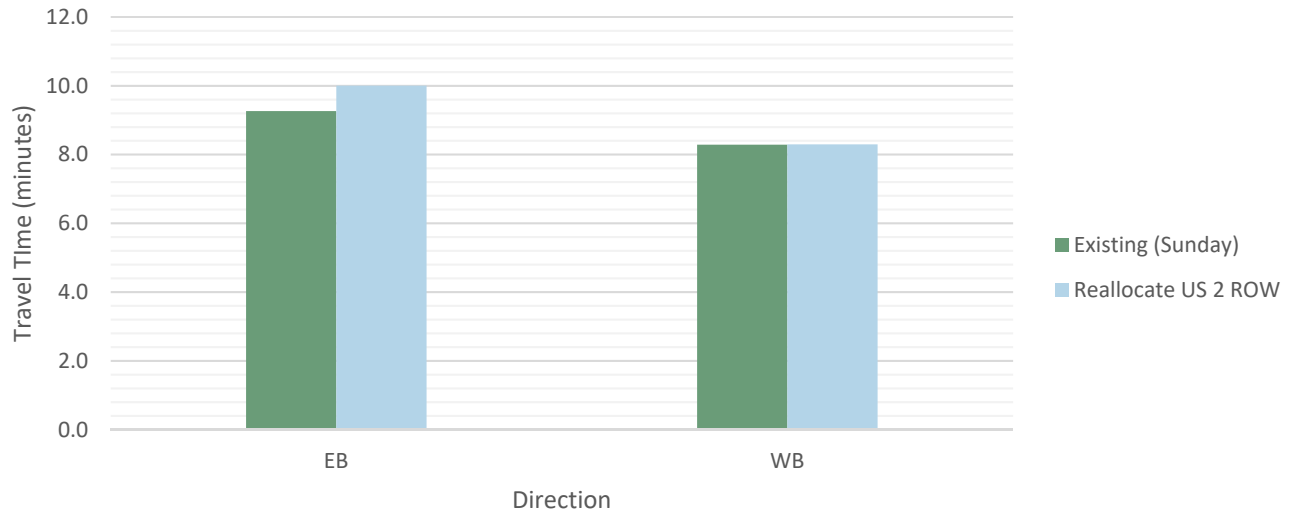


### Benefit:

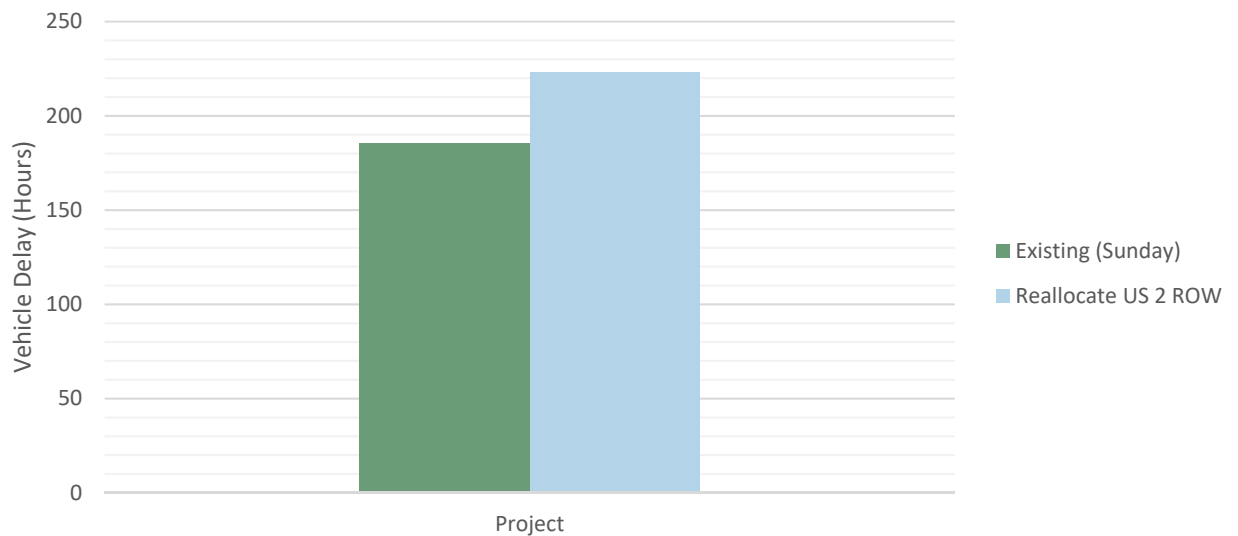
- Bicyclists would be separated from vehicle traffic with striped buffer. At intersections and local access points, striping would indicate a bicycle-vehicle conflict zone. Additional treatments would be needed at intersections to separate bicyclists from right-turning vehicles.
- Delay experienced by bicyclists, transit, and emergency access would be limited to delay occurring at US 2 intersections.
- Would maintain reliable transit travel time during high-demand periods or peak travel periods on US 2, which would incentivize use of transit or shuttle option during events.
  - Assuming 2.5 passengers per car:
    - Trolley or similar size equivalent could eliminate 15 cars for every trip
    - Full size bus could eliminate 30 cars for every trip
- Buffer between general purpose travel lanes and sidewalk would improve pedestrian experience and crossing additional lanes would limit desire to cross at-will.
- Emergency response times would be less impacted by congestion on US 2.



### Travel Time Comparison



### Vehicle Hours of Delay



#### Considerations:

- Minimum curb to curb width required would be 46' (11', 12', 11', 12' lanes)
- Would require limiting driveway access along US 2
- Would need striped lane for bicyclists at intersections to move them to inside of right-turning traffic; bike boxes may be provided
- Left-turns from US 2 would be limited to intersections

- May require elimination of protected-permitted phasing at US 2 intersections (flashing yellow arrow)
- Additional Right-of-Way or modifications to curb/sidewalk may be needed at intersections
- Comfort of bicyclists in Bike/Transit lane would decrease as transit service/transit frequency increased; care must be taken to keep bus speeds low
- Would need to identify where tour bus drop-off would occur

Timeline: 5-10 Years

Cost: Moderate

Eliminates:

- Center Running Transit/Emergency Lane During Festivals (Project #17)
- Roundabouts at US 2 Intersections (Project #33)
- Parking Flex-Space on US 2 (Project #37)

Supports/Pairs With:

- Parking Management (Project #30)
- Signal Pre-Emption (Project #38)
- Transit Shuttle Service (Project #26)
- Grade Separated Pedestrian Crossings (Project #18)
- Transit-on-Shoulder (Project #49)
- Micro-Mobility Options (Project #47)
- Delivery Hours/Permits (Project #45)

## **Alternative B – Bi-Directional Transit Lane & Separated Bicycle Path**

Project Description: Reallocate existing US 2 Right-of-Way to include a bi-directional transit only lane and separated bicycle lane adjacent to US 2.

### Benefit:

- Bicyclists would have a separated parallel route along US 2 through Leavenworth
- Pedestrian experience improved by addition of separated facility between sidewalk and travel lanes
- Transit would have prioritized lane improving route reliability during high-congestion on US 2
- Dedicated lane could be utilized by emergency services

### Considerations:

- Due to coordination and headways required for shared lane, operation in lane would need to be limited to one operator (i.e. Link Transit or local circulator), functioning like center-running streetcars
- Would require sidewalk in median to accommodate boarding's from both directions
- Would require transit signal priority at signalized intersections

Timeline: 5-10 Years

Cost: High

### Eliminates/Conflicts With:

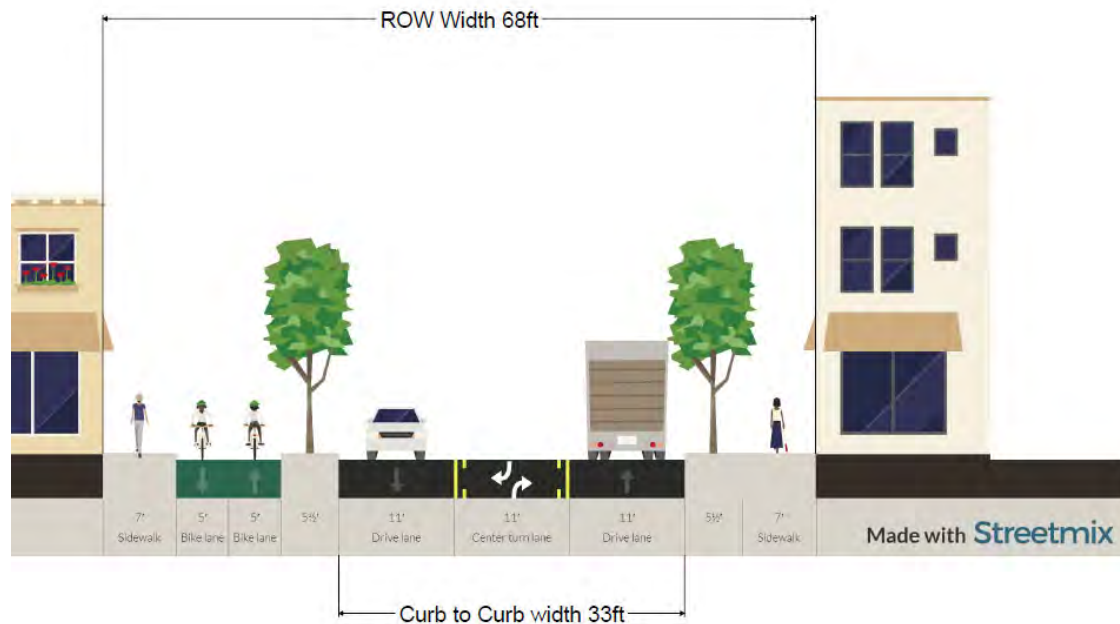
- Center Running Transit/Emergency Lane During Festivals (Project #17)
- Roundabouts at US 2 Intersections (Project #33)
- Parking Flex-Space on US 2 (Project #37)

### Supports/Pairs With:

- Parking Management (Project #30)
- Signal Pre-Emption (Project #38)
- Transit Shuttle Service (Project #26)
- Grade Separated Pedestrian Crossings (Project #18)
- Transit-on-Shoulder (Project #49)
- Micro-Mobility Options (Project #47)
- Delivery Hours/Permits (Project #45)

## Alternative C – Separated Bicycle Path

Project Description: Reallocate existing US 2 Right-of-Way to include a two-way buffered bicycle lane adjacent to US 2.



### Benefit:

- Bicyclists would have a separated parallel route along US 2 through Leavenworth.
- Pedestrian experience on selected side of US 2 improved by addition of separated facility between sidewalk and travel lanes.

### Considerations:

- Special treatments would be required at beginning and end of separated path, and at intersections to transition eastbound bicyclists back to the south side of US 2.
- Would need to limit local access on side of US 2 with path.

### Supports/Pairs With:

- Grade Separated Pedestrian Crossings (Project #18)
- Micro-Mobility Options (Project #27)

### Eliminates/Conflicts With:

- Connecting on-street bicycle lane on US 2

Timeline: 5-10 Years

Cost: Moderate

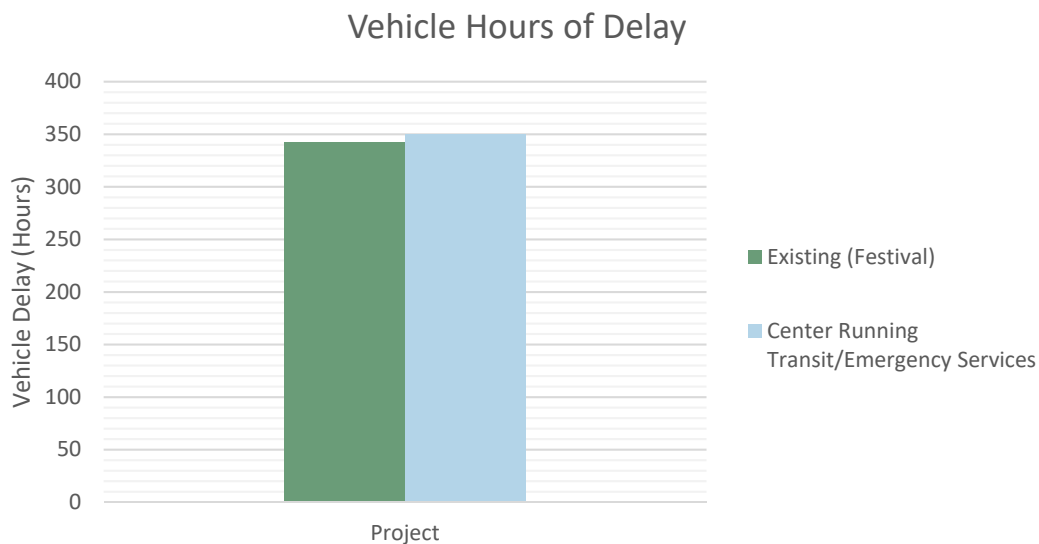
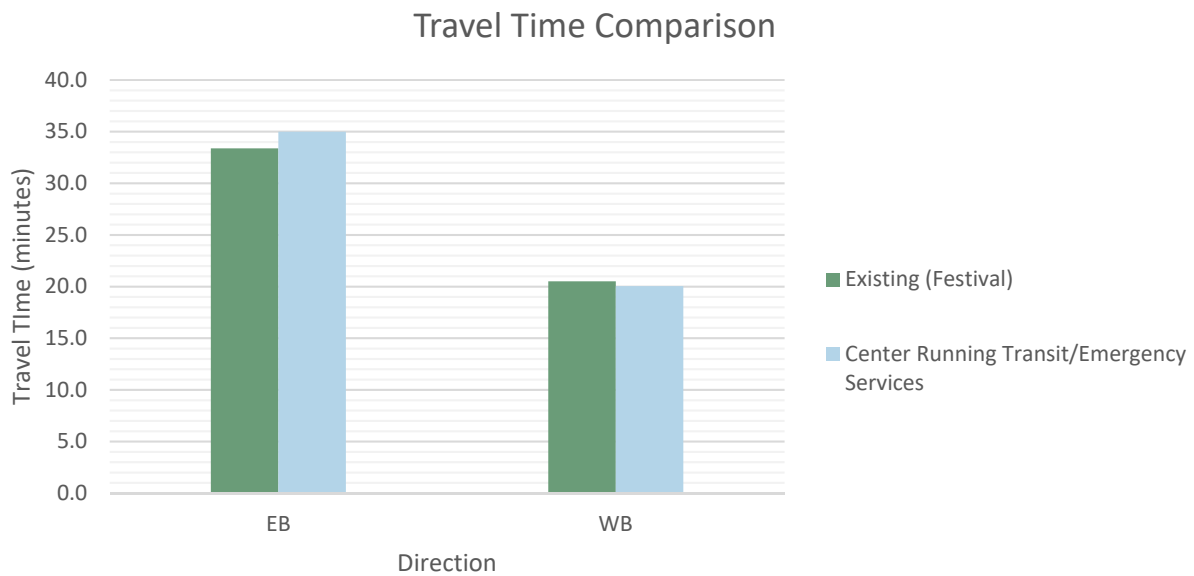


## 17. Temporary Center Running Transit/Emergency Lanes during Events

Project Description: Project would utilize Two-Way-Left-Turn-Lane as a temporary transit only lane for a circulator or transit during events or high congestion periods. Lane could also be utilized by emergency vehicles.

Benefit:

- Prioritizes transit/circulator option during events
- Improves emergency services access in/out of Leavenworth during events



Considerations:

- Limited Local Access – would require limiting turning movements between Chumstick Highway and 3<sup>rd</sup> Street/Ski Hill Drive to right-turn only
- Would require way-finding signage for local access and circulation

Timeline: 0-5 Years

Cost: Low (per event) Moderate to High with continued deployment.

Eliminates/Conflicts With:

- Roundabouts on US 2 (Project # 33)

Supports/Pairs With:

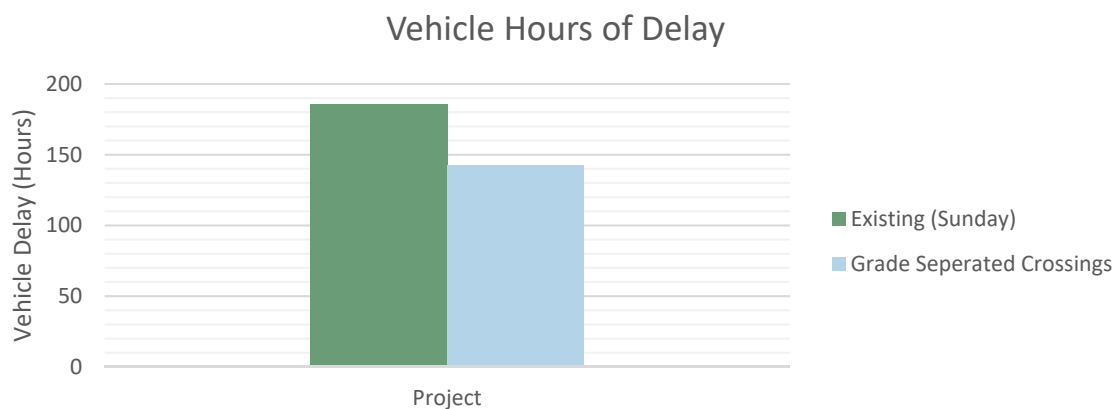
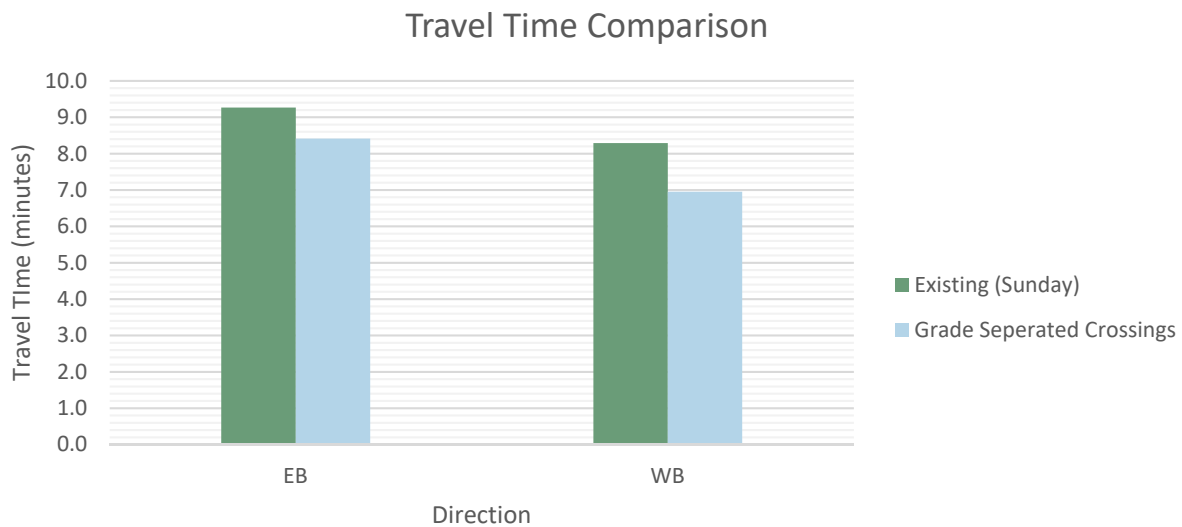
- Parking Management (Project #30)
- Transit Shuttle Service (Project #26)
- Parking Flex Space on US 2 (Project #37)
- Transit-on-Shoulders (Project #49)

## 18. Grade Separated Crossing:

Project Description: Currently 2,300 pedestrians use the crosswalks at Front Street City Hall and 9<sup>th</sup> Street on Sunday between 11 AM and 2 PM to cross US 2 during the summer months. Just under 5,000 pedestrians cross US 2 at 9<sup>th</sup> Street and Front Street during the Tree Lighting Festival peak hours. This project would construct three grade-separated crossings at Front Street, City Hall, and the Park & Ride Lot separating pedestrians crossing US 2 from vehicle traffic on US 2.

### Benefit:

- Signal timing can prioritize vehicle movements at traffic signals along US 2
- Safety benefit by eliminating potential vehicle-pedestrian conflicts on US 2
- Bridge design and decorations/lights on over-crossing could contribute to community character



Considerations:

- For over-crossing – access ramps needed to meet ADA grade requirements would be high-cost.
- Under-crossing can be under-utilized and would need to be designed to ensure users feel safe (i.e. adequate lighting)
- Locations can be prioritized and phased with funding availability

Timeline: 10+ Years

Cost: High

Eliminates/Conflicts With:

- N/A

Supports/Pairs With:

- Pedestrian Barrier (Project #18)
- Reallocation of US Right of Way (Project #16)

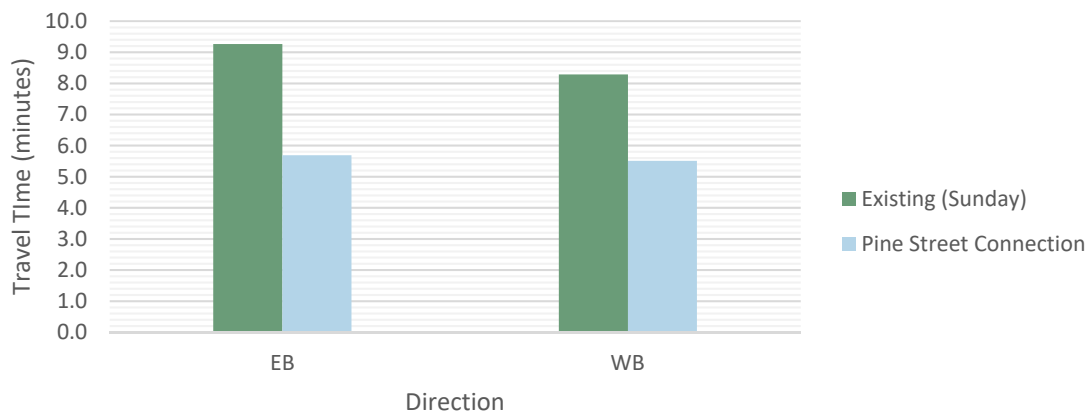
## 19. Pine Street Connection

Project Description: The extension of Pine Street to include a direct connection with Chumstick Highway, construction of a bridge across the Wenatchee River with connection to River Bend Drive. In addition to one travel lane in each direction, the bridge would provide dedicated bicycle and pedestrian facilities creating a parallel route to US 2 for all modes.

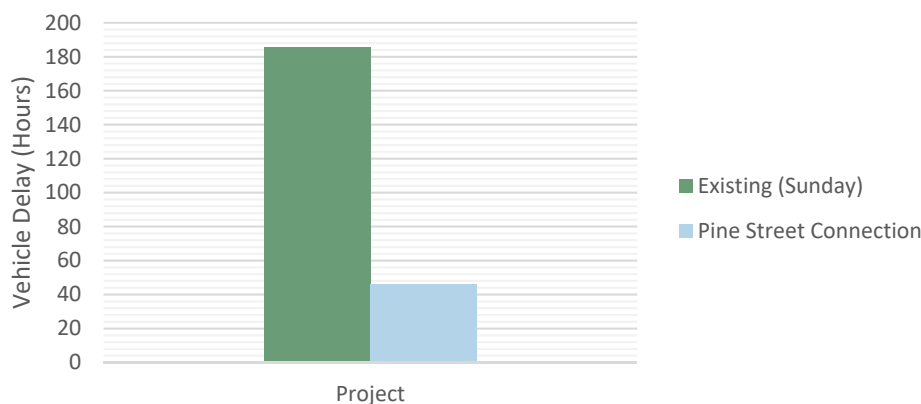
Benefit:

- Route Resiliency – construction of a bridge over the Wenatchee River would provide a second option for entering/exiting Leavenworth, which would be beneficial during emergency situations and during events
- Could serve multiple modes – vehicles, bicycles, pedestrians, and transit
- Improves local circulation and access to local traffic generators and Link Transit facility.
- Could shift approximately 30% of eastbound traffic and 20% of westbound traffic during Sunday Mid-Day peak

Travel Time Comparison



Vehicle Hours of Delay





Considerations:

- Will require significant Right-of-Way acquisition
- Highest cost project

Timeline: 10+ Years

Cost: High

Eliminates/Conflicts With:

- N/A

Supports/Pairs With:

- N/A

## **22. Enhanced Modal Separation**

Project Description: Enhance separation between vehicles and pedestrians on US 2 through visually appealing fence and/or vertical elements which would limit pedestrian crossings to marked-crossings and intersections. On the north side of US 2 where no on-street parking exists, barrier would be a permanent element from Front Street to 9<sup>th</sup> Street. On the south side of US 2, until on-street parking is removed, temporary planter boxes placed diagonally would be used such that people utilizing the on-street parking can open their doors and access the sidewalk.

