AGENDA
Bend Metropolitan Planning Organization
Policy Board & TAC Joint Meeting

Date: November 29, 2018
Time: 9:00am - Noon
Location: Deschutes Services Center, Sawyer Room
1300 NW Wall Street, Bend
Contact: Tyler Deke, BMPO (541) 693-2113
Jovi Anderson, BMPO (541) 693-2122

US 97 Bend Parkway Plan

Purpose of Meeting: Establish 2040 Vision for the Bend Parkway Corridor

Time	Topic	Lead
9:00	**Welcome & Update** • Introductions • Review agenda and meeting purpose • Project progress report	**Sally Russell** **Jeanne Lawson/ Rick Williams**
9:10	**Draft Vision Concept** • Review project goals and objectives and charter ▪ Project Goals (**Attachment A**) ▪ Project Charter (**Attachment B**) • Overview of Vision Concept ▪ Draft Vision Concept (redline version) (**Attachment C**) ▪ Draft Vision Concept (clean version) (**Attachment D**)	**Bridget Wieghart/ Jeanne**
9:25	**Existing and Future Conditions** • Update on Existing Conditions ▪ Existing Conditions summary (**Attachment E)** • Future forecast and issues ▪ Future Conditions summary (**Attachment F)** ❖ The full-length Existing and Future Conditions reports and supporting appendices are posted on the following site: https://www.bendoregon.gov/government/departments/growth-management/bend-mpo/mpopolicyboard	**Bridget/ John Bosket**

9:55	**Public Outreach Update**
	• Survey
	  ▪ Survey Summary (**Attachment G**)
	• Sounding Board
	  ▪ Sounding Board meeting summary (**Attachment H**)
	• Other
		Jeanne/Rick

10:25	**Break**	
10:35	**Vision Workshop** • Review vision by element, original statement and public feedback • Identify and discuss elements that need refinement • Group discussion	**Jeanne/ Group**
11:20	**Alternative Concepts**	**John/Rick**
11:50	**Conclusions and Next Steps**	**Rick/Bridget**
Noon	**Close**	**Sally Russell**

Upcoming MPO meetings

TAC: The next regular meeting of the TAC is scheduled for December 5 from 10 am – 1 pm. The meeting will be focused on the Transportation Safety Action Plan and the MPO plan and City TSP updates.

Policy Board: The next regular meeting of the Policy Board is scheduled for December 18 at 12:00 noon

Accessible Meeting/Alternate Format Notification

This meeting event/location is accessible. Sign or other language interpreter service, assistive listening devices, materials in alternate format, such as Braille, large print, electronic formats, or any other accommodations are available upon advance request at no cost. Please contact Jovita Anderson no later than 24 hours in advance of the meeting at (541) 693-2122, or janderson@bendoregon.gov. Providing at least 2 days-notice prior to the event will help ensure availability.

US 97 Parkway Plan
Goals and Objectives

May 9, 2017 Final

Project Purpose

The purpose of the US 97 Parkway Plan is to complete a multi-phase planning process that:

- Analyzes the transportation deficiencies and clearly identifies, articulates and prioritizes problems in the corridor over the next 20 years
- Identifies feasible solutions to key problems
- Evaluates and prioritizes solutions based on benefits, costs and ability to implement them within financial constraints.
- Develops an implementation plan that is supported by partner jurisdictions and includes commitments to short term actions

Goals and Objectives

The goals and objectives of the planning process are below. Goals are numbered and the objectives are listed in bullets below each goal. Once we agree on the goals and objectives, specific criteria and measures will be developed for each objective.

1. Improve safety for all modes
    - Reduce the frequency and severity of crashes for all modes with an emphasis on severe and fatal injuries
2. Support economic development throughout the region and state
    - Support efficient movement of people, goods and services, and recreational traffic to, within and through the City of Bend
    - Develop strategies to accommodate planned growth through provision of transportation options now, and into the future
3. Manage transportation mobility into the future
    - Evaluate the ability to achieve ODOT volume/capacity (V/C) targets and develop alternative mobility measures and targets, where appropriate
    - Assess impacts on local system
4. Consider accessibility to key destinations now and in the future
    - Evaluate and assess reliable travel times between key destinations during peak periods
5. Facilitate the use of multimodal travel options
    - Enhance transit, bicycle and pedestrian facilities along, parallel to, and across, US 97
    - Look for transportation demand management opportunities
6. Enhance the environment
    - Reduce emissions through reduction of vehicular delay, improved connections in the local system, and the use of alternative modes

- Minimize right of way impacts
- Design projects to avoid, mitigate and minimize impacts

7. Identify cost effective solutions
    - Prioritize low cost, high benefit solutions
    - Prioritize solutions that that leverage existing planned projects and programs
8. Develop an implementation plan
    - Consider available funding sources and existing planned projects and programs
    - Recommend potential future funding sources
    - Include partner commitments to short term actions

US 97 Parkway Plan Phase 1 and Phase 2 - Project Charter

November 20, 2018 – Phase 2 Update

Project Overview

This planning effort will identify geometric, operational, management and safety strategies that can be implemented to improve the future performance of US 97 in Bend between Deschutes Market Road and Baker Road. Due to the volume of data to be gathered and analyzed, the planning effort has been divided into two phases:

- The first phase addressed Project chartering, developing goals and objectives and understanding existing conditions.
- The second phase will analyze corridor transportation needs over the next 20 years, will establish a vision for the facility, will address multimodal analysis, system management and operational strategies, and will seek to identify, evaluate, and prioritize strategies that improve mobility, reliability, and safety. It will also establish an implementation plan.

The Oregon Department of Transportation (ODOT) is sponsoring this project in coordination with the City of Bend and the Bend Metropolitan Planning Organization (BMPO). The results of the overall planning effort (Phase 1 and Phase 2) will become a part of the 2019 BMPO Metropolitan Transportation Plan, but will also inform, and be informed by, related regional planning efforts, such as the City of Bend Transportation System Plan.

Background

In 2014, the BMPO completed an update to the regional long range transportation plan. This Metropolitan Transportation Plan update identified future traffic congestion on US 97 through Bend and predicts that US 97 is unlikely to meet mobility targets in the future.

US 97 is heavily used and serves a significant volume of freight, state-wide, regional, local and recreational traffic within the Bend MPO as well as through Central Oregon. Adding traditional lane capacity to the road in the future is unlikely due to financial and physical constraints.

While the US 97 North Corridor EIS identified a detailed plan for the section of US 97 north of US 20, and the South Parkway Refinement Plan identified a plan for the southernmost section of US 97 in Bend, the remainder of the facility through the MPO area has not had a detailed assessment of possible solutions and strategies since construction was completed in 2001. Additionally, the projects identified in the North Corridor EIS and South Parkway Refinement Plan do not have dedicated funding and may not be constructed in the near or mid-term. As such, ODOT, the MPO and their partner agencies prioritized moving forward with a more refined and focused look at US 97 through the Bend urban area.

Project Goals and Objectives

A set of Goals and Objectives will be used to develop specific criteria and metrics for evaluating potential project outcomes. The current list of Goals and Objectives are listed in Appendix A.