Benefit:

- Reduces pedestrians crossing US 2 at-will, improving flow of traffic on US 2 and improving pedestrian safety.

Considerations:

- Would require temporary barrier on south side of US 2 until on-street parking is relocated.

Timeline: 0-5 Years

Cost: Moderate

Eliminates:

- N/A

Supports/Pairs With:

- Grade-Separated Crossing (Project #18)
- Parking Flex Space on US 2 (Project #37)



### **30. Parking Management**

Project Description: Project would improve visitor parking opportunities through addition of more spaces including remote options, creating uniform standards to optimize existing capacity, and building on recommendations in the adopted 2017 Downtown Leavenworth Strategic Parking Plan. Initial remote parking strategies could utilize new Link Transit Park & Ride located behind Safeway, with expanded capacity as that lot is fully utilized.

Benefit:

- Create a 'Park Once' scenario for Leavenworth visitors when paired with other projects
- Eliminates congestion due to circulating traffic attempting to find parking
- Lowers number of vehicles traveling into Downtown Leavenworth

Considerations:

- Parking supply in Leavenworth is over capacity today during peak periods
- Would require active management of parking supply and messaging directing users to remote parking
- Would include need for policy changes to incentivize remote parking and cost analysis identifying locations and providing transit/shuttle links
- Required to capture full benefit of other projects

Timeline: Phased Implementation (0-10+Years)

Cost: Low to High (varies with strategy implementation)

Eliminates/Conflicts With:

- N/A

Supports/Pairs With:

- Center Running Transit/Emergency Services Lane (Project #17)
- Reallocation of US 2 Right-of-Way (Project #16)
- Transit-on-Shoulders (Project #49)
- Transit Shuttle Service (Project #26)
- Micro-Mobility Options (Project #27)

### 33. Roundabouts at US 2 Intersections

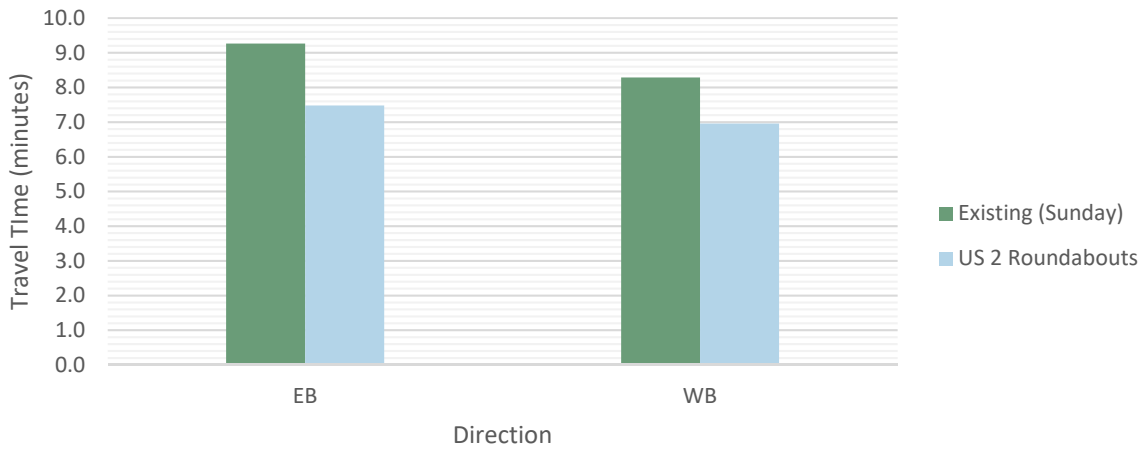
Project Description: Construction of single-lane roundabouts at major US 2 intersections (Chumstick/9<sup>th</sup> Street/Front Street).

*Note: Also evaluated roundabout at Ski Hill Drive in addition to roundabouts noted above and tested limited access option through Downtown Leavenworth. Description above was found to provide most benefit.*

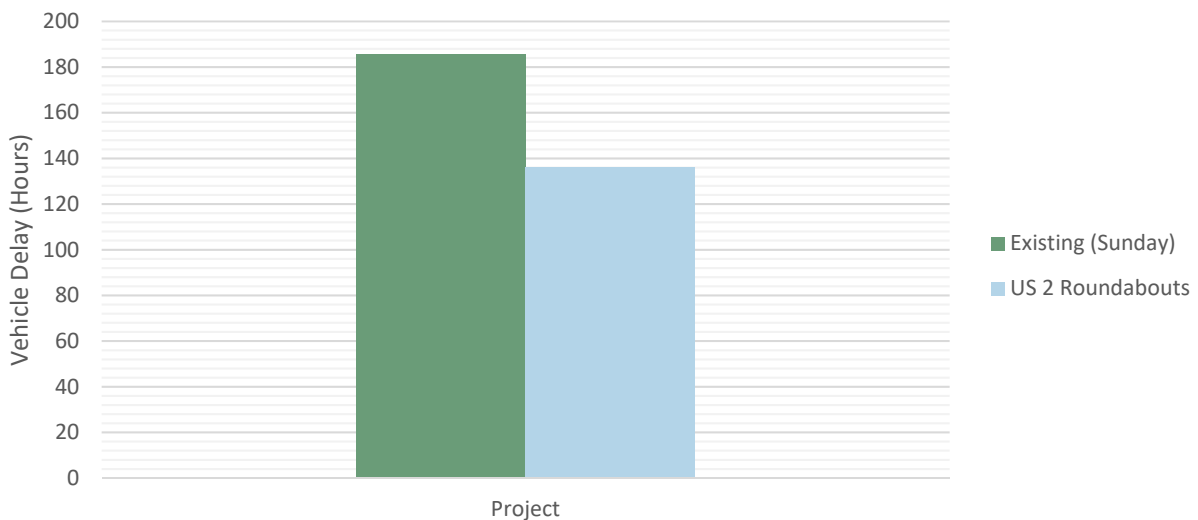
Benefit:

- Improved flow for eastbound/westbound traffic on US 2
- Fewer conflict points for bicyclists and pedestrians in roundabout configuration

Travel Time Comparison



Vehicle Hours of Delay



Considerations:

- In order to accommodate turning radius for large trucks, roundabouts will need to be large and would require additional Right-of-Way.
- Temporary traffic control options are– reduced ability to utilize extra lanes during events or emergency situation.
- HAWK at City Hall could create back-up through roundabouts unless paired with Grade-Separated Crossings.
- Vehicles must yield to pedestrians at roundabouts – could significantly impact vehicle flow during events.
- Grade of 9<sup>th</sup> Street may require shifting roundabout north or closing access at 9<sup>th</sup>.

Timeline: 10+ Years

Cost: High

Eliminates/Conflicts With:

- Reallocation of US 2 Right-of-Way (Project #16)
- Center Running Transit Lane (Project #17)
- Signal Pre-Emption (Project #38)

Pairs With/Supports:

- Pedestrian Barrier on Sidewalk (Project #22)
- Grade-Separated Crossing (Project #18)

## **37. Parking Flex Space & Bicycle Lane Connection on US 2**

Project Description: Project would transition current tour bus drop-off located next to Front Street Park into a flexible space that could serve delivery drop-offs that currently park in the center left-turn lane, tour bus drop-off, and on-street parking. Parking for delivery would be allowed during early morning hours, during week-day and non-event weekends the space would allow on-street parking. On festival or high-demand weekends when tour buses are visiting the space would be reserved for tour bus drop-off. Project would remove current on-street parking on US 2 between Front Street & Front Street Park and would connect the current bicycle lane between Front Street and 9<sup>th</sup> Street on US 2.

### Benefit:

- Provides dedicated space for bicyclists on most active part of US 2 and moves bicyclists out of lane of traffic
- Provide designated space for delivery vehicle unloading
- Serve multiple users in one space (more efficient use of space)

### Considerations:

- On-Street Parking Occupancy in Downtown Leavenworth is greater than 100% (includes illegal parking) today during high-demand periods.
- Deliveries occurring on US 2 should be limited to businesses with US 2 frontage, other deliveries occur on Front Street.

Timeline: 0-5 Years

Cost: Low

### Eliminates/Conflicts With:

- Reallocation of US 2 ROW (Project #16)

### Supports/Pairs With:

- Delivery Hours/Permits (Project #45)
- Pedestrian Barrier (Project #22)

## **49. Transit on the Shoulders between Leavenworth & 97**

Project Description: Project would improve US 2 shoulders between SR 97 and Leavenworth City Limits to accommodate transit on the shoulders when congestion is occurring on US 2. This project would also include expanding current Park & Ride lot at the Y interchange to encourage drivers traveling into Leavenworth to utilize remote parking.

Benefit:

- Would allow transit to bypass high congestion on US 2 – transit would operate lower than typical free-flow speeds on US 2 but would see significant improvement during congested times
- Would provide additional room for Emergency vehicles during high congestion on US 2
- Would help improve route reliability during summer weekends and festivals for Route 22
- Incentivize use of over 300 Park & Ride spaces that exist today between Wenatchee & Leavenworth and served by Route 22

Considerations:

- While project will benefit current transit users and help with route reliability, transit must be prioritized within Leavenworth to see full benefit and capture new users.
- Shoulder width and current condition varies, will be unable to accommodate transit on the shoulder for the entire length without capital improvements.

Timeline: 5-10 Years

Cost: High

Eliminates/Conflicts With:

- Spot Treatments at Local Access Points (Project #48)

Supports/Pairs With:

- Reallocation of US 2 Right-of-Way (Project #16)
- Center Running Transit/Emergency Services Lane (Project #17)
- Employee Travel Demand Management Strategies (Project #44)

## **52. Bicycle & Pedestrian Improvements at Peshastin Bridge**

Project Description: Parallel structure for bicycles and pedestrians at Peshastin Bridge providing access from Peshastin to Route 22 stops on US 2.

Benefit:

- Current bridge is narrow and only has sidewalk on one-side of bridge and lanes on the bridge are narrow, a parallel structure would provide separated facility for bicycles and pedestrians.
- Improves Main Street/ US 2 intersection to provide marked-crosswalks and sidewalk connection to Link Transit stop.
- Improves connection from new bridge end to School Street

Timeline: 10+ Years

Cost: High

Eliminates/Conflicts With:

- N/A

Supports/Pairs With:

- Transit-on-Shoulders (Project #49)
- Shoulder Treatments to better accommodate bicyclists on US 2 (Project #66)
- Employee Travel Demand Management Strategies (Project #44)



## Travel Time Summary (Between River Bend Drive and Icicle Road)

#	Scenario	EB (mins)	WB (mins)	Average Speed (mph)	EB Difference (mins)	WB Difference (mins)	Speed Difference (mph)
0	Observed	9.0	9.7	-	-	-	-
1	Existing (Summer Sunday)	9.3	8.3	10.3	-	-	-
1.1	Festival Baseline	33.4	20.5	4.9	-	-	-
16	Reallocate US 2 ROW	10.0	8.3	8.9	0.7	0.0	-1.4
17	Center Running Transit Emergency	22.2	9.0	6.4	-8.5	1.1	0.7
18	Grade Separated Crossing	8.4	7.0	11.9	-0.8	-1.3	1.6
19	Pine Street Connection	5.7	5.5	16.5	-3.6	-2.8	6.2
33a	Roundabouts w/o Ski Hill	7.5	7.0	12.4	-1.8	-1.3	2.1
33b	Roundabouts w/ Ski Hill	7.7	8.3	11.8	-1.5	0.1	1.5
33c	Roundabouts w/ Limited Access	14.2	8.2	7.4	4.9	-0.1	-2.9

## Vehicle Hours of Delay Summary

#	Scenario	Hours of Delay	% Change
0	Observed	-	-
1	Existing (Summer Sunday)	185	-
1.1	Festival Baseline	343	-
16	Reallocate US 2 ROW	223	20%
17	Center Running Transit Emergency	350	2%
18	Grade Separated Crossing	143	-23%
19	Pine Street Connection	46	-75%
33a	Roundabouts w/o Ski Hill	136	-27%
33b	Roundabouts w/ Ski Hill	151	-18%
33c	Roundabouts w/ Limited Access	271	46%



# US 2 Upper Wenatchee Valley Transportation Study Project Advisory Committee Meeting #4

September 26, 2019



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY



Chelan-Douglas  
TRANSPORTATION COUNCIL  
CDTC



# Meeting Agenda

- Project Grouping: Process & Recommendations
- Project Evaluation Findings
- Project Feedback Exercise
- Project Next Steps & Overview



# Meeting Purpose

- Project Team Will Share Project Grouping & Initial Project Evaluation
- Project Advisory Committee Will:
  - Help Make Sure Voices are Heard
  - Serve as Sounding Board for Project Decisions



# Meeting Agenda

- Project Grouping: Process & Recommendations
- Project Evaluation Findings
- Project Feedback Exercise
- Project Next Steps & Overview



# Project Selection: The Process



## PAC MEETING #1

- What users should we serve and where?
- What should our inform our Vision & Guiding Principles?

- Development of Vision & Guiding Principles
- Existing Planning & Context
- 16 Stakeholder Interviews

## PAC MEETING #2

- Feedback on Vision & Guiding Principles
- Presentation of Planning Context & Needs
- Draft Vision & Guiding Principles

- Online Survey for Vision & Guiding Principles
- Local input at Leavenworth Farmer's Market

- Development of Project Ideas
- Development of Project Evaluation Matrix

## PAC MEETING #3

- Adoption of Vision & Guiding Principles
- Does our criteria work?

- Public Input on New Ideas
- Public Feedback on Project Team Ideas

- Final Project Idea List
- Evaluation of Projects
- Summer Data Collection
- Initial Project Evaluation
- Gathered Agency Input

## PAC MEETING #4

- Project Grouping & Evaluation
- Project Feedback



# Project Selection: The Groups

## Selected For Evaluation:

Projects being evaluated for potential as a recommended investment.

## Quick Wins & Small Steps:

Projects that could be implemented within six years and outside the scope of this project.

## Vision Project:

Projects identified as part of the process that extend beyond the scope of this project due to timeline and/or funding needs.

## Project Not Advancing:

Projects identified as not advancing two or more of the Guiding Principles or that were identified to have a fatal flaw.

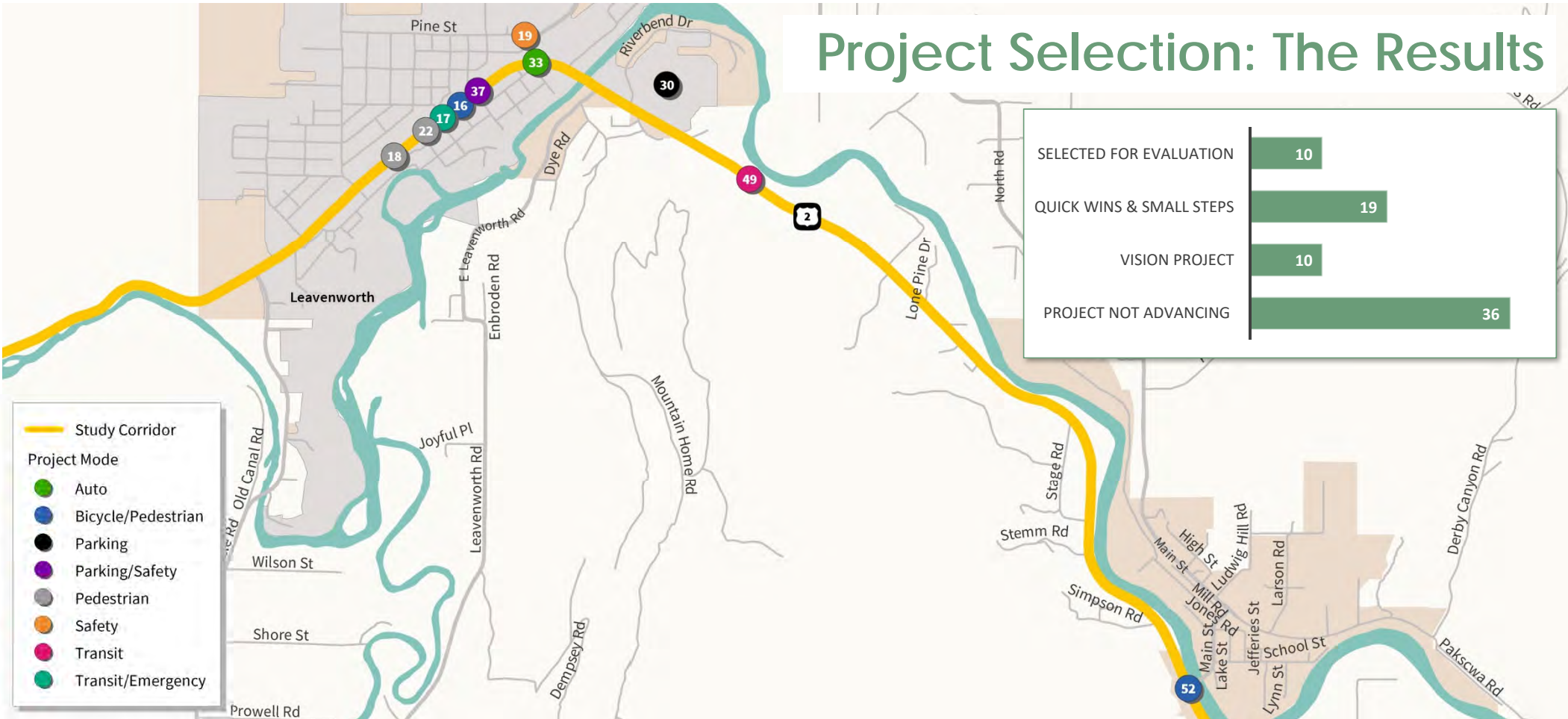
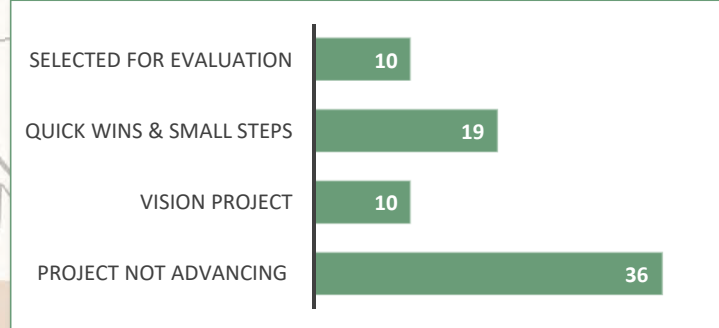


# Project Selection: Sorting the Projects

- How do we get from **75 project ideas** to the proposed groups?
  - Project Tiers
    - 3 project tiers based on scoring
  - Guiding Principles
    - Projects must improve at least **three** of the Guiding Principles
  - Project Vision
    - Advances the vision for **US 2**
  - Fatal Flaws
    - Is this project infeasible and **why**?



# Project Selection: The Results



# Meeting Agenda

- Project Grouping: Process & Recommendations
- Project Evaluation Findings ←
- Project Feedback Exercise
- Project Next Steps & Overview



# Project Evaluation: The Metrics



**Safety:** Improvement of a known location or conflict or improvement to user experience



**Travel Time:** How long it takes drivers to travel between River Bend Drive & Icicle Road



**Parking:** Change in parking capacity or change that supports use of remote parking



**Right-of-Way:** Project impact to the built or natural environment



**Vehicle Hours of Delay:** Measure of total delay experienced by all drivers

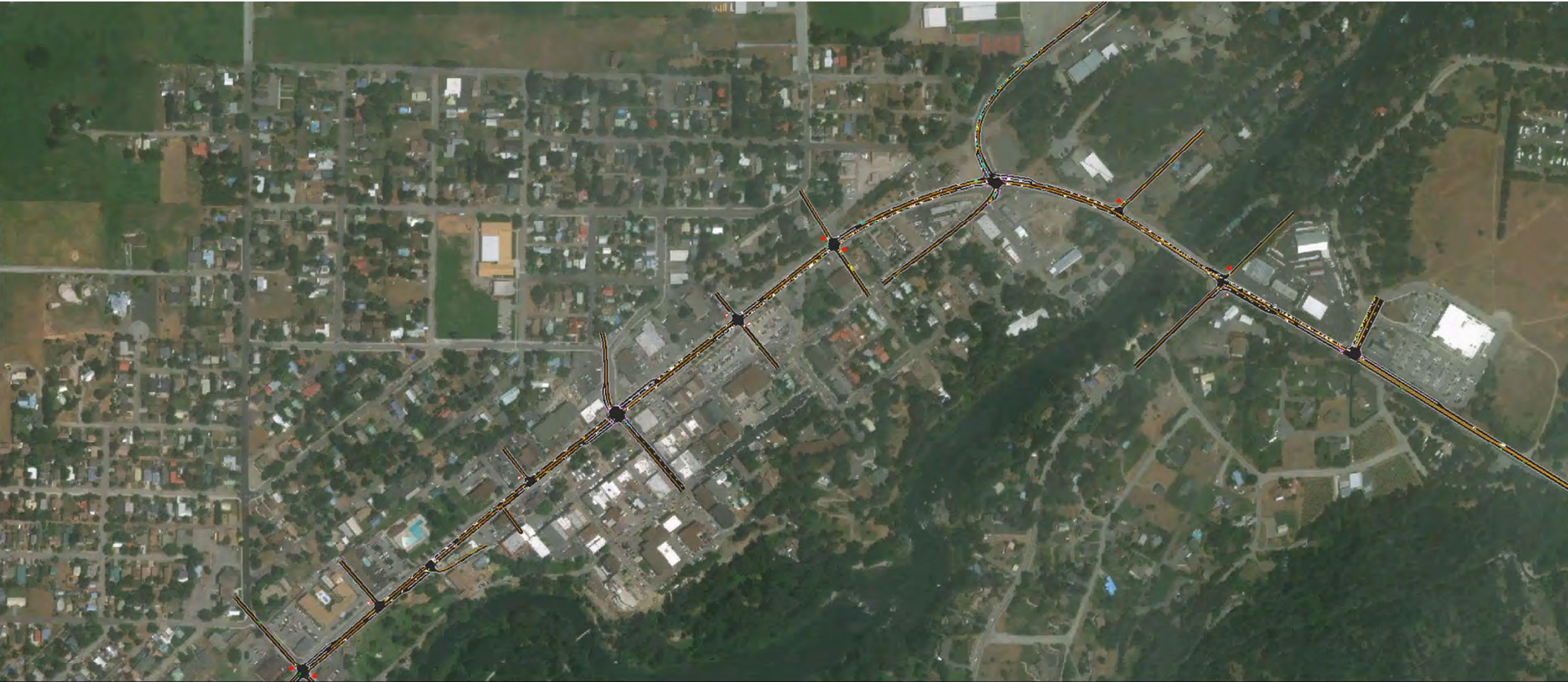


# Project Evaluation: The Approach

- Travel Time & Delay evaluated using **SimTraffic**
  - Micro-simulation tool that allows us to simulate actual conditions based on:
    - Geometry
    - Signal Timing
    - Vehicle Volume
    - Pedestrian Volume
  - First: **Validation** – does our model actually reflect what's happening?
  - Next - Evaluate projects under **Summer Sunday** or **Festival** Conditions



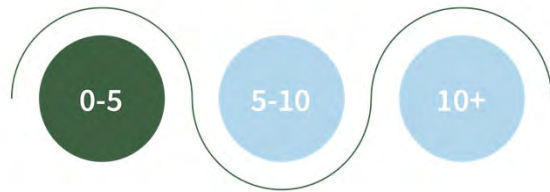




# Project Evaluation: The Approach

- Timeline:

- 0-5 Years
- 5-10 Years
- 10 Years +



- Cost:

- Low - \$0 - \$400,000
- Moderate - \$400,000 - \$3M
- High - \$3M+



- Engineering Considerations:

- Is the project known to increase safety?
- How are multi-modal and/or freight elements integrated?
- Does it fit within existing curb to curb width?
- Are there Right of Way constraints?
- What additional public coordination will be needed?
- Is it multi-jurisdictional?
- Is it practical?
- What are the environmental constraints? (slope, utilities, buildings, etc.)



# Project: Reallocate US 2 Right-of-Way (ROW)

**Project Description:** Reallocate US 2 ROW to provide dedicated facilities for bicycles, transit, and emergency access.