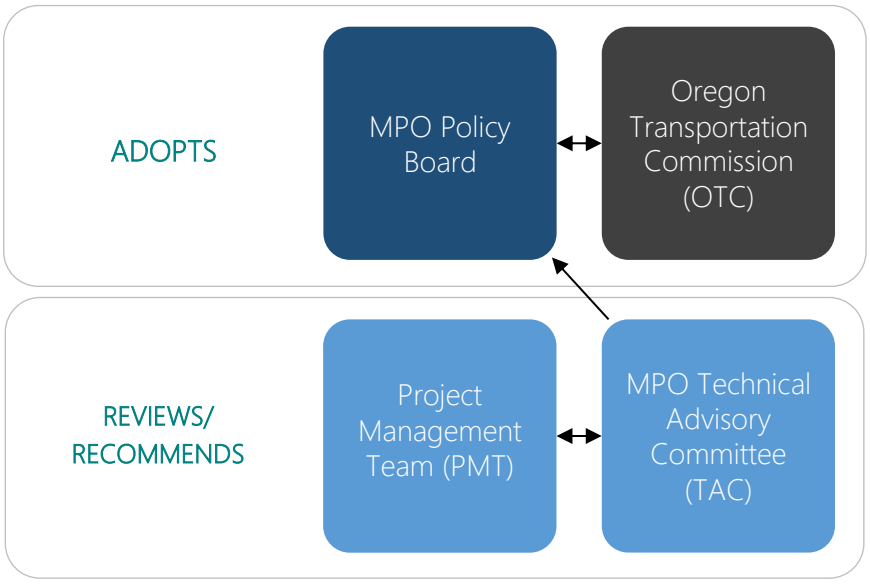
Project Partners

The project will be overseen by a **Project Management Team** (PMT) that includes the sponsoring agency (ODOT), the BMPO, the City of Bend, and the project consultant team.

The PMT will use the existing BMPO **Technical Advisory Committee** (TAC) and **Policy Board** as committees throughout both phases of the Project. These committees are intended to represent a range of community and agency interests related to the project. The BMPO TAC (the TAC) will be charged with reviewing project materials for technical accuracy, providing feedback to the PMT, and recommending policy actions to the BMPO Policy Board (the Policy Board). The Policy Board will ultimately be responsible for decision-making guidance on project outcomes, recommendations to ODOT (as sponsor), and for making any applicable adoptions to the MTP.

The **Oregon Transportation Commission** (OTC) will adopt the final US 97 Parkway Facility Plan as a component of the Oregon Highway Plan. Adoption by the OTC will establish policies and priorities for the corridor that guide management of the facility by (ODOT) and local governments. The BMPO Policy Board will also adopt the facility plan as a component of the Metropolitan Transportation Plan (MTP). The plan will establish MTP policy and project priorities.

Decision Structure



Committee Membership, Roles, and Responsibilities

Project Management Team (PMT)

Membership currently includes:

- David Amiton, ODOT Region 4 Interim Planning Manager
- Tyler Deke, Bend MPO
- Brian Dunn, ODOT Transportation Analysis Unit (TPAU)
- David Hirsch, ODOT Region 4 Traffic Manager
- Nick Arnis, City of Bend
- Joel McCarroll, ODOT District 10 Manager
- Michelle Rhoads, Cascades East Transit
- Peter Russell, Deschutes County
- Peter Schuytema, ODOT TPAU
- Rick Williams, ODOT Project Manager

The Project Management Team is responsible for day-to-day project coordination and guidance.

BMPO Policy Board

Membership currently includes:

- Sally Russell, Chair, City of Bend
- Barb Campbell, City of Bend
- Anthony DeBone, Vice Chair, Deschutes County
- Bob Townsend, ODOT
- Bill Moseley, City of Bend

Decision Making (BMPO Policy Board): The BMPO Policy Board is ultimately responsible for making final project decisions and recommendations. As such, it will adopt this Charter.

BMPO Policy Board actions may not be conducted without a quorum of the voting members. A quorum consists of the representatives from the Oregon Department of Transportation, and Deschutes County, and two of the three City of Bend representatives. Approval by a simple majority of the voting members will constitute passage of any action.

At their discretion, the BMPO Policy Board may appoint non-voting members that represent alternate travel modes, the business community, freight community, or other interests deemed appropriate. Non-voting members can participate in all discussions and deliberations of the Policy Board. Non-voting members shall have no vote and shall not make or second motions.

BMPO Technical Advisory Committee (TAC)

Membership currently includes:

- Michel Bayard, Citizen Representative
- Casey Bergh, Oregon State University Cascades
- Ned Conroy, Federal Transit Administration*
- Scott Edelman, Oregon Department of Land Conservation and Development*
- Karen Friend, Central Oregon Intergovernmental Council (COIC)
- Janet Hruby, Bend Streets and Operations Dept.
- Nick Arnis, City of Bend
- Jeff Monson, Commute Options
- David Amiton, ODOT Region 4
- Michelle Rhoads, Cascades East Transit (CET)
- Rick Root, Deschutes County Bicycle & Pedestrian Advisory Committee (BPAC)
- Peter Russell, Deschutes County
- Sharon Smith, Bend La Pine Schools*
- Karen Swirsky, City of Bend
- Rachel Tupica, Federal Highway Administration*
- Laura Underhill, Bend Park and Recreation District
- Joe Viola, Central Oregon Community College (COCC)
- Robin Vora, Citizen Representative

* non-voting members

For the purposes of the US 97 Parkway project, additional representatives may be required and granted voting privileges. The BMPO Policy Board may also appoint non-voting members to the TAC that represent alternate travel modes, the business community, freight community, or other interests deemed appropriate. Potential additional TAC members for Phase 2 could include:

- City of Bend Police (Phase 2)
- Deschutes County Sherriff's Office (Phase 2)
- City of Bend Fire/Ambulance (Phase 2)

Decision Making (BMPO TAC): The BMPO TAC is primarily charged with providing review and recommendations to the BMPO Policy Board. A quorum shall consist of a majority of voting members. Upon declaration that a quorum exists, a majority of votes from voting members in attendance at the meeting shall constitute a formal decision or recommendation from the committee. It is to the discretion of the BMPO TAC Chairperson to determine if email or phone correspondence will be considered as attendance and therefore count toward the number for a quorum. Non-voting members can participate in all discussions and deliberations of the BMPO TAC. Non-voting members shall have no vote and shall not make or second motions.

Committee Expectations and Ground Rules

Five, two-hour meetings of the BMPO TAC and BMPO Policy Board are currently planned under Phase 2. The first (joint) meeting will include TAC and Policy Board members. Meetings will be convened adjacent to standing BMPO TAC and Policy Board meetings.

All committee meetings will be held in Bend. The Bend MPO staff will arrange all TAC and Policy Board meetings, provide all meeting logistics (including final meeting agendas) and develop summaries that document the key points of each discussion. The PMT will work to make meeting agendas and project materials available for committee member review at least one week prior to each meeting.

A facilitator will be provided to help plan and moderate meetings and to help ensure that meetings are productive. The facilitator will manage meeting time and enforce committee ground rules, provide opportunities for each committee members to provide input, and work with the committees to reach consensus. If meetings begin to run long, it may be necessary to conduct time checks to determine if any topics need a follow-up meeting or whether members are willing to stay longer to complete a discussion or decision topic.

Committee members are expected to participate in all scheduled meetings. Members representing interest groups and agencies should be well informed on their group's perspectives, needs, issues and processes. Members are expected to support the outreach and involvement program by reporting back to their constituencies and being prepared to comment on their behalf at meetings.

Members and Project Staff agree to:

a. Treat each other and guests with respect;
b. Listen carefully, seeking to understand each other;
c. Raise issues honestly, clearly and early in the process;
d. Focus on the subject at hand and help the group stick to the agenda;
e. Discuss topics constructively with the aim of solving problems;
f. Seek to find unity and common ground;
g. Share the air by allowing others to finish completely before speaking, and pausing to let others speak before speaking again;
h. Minimize distractions during meetings by putting cell phones on silent mode and avoiding side conversations;

In addition, committee members agree to:

a. Review any materials from missed meetings and follow-up with questions or for a more in-depth briefing;
b. Represent personal views but not speak for the committee as a whole when engaged in other forums, including contacts with the news media or other stakeholders;

c. **Refer public and media inquiries about the project** to the ODOT Project Manager;
d. **Raise any concerns about process** to help future meetings and activities work more effectively, and
e. **Strive for consensus** with the understanding that recommendations are strengthened by high levels of agreement. Committee decisions and recommendations will be understood to be the preferred choice by the committee even if it may not match each individual member's personal preference.

Public Involvement Opportunities

Early in Phase I, stakeholder interviews with neighborhood groups, businesses, and community organizations provided the basis for a summary of input on how the Project Team should approach its analysis of existing conditions. In Phase II, the findings from Phase I will be shared with the public and feedback will be sought on proposed solutions.