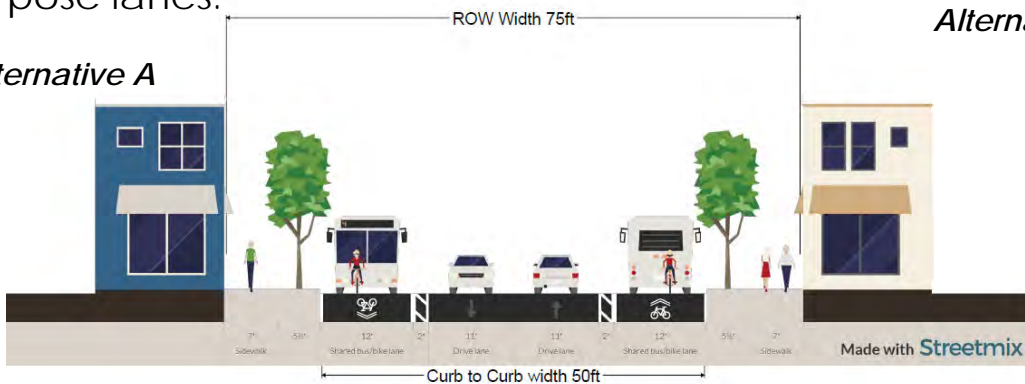
**Alternative A:** Dedicated lane for bicyclists and transit could be used by emergency services in addition to two general purpose lanes.

**Alternative B:** Dedicated lane for transit operating in both directions and a two-way separated bicycle path in addition to two general purpose lanes.

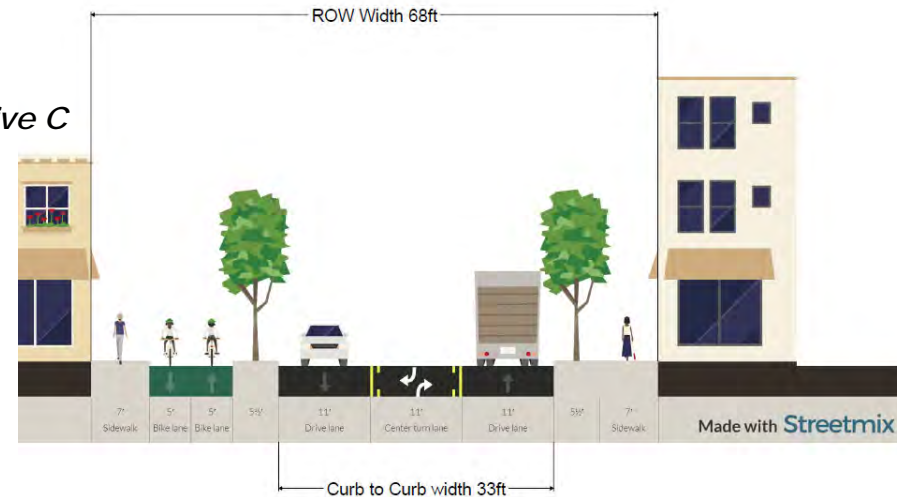
**Alternative C:** Two-way separated bicycle path adjacent to US 2 in addition to two general purpose lanes.



*Alternative A*



*Alternative C*

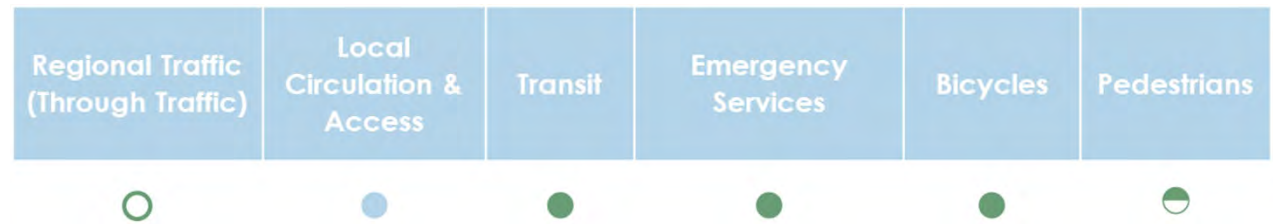




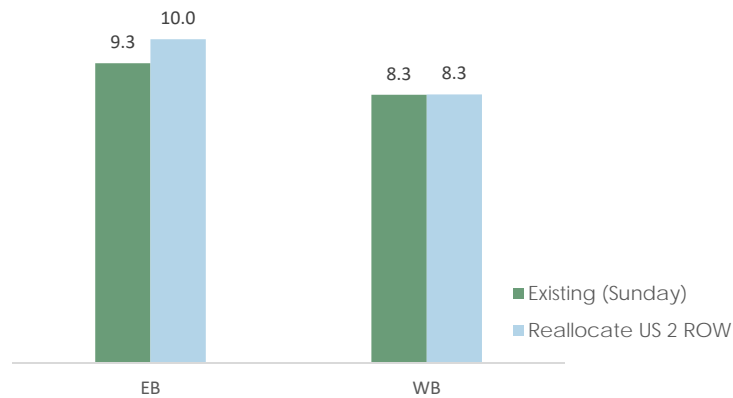
# Project: Reallocate US 2 Right-of-Way

## Project Benefits:

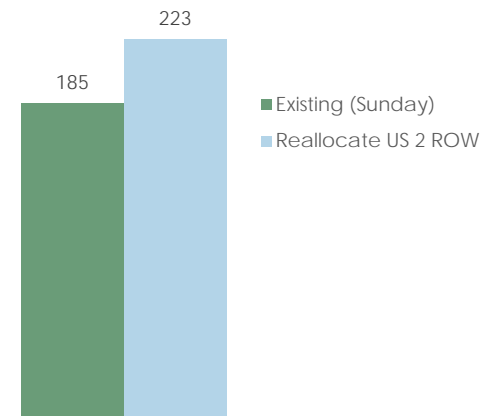
- Increased comfort for bicyclists (while transit frequency is low)
- Transit & Emergency services only experience intersection delay
- Increased buffer for pedestrians on US 2
- Encourage use of transit or circulator



Travel Time (minutes):



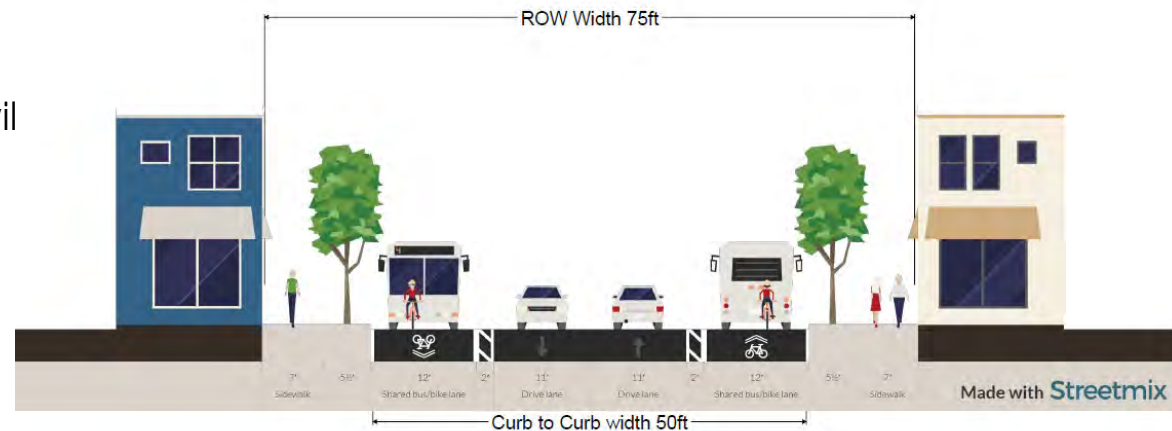
Vehicle Hours of Delay (hours):



# Project: Reallocate US 2 Right-of-Way

## Considerations:

- Can be accomplished within existing ROW width, curb lines in certain areas will need adjustment.
- Need to evaluate where left turn lanes can be added at intersections.
- Right turns are legal in shared bus/bike lane
- Curb-to-curb width is tight, but size of planter areas can vary.



Timeline (Years):

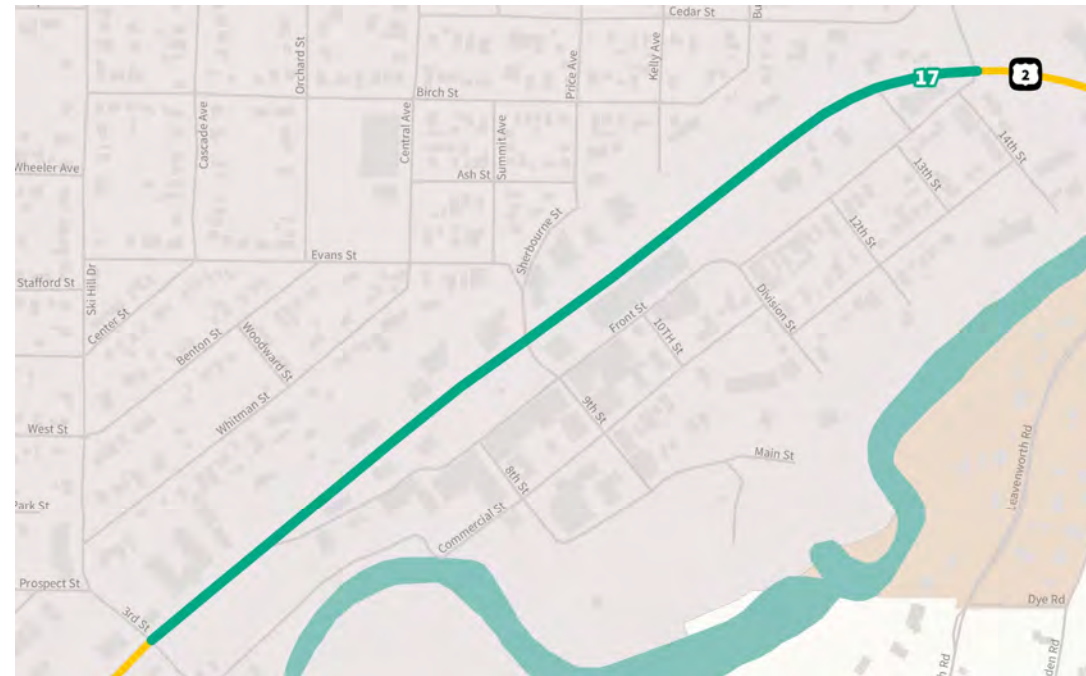


Cost:



# Project: Temporary Center Running Transit/Emergency Lanes

**Project Description:** Create a temporary transit/emergency services only lane during events or high congestion periods using the two-way-left-turn-lane



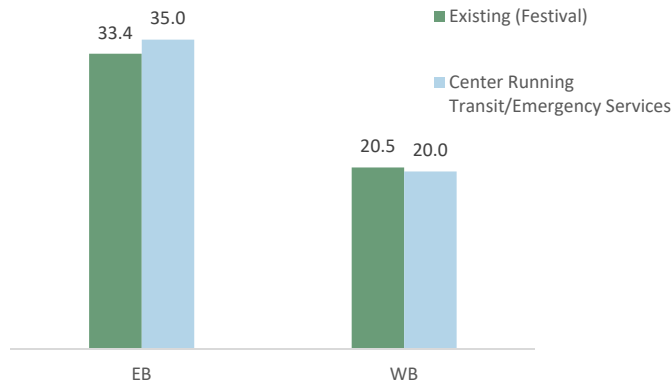
# Project: Temporary Center Running Transit/Emergency Lanes

## Project Benefits:

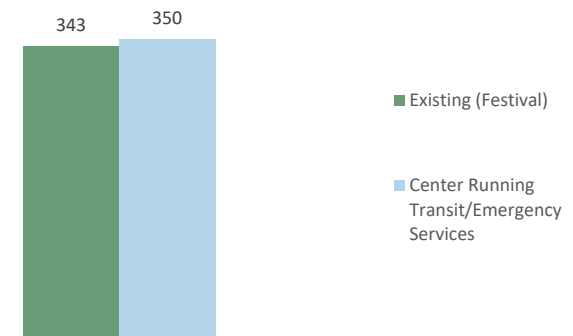
- Prioritizes transit/circulator option during events or high-congestion periods
- Improves emergency services access in/out of Leavenworth during events



Travel Time (minutes):



Vehicle Hours of Delay (hours):



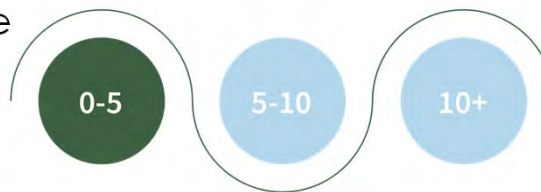
# Project: Temporary Center Running Transit/Emergency Lanes

## Considerations:

- Utilizes Temporary Traffic Control
- Left turns may be allowed at some intersections, but most restricted to Right-In / Right-Out
- Will require wayfinding signage for local access
- Thoughtful outreach required, along with creation of event specific traffic control plans.
- Only Link Transit and EMS could use it, as scheduling to use the lane would be critical (no tour or hotel busses)



## Timeline (Years):



## Cost:



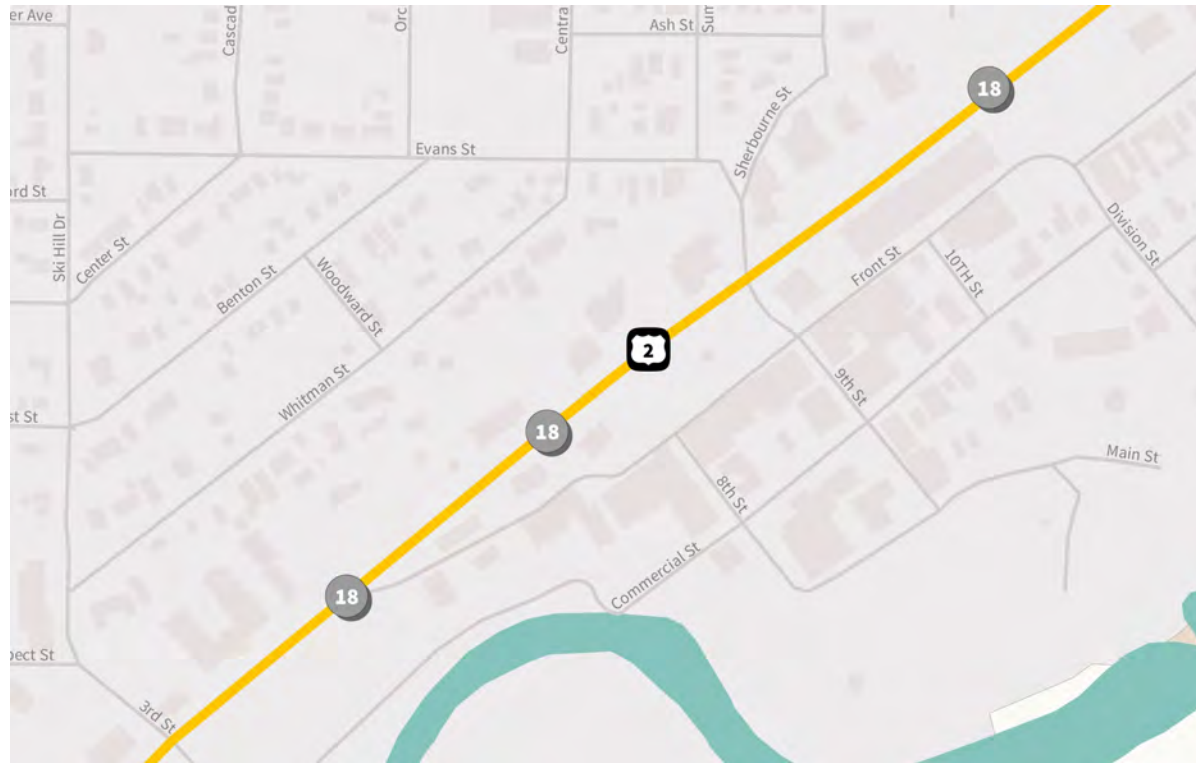


# Project: Grade-Separated Pedestrian Crossings

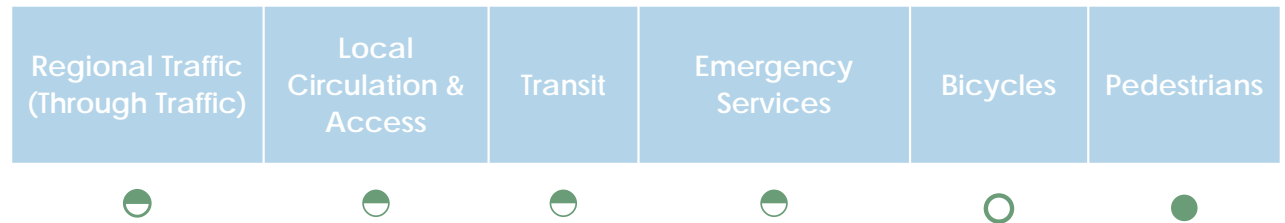
**Project Description:** This project would construct three grade-separated crossings at Front Street, City Hall, and the Park & Ride Lot separating pedestrians crossing US 2 from vehicle traffic on US 2.

## Project Benefits:

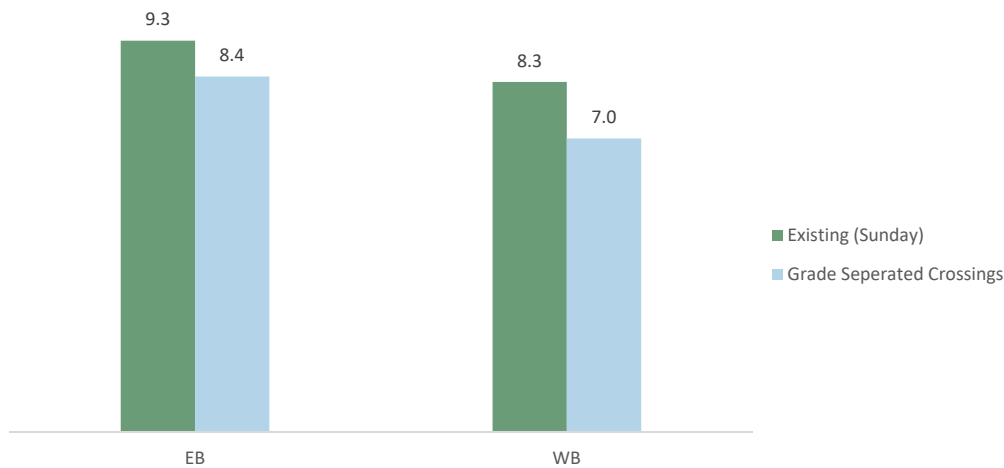
- Improved experience for the large number of pedestrians crossing US 2
- Signal timing can prioritize vehicle movements along US 2
- Bridge design and decorations/lights on over-crossing could contribute to community character



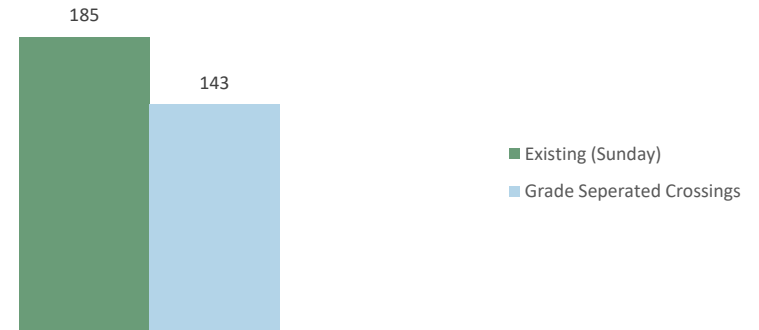
# Project: Grade-Separated Pedestrian Crossings



Travel Time (minutes):



Vehicle Hours of Delay (hours):





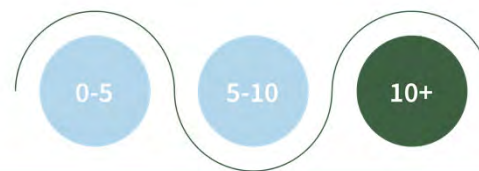
# Project: Grade Separated Crossing

## Considerations:

- Overcrossing or undercrossing?
- To meet ADA standards, will require long approaches to meet required minimum grades
- ROW likely required
- Should be combined with sidewalk buffers
- Locations can be prioritized with funding availability



## Timeline (Years):



## Cost:

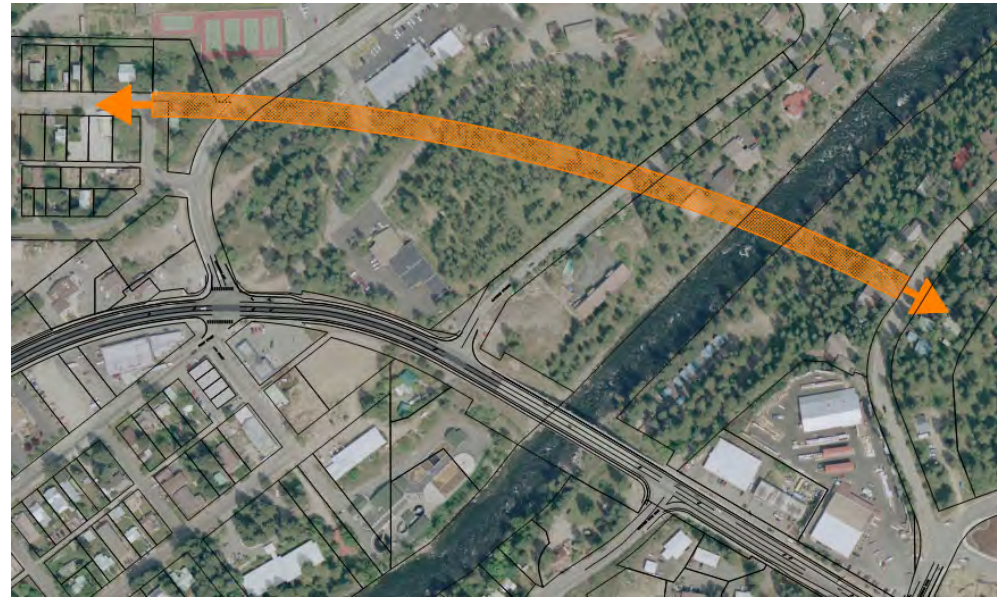


# Project: Pine Street Connection

- **Project Description:** Extension of Pine Street to include a direct connection with US 2 east of the river via a new bridge that includes dedicated bicycle and pedestrian facilities.

## Project Benefits:

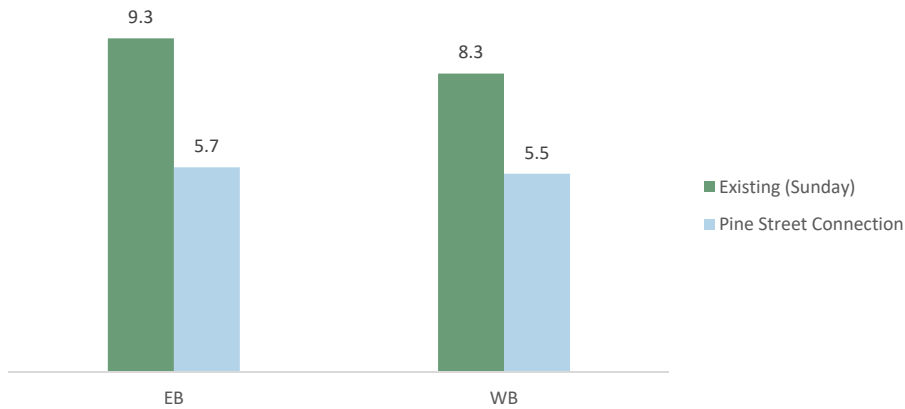
- Route Resiliency
- Improves local circulation and access
- Shifts local traffic from US 2



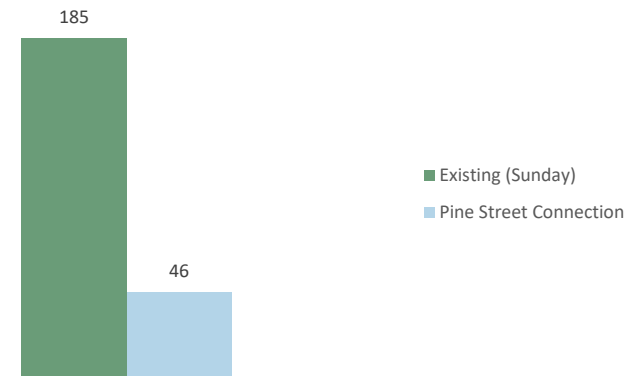
# Project: Pine Street Connection



Travel Time (minutes):



Vehicle Hours of Delay (hours):



# Project: Pine Street Connection

## Considerations:

- Will require significant Right-of-Way acquisition
- Highest Cost Project, and long timeframe
- Extensive public outreach required
- Environmental considerations for working Wenatchee River, several permits required.
- Improvements required at Chumstick, Alpensee Strasse, and Riverbend Drive.