Meetings of the BMPO TAC and Policy Board will continue to be advertised via MPO-managed email lists, on the BMPO calendar and will be open to the public. There will be opportunities for public comment prior to meetings of the BMPO Policy Board. Public involvement opportunities during Phase 2 will also include: project information materials, formation and two meetings of the Sounding Board (discussed below) and presentations from ODOT to community groups (on request). An online survey will be used early in the process to help inform the development of a Parkway Vision statement, and to gather public feedback on the findings from Phase 1. An online open house will be used later in the project to gather feedback on proposed solutions.

Sounding Board (SB)

The PMT will recommend, and the Policy Board will approve, membership for a Sounding Board that will provide project and process feedback. The group will meet twice during Phase 2. Suggested group membership may include representatives from neighborhood associations; the Chamber of Commerce and local business groups; economic development groups; transportation advocacy groups; the freight industry; environmental justice and community organizations; and advocates for local tourism.

- **Neighborhood Associations** located near the parkway.
- **Tourism** (Visit Bend.)
- **Business/Economic Development** (Bend Chamber of Commerce, Downtown Business Association.)
- **Freight** (Local distributors.)
- **Transportation and Mobility** (Deschutes County Bicycle and Pedestrian Advisory Committee, Commute Options**,** Cascades East Transit. City of Bend TSP Advisory Committee.)
- **Environmental Justice** (minority advocacy groups.)

Decision Making (Sounding Board): The Sounding Board will be charged with providing review and feedback to the BMPO Policy Board.

Acceptance of This Charter

This updated charter shall be reviewed by the Project Management Team and presented to the TAC and Policy Board at their first joint meeting for review. The BMPO Policy Board will be responsible for approving this document and making updates as needed throughout the project.

_____

Sally Russell
BMPO Policy Board Chair (City of Bend)

_____

Anthony DeBone
BMPO Policy Board (Deschutes County)

_____

Gary Farnsworth
BMPO Policy Board Vice-Chair (ODOT)

_____

Barb Campbell
BMPO Policy Board (City of Bend)

_____

Bill Moseley
BMPO Policy Board (City of Bend)

Attachment C

US 97 Bend Parkway Corridor Vision Concept and Development Plan

~~September~~ Revised Draft November 20~~14~~28, 2018

Study Purpose and Context

The U.S. 97 Bend Parkway was constructed in phases between 1994 and 2002. At the time the region and the State intended that the Parkway serve through-traffic as a relatively free flowing bypass of the urban area. Certain Parkway design elements (such as right in, right out) were provided on an interim basis, with an intergovernmental agreement that stipulated that ODOT would close or restrict public road connections if they began to affect the safety or function of the Parkway

Since the Parkway was completed, the population of Bend has nearly doubled and phase 1 of the Parkway Plan identified significant congestion, safety and reliability issues that are impacting local and regional travel. These challenges are expected to worsen over time~~,~~ as more people move into the region and State, placing more pressure on the US 97 corridor. ~~with~~ Bend itself consistently ranks ~~ing~~ as one of the fastest growing cities in the country with a population that is expected to nearly triple by 2040.

To ensure that the Parkway is able to serve anticipated growth and fulfill its regional and statewide function, it is necessary to explore viable transportation solutions. As a basis for the solutions, the team will facilitate the community and decision makers in forming a **2040 Vision for the Bend Parkway**, compatible with the state's Vision for Highway 97 in Oregon.

Parkway Vision Purpose

The purpose of the Parkway Vision is to ground the exploration and selection of solutions in a common understanding of the purpose and role of the Parkway and provide direction for future changes.

To develop a vision concept, the team reviewed the following materials and identified key themes that describe the nature of the facility and the corridor:

- U.S. 97 Parkway Plan Phase 1 adopted Goals and Objectives
- U.S. 97 Parkway Plan Phase 1 Stakeholder interviews
- Previous Parkway Plan TAC and Policy Board meetings