## Timeline (Years):



## Cost:

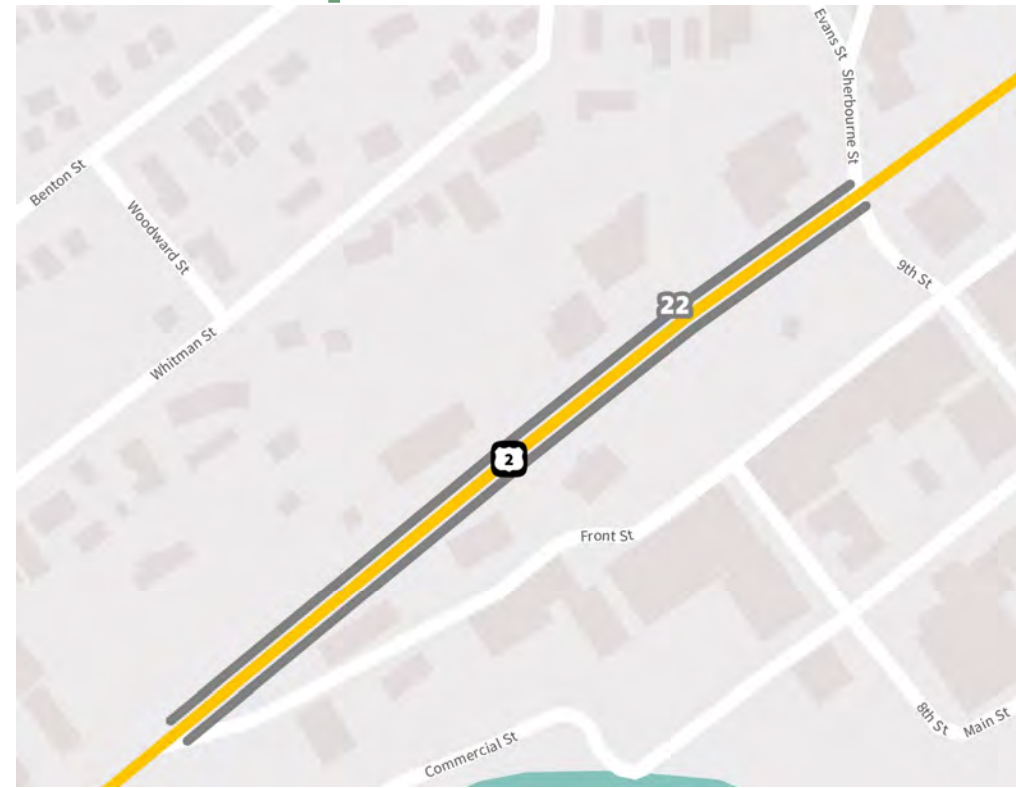


# Project: Enhance Modal Separation

**Project Description:** Enhance separation between vehicles and pedestrians on US 2 through visually appealing fence and/or vertical elements which would limit pedestrian crossings to marked-crossings and intersections.

## Project Benefit:

- Reduces pedestrians crossing US 2 at-will, improving flow of traffic on US 2 and improving pedestrian safety.





# Project: Enhance Modal Separation

## Considerations:

- Would require temporary feature on south side of US 2 until on-street parking is relocated
- Could be implemented as a first step for Grade-Separated Crossings

Regional Traffic (Through Traffic)	Local Circulation & Access	Transit	Emergency Services	Bicycles	Pedestrians
------------------------------------	----------------------------	---------	--------------------	----------	-------------



## Timeline (Years):



## Cost:



# Project: Parking Management

**Project Description:** Improve visitor parking opportunities through addition of more spaces including remote options, creating uniform standards to optimize existing capacity.

## Project Benefits:

- Create a 'Park Once' scenario for Leavenworth visitors when paired with other projects
- Eliminates congestion due to circulating traffic attempting to find parking
- Lowers number of vehicles traveling into Downtown Leavenworth





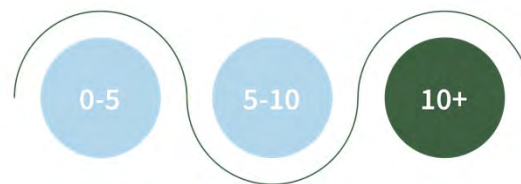
# Project: Parking Management

## Considerations:

- Would require active management of parking supply and messaging directing users to remote parking
- Policy changes to incentivize remote parking and cost analysis identifying locations and providing transit/shuttle links
- Required to capture full benefit of other projects



## Timeline (Years):



## Cost:



# Project: US 2 Roundabouts

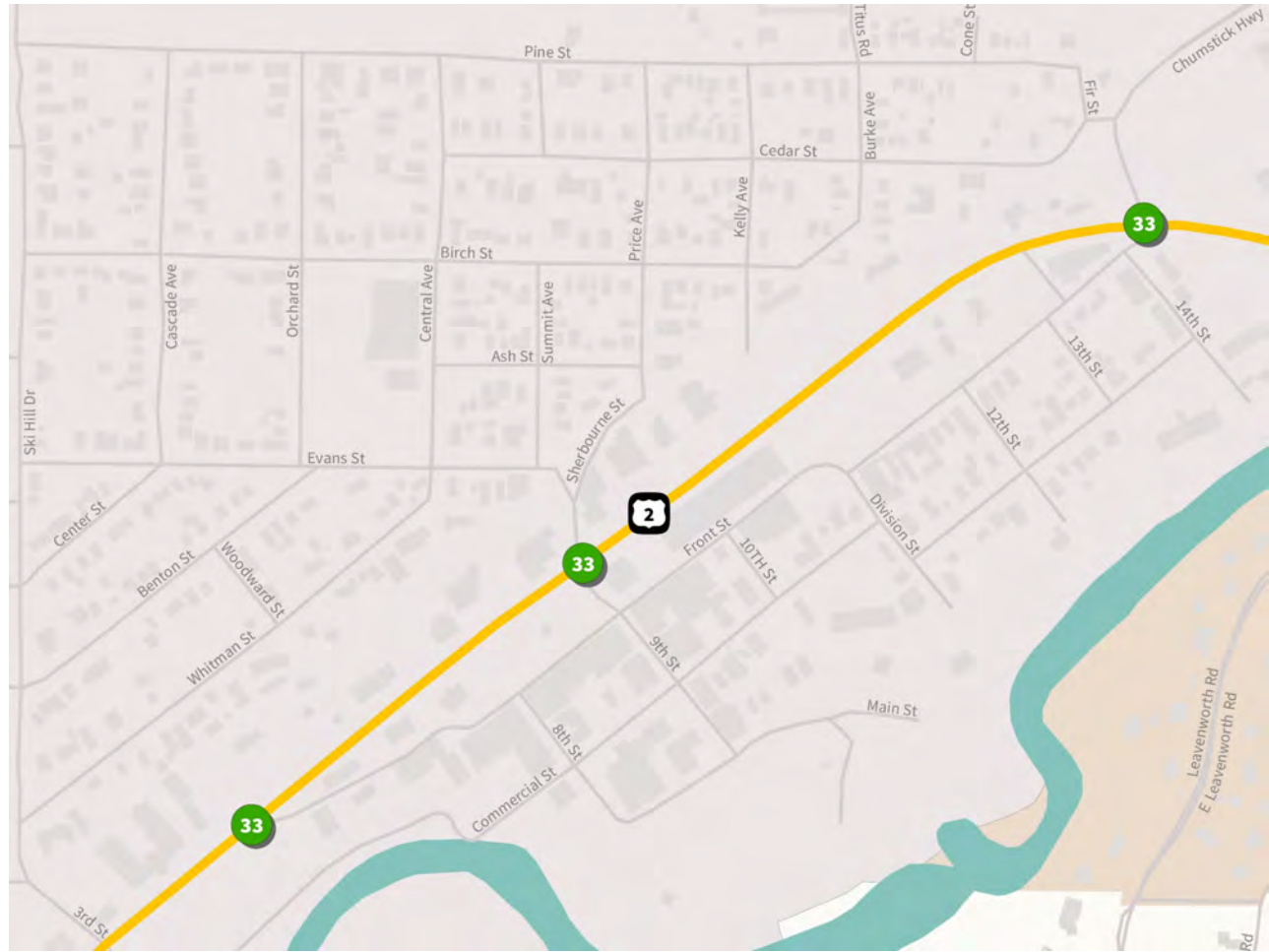
**Project Description:** Construction of single-lane roundabouts at major US 2 intersections (Chumstick/9<sup>th</sup> Street/Front Street)

## Alternatives Considered:

- Additional Roundabout at Ski Hill Drive
- Roundabouts paired with limited local access

## Project Benefits:

- Improved flow for eastbound/westbound traffic on US 2
- Fewer conflict points for pedestrians in roundabout configuration



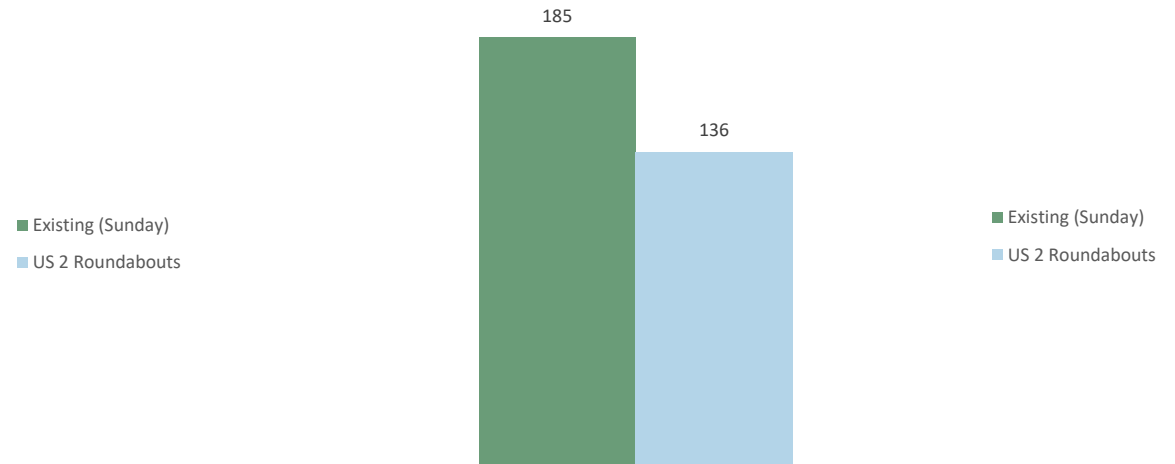
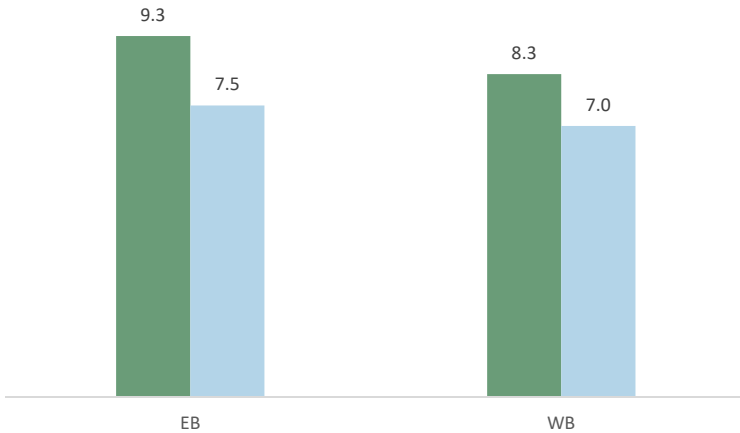
# Project: US 2 Roundabouts

Regional Traffic (Through Traffic)	Local Circulation & Access	Transit	Emergency Services	Bicycles	Pedestrians
------------------------------------	----------------------------	---------	--------------------	----------	-------------



Travel Time (minutes):

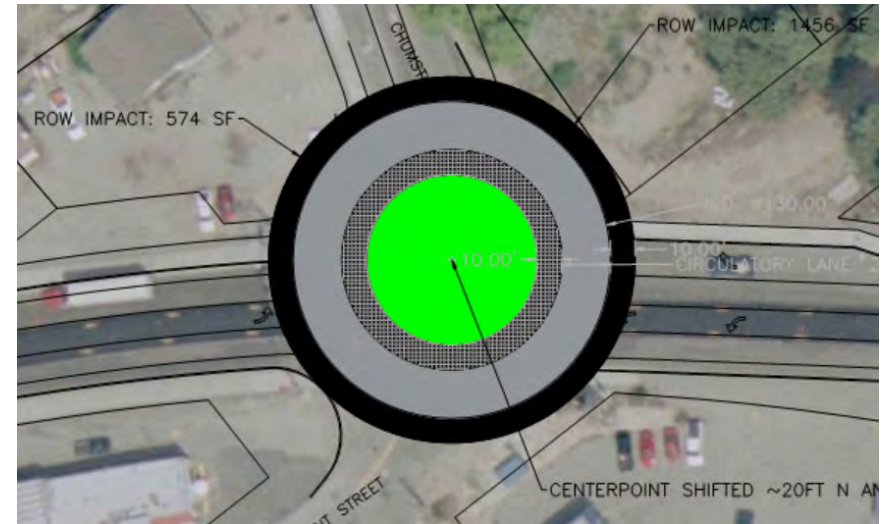
Vehicle Hours of Delay (hours):



# Project: US 2 Roundabouts (Chumstick)

## Considerations:

- This is a very basic initial sizing – doesn't account for splitter islands.
- Initial design size of inscribed circle diameter (ICD) is based on allowing a WB-67 to make the turns left or right. This may not be necessary based on freight types and routes.
- With an ICD of 130' would likely need a 15-20 foot apron to make the left or right turn possible.
- It's possible to create a mini-roundabout allowing trucks to drive over center apron.
- Angle of Front Street connection would require shifting the center point.



## Timeline (Years):



## Cost:

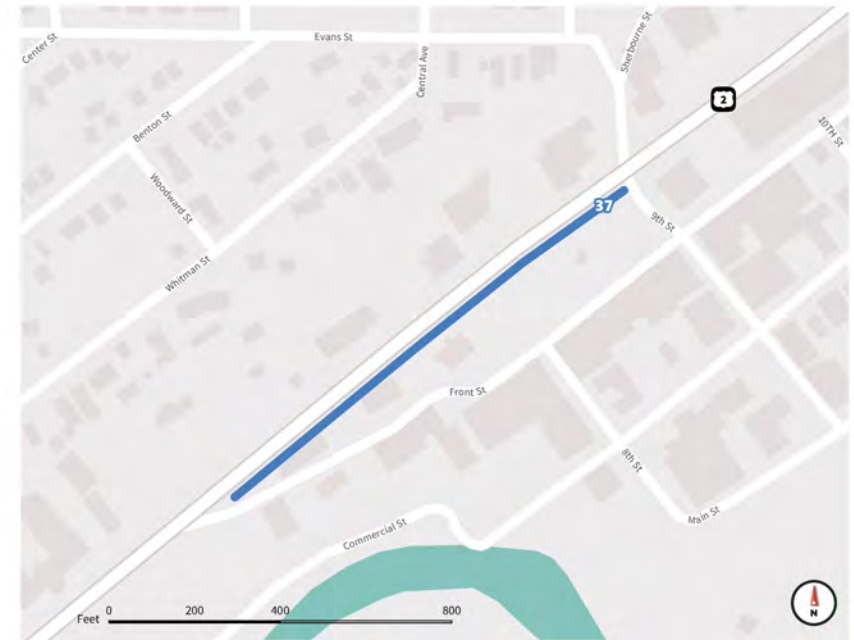


# Project: Parking Flex Space & US 2 Bicycle Lane Connection

**Project Description:** Transition current tour bus drop-off located next to Front Street Park into a flexible space that could serve delivery drop-offs, tour bus drop-off, and on-street parking and connect existing US 2 bicycle lane.

## Project Benefits:

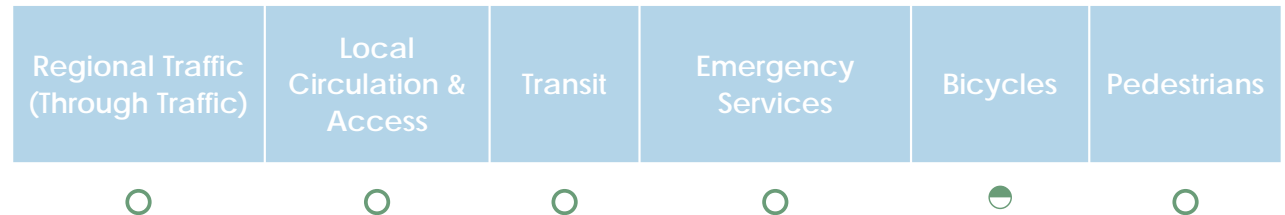
- Dedicated space for bicyclists on most active part of US 2 and moves bicyclists out of lane of traffic
- Provide designated space for delivery vehicle unloading
- Serve multiple users in one space (more efficient use of space)



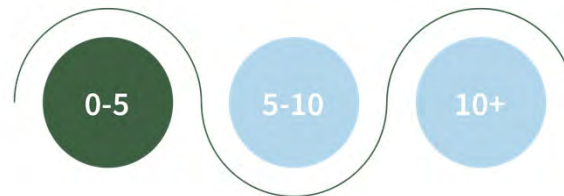
# Project: Parking Flex Space & US 2 Bicycle Lane Connection

## Considerations:

- On-Street Parking Occupancy in Downtown Leavenworth is greater than 100% (includes illegal parking) today during high-demand periods.
- Deliveries occurring on US 2 should be limited to businesses with US 2 frontage, other deliveries occur on Front Street.



## Timeline (Years):



## Cost:



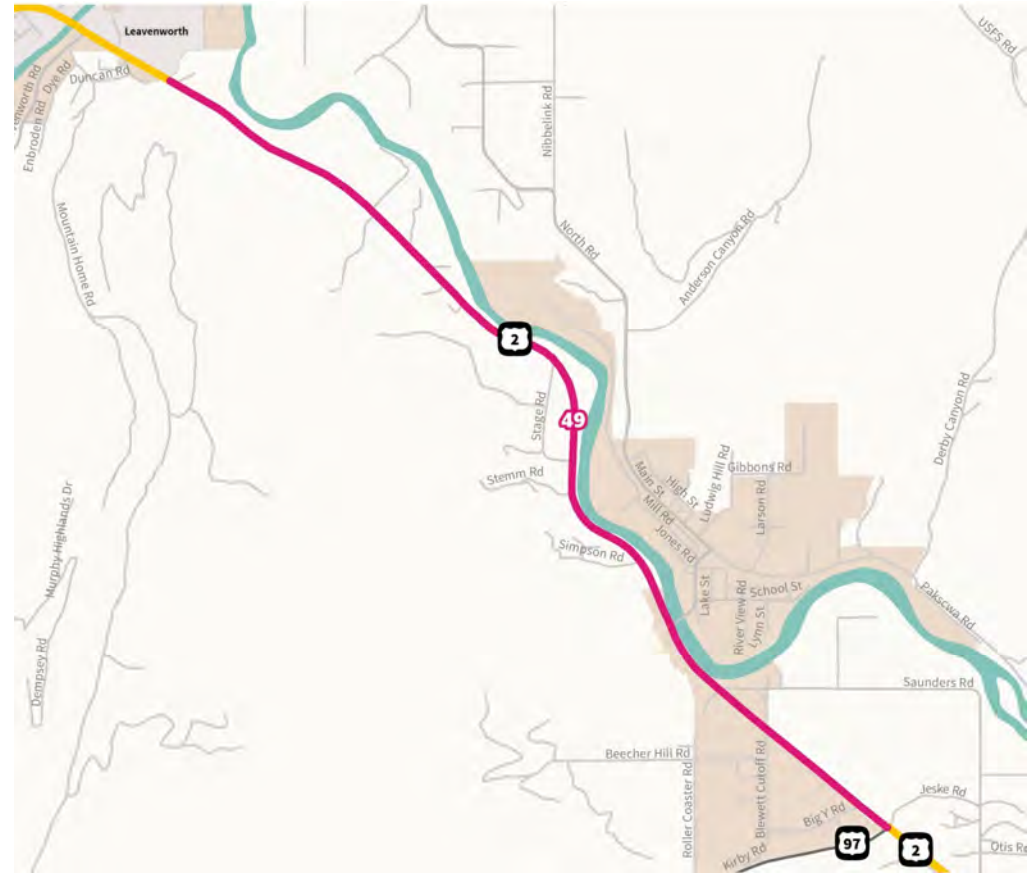


# Project: Transit-on-Shoulders

**Project Description:** Project would improve US 2 shoulders between SR 97 and Leavenworth City Limits to accommodate transit on the shoulders when congestion is occurring on US 2.

## Project Benefits:

- Allow transit to bypass high congestion on US 2
- Additional room for emergency vehicles
- Improve transit route reliability
- Incentivize use of Park & Ride spaces between Wenatchee & Leavenworth

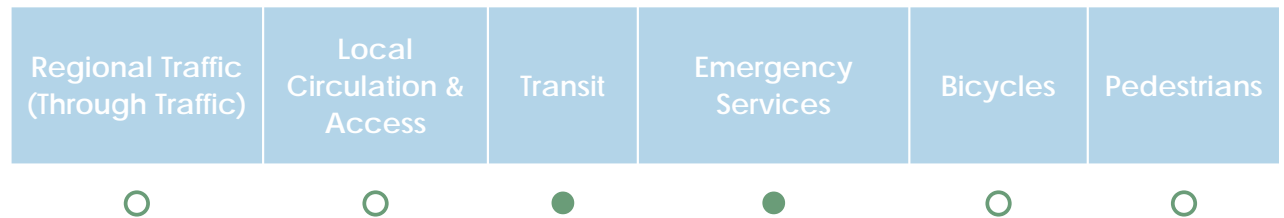




# Project: Transit-on-Shoulders

## Considerations:

- Transit must be prioritized in Leavenworth to capture new users
- Shoulder width and condition varies



## Timeline (Years):



## Cost:



# Project: Bicycle & Pedestrian Improvements at Peshastin Bridge

**Project Description:** Parallel structure for bicycles and pedestrians at Peshastin Bridge providing access from Peshastin to Route 22 stops on US 2.

## Project Benefits:

- Would provide separated facility for bicycles and pedestrians
- Improve Main Street/ US 2 intersection to provide marked-crosswalks and sidewalk connection to Link Transit stop
- Improve connection from new bridge end to School Street



# Project: Bicycle & Pedestrian Improvements at Peshastin Bridge



Timeline (Years):



Cost:



# Meeting Agenda

- Project Grouping: Process & Recommendations
- Project Evaluation Findings
- Project Feedback Exercise ←
- Project Next Steps & Overview



# Project Feedback Exercise

We want you to tell us.....

- What are you excited about? Why?
- Is there something you don't like? Why?



Project	Shane Coakley	Scott Bradford	Nancy Smith	Craig Christensen	Dave Kelle	Nick Mancini	Paula Cox	Bergant Dean Woodard	Jeff Wilkins	Joel Walczak	Richard DeBrock
1. Reallocate US 2 ROW (Alternative A)											
2. Temporary Center Running Transit/Emergency Lane											
3. Grade-Separated Pedestrian Crossings											
4. Pine Street Connection											
5. Enhance Modal Separation											
6. Parking Management											
7. Roundabouts @ Front Street, 9th Street, Chumstick Highway											
8. US 2 Parking Flex Space & Bicycle Lane Connection											
9. Transit on Shoulders											
10. Bicycle & Pedestrian Bridge in Peshastin											

# Meeting Agenda

- Project Grouping: Process & Recommendations
- Project Evaluation Findings
- Project Feedback Exercise
- Project Next Steps & Overview ←



# Project Timeline & Next Steps

- Now – November 1<sup>st</sup>
  - Finish Project Evaluation & Refine Based on PAC Feedback
  - Identification of Recommend Investments
  - Development of Draft Plan
- Early November
  - Next PAC Meeting – Community & Leavenworth City Council Invited
- Mid-November
  - Publish Draft Plan for Community Input
- January 2020
  - Final Plan







US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## Project Advisory Committee Meeting #4

Wednesday, September 26, 2019

11:00 AM – 1:00 PM

### AGENDA ITEM #1: WELCOME

#### In-Person Participants:

- Penny Mabie, EnviroIssues
- Jeff Wilkens, CDTC
- Nancy Smith, Leavenworth Chamber of Commerce
- Duane Goehner, Citizen, Friends of Leavenworth
- Joel Walinski, City of Leavenworth
- Kendra Breiland, Fehr & Peers
- Kara Hall, Fehr & Peers
- Bianca Popescu, Fehr & Peers
- Jennifer Saugen, Perteet
- Pete Collins, Rick Williams Consulting
- Sergeant Jason Reinfeld, Chelan County Sheriff
- Nick Manzano, WSDOT
- Richard DeRock, Link Transit
- Josh Patrick, Chelan County
- Dave Nalle, Chelan County Fire Department
- Scott Bradshaw, City of Leavenworth Planning Commission

#### In-Person Observing:

- Richard Warren, WSDOT
- Jim Mahugh, WSDOT
- Lilith Vespier, City of Leavenworth

Purpose of Meeting: Present PAC Members with Project Grouping & Project Evaluation Findings. Ask PAC Members for Feedback on Projects Evaluated.

### AGENDA ITEM #2 – PROJECT GROUPING

- Process To Date:
  - PAC Input

- Which users do we serve where along the corridor?
- What should inform the Vision & Guiding Principles?
- Adoption of Vision & Guiding Principles
- What metrics should we use to evaluate project ideas?
- Does our criteria work?
- Feedback on Project Selection & Evaluation (Today)
- Public Input
  - Survey for Vision & Guiding Principles – Community selected Safe & Complete and Reliable as two most important principles.
  - Local input collected at Leavenworth Farmers Market
  - Online Project Map
    - Input on our Ideas
    - New Ideas
- Project Team:
  - Developed Vision & Guiding Principles for Input
  - Existing Planning & Context Memo
  - Holiday & Summer Data Collection
  - Project Evaluation Matrix
  - Project Grouping
  - Selected Project Evaluation
  - Gathered Agency Input on Project Ideas
- Project Groups:
  - Selected for Evaluation: Projects evaluated in more detail, focus of PAC Meeting #4
  - Quick Wins & Small Steps: Projects that can be implemented within six years, could be moved forward by responsible agency with additional focus from this study.
  - Vision Project: Project outside scope of this study due to extend timeline for implementation or funding.
  - Project Not Advancing: Project screened through evaluation matrix.
- Project Grouping Process:
  - 75 projects total – Split into Tier 1,2,3 based on scoring
    - Projects scoring 20 or less points out of 60 points were considered Tier 3
    - All Tier 3 Projects Screened
  - Projects Must Advance Three or More Guiding Principles including top two identified by the community (Safe & Complete, Reliable)
  - Project must align with Vision for US 2
  - Does the Project Have A Fatal Flaw?
  - Results:
    - 10 Projects Selected for Evaluation
    - 19 Quick Wins & Small Steps
    - 10 Vision Projects
    - 36 Not Advancing

### AGENDA ITEM #3 – PROJECT EVALUATION FINDINGS

- High level project evaluation metrics:

- Safety: Improvement or elimination of known area of concern, or improves user experience.
- Travel time: How long does it take to drive between Icicle Road & River Bend Drive?
- Parking: Does the project change the parking supply? Encourage more efficient use of existing supply? Does the project encourage use of remote lots?
- Right of Way: Impact to the built or natural environment.
- Vehicle Hours of Delay: Measure of total delay experienced by drivers.
- The traffic approach of project evaluation
  - Utilized SimTraffic to evaluate Travel Time & Vehicle Hours of Delay.
    - State of the Practice Microsimulation tool used to simulate actual conditions on the corridor considering:
      - Signal timing and geometry
      - Vehicle Volume
      - Pedestrian & Bicycle Volume
      - Driver Behavior
  - First step is validation to be sure we are accurately representing the corridor.
    - Visual inspection and travel time in the simulation must match collected travel time within 15%.
      - Travel Time data collected on a Friday & Sunday.
        - Used Sunday volumes since they were slightly higher as our baseline conditions
        - Projects recommended for use only during Festivals/Events were analyzed using data collected during Tree Lighting
- Project Timeline:
  - Short-Term – 0-5 Years
  - Mid-Term – 5-10 Years
  - Long Term – 10+ Years
- Cost:
  - Low – \$0-\$300K
  - Moderate - \$300K - \$3M
  - High - \$3M
- Design Considerations:
  - Safety elements that would need to be included
  - Multimodal or freight elements required
  - Does it fit within existing curb to curb?
  - Right-of-Way (ROW) constraints
  - Additional public coordination – based on timeline, cost
  - Multi-jurisdictional
  - Environmental constraints
  - Utilities may need to be moved
- Projects Presented (See Attachment for Project Description & Findings)
  - Reallocate US 2 ROW
  - Temporary Center Running Transit/Emergency Lane

- Grade-Separated Pedestrian Crossings
- Pine Street Connection
- Enhanced Modal Separation
- Enhanced Modal Separation
- US 2 Roundabouts
  - PAC Member Question: Do we expect roundabouts to operate well enough not to back-up through roundabouts and limit local street access to US 2.
    - Kara noted that while we are doing additional analysis for roundabouts to understand what the gaps will be allowing local trips to access US 2, current results do not indicate spill-back through roundabouts limiting local access.
  - PAC Member Question: Do we expect the large number of pedestrians to impact roundabout operations?
    - Kara noted that pedestrian volumes, especially during event traffic, are a concern for this alternative. There are multiple options for pedestrian treatments at roundabouts that we will be considering as we continue to evaluate roundabouts.
- Parking Flex Space & US 2 Bicycle Lane Connection
- Transit-on-shoulders
- Peshastin Bike & Pedestrian Bridge with Transit Connection

#### AGENDA ITEM #4 – PROJECT FEEDBACK EXERCISE

- Each PAC Member provided two dots to select projects they like, could also cross out project not supported.
- Projects Not Supported:
  - Project # 17 – Temporary Center Running Lane
    - Not most efficient use of ROW/Transit
  - Project #33 – Roundabouts
    - Concern for high-pedestrian numbers and elimination of other projects
    - Concern for roundabouts during high demand periods – need more analysis
  - Project #19 - Pine St connection
    - So close to existing US 2 Bridge – should we just widen existing bridge?
    - US 2 / River Bend Drive already operates poorly – concern for impact from changes at that intersection.
- Projects Supported:
  - Project # 16 – Reallocating US 2 ROW – Most supported project
    - Chelan County Sheriff - likes that there are now four lanes to work with and that emergency vehicles using transit lanes. Useful during festival events, drawback is vehicles not turning right using lane.
    - Link Transit – Support for concept for concern for Business Access Transit lane because people utilize lane when they aren't turning right. Illegal use is very hard to enforce under current legislation. May be able to control with barrier.

Center running transit lane may make more sense with pedestrian islands for stops.

- Other Input:
  - Snow removal may be fatal flaw for physical barrier
  - Need to maintain left-turns at intersections, especially front street
- Project # 18 – Grade-Separated Pedestrian Crossing
  - WSDOT Input:
    - Paris well with Reallocating ROW
    - Water Table may be fatal flaw for undercrossing option but either option could be designed to work well
  - Chelan County Sheriff:
    - Currently all traffic has to be stopped to move pedestrians on US 2 during events, this could bypass need to do that and keep traffic moving.
  - Chelan County Fire:
    - Many close calls with pedestrians occur at night – separation of vehicles and pedestrians could eliminate this
  - Other Input:
    - Overcrossing could be an issue with snow and ice – would need to have a roof
    - Some members think community would support, others think community support may be limited
      - Some locals might prefer to see money allocated to other investments like parking
    - Either over/undercrossing would work, but need to ensure they are designed to get usage
    - Needs to be paired with option to limit ability to cross US 2 between over/undercrossing.
- Project # 19 - Pine Street Connection
  - Leavenworth Planning Commission – Long term solution, Leavenworth needs bypass
    - Could consider alternative locations
- Project #22 – Enhanced Modal Separation
  - Support for cost-effective solution in support of other projects
- Project #30 - Parking Management
  - Planning Commission: Good short term solution to get traffic off the street
    - Good short term way to get traffic off of the street
    - Need to utilize signage & apps
    - Get people in /out quickly, reduce circulation as people are looking for a spot
  - CDTC– Do the best with what you have, positive momentum in town right now for parking solutions
  - WSDOT – think it has to happen regardless, city currently pursuing implementation of some recommendations

- City of Leavenworth– reallocating US 2 will help people use the further parking, along with a shuttle service
- Project #33 - Roundabouts
  - Chelan County – Support for roundabouts paired with Grade-Separated crossings
    - Noted consideration for signals at end of the corridor
  - Chamber of Commerce – noted existing bottleneck locations like E. Leavenworth Road and Ski Hill Road should be considered.
  - Planning Commission – noted concern for driver demographic and understanding
- Project # 49 – Transit-on-Shoulders
  - Link Transit – Project would help with need to get to P&R with shuttles and incentive use of existing Park & Rides between Wenatchee and Leavenworth
    - Concern for cost because it could be more expensive than it appears
  - WSDOT- supports project with considerations for existing structures
  - Kendra noted that other ITS solutions like queue jumps and preemption could be utilized to limit impact
- Project # 52- Peshastin bicycle/ped bridge
  - Link Transit noted that the cost of turning into Peschastin costs approximately \$250,000 per year, improvements with transit stop would save 6 minutes from route time and the current configuration is a barrier to ridership in the area
- Lighting Round – Where would you put a third dot?
  - Leavenworth Planning Commission - Transit-on-Shoulders
  - Chelan County – Reallocate US 2 ROW
  - Chelan County Sherriff – Parking Management
  - CDTC – Pine Street Connection
  - Chelan County Fire – Parking Management
  - Link Transit– Peshastin Bike/Ped Bridge & Transit Connection
  - Leavenworth Chamber of Commerce – Pine St connection
  - WSDOT – Transit-on-Shoulders
  - Friends of Leavenworth/Citizen – Reallocating ROW
  - City of Leavenworth – Pine Street Connection

## AGENDA ITEM #5 – NEXT STEPS

- Now - November: Finish Project Evaluation & Refine Recommended Investments based on feedback from today
  - Kara noted this will rely on feedback today, Project Guiding Principles & Vision and Practical Solutions Framework
- Next PAC meeting early November – Community and City Council Invited
  - Festhalle location potentially? Or high school?
  - Would be evening format
- Mid-November: Publish draft for community input on website, PAC will help us share this information
- January 2020 – Final Plan

Project Advisory Committee Meeting #5  
January 29, 2020





US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## PROJECT ADVISORY COMMITTEE MEETING

Wednesday, January 29, 2020

Leavenworth City Council Chambers

11:00 AM – 1:00 PM

### AGENDA

#### Purpose of the Meeting:

Topic	Facilitator	Time
1. Welcome	Penny Mabie	10 min
2. Project Analysis & Fatal Flaws	Kara Hall/Jenn Saugen	20 min
3. Recommended Investments	Kara Hall/Jenn Saugen	60 min
4. Upcoming Community Input Opportunities	Penny Mabie	15 min
5. Project Next Steps	Kara Hall/Jeff Wilkens	15 min



## Fatally Flawed Projects

Twelve project ideas were identified as having a fatal flaw that would make them either infeasible to implement or inconsistent with the ultimate goals of this US 2 corridor plan. Fatal flaws were identified through input from the community, stakeholders, the PAC, and in some cases through technical evaluation.

All projects identified as having a fatal flaw can be found in the Project Evaluation Matrix in **Appendix E**. Four major capital investments that were found to be fatally flawed are summarized below.

### Roundabouts at Primary US 2 Intersections

One question that has been frequently asked is if converting US 2 intersections to roundabouts would better manage traffic by improving local access to US 2 and removing signal delay. The project team evaluated the feasibility of constructing roundabouts at three major US 2 intersections: Ski Hill, 9<sup>th</sup> Street, and Chumstick Highway. Through the project evaluation process, this project was identified as a Tier Two project using the Project Evaluation Matrix. The project also received community and PAC member support and advanced four of the five Guiding Principles (Safe & Complete, Reliable, Vibrant, and Supported). As a result, a traffic simulation analysis of this project was performed.

The evaluation of this project in greater detail led to the identification of two fatal flaws: queueing on US 2 and the inability to implement temporary traffic control once roundabouts were in place.

Simulation of the US 2 corridor through Leavenworth with roundabouts at these intersections indicated that on a summer weekend queueing along the corridor would spillback into upstream roundabouts creating operational failures. The analysis also indicated that heavy through traffic flows on US 2 would result in relatively few gaps for traffic from local streets to enter the roundabout, which could exacerbate high delays for residents and traffic attempting to access US 2.

Another key limitation of roundabouts is the inability to deploy temporary traffic control measures. Given the dynamic nature of Leavenworth and the need for flexible traffic management during events like Oktoberfest and the Tree Lighting Festival, or even more critically, during a natural disaster, the limited flexibility associated with roundabouts was also identified as a fatal flaw. For example, in the event an evacuation was needed, the current two-way-left-turn lane could be repurposed as a receiving lane to add capacity in the eastbound direction. With a roundabout in place, this repurposing of space would no longer be possible.

Identification of these two fatal flaws resulted in the recommendation that this project be removed from further consideration as part of this study.



## US 2 Widening

When the traffic volume on a roadway exceeds capacity and results in heavy congestion, as is experienced during peak times on US 2, one of the most apparent solutions is to widen the roadway. With approximately 60 feet of space between curbs on US 2 through Leavenworth, the widening of US 2 from two general purpose lanes and a two-way-left-turn lane to four general purpose lanes was considered.

While additional capacity through Leavenworth could reduce delay for through trips on the corridor, impacts to local access, parking, bicycle lanes, and sidewalks would be substantial. Right-of-way exists to accommodate four lanes of travel, but maintaining local access at US 2 intersections would require the removal of parking both on-street and in some business parking lots along the corridor. This would also require sidewalks along US 2 to be narrowed throughout Leavenworth. Widening the highway would also eliminate the ability to accommodate bicyclists on US 2 as it would require removal of the existing on-street bicycle lanes. This would force bicyclists to choose another route through Leavenworth or use the sidewalk with pedestrians.

With any roadway widening project, one important consideration is induced demand. As a result of the congestion that occurs today on US 2 through Leavenworth, it is likely that there are additional users who want to travel on US 2 but choose not to. These users may be taking alternate routes, either local or regional, shifting their travel to off-peak times, or using alternative modes like biking or walking. As widening US 2 through Leavenworth would be expected to reduce congestion and make traveling on US 2 more appealing, this may lead to users altering their routes, travel times, or mode choices, resulting in an increase in demand on US 2.

Lastly, for US 2 widening to be truly effective, the widening would need to extend all the way to SR 97. Through a micro-simulation evaluation of two-lane travel through Leavenworth, the simulation indicated that at the east end of Leavenworth, the transition from two through lanes of travel to a single through lane would create a bottleneck resulting in significant queuing and congestion.

A high-level cost estimate developed for widening US 2 from the west end of Leavenworth to SR 97 resulted in a cost of \$32,000,000.<sup>1</sup> Given the costs required to widen US 2 through this entire section and the impact of widening US 2 to local access and biking on the corridor, this project was identified as not feasible and removed from further consideration.

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<sup>1</sup> Cost-estimated using estimated cost per mile for roadway improvements developed by Arkansas Department of Transportation. Costs for widening from a 2 lane to 4 lane roadway in an urban area were determined to be most applicable to the Leavenworth section. Given the extent of rock blasting and bridge widening determined necessary for widening between Leavenworth and SR 97, costs associated with construction of a new roadway in a mountainous area were determined to be most applicable to that section. This cost estimate does not include a number of other likely costs, such as right of way acquisition.



## Improving Parallel Routes

Another question that often comes up is whether there's the opportunity create a US 2 bypass or sufficiently improve parallel routes to offer a viable US 2 alternative. To answer this question, the project team considered what it would take to improve three potential US 2 alternatives.

### *Icicle Road to East Leavenworth Road*

The first route considered, Icicle Road to East Leavenworth Road is an alternate route for the segment of US 2 through Leavenworth. This route provides access to resorts and residential areas located in Chelan County. Both Icicle Road and East Leavenworth Road are two-lane roadways; however, Icicle Road has paved shoulders wide enough to accommodate bicyclists, while East Leavenworth Road has no shoulders. Both roadways are also heavily utilized by bicyclists and other recreational modes of travel and have direct access to residential driveways.

Improving this route to serve as an official alternate to US 2 through Leavenworth would require substantial improvements to both Icicle Road and East Leavenworth Road. On East Leavenworth Road, widening would be required to provide a dedicated space for bicyclists or other non-motorized modes that is separate from vehicles. Increased demand on these roadways would also require significant improvements to the pavement and increase on-going maintenance costs as trucks and recreational vehicles degrade pavement faster than passenger-cars. A high-level cost estimate for this project indicates that roadway reconstruction with needed widening to improve the roadway for more consistent use would be approximately \$15,000,000.<sup>2</sup>

While the costs of capital improvements and the on-going maintenance that would be required for these roadways is one consideration in this project's feasibility, the intended use of the roadway must also be considered. This area provides public access to several recreational areas, including trailheads and Icicle Creek, some of which are located directly adjacent to the roadways. Land use in this area is mostly residential, with many residents having direct access to both Icicle Road and East Leavenworth Road. With no other route options into Leavenworth, these residents would be heavily impacted by use of these roadways as an alternate route. This impact to residents led to this project being unsupported by project stakeholders and ultimately identified as having a fatal flaw likely to prohibit the project from moving forward.

### *North Road to Chumstick Highway*

A second route that was considered as an option to bypass both Leavenworth and Tumwater Canyon is North Road to Chumstick Highway, which connects to SR 207 before reconnecting with US 2 at Coles Corner.

Chumstick Highway is a narrow two-lane road with hairpin curves that prevent large trucks from using this route. North Road is also a narrow two-lane roadway with no shoulder. North Road is

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<sup>2</sup> Cost-estimated using estimated cost per mile for roadway improvements developed by Arkansas Department of Transportation. Assumes 10 lane-miles of reconstruction for a rural non-freeway facility.



also heavily used by the agricultural land uses between Peshastin and the connection to Chumstick Highway.

This route was identified as having several fatal flaws by the project team and stakeholders. The first being safety. While Chumstick Highway is currently used as an alternative route when Tumwater Canyon is closed, encouraging more use of this route would require significant safety improvements. These improvements would require straightening of roadway to eliminate hairpin curves on Chumstick Highway that make it inaccessible to some vehicles. On North Road, an increase in traffic volumes (which would include general purpose traffic and agricultural vehicles) would also require safety improvements such as widening to provide shoulders.

The construction and widening of shoulders along with improving horizontal curves, signage and safety, between Fox Road and Nibblelinke Road was identified as a 20-year project in Chelan County's Transportation Element. The planning level cost estimates for these improvements resulted in an estimate of \$3,500,000 and account for only 1.5 of the four miles of North Road that would need to be improved. Assuming improvements on North Road are likely to cost approximately \$2,300,000 per mile, based on previous estimates completed, this project is likely to cost nearly \$10,000,000. The cost alone would likely make these improvements infeasible, but paired with the fact that this alternate route would require substantial out-of-direction travel, this was also considered to be a fatal flaw for this project. On a typical summer weekend, travel time between the east side of Leavenworth and Coles Corner is estimated to be 22 minutes on US 2. Using Chumstick Highway to bypass Leavenworth and Tumwater Canyon is estimated to be 34 minutes, a 50 percent increase in travel time due to the longer distance even when considering congestion in Leavenworth.

Lastly, this alternate route was not supported by project stakeholders or the community. Community input noted that this route is heavily utilized by not only bikers, but cross-country skiers, and people accessing the Wenatchee River, a major concern when considering increasing not only traffic volume, but freight vehicles. The community and stakeholders also noted the concern for ongoing maintenance costs as a major concern for this project.

With costly safety improvements required, no way to make the route travel time competitive, and no support, this project was eliminated from further consideration.

### *Leavenworth Bypass*

A third alternative route option that has been discussed in the Upper Wenatchee Valley since the 1960's is the idea of constructing a bypass that would take US 2 around both Tumwater Canyon and Leavenworth.

A reconnaissance report developed by WSDOT in 1965 evaluated the idea of US 2 leaving the current alignment at Merritt, just west of Coles Corner, following the existing SR 207 and Chumstick Highway alignment, before rejoining the current US 2 alignment just west of Peshastin. While the concept was never advanced, as congestion on US 2 has continued to increase through Leavenworth and Tumwater Canyon, the question of "would a bypass solve US 2 congestion?" continues to be asked.



The primary benefit of a bypass is to move more of the regional through trips that don't have an origin or destination in Leavenworth to a separate route that is unaffected by local traffic. In theory, through traffic could continue at higher speeds and would no longer impact Leavenworth's local mobility during the summer season.

Similar to the other alternate route options, the costs of this bypass far exceed the potential benefits. At an estimated \$2,300,000 per mile this 18 mile bypass would likely cost over \$40,000,000 to construct. The most feasible option for a Leavenworth bypass, consistent with the idea evaluated in the 1960's would follow SR 207 and Chumstick Highway, a route with many fatal flaws as discussed above. All other potential routes would require constructing a new route through the Cascades, which would still require out-of-direction travel, significantly reducing the potential travel benefit. As such, this alternate route was also considered fatally flawed.

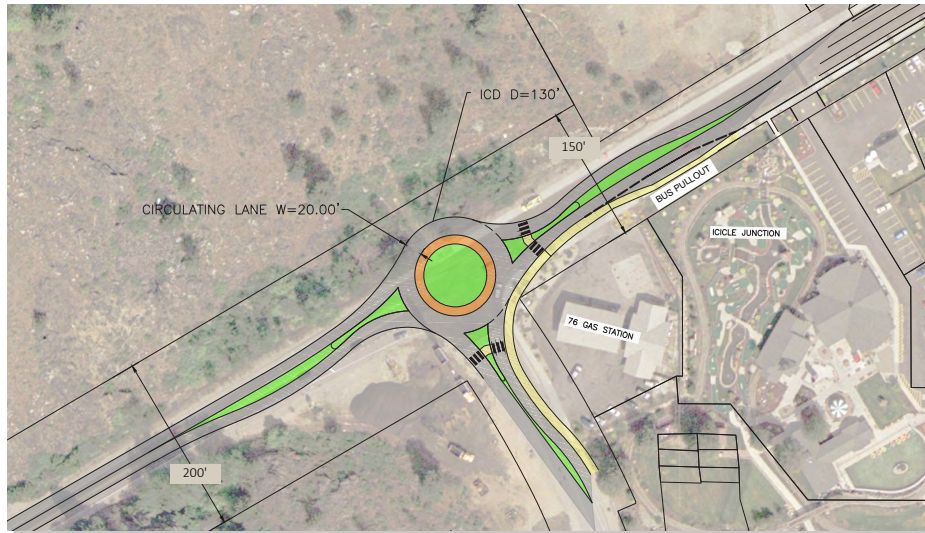




## US 2 Roundabout at Icicle Road

### PROJECT DESCRIPTION

This project would construct a single-lane roundabout at the intersection of Icicle Road and US 2. Paired with center-island landscaping, a display of public art or a sculpture, and Bavarian-themed signage, the roundabout would create an opportunity to create a gateway to Leavenworth as visitors arrive from Tumwater Canyon. Located at the western terminus of Link Transit’s Route 22, this project would also create an improved turn-around for transit and shuttles operating on the US 2 corridor through Leavenworth.



### PROJECT BENEFITS

- ✓ Improved local access to US 2
- ✓ A western gateway to Leavenworth
- ✓ Improved transit and shuttle circulation

This project would improve access for locals using Icicle Road to access homes or jobs without impacting travel times or congestion on US 2. Today, US 2 through traffic has priority at the intersection over traffic turning left onto Icicle Road and traffic on Icicle Road, which is stop-controlled. This configuration forces locals to wait for gaps in traffic on US 2, which can be difficult during periods of high congestion. With roundabout control at this intersection, all approaches would be yield-controlled, giving more equal opportunities for local and through traffic. A roundabout configuration would also improve safety at the intersection by reducing speeds and limiting opportunities for severe collisions.



Example of a roundabout paired with public art in Pueblo, CO  
Source: Colorado Public Radio, 2018

The Icicle Road intersection marks the transition of US 2 from a mountainous highway to Leavenworth’s “main street”. Installation of a roundabout would reinforce this gateway, by slowing speeds paired with signage and landscaping that would serve as a way to alter driver expectations and behaviors from the nearly 65 mile stretch of US 2 across the Cascades.

Moreover, landscaping features of a roundabout provide the opportunity to incorporate Bavarian-themed elements, reinforcing the unique identity of Leavenworth.

The intersection is also the western terminus of Link Transit’s Route 22. The current configuration of the intersection requires transit operators to make a left-turn onto Icicle Road before pulling into the gas station on the southeast corner of the intersection and using the parking lot as the turnaround before continuing eastbound. Construction of a roundabout and relocating the transit stop from the parking lot to US 2 would improve transit service and efficiency at the west end of Leavenworth.



## GUIDING PRINCIPLES

### Reliable



The roundabout improves local access onto the US 2 corridor, while not diminishing through traffic.

### Safe & Complete



The roundabout enhances corridor safety, but slowing down vehicle speeds and significantly reducing the risk of serious collisions. The roundabout also provides a more complete facility for transit by providing a more formal turn-around.

### Vibrant



Paired with landscaping, public art or a sculpture, and signage, this project would create a unique and welcoming gateway into Leavenworth for visitors traveling on US 2. This project would also serve as a point to transition drivers from the mountain highway driving through Tumwater Canyon, to the slower speeds and behaviors needed when driving on a "main street".

### Realistic



This project is the lowest cost capital project recommended and can be completed almost entirely within available right-of-way.

### Supported



This project was not only added by the community as part of the engagement process, but also received over 60 "likes" on the online map.

## ADDITIONAL CONSIDERATIONS

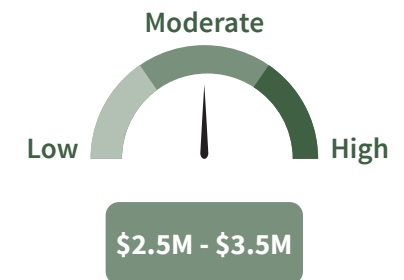
### Temporary Traffic Control

Roundabout control limits the opportunity to deploy temporary traffic control measures. While queueing reaching Icicle Road was not observed this should be considered in evacuation planning.

### Maintenance & Art Costs

While the roundabout would be constructed on a WSDOT facility, any WSDOT fund contributions would not cover the addition of art or other visual enhancements to create a visual gateway to Leavenworth.

## COST





# Parking Management

## PROJECT DESCRIPTION

This project identifies parking management strategies that support and build on strategies recommended as part of the Downtown Leavenworth Parking Management Plan and in some cases, identified for implementation in the near-term by the City of Leavenworth Parking Committee. Strategies identified and recommended as part of this study, maximize efficient use of the parking supply such that visitors can easily find parking, reducing congestion in Downtown that results from cruising for parking. This strategy would also allow the City to flexibly manage parking during high demand events.

**Strategy 1: Allocate remote parking for employees that work in Downtown.** With the recent transition of the WSDOT lot to City ownership, a portion of the available capacity in this lot would be allocated to employee parking. This lot is adjacent to the US 2/Mill Street transit stop, which would connect employees parking at this location to jobs in Downtown. Creating employee parking at this lot would also be supported by the TDM Strategies and Bike/Scooter Share projects discussed in the Considered Investments section and the US 2 Ski Hill to River Bend Streetscape Improvements project.

**Strategy 2: Make other remote options available to employees.** Any unused capacity at the existing Willkommen Village could also be utilized followed by the paid use of parking in private-lots for employees,

**Strategy 3: Active management of on-street parking Downtown.** Once employees have adequate options to park remotely and connect to jobs in Downtown, measures including paid on-street parking and time-restricted parking in Downtown should be deployed to ensure that employees utilize remote parking opportunities leaving spaces in Downtown available for visitors.

**Strategy 4: Event-specific parking management.** With an active management plan for parking in place, the City would be able to transition use of the parking supply during large events. During events demanding large amounts of parking, the City could transition some of the parking available to employees with additional incentives available to employees to travel to Leavenworth by rideshare or public transit during events and festivals. This would allow the City to better accommodate and manage the parking required for festivals, without construction of additional remote parking facilities.

## PROJECT BENEFITS

- ✔ A parking system that visitors can easily navigate
- ✔ The flexibility to transition parking between employees and visitors
- ✔ A system that allows visitors to park once



2-Hour Parking Sign  
Source: City Of Seattle, 2020

Turnover of parking in Downtown Leavenworth was measured to be below typical parking turnover rates when data was collected for the Downtown Parking Management Plan. The data indicated that parking spots in Leavenworth were turning over approximately half as often as the industry average. This was believed to be a result of employees using on-street parking in Downtown. By shifting employees to parking located outside of Downtown connected by transit, parking in Downtown would be more frequently available to visitors near their destination. This would limit the need for people

unfamiliar with Leavenworth to circulate through Downtown looking for parking, improving not only the parking system, but also reducing congestion in Downtown.

Today, management of parking within Leavenworth for events and festivals requires starting from scratch each time management is needed and relies on parking lot owners to actively manage their parking supply. By putting management strategies in place, first focused on the management of employee parking, those systems can be leveraged to more efficiently manage the supply during times of high demand.



Example of On-Street Parking Meters  
Source: City of Lexington, KY

These strategies paired with other Considered and Recommended Investments would help to create a “park once” experience for visitors in Leavenworth. With the ability to transition remote parking to visitors and have transit and bike/scooter share options in place, visitors can park and easily navigate between destinations using other modes.

## GUIDING PRINCIPLES

### Vibrant



Several strategies recommended as part of this project focus on more efficiently parking employees, which creates more opportunities for parking visitors.

### Realistic



Many of the management strategies recommended as part of this project can be implemented without significant costs and within the near-term (less than five years).

### Supported



Project stakeholders, PAC members, and community members have all expressed support for parking management strategies as part of this study.

## ADDITIONAL CONSIDERATIONS

### Support of Other Projects

Recommendations above would support the US 2 Ski Hill to River Bend Streetscape Improvements Project, Transit-on-Shoulders, and Bike/Scooter Share Projects, and TDM strategies. These management strategies would ensure that Leavenworth's parking system has adequate capacity in strategic locations encouraging visitors to park and then leverage other mode choices to travel within Leavenworth.

### Increased Transit Service

As Link Transit continues to increase service on Route 22 over the next several years and continues the operation of the circulator shuttle to complete

Route 22 within Leavenworth, the use of transit by employees participating in TDM programs will continue to increase.

### The Downtown Parking Plan

While many of the strategies recommended as part of this study are also documented in the Downtown Parking Plan, recommendations in the study are strategies that would provide meaningful benefit to the US 2 corridor as a whole and support other recommended investments. The continued implementation of other strategies documented in the Downtown Parking Plan, not discussed in this plan, will continue to contribute to improving Leavenworth's transportation system.

## COST

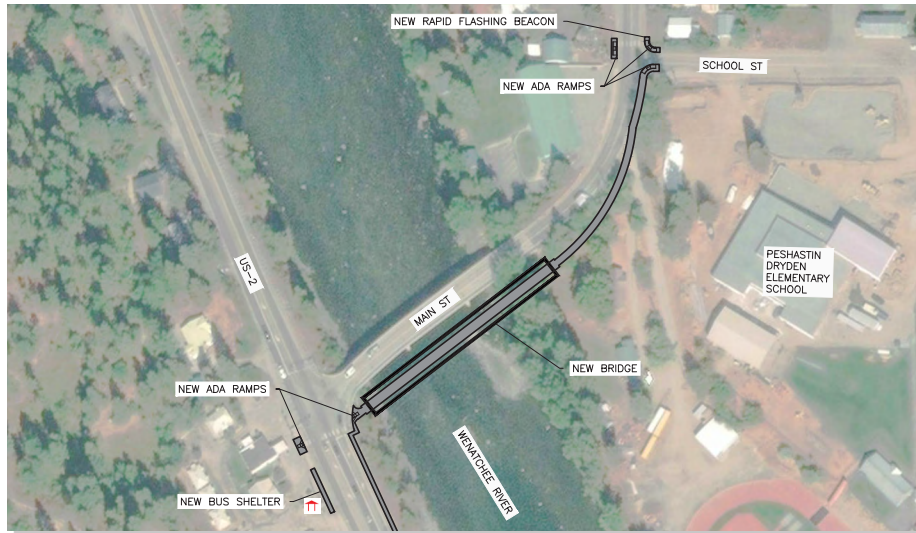
*Cost for this project would vary depending on implementation of recommended strategies.*



## Peshastin Bicycle & Pedestrian Transit Connection

### PROJECT DESCRIPTION

This project would construct a bicycle and pedestrian bridge adjacent to the existing Main Street Bridge in Peshastin. The parallel bridge would accommodate non-motorized modes and provide an all-ages, all-abilities connection to an improved Peshastin transit stop at the US 2 and Main Street intersection. Improvements to pedestrian facilities between the new bridge and School Street would be completed as part of this project, as would enhanced crosswalk markings connecting the bridge to the improved transit stop.



### PROJECT BENEFITS

- ✔ An all-ages all-abilities bicycle and pedestrian bridge to Peshastin that connects to transit
- ✔ Transit travel time savings between Wenatchee and Leavenworth

The narrow Main Street Bridge has an outdated design without opportunity for expansion to better serve non-motorized modes. By constructing a separate, parallel footbridge the project would accommodate bicyclists and pedestrians on a separate facility that would be accessible and comfortable for people of all ages and all abilities with a direct connection to transit.

To serve Peshastin, Route 22 must currently divert off of US 2 over the Main Street bridge. This loop into Peshastin adds six minutes to the route travel time, resulting in higher costs to operate the route and less competitive travel times compared to driving. The additional six minutes is estimated to add \$250,000 in operating costs to Route 22 over the course of one year. By creating a connection and improved stop on US 2, this project would lower operating costs while improving travel time and reliability.



*Bicycle & Pedestrian Bridge*  
Source: Public Square, 2018

## GUIDING PRINCIPLES

### Reliable



With the travel time savings from eliminating the loop into Peshastin, Route 22 would operate more efficiently with better on-time performance making transit a more attractive and reliable option.

### Safe & Complete



A parallel facility would serve both bicyclists and pedestrians of all-ages and abilities through the separation from vehicles crossing the Wenatchee River.

### Vibrant



The addition of an all ages, all abilities bicycle and pedestrian bridge serves the dual purpose of making transit more efficient and creating an amenity that could benefit outdoor recreation along the US 2 corridor.

### Supported



Both Link Transit and community members have expressed support for this project.

## ADDITIONAL CONSIDERATIONS

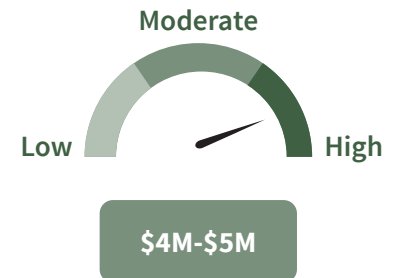
### Cost-Benefit

This project would result in a direct cost-savings for Link Transit. With an estimated savings of \$250,000 per year and a total capital cost of between \$4 and \$5 million, investment in this project would be recovered in 10 years.

### Support of Other Recommendations

Transit travel time savings and reliability resulting from this project benefit other projects including Recommended Investments: Parking Management, US 2 Ski Hill to River Bend Streetscape Improvements Enhancement. This project would also support several projects identified as Considered Investments: Employee Travel Demand Management and the Transit-on-Shoulders project, making transit a more attractive option during congested conditions.

## COST







## US 2 Ski Hill to River Bend Streetscape Improvements

### PROJECT DESCRIPTION

This project would re-stripe and reconfigure the lanes along US 2 in Leavenworth to provide a more complete and efficient facility for vehicles, transit, walking and bicycling. The improvements would improve local accessibility for residents, prioritize the needs of emergency service vehicles, transit, and shuttles along the corridor and separate bicyclists and pedestrians from vehicles on US 2.

To improve mobility for local traffic using US 2 to access residential neighborhoods and Downtown Leavenworth, the existing westbound right-turn lane at Chumstick Highway, 9th Street, and Front Street would be extended. Only right-turning vehicles, transit, shuttles and emergency services would be able to utilize the extended right-turn lanes. All signalized intersections along US 2 in Downtown Leavenworth would be modified such that, only transit, shuttles, and emergency services would be able to continue through the intersection in this lane, with all other drivers being forced to turn right.

As part of this project, a traffic signal would be added at Front Street and the existing signals would be upgraded to include signal preemption. Signal preemption would allow vehicles with the appropriate transponder (emergency services, transit, and shuttles) to preempt the regularly operating traffic signal to prioritize their movement through the intersection. To allow emergency services, transit, and shuttles to access the general purpose traffic lane ahead of the queue on US 2, the traffic signal would hold all through traffic on US 2 for approximately seven seconds to allow emergency services, transit, and shuttles in the right-turn lane to transition back into the general purpose lane.

Pedestrian improvements would include the addition of a visually appealing fence or landscaped buffer to improve separation between pedestrians and bicyclists and vehicles on US 2. This barrier would also discourage jaywalking across US 2 between intersections, enhancing pedestrian safety and improving traffic flow on US 2.

Bicyclists on US 2 would be accommodated by a shared-use path between Chumstick Highway and Ski Hill Drive. The existing sidewalk on the north side of US 2 would be widened to accommodate both bicyclists and pedestrians. While bicyclists would transition to the shared-use path between Ski Hill Drive and Chumstick Highway, to the east and west of the improvements the existing on-street bicycle lane would be maintained. Crossings at Ski Hill Drive and Chumstick Highway would be restriped with additional markings, including green painted conflict areas, to connect bicyclists to the north side of US 2.

EXISTING



PROPOSED





## PROJECT BENEFITS

- ✓ Truly multimodal US 2 that is more inviting to pedestrians and bicyclists
- ✓ Travel time benefits for transit, shuttles, and emergency services without adding measurable delay for general traffic
- ✓ Destinations in Leavenworth better connected via transit, shuttles and bike/scooter share

Today US 2 has on-street bicycle lanes through most of downtown and sidewalks on both sides. While confident cyclists use the on-street lanes, less confident cyclists tend to use the sidewalks, which vary in width and cannot always accommodate both bicyclists and pedestrians. With the addition of a shared-use path on the north side of US 2, this project would create a space designed to be shared by bicyclists and pedestrians. Paired with wayfinding

and crossing improvements, the shared-use path would create an accessible route through downtown for both bicyclist and pedestrians.

Signal priority paired with queue-jump at signalized intersections would improve travel time through Leavenworth for emergency services, transit, and shuttles. Travel time improvement for shuttles and transit not only improve on-time operations, but also create an incentive to use transit or shuttles to travel with Leavenworth. For emergency services, improved travel times translates into lower response times, meaning they can get to people in need in less time.

The priority for transit and shuttles paired with complete bicycle and pedestrian facilities would create more options in how people travel from Willkommen Village to Icicle Road. Paired with a bike/scooter share program, discussed in the Quick Wins section, visitors would have access to multiple options to travel within Leavenworth whether arriving by transit or shuttles or driving and parking off the corridor or remotely.

## GUIDING PRINCIPLES

### Reliable



Using extended right-turn lanes paired with signal preemption to prioritize transit would create a more reliable transit option within the region. The extended right-turn lanes available only for use by transit, shuttles, emergency services, and right-turning vehicles would also ensure better access to residential neighborhoods.

### Safe & Complete



With improved access and signal priority, this project would ensure emergency services could better serve Leavenworth residents.

### Vibrant



This project would encourage more efficient use of the corridor by creating mode shift opportunities by incentivizing the use of transit and shuttles through travel-time savings.

### Supported



Identifying a way to better prioritize emergency services along US 2 through Leavenworth while continuing to accommodate vehicles, bicyclists, pedestrians, and transit was supported by the community.

## COST



*Cost for this project is expected to vary based on phased implementation.*





## ADDITIONAL CONSIDERATIONS

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### **US 2 Driveway Access**

While full access would be maintained at all intersections along US 2, the extended right-turn pocket would eliminate the ability for eastbound traffic to turn left between intersections from Chumstick Highway to Front Street.

### **Support of Other Projects**

This project would support the Bike/Scooter Share, Transit-on-Shoulders, and Shuttle Partnership projects discussed above. This project ensures that transit and shuttles operating on US 2 have a travel-time savings and can operate efficiently within Leavenworth encouraging higher use of the services, resulting in mode-shift for trips to Leavenworth. The project also ensures that bicyclists have a comfortable space encouraging them to park once and utilize bike share and transit options to travel within Leavenworth. The reliable connection

between Leavenworth destinations would also support parking management strategies and make the “park once” strategy achievable for Leavenworth visitors.

### **General Purpose Traffic Travel Time**

While this project would improve travel time for transit, shuttles, and emergency vehicles, there would be no benefit to travel time for drivers traveling through Leavenworth on US 2.

### **Implementation**

This project could be implemented in steps as funding is available. Improvements could be made one intersection at a time or with priority for the westbound direction, followed by the eastbound direction.



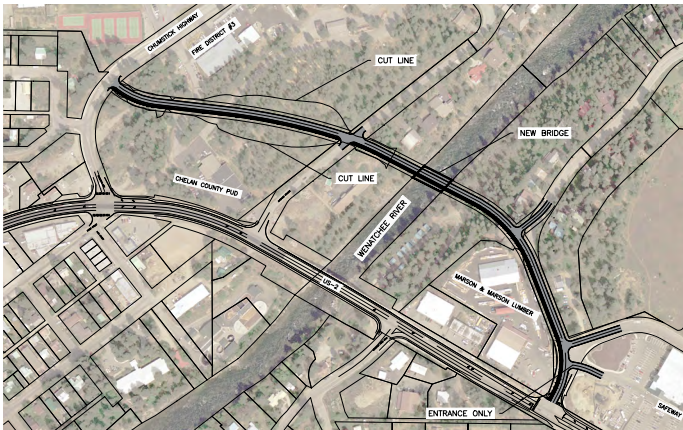
# Pine Street Connection

## PROJECT DESCRIPTION

This project would connect Pine Street from the current eastern terminus at Fir Street, across Chumstick Highway and the Wenatchee River, to River Bend Drive. This project would include construction of a new intersection with Chumstick Highway, a bridge across the Wenatchee River, and improvements to River Bend Drive from the new Pine Street connection to US 2.

The Pine Street Bridge would provide two general purpose travel lanes (one in each direction) to accommodate vehicles. Bicyclists would be accommodated in a side-running path shared with pedestrians on the north side of the bridge, while a sidewalk on the south side of the bridge would accommodate pedestrians.

To create the opportunity for transit to bypass US 2 during events (when US 2 is highly congested) and to facilitate better transit connections to residential neighborhoods, both the River Bend Drive intersection with US 2 and the Chumstick Highway intersection with Pine Street could be upgraded to include transit pre-emption. This technology could also be utilized by emergency services using this connection to access residential neighborhoods in Leavenworth.



## PROJECT BENEFITS

- ✓ 40% reduction in summer weekend travel times on US 2 through Leavenworth
- ✓ Additional capacity to move people across the Wenatchee River
- ✓ Improved bicycle and pedestrian connections to local trails and destinations



Example of Pine Street Bridge Cross-Section  
Source: Aspen Public Radio, 2018

The Pine Street Connection is the only viable project evaluated as part of this study that would result in significant travel time savings on US 2 during typical summer weekends. Evaluation of this project under summer weekend conditions resulted in a travel time savings of four minutes in the eastbound direction on US 2 and three minutes in the westbound direction. These travel time savings are equivalent to a 40 percent reduction from existing summer weekend travel times on US 2. During peak festival times heavy congestion on US 2 would still be expected to occur as a result of the limited capacity on US 2 as it exits Leavenworth.

Today, US 2 is the only route that crosses Wenatchee River within the Leavenworth city limits, with extensive out-of-direction travel required to reach alternate crossings. Construction bottlenecks at both the Chumstick Highway and River Bend Drive intersections meter traffic on the bridge. While a new bridge would operate at a lower capacity than US 2, it would also reduce the bottleneck for traffic traveling on US 2 at both the Chumstick Highway and River Bend Drive, increasing the number of vehicles able to cross the existing bridge. Considering the removal of bottlenecks and additional capacity offered by a new bridge, this project would increase the number of vehicles that can cross the Wenatchee River more than 50 percent compared to the capacity that exists today.

While a new bridge would facilitate the movement of vehicles across the Wenatchee River, it would also serve as an important connection for bicyclists. The existing portion of Pine Street was recently improved for bicyclists as part of the Pine Street Trail. The improvements already in place paired with dedicated facilities on the Pine Street Bridge would create a parallel route to US 2 between River Bend Drive and Ski Hill Road through Leavenworth. The route would also provide a connection to the middle school and high school for students living on the east side of the Wenatchee River.

<sup>5</sup>icycle/E Leavenworth Road to the south and Chumstick/North Road to the north

## GUIDING PRINCIPLES

### Reliable



This project would improve travel times on US 2 by 40 percent during summer weekend conditions, making US 2 a more reliable route during periods of congestion. A new connection across the Wenatchee River would also ensure that movement across the river could continue to occur in the event of an incident on the US 2 bridge.

### Safe & Complete



This project would improve public safety by creating an additional capacity to move people, vehicles, and emergency responders across the Wenatchee River in the event of an emergency or natural disaster. With dedicated facilities for bicyclists and pedestrians, this project would also reduce the exposure of bicyclists crossing the Wenatchee River creating a safer and more comfortable bicycling experience.

### Vibrant



This project would encourage more efficient use of the corridor by creating mode shift opportunities by incentivizing the use of transit and shuttles through travel-time savings.

## ADDITIONAL CONSIDERATIONS

### Right-of-Way

Construction of Pine Street between the current terminus and River Bend Drive and construction of a new bridge will require significant right-of-way acquisition

### Continuing Public Outreach

Advance of this concept past the planning level will require engagement and support of the greater Leavenworth community

### Environmental

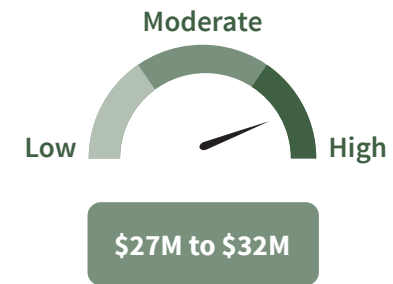
Work near the Wenatchee River is likely to require special permits and coordination with resource agencies

### Additional Improvements

Reconfiguration will be required for several local roadways including Chumstick Highway, Alpensee Strauss, Riverbend Drive and access to Safeway

***This bridge would be a local road owned and maintained by the City of Leavenworth.***

## COST

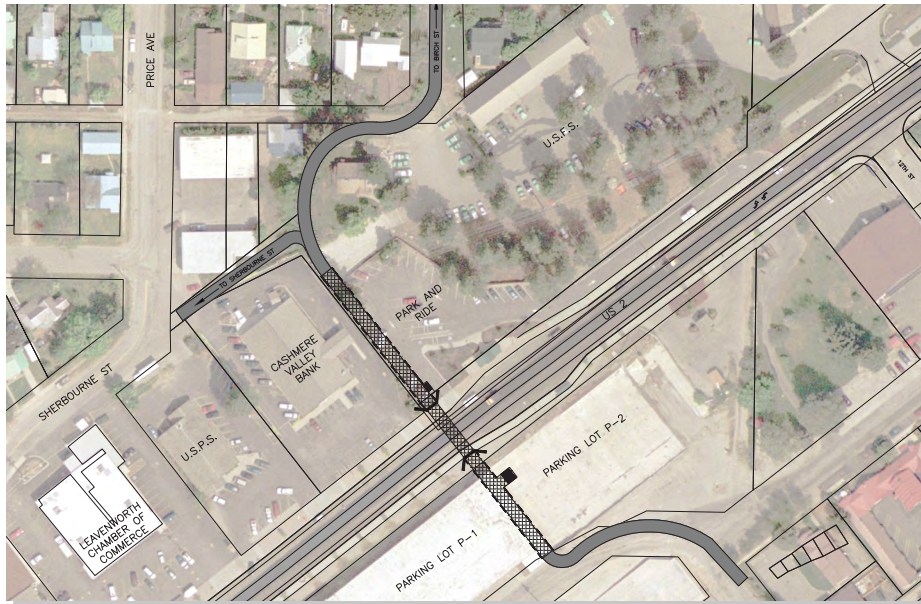




## US 2 Undercrossing

### PROJECT DESCRIPTION

This project would connect the residential neighborhoods north of US 2 to downtown Leavenworth and the Wenatchee River Waterfront by constructing a US 2 undercrossing near the Leavenworth Park and Ride. The undercrossing would be accessible from both the Park and Ride lot and Sherbourne Street on the north and Division Street on the south, creating a more seamless connection across US 2 for bicyclists and pedestrians.



### PROJECT BENEFITS

- ✓ Separation of vehicles and pedestrians and bicyclists crossing US 2
- ✓ Elimination of a barrier for residents accessing the waterfront area
- ✓ Encouragement for Downtown employees and patrons to “park once”

Leavenworth’s Comprehensive Plan identifies US 2 as a barrier for biking and walking that separates the downtown area from the residential areas. All existing options for crossing US 2 near downtown expose bicyclists and pedestrians to conflicts with right-turning vehicles, except for the High-Intensity Activated Crosswalk (HAWK) beacon at City Hall, which is a mid-block crossing. The large number of pedestrian crossings that can occur in Downtown Leavenworth on a summer day or during events (over 3,000 pedestrians were counted on a Sunday in August at one crossing) create delay for vehicles along the US 2 corridor. Providing a grade separated crossing for bicyclists and pedestrians creates a safer and more comfortable experience that reduces barriers to visiting the waterfront, encourages parking once in Downtown to visit multiple destinations, and improves operations at signalized intersections.



Example of Pedestrian Undercrossing  
Source: Schultz Heavy Civil Construction, 2020



## GUIDING PRINCIPLES

### Reliable



The large number of pedestrian crossings that can occur on a summer weekend or during events reduce the efficiency of signalized intersections and add delay to the US 2 corridor. Providing a grade-separated crossing of US 2 would reduce this conflict, improving the efficiency and reliability of the corridor. Similarly, a grade separated crossing would make parking once in downtown and traveling between destinations more feasible, reducing the number of vehicles in downtown cruising in search of a parking space.

### Safe & Complete



The separation of pedestrians and bicyclists crossing US 2 would not only reduce potential conflicts with vehicles, but also create a more comfortable biking and walking experience.

### Vibrant



Encourages residents to walk or bike to the downtown or the waterfront area by eliminating the need to cross US 2, which is identified as a barrier separating downtown Leavenworth and the waterfront from residential neighborhoods. The ability to “park once” also makes downtown a more accessible destination.

### Supported



The community and stakeholders have supported project ideas that lower the number of pedestrians crossing US 2 during summer weekends and festivals.

## ADDITIONAL CONSIDERATIONS

### Enhanced Pedestrian Separation

This project should be paired with enhanced modal separation on US 2, through use of planters or visually appealing fencing to encourage use of the undercrossing.

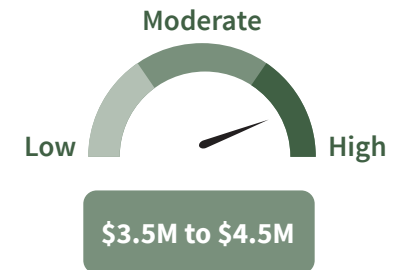
### Wayfinding

Wayfinding signs will be required to direct bicyclists and pedestrians on both sides of US 2 to the undercrossing.

### Right-of-Way

Some right-of-way acquisition will be required to connect the undercrossing to neighborhood streets facilitating a connection for residents.

## COST



# US 2 Upper Wenatchee Valley Transportation Study Project Advisory Committee Meeting #5 January 29, 2020



# Meeting Agenda

- Project Analysis & Fatal Flaws
- Recommended Investments
- Upcoming Community Input Opportunities
- Project Next Steps





# Meeting Purpose

- Project Team Will:
  - Share Fatal Flaw Projects & Recommended Investments
- Project Advisory Committee Will:
  - Share input on Recommended Investments from perspective of their representative organizations



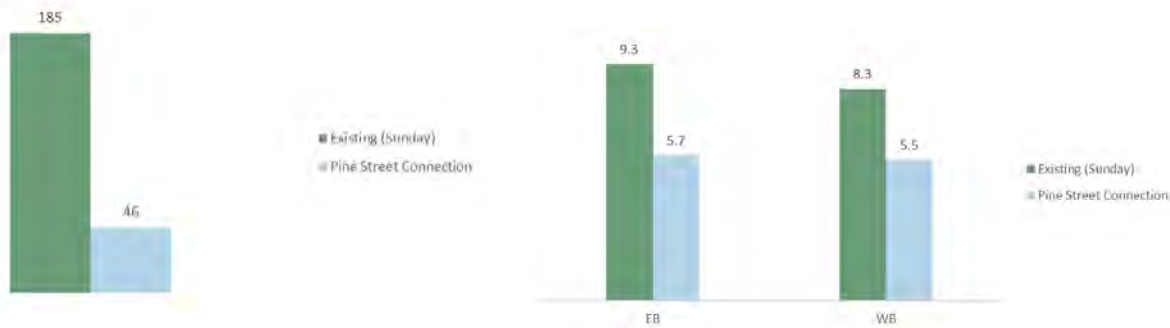
# Meeting Agenda

- Project Analysis & Fatal Flaws ←
- Recommended Investments
- Upcoming Community Input Opportunities
- Project Next Steps



# Last Time We Saw You....

- Presented Evaluation of 10 Highest Performing Projects



US 2 Upper Wenatchee Valley Transportation Study  
Project Feedback

Project	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8	Phase 9	Phase 10
1. Reallocate US 2 ROW (Alternative A)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. Temporary Center Turning Truck/ Emergency Lane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Curb Separated Pedestrian/ Bicycle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Pine Street Conversion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Enhance Modal Separation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Parking Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Roundabout @ Front Street, 9th Street, Chumuck Highway	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. US 2 Parking File Space & Bicycle Lane Connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Transit on Shoulders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Bicycle & Pedestrian Bridge in Prosser	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- We asked you to tell us....
  - What are you excited about? Why?
  - Is there something you don't like? Why?

# Since We Saw You....

- Reallocate US 2 ROW
- Temporary Center Running Transit/Emergency Lane
- Grade-Separated Pedestrian Crossings
- Pine Street Connection
- Enhanced Modal Separation
- Parking Management
- Roundabouts on US 2
- US 2 Parking Flex Space & Bicycle Lane Connection
- Transit-on-Shoulders
- Bicycle & Pedestrian Connection in Peshastin



- US 2 Ski Hill to River Bend Streetscape Improvements
- US 2 Pedestrian Undercrossing
- Pine Street Connection
- Parking Management
- US 2 Roundabout at Icicle Road
- Peshastin Bicycle & Pedestrian Transit Connection



# Projects with Fatal Flaws

- **High Performing Projects with Fatal Flaws**
  - Temporary Center Running Transit/Emergency Lane
  - Grade Separated Crossing Locations
  - Roundabouts at Major US 2 Intersections
- **Projects Screened Due to Fatal Flaws**
  - US 2 Widening
  - Improving Parallel Routes

# Projects: Grade Separated Crossings

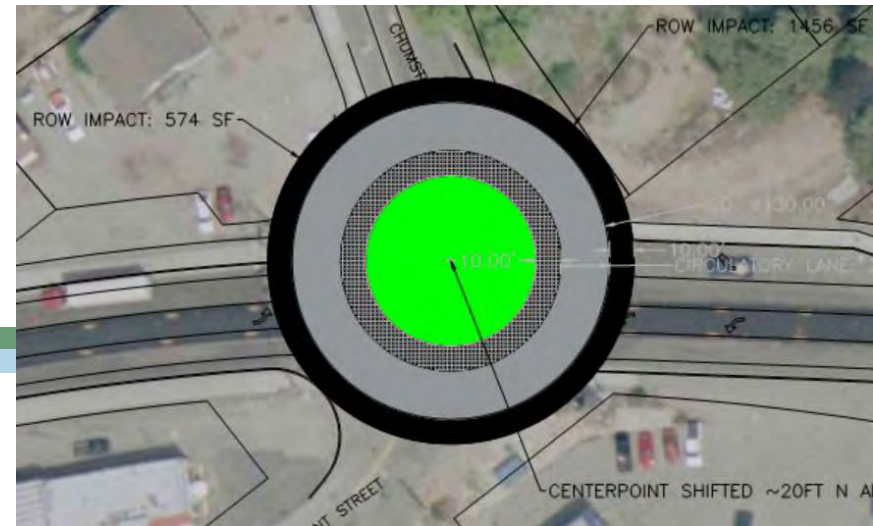
- Evaluated 3 Locations for Undercrossing or Overcrossing
  - 9th Street
  - Front Street
  - US 2 Park & Ride
- 2 of 3 Locations Eliminated Based On:
  - Grade
  - Impact of Ramps to US 2 Frontage
  - Out-of-Direction Travel to Access Ramps





# Projects: US 2 Roundabouts

- Considered Roundabouts at Front Street, 9<sup>th</sup> Street, Chumstick Highway
  - Queueing may block roundabouts during high demands
  - Not likely to operate well under festival conditions
    - Hard to deploy temporary traffic management
  - Not likely to provide enough capacity to serve demand when analyzed using WSDOT guidelines
  - Right-of-Way Impacts





# Projects: Widening US 2 & Parallel Routes

- **Widening US 2**

- Does not advance project Guiding Principles
- Induced Demand
- Significant widening required to benefit
- High-level cost estimate over \$30M

- **Parallel Routes**

- Impact to local residents
- Cost
- Travel Time Increases



# Meeting Agenda

- Project Analysis & Fatal Flaws
- Recommended Investments ←
- Upcoming Community Input Opportunities
- Project Next Steps



# Recommended Investments

- **Localized Improvements & Management Strategies**

- ✓ US 2 Roundabout at Icicle Road
- ✓ Peshastin Bicycle & Pedestrian Transit Connection
- ✓ Parking Management

- **Transformative Measures**

- ✓ US 2 Ski Hill to River Bend Streetscape Improvements
- ✓ Undercrossing at US 2 Park & Ride
- ✓ Pine Street Connection



# Localized Improvements & Management Strategies



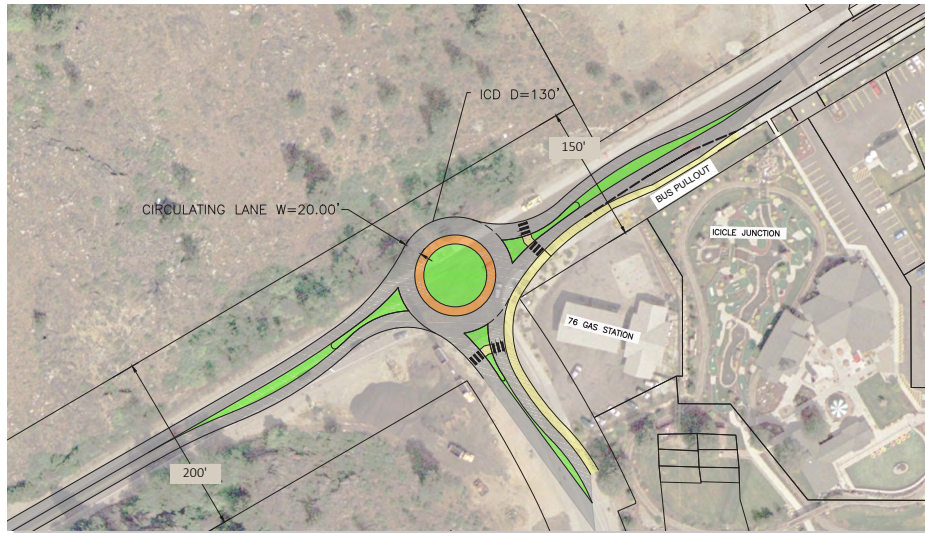
US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY



## US 2 Roundabout at Icicle Road

### PROJECT DESCRIPTION

This project would construct a single-lane roundabout at the intersection of Icicle Road and US 2. Paired with center-island landscaping, a display of public art or a sculpture, and Bavarian-themed signage, the roundabout would create an opportunity to create a gateway to Leavenworth as visitors arrive from Tumwater Canyon. Located at the western terminus of Link Transit’s Route 22, this project would also create an improved turn-around for transit and shuttles operating on the US 2 corridor through Leavenworth.



### PROJECT BENEFITS

- ✓ Improved local access to US 2
- ✓ A western gateway to Leavenworth
- ✓ Improved transit and shuttle circulation

This project would improve access for locals using Icicle Road to access homes or jobs without impacting travel times or congestion on US 2. Today, US 2 through traffic has priority at the intersection over traffic turning left onto Icicle Road and traffic on Icicle Road, which is stop-controlled. This configuration forces locals to wait for gaps in traffic on US 2, which can be difficult during periods of high congestion. With roundabout control at this intersection, all approaches would be yield-controlled, giving more equal opportunities for local and through traffic. A roundabout configuration would also improve safety at the intersection by reducing speeds and limiting opportunities for severe collisions.



Example of a roundabout paired with public art in Pueblo, CO  
Source: Colorado Public Radio, 2018

The Icicle Road intersection marks the transition of US 2 from a mountainous highway to Leavenworth’s “main street”. Installation of a roundabout would reinforce this gateway, by slowing speeds paired with signage and landscaping that would serve as a way to alter driver expectations and behaviors from the nearly 65 mile stretch of US 2 across the Cascades.

Moreover, landscaping features of a roundabout provide the opportunity to incorporate Bavarian-themed elements, reinforcing the unique identity of Leavenworth.

The intersection is also the western terminus of Link Transit’s Route 22. The current configuration of the intersection requires transit operators to make a left-turn onto Icicle Road before pulling into the gas station on the southeast corner of the intersection and using the parking lot as the turnaround before continuing eastbound. Construction of a roundabout and relocating the transit stop from the parking lot to US 2 would improve transit service and efficiency at the west end of Leavenworth.

## GUIDING PRINCIPLES

### Reliable



The roundabout improves local access onto the US 2 corridor, while not diminishing through traffic.

### Safe & Complete



The roundabout enhances corridor safety, but slowing down vehicle speeds and significantly reducing the risk of serious collisions. The roundabout also provides a more complete facility for transit by providing a more formal turn-around.

### Vibrant



Paired with landscaping, public art or a sculpture, and signage, this project would create a unique and welcoming gateway into Leavenworth for visitors traveling on US 2. This project would also serve as a point to transition drivers from the mountain highway driving through Tumwater Canyon, to the slower speeds and behaviors needed when driving on a "main street".

### Realistic



This project is the lowest cost capital project recommended and can be completed almost entirely within available right-of-way.

### Supported



This project was not only added by the community as part of the engagement process, but also received over 60 "likes" on the online map.

## ADDITIONAL CONSIDERATIONS

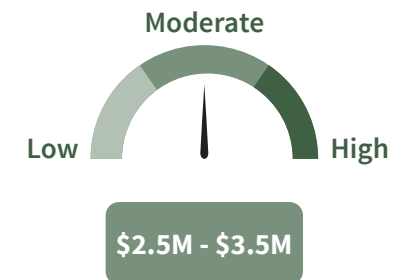
### Temporary Traffic Control

Roundabout control limits the opportunity to deploy temporary traffic control measures. While queueing reaching Icicle Road was not observed this should be considered in evacuation planning.

### Maintenance & Art Costs

While the roundabout would be constructed on a WSDOT facility, any WSDOT fund contributions would not cover the addition of art or other visual enhancements to create a visual gateway to Leavenworth.

## COST





# Parking Management

## PROJECT DESCRIPTION

This project identifies parking management strategies that support and build on strategies recommended as part of the Downtown Leavenworth Parking Management Plan and in some cases, identified for implementation in the near-term by the City of Leavenworth Parking Committee. Strategies identified and recommended as part of this study, maximize efficient use of the parking supply such that visitors can easily find parking, reducing congestion in Downtown that results from cruising for parking. This strategy would also allow the City to flexibly manage parking during high demand events.

**Strategy 1: Allocate remote parking for employees that work in Downtown.** With the recent transition of the WSDOT lot to City ownership, a portion of the available capacity in this lot would be allocated to employee parking. This lot is adjacent to the US 2/Mill Street transit stop, which would connect employees parking at this location to jobs in Downtown. Creating employee parking at this lot would also be supported by the TDM Strategies and Bike/Scooter Share projects discussed in the Considered Investments section and the US 2 Ski Hill to River Bend Streetscape Improvements project.

**Strategy 2: Make other remote options available to employees.** Any unused capacity at the existing Willkommen Village could also be utilized followed by the paid use of parking in private-lots for employees,

**Strategy 3: Active management of on-street parking Downtown.** Once employees have adequate options to park remotely and connect to jobs in Downtown, measures including paid on-street parking and time-restricted parking in Downtown should be deployed to ensure that employees utilize remote parking opportunities leaving spaces in Downtown available for visitors.

**Strategy 4: Event-specific parking management.** With an active management plan for parking in place, the City would be able to transition use of the parking supply during large events. During events demanding large amounts of parking, the City could transition some of the parking available to employees with additional incentives available to employees to travel to Leavenworth by rideshare or public transit during events and festivals. This would allow the City to better accommodate and manage the parking required for festivals, without construction of additional remote parking facilities.

## PROJECT BENEFITS

- ✔ A parking system that visitors can easily navigate
- ✔ The flexibility to transition parking between employees and visitors
- ✔ A system that allows visitors to park once



2-Hour Parking Sign  
Source: City Of Seattle, 2020

Turnover of parking in Downtown Leavenworth was measured to be below typical parking turnover rates when data was collected for the Downtown Parking Management Plan. The data indicated that parking spots in Leavenworth were turning over approximately half as often as the industry average. This was believed to be a result of employees using on-street parking in Downtown. By shifting employees to parking located outside of Downtown connected by transit, parking in Downtown would be more frequently available to visitors near their destination. This would limit the need for people

unfamiliar with Leavenworth to circulate through Downtown looking for parking, improving not only the parking system, but also reducing congestion in Downtown.

Today, management of parking within Leavenworth for events and festivals requires starting from scratch each time management is needed and relies on parking lot owners to actively manage their parking supply. By putting management strategies in place, first focused on the management of employee parking, those systems can be leveraged to more efficiently manage the supply during times of high demand.



Example of On-Street Parking Meters  
Source: City of Lexington, KY

These strategies paired with other Considered and Recommended Investments would help to create a “park once” experience for visitors in Leavenworth. With the ability to transition remote parking to visitors and have transit and bike/scooter share options in place, visitors can park and easily navigate between destinations using other modes.



## GUIDING PRINCIPLES

### Vibrant



Several strategies recommended as part of this project focus on more efficiently parking employees, which creates more opportunities for parking visitors.

### Realistic



Many of the management strategies recommended as part of this project can be implemented without significant costs and within the near-term (less than five years).

### Supported



Project stakeholders, PAC members, and community members have all expressed support for parking management strategies as part of this study.

## ADDITIONAL CONSIDERATIONS

### Support of Other Projects

Recommendations above would support the US 2 Ski Hill to River Bend Streetscape Improvements Project, Transit-on-Shoulders, and Bike/Scooter Share Projects, and TDM strategies. These management strategies would ensure that Leavenworth's parking system has adequate capacity in strategic locations encouraging visitors to park and then leverage other mode choices to travel within Leavenworth.

### Increased Transit Service

As Link Transit continues to increase service on Route 22 over the next several years and continues the operation of the circulator shuttle to complete

Route 22 within Leavenworth, the use of transit by employees participating in TDM programs will continue to increase.

### The Downtown Parking Plan

While many of the strategies recommended as part of this study are also documented in the Downtown Parking Plan, recommendations in the study are strategies that would provide meaningful benefit to the US 2 corridor as a whole and support other recommended investments. The continued implementation of other strategies documented in the Downtown Parking Plan, not discussed in this plan, will continue to contribute to improving Leavenworth's transportation system.

## COST

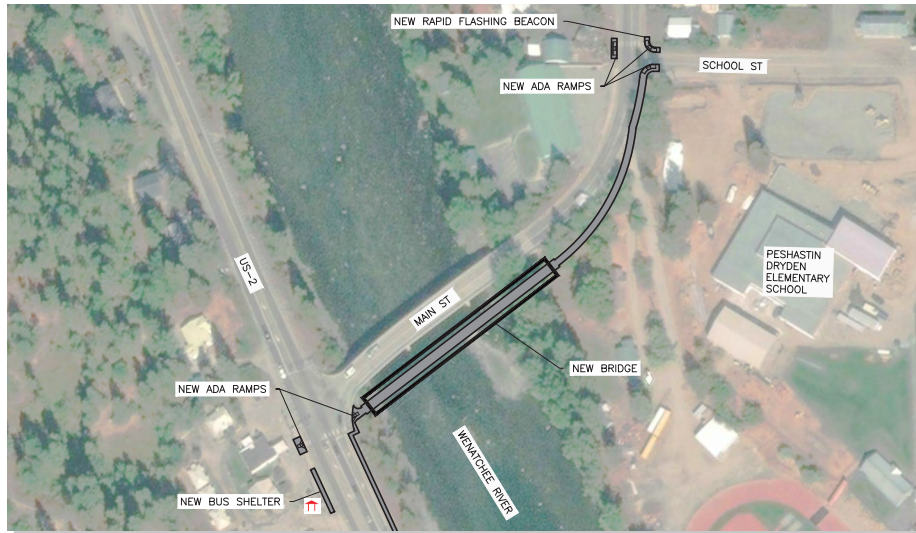
*Cost for this project would vary depending on implementation of recommended strategies.*



## Peshastin Bicycle & Pedestrian Transit Connection

### PROJECT DESCRIPTION

This project would construct a bicycle and pedestrian bridge adjacent to the existing Main Street Bridge in Peshastin. The parallel bridge would accommodate non-motorized modes and provide an all-ages, all-abilities connection to an improved Peshastin transit stop at the US 2 and Main Street intersection. Improvements to pedestrian facilities between the new bridge and School Street would be completed as part of this project, as would enhanced crosswalk markings connecting the bridge to the improved transit stop.



### PROJECT BENEFITS

- ✔ An all-ages all-abilities bicycle and pedestrian bridge to Peshastin that connects to transit
- ✔ Transit travel time savings between Wenatchee and Leavenworth

The narrow Main Street Bridge has an outdated design without opportunity for expansion to better serve non-motorized modes. By constructing a separate, parallel footbridge the project would accommodate bicyclists and pedestrians on a separate facility that would be accessible and comfortable for people of all ages and all abilities with a direct connection to transit.

To serve Peshastin, Route 22 must currently divert off of US 2 over the Main Street bridge. This loop into Peshastin adds six minutes to the route travel time, resulting in higher costs to operate the route and less competitive travel times compared to driving. The additional six minutes is estimated to add \$250,000 in operating costs to Route 22 over the course of one year. By creating a connection and improved stop on US 2, this project would lower operating costs while improving travel time and reliability.



*Bicycle & Pedestrian Bridge*  
Source: Public Square, 2018

## GUIDING PRINCIPLES

### Reliable



With the travel time savings from eliminating the loop into Peshastin, Route 22 would operate more efficiently with better on-time performance making transit a more attractive and reliable option.

### Safe & Complete



A parallel facility would serve both bicyclists and pedestrians of all-ages and abilities through the separation from vehicles crossing the Wenatchee River.

### Vibrant



The addition of an all ages, all abilities bicycle and pedestrian bridge serves the dual purpose of making transit more efficient and creating an amenity that could benefit outdoor recreation along the US 2 corridor.

### Supported



Both Link Transit and community members have expressed support for this project.

## ADDITIONAL CONSIDERATIONS

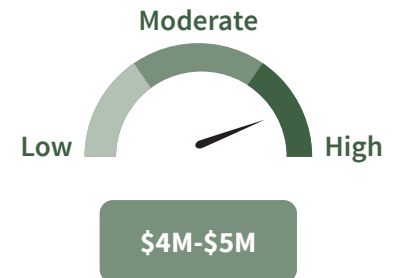
### Cost-Benefit

This project would result in a direct cost-savings for Link Transit. With an estimated savings of \$250,000 per year and a total capital cost of between \$4 and \$5 million, investment in this project would be recovered in 10 years.

### Support of Other Recommendations

Transit travel time savings and reliability resulting from this project benefit other projects including Recommended Investments: Parking Management, US 2 Ski Hill to River Bend Streetscape Improvements Enhancement. This project would also support several projects identified as Considered Investments: Employee Travel Demand Management and the Transit-on-Shoulders project, making transit a more attractive option during congested conditions.

## COST



# Transformative Measures



US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY



## US 2 Ski Hill to River Bend Streetscape Improvements

### PROJECT DESCRIPTION

This project would re-stripe and reconfigure the lanes along US 2 in Leavenworth to provide a more complete and efficient facility for vehicles, transit, walking and bicycling. The improvements would improve local accessibility for residents, prioritize the needs of emergency service vehicles, transit, and shuttles along the corridor and separate bicyclists and pedestrians from vehicles on US 2.

To improve mobility for local traffic using US 2 to access residential neighborhoods and Downtown Leavenworth, the existing westbound right-turn lane at Chumstick Highway, 9th Street, and Front Street would be extended. Only right-turning vehicles, transit, shuttles and emergency services would be able to utilize the extended right-turn lanes. All signalized intersections along US 2 in Downtown Leavenworth would be modified such that, only transit, shuttles, and emergency services would be able to continue through the intersection in this lane, with all other drivers being forced to turn right.

As part of this project, a traffic signal would be added at Front Street and the existing signals would be upgraded to include signal preemption. Signal preemption would allow vehicles with the appropriate transponder (emergency services, transit, and shuttles) to preempt the regularly operating traffic signal to prioritize their movement through the intersection. To allow emergency services, transit, and shuttles to access the general purpose traffic lane ahead of the queue on US 2, the traffic signal would hold all through traffic on US 2 for approximately seven seconds to allow emergency services, transit, and shuttles in the right-turn lane to transition back into the general purpose lane.

Pedestrian improvements would include the addition of a visually appealing fence or landscaped buffer to improve separation between pedestrians and bicyclists and vehicles on US 2. This barrier would also discourage jaywalking across US 2 between intersections, enhancing pedestrian safety and improving traffic flow on US 2.

Bicyclists on US 2 would be accommodated by a shared-use path between Chumstick Highway and Ski Hill Drive. The existing sidewalk on the north side of US 2 would be widened to accommodate both bicyclists and pedestrians. While bicyclists would transition to the shared-use path between Ski Hill Drive and Chumstick Highway, to the east and west of the improvements the existing on-street bicycle lane would be maintained. Crossings at Ski Hill Drive and Chumstick Highway would be restriped with additional markings, including green painted conflict areas, to connect bicyclists to the north side of US 2.

EXISTING



PROPOSED







## PROJECT BENEFITS

- ✓ Truly multimodal US 2 that is more inviting to pedestrians and bicyclists
- ✓ Travel time benefits for transit, shuttles, and emergency services without adding measurable delay for general traffic
- ✓ Destinations in Leavenworth better connected via transit, shuttles and bike/scooter share

Today US 2 has on-street bicycle lanes through most of downtown and sidewalks on both sides. While confident cyclists use the on-street lanes, less confident cyclists tend to use the sidewalks, which vary in width and cannot always accommodate both bicyclists and pedestrians. With the addition of a shared-use path on the north side of US 2, this project would create a space designed to be shared by bicyclists and pedestrians. Paired with wayfinding

and crossing improvements, the shared-use path would create an accessible route through downtown for both bicyclist and pedestrians.

Signal priority paired with queue-jump at signalized intersections would improve travel time through Leavenworth for emergency services, transit, and shuttles. Travel time improvement for shuttles and transit not only improve on-time operations, but also create an incentive to use transit or shuttles to travel with Leavenworth. For emergency services, improved travel times translates into lower response times, meaning they can get to people in need in less time.

The priority for transit and shuttles paired with complete bicycle and pedestrian facilities would create more options in how people travel from Willkommen Village to Icicle Road. Paired with a bike/scooter share program, discussed in the Quick Wins section, visitors would have access to multiple options to travel within Leavenworth whether arriving by transit or shuttles or driving and parking off the corridor or remotely.

## GUIDING PRINCIPLES

### Reliable



Using extended right-turn lanes paired with signal preemption to prioritize transit would create a more reliable transit option within the region. The extended right-turn lanes available only for use by transit, shuttles, emergency services, and right-turning vehicles would also ensure better access to residential neighborhoods.

### Safe & Complete



With improved access and signal priority, this project would ensure emergency services could better serve Leavenworth residents.

### Vibrant



This project would encourage more efficient use of the corridor by creating mode shift opportunities by incentivizing the use of transit and shuttles through travel-time savings.

### Supported



Identifying a way to better prioritize emergency services along US 2 through Leavenworth while continuing to accommodate vehicles, bicyclists, pedestrians, and transit was supported by the community.

## COST



*Cost for this project is expected to vary based on phased implementation.*



## ADDITIONAL CONSIDERATIONS

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### **US 2 Driveway Access**

While full access would be maintained at all intersections along US 2, the extended right-turn pocket would eliminate the ability for eastbound traffic to turn left between intersections from Chumstick Highway to Front Street.

### **Support of Other Projects**

This project would support the Bike/Scooter Share, Transit-on-Shoulders, and Shuttle Partnership projects discussed above. This project ensures that transit and shuttles operating on US 2 have a travel-time savings and can operate efficiently within Leavenworth encouraging higher use of the services, resulting in mode-shift for trips to Leavenworth. The project also ensures that bicyclists have a comfortable space encouraging them to park once and utilize bike share and transit options to travel within Leavenworth. The reliable connection

between Leavenworth destinations would also support parking management strategies and make the “park once” strategy achievable for Leavenworth visitors.

### **General Purpose Traffic Travel Time**

While this project would improve travel time for transit, shuttles, and emergency vehicles, there would be no benefit to travel time for drivers traveling through Leavenworth on US 2.

### **Implementation**

This project could be implemented in steps as funding is available. Improvements could be made one intersection at a time or with priority for the westbound direction, followed by the eastbound direction.





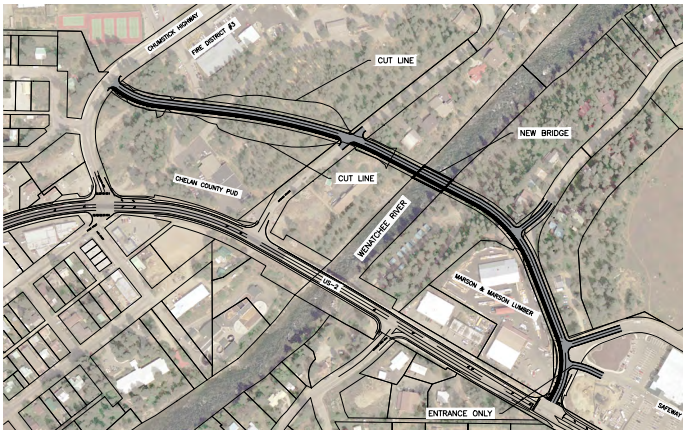
# Pine Street Connection

## PROJECT DESCRIPTION

This project would connect Pine Street from the current eastern terminus at Fir Street, across Chumstick Highway and the Wenatchee River, to River Bend Drive. This project would include construction of a new intersection with Chumstick Highway, a bridge across the Wenatchee River, and improvements to River Bend Drive from the new Pine Street connection to US 2.

The Pine Street Bridge would provide two general purpose travel lanes (one in each direction) to accommodate vehicles. Bicyclists would be accommodated in a side-running path shared with pedestrians on the north side of the bridge, while a sidewalk on the south side of the bridge would accommodate pedestrians.

To create the opportunity for transit to bypass US 2 during events (when US 2 is highly congested) and to facilitate better transit connections to residential neighborhoods, both the River Bend Drive intersection with US 2 and the Chumstick Highway intersection with Pine Street could be upgraded to include transit pre-emption. This technology could also be utilized by emergency services using this connection to access residential neighborhoods in Leavenworth.



## PROJECT BENEFITS

- ✓ 40% reduction in summer weekend travel times on US 2 through Leavenworth
- ✓ Additional capacity to move people across the Wenatchee River
- ✓ Improved bicycle and pedestrian connections to local trails and destinations



Example of Pine Street Bridge Cross-Section  
Source: Aspen Public Radio, 2018

The Pine Street Connection is the only viable project evaluated as part of this study that would result in significant travel time savings on US 2 during typical summer weekends. Evaluation of this project under summer weekend conditions resulted in a travel time savings of four minutes in the eastbound direction on US 2 and three minutes in the westbound direction. These travel time savings are equivalent to a 40 percent reduction from existing summer weekend travel times on US 2. During peak festival times heavy congestion on US 2 would still be expected to occur as a result of the limited capacity on US 2 as it exits Leavenworth.

Today, US 2 is the only route that crosses Wenatchee River within the Leavenworth city limits, with extensive out-of-direction travel required to reach alternate crossings. Construction bottlenecks at both the Chumstick Highway and River Bend Drive intersections meter traffic on the bridge. While a new bridge would operate at a lower capacity than US 2, it would also reduce the bottleneck for traffic traveling on US 2 at both the Chumstick Highway and River Bend Drive, increasing the number of vehicles able to cross the existing bridge. Considering the removal of bottlenecks and additional capacity offered by a new bridge, this project would increase the number of vehicles that can cross the Wenatchee River more than 50 percent compared to the capacity that exists today.

While a new bridge would facilitate the movement of vehicles across the Wenatchee River, it would also serve as an important connection for bicyclists. The existing portion of Pine Street was recently improved for bicyclists as part of the Pine Street Trail. The improvements already in place paired with dedicated facilities on the Pine Street Bridge would create a parallel route to US 2 between River Bend Drive and Ski Hill Road through Leavenworth. The route would also provide a connection to the middle school and high school for students living on the east side of the Wenatchee River.

<sup>5</sup>icycle/E Leavenworth Road to the south and Chumstick/North Road to the north

## GUIDING PRINCIPLES

### Reliable



This project would improve travel times on US 2 by 40 percent during summer weekend conditions, making US 2 a more reliable route during periods of congestion. A new connection across the Wenatchee River would also ensure that movement across the river could continue to occur in the event of an incident on the US 2 bridge.

### Safe & Complete



This project would improve public safety by creating an additional capacity to move people, vehicles, and emergency responders across the Wenatchee River in the event of an emergency or natural disaster. With dedicated facilities for bicyclists and pedestrians, this project would also reduce the exposure of bicyclists crossing the Wenatchee River creating a safer and more comfortable bicycling experience.

### Vibrant



This project would encourage more efficient use of the corridor by creating mode shift opportunities by incentivizing the use of transit and shuttles through travel-time savings.

## ADDITIONAL CONSIDERATIONS

### Right-of-Way

Construction of Pine Street between the current terminus and River Bend Drive and construction of a new bridge will require significant right-of-way acquisition

### Continuing Public Outreach

Advance of this concept past the planning level will require engagement and support of the greater Leavenworth community

### Environmental

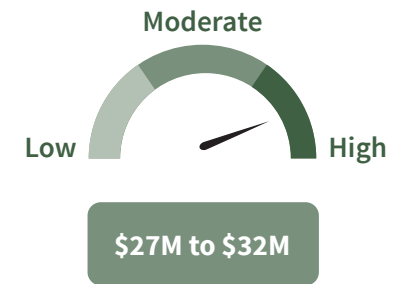
Work near the Wenatchee River is likely to require special permits and coordination with resource agencies

### Additional Improvements

Reconfiguration will be required for several local roadways including Chumstick Highway, Alpensee Strauss, Riverbend Drive and access to Safeway

***This bridge would be a local road owned and maintained by the City of Leavenworth.***

## COST

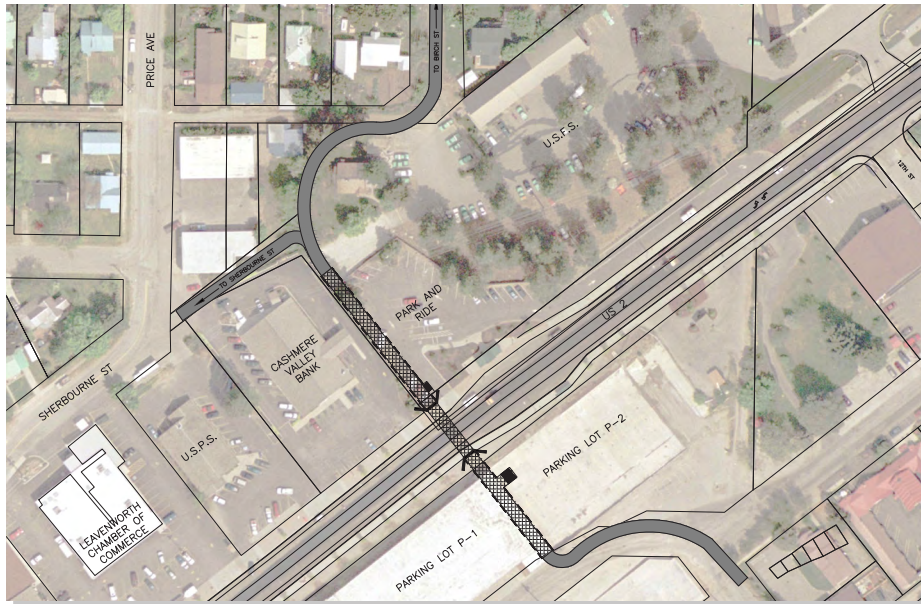




## US 2 Undercrossing

### PROJECT DESCRIPTION

This project would connect the residential neighborhoods north of US 2 to downtown Leavenworth and the Wenatchee River Waterfront by constructing a US 2 undercrossing near the Leavenworth Park and Ride. The undercrossing would be accessible from both the Park and Ride lot and Sherbourne Street on the north and Division Street on the south, creating a more seamless connection across US 2 for bicyclists and pedestrians.



### PROJECT BENEFITS

- ✓ Separation of vehicles and pedestrians and bicyclists crossing US 2
- ✓ Elimination of a barrier for residents accessing the waterfront area
- ✓ Encouragement for Downtown employees and patrons to “park once”

Leavenworth’s Comprehensive Plan identifies US 2 as a barrier for biking and walking that separates the downtown area from the residential areas. All existing options for crossing US 2 near downtown expose bicyclists and pedestrians to conflicts with right-turning vehicles, except for the High-Intensity Activated Crosswalk (HAWK) beacon at City Hall, which is a mid-block crossing. The large number of pedestrian crossings that can occur in Downtown Leavenworth on a summer day or during events (over 3,000 pedestrians were counted on a Sunday in August at one crossing) create delay for vehicles along the US 2 corridor. Providing a grade separated crossing for bicyclists and pedestrians creates a safer and more comfortable experience that reduces barriers to visiting the waterfront, encourages parking once in Downtown to visit multiple destinations, and improves operations at signalized intersections.



Example of Pedestrian Undercrossing  
Source: Schultz Heavy Civil Construction, 2020

## GUIDING PRINCIPLES

### Reliable



The large number of pedestrian crossings that can occur on a summer weekend or during events reduce the efficiency of signalized intersections and add delay to the US 2 corridor. Providing a grade-separated crossing of US 2 would reduce this conflict, improving the efficiency and reliability of the corridor. Similarly, a grade separated crossing would make parking once in downtown and traveling between destinations more feasible, reducing the number of vehicles in downtown cruising in search of a parking space.

### Safe & Complete



The separation of pedestrians and bicyclists crossing US 2 would not only reduce potential conflicts with vehicles, but also create a more comfortable biking and walking experience.

### Vibrant



Encourages residents to walk or bike to the downtown or the waterfront area by eliminating the need to cross US 2, which is identified as a barrier separating downtown Leavenworth and the waterfront from residential neighborhoods. The ability to “park once” also makes downtown a more accessible destination.

### Supported



The community and stakeholders have supported project ideas that lower the number of pedestrians crossing US 2 during summer weekends and festivals.

## ADDITIONAL CONSIDERATIONS

### Enhanced Pedestrian Separation

This project should be paired with enhanced modal separation on US 2, through use of planters or visually appealing fencing to encourage use of the undercrossing.

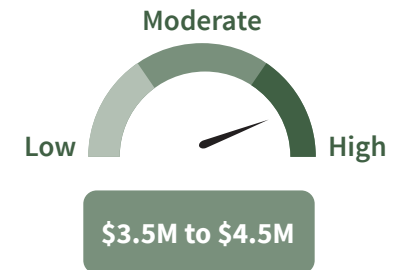
### Wayfinding

Wayfinding signs will be required to direct bicyclists and pedestrians on both sides of US 2 to the undercrossing.

### Right-of-Way

Some right-of-way acquisition will be required to connect the undercrossing to neighborhood streets facilitating a connection for residents.

## COST





# Meeting Agenda

- Project Analysis & Fatal Flaws
- Recommended Investments
- Upcoming Community Input Opportunities
- Project Next Steps



# Upcoming Engagement Opportunities

- **Community Meeting**

- Thursday, February 13<sup>th</sup> from 5:30 to 7:30PM at Leavenworth High School
- Join us and help us spread the word!
- Sharing the Draft Plan with the Community and asking for their feedback

- **Project Website**

- Draft Plan will be posted for Community to review and provide input
  - Live until March 5th



# Meeting Agenda

- Project Analysis & Fatal Flaws
- Recommended Investments
- Upcoming Community Input Opportunities
- Project Next Steps ←





# Project Next Steps

- **Today – February 13<sup>th</sup>**
  - Finalize Draft Plan
- **February 13<sup>th</sup>**
  - Community Meeting
  - Draft Plan goes live on Project Website
- **February 13<sup>th</sup> – March 5<sup>th</sup>**
  - Draft Plan is available for public input
- **April 1<sup>st</sup>**
  - Publish Final Plan!





US 2 Upper Wenatchee Valley  
TRANSPORTATION STUDY

## Project Advisory Committee Meeting #5

Wednesday, January 29, 2020

11:00 AM – 1:00 PM

### AGENDA ITEM #1: WELCOME

#### In-Person Participants:

- Penny Mabie, EnviroIssues
- Jeff Wilkens, CDTC
- Nancy Smith, Leavenworth Chamber of Commerce
- Duane Goehner, Citizen, Friends of Leavenworth
- Joel Walinski, City of Leavenworth
- Kendra Breiland, Fehr & Peers
- Kara Hall, Fehr & Peers
- Jennifer Saugen, Perteet
- Sergeant Jason Reinfeld, Chelan County Sheriff
- Nick Manzano, WSDOT
- Richard DeRock, Link Transit
- Josh Patrick, Chelan County

#### In-Person Observing:

- Lilith Vespier, City of Leavenworth

Purpose of Meeting: Share projects identified as having a fatal flaw and the recommended investments.

### AGENDA ITEM #2 – PROJECT ANALYSIS & FATAL FLAWS

- The 10 highest performing projects were presented at the last PAC meeting and each member was asked to identify the projects they were most excited about
- Since then the Study Team has continued to evaluate and refine those projects
- Resulted in a list of six projects that have been evaluated in more detail
  - US 2 Ski Hill to River Bend Improvements
  - US 2 Pedestrian Undercrossing
  - Pine Street Connection
  - Parking Management
  - US 2 Roundabout at Icicle Road
  - Peshastin Bicycle & Pedestrian Transit Connection

- A number of projects with fatal flaws have been identified – a few of the high performing projects presented at the last meeting
- Grade Separated Crossings
  - This project was identified as infeasible at 9<sup>th</sup> and Front due to grade and the length of ADA ramps needed
    - Replacing ramps with stairs were considered but would require the addition of elevators
    - The long ramps would require pedestrians to walk the wrong direction to access crossings and block businesses on US 2
  - Simulation indicated some improvement in travel time on US 2, less than 2 minutes, but the minimal improvement paired with cost led to elimination of this
  - At Front Street an Overcrossing was considered due to grade to the south of US 2
  - At 9<sup>th</sup> Street an Undercrossing was considered
- Roundabouts on US 2
  - Roundabouts considered at Front Street, 9<sup>th</sup> Street, Chumstick Highway
    - Additional analysis completed since the previous PAC meeting indicates that queueing on US 2 and on side-streets would be a concern
    - Roundabouts would not operate well under festival conditions
      - Temporary traffic control measures would also be harder to implement
    - Roundabouts are likely to have right-of-way impacts at major intersections
    - The number of pedestrians crossing US 2 on summer weekends would also impact operations at the roundabouts
- Two other projects evaluated at high-level to determine feasibility
  - Widening US 2
    - Project would adversely impact several of the guiding principles including Safe & Complete
    - Would impact bicyclists and pedestrians on US 2 through Leavenworth
    - Would need to extend all the way to SR 97
    - It was noted that the \$30M cost estimate is too low and that costs for this project would be likely to exceed \$100M based on widening between Leavenworth and SR 97
  - Parallel Routes
    - 3 options were considered – a bypass, E. Leavenworth Road to Icicle Road, North Road to Chumstick Highway
      - E. Leavenworth Road to Icicle Road – screened based on cost and local impact to residents
      - North Road to Chumstick Highway – would require reconstruction to accommodate mix of uses with freight, passenger vehicles, and agricultural uses
        - Screened based on cost
      - Leavenworth Bypass
        - 1965 WSDOT idea would use Chumstick Highway alignment
        - No other environmentally feasible routes

- No options result in travel time savings, based on that and cost this idea was screened

### AGENDA ITEM #3 – RECOMMENDED INVESTMENTS

- Projects have been grouped in two categories
  - Localized Improvements & Management Strategies: these are projects that improve one location along the corridor or recommend a strategy rather than a capital improvement
    - US 2 Roundabout at Icicle Road
    - Peshastin Bicycle & Pedestrian Transit Connection
    - Parking Management
  - Transformative Measures: projects that provide measurable benefit to the corridor as a whole
    - US 2 Ski Hill to River Bend Streetscape Improvements
    - Undercrossing at US 2 Park & Ride
    - Pine Street Connection
  - US 2 Roundabout at Icicle Road
    - Would construct a single lane roundabout at Icicle Road
      - Providing safer access for locals using Icicle Road
      - Create a gateway to Leavenworth to transition drivers from mountain highway driving
      - Create a more efficient turn around for Link Transit by keeping the bus on US 2 rather than using the gas station parking lot
    - Project advances all five of the Guiding Principles
    - Was added by the community as part of the online pin-map and received over 60 “likes”
    - PAC members asked about growth assumed to occur at that intersection
      - While no growth was assumed, the roundabout was analyzed under seasonal conditions, which would have higher volume than most typical days
      - If future growth occurred at this intersection, signals could be added to meter traffic entering the roundabout to make sure that Icicle Road traffic could still access US 2
    - Project cost estimated between \$2.5-3M
  - Parking Management Strategies
    - Focuses on building on what has already been recommended and what is moving towards implementation
    - The goal is to park employees outside the downtown core or in off-street lots so that on-street spaces are available for visitors
    - First, rely on the WSDOT lot recently transitioned to the City, then utilize remaining capacity at Willkommen Village Park & Ride
    - Once a management system is in place, parking can be managed differently for different events
    - Advances three of the Guiding Principles, cost will vary with implantation
  - Peshastin Bicycle & Pedestrian Connection

- Construction of a parallel bridge to the Peshastin Bridge to accommodate bicyclists and pedestrians
- Would allow Link Transit stop to be moved to US 2 rather than circulating into Peshastin – would save 6 minutes per loop
- Advances four of the Guiding Principles and is estimated to cost between \$4M-5M
- It was noted that this project could apply for funding that would not be available to other capital projects evaluated as part of this plan
- US 2 Ski Hill to River Bend Drive Streetscape Improvements
  - Project would widen north sidewalk to create a shared use path for bicyclists and pedestrians and restripe US 2 to provide extended right-turn lanes for local residents and transit
  - Traffic signal pre-emption would allow transit vehicles in the right-turn lane to proceed into general purpose traffic lane before passenger cars creating an advantage for using transit
    - This technology could be used by other shuttle operators
  - Emergency services would also have pre-emption and more space for vehicles to pull to the right, allowing first responders to have priority on the corridor
  - Would also include a visually appealing barrier to separate bicyclists and pedestrians on US 2
  - Would require eliminating the two-way-left-turn lane only in areas where additional right-turn lanes are added
  - Project would not improve travel time on US 2 but would provide more access for local residents and would not increase travel time
  - Advances four of the guiding principles and cost would be likely to vary based on implementation
    - Could be implemented one intersection at a time
- Pine Street Connection
  - Project would connect Pine Street across Chumstick Highway to River Bend Drive with construction of a new bridge across the river
  - Would match recent Pine Street improvements – two general purpose travel lanes, shared use-path and sidewalks
  - Only project found to improve travel time on US 2
  - US 2 would still be congested during peak weekends and events but with a new bridge more people would be moving across the river
  - Would provide local connection to Safeway and schools on the other side of the river
  - It was noted that there is planned growth near US 2/River Bend Drive which operates poorly today that would need to be accounted for in a more detailed evaluation
  - This project would require intersection improvements at Alpensee Strauss and River Bend Drive as well as reconfiguration of the Safeway driveways
  - Should this project be advanced, more detailed operational analysis and environmental analysis would be needed to understand local impacts
  - This project advances three of the Guiding Principles and would cost between \$27-32M
- US 2 Undercrossing

- An Undercrossing near the US 2 Park & Ride was identified as the only feasible location for a grade separated crossing
- Undercrossing could be accessed from the Park & Ride but would also connect to the residential areas north of US 2 creating a connection for residents to the waterfront
- While no crossing exists at this location today it is anticipated that this location would serve as a mid-block crossing and would be a more direct connection across US 2 from residential neighborhoods
- Advances four of the Guiding Principles and is estimated to cost between \$3.5-4.5M

#### AGENDA ITEM #4 – UPCOMING COMMUNITY INPUT OPPORTUNITIES

- Community Meeting will be held Thursday February 13<sup>th</sup> from 5:30PM to 7:30PM
  - Study team will present project ideas and answer questions from community members
- Opportunity to provide input will also be available online for community members that cannot attend the meeting

#### AGENDA ITEM #5 – PROJECT NEXT STEPS

- Study team will be revising the Draft Plan based on input shared today
- Draft Plan will be published on February 13<sup>th</sup> and available for comment through Mid-March
  - The community input at the meeting and online will be used to finalize the Final Plan which will be available in early April
- None of the projects presented in this plan have funding. This plan is intended to be a menu of options for local agencies along the corridor. Any advancement of these projects will be based on interest of local agencies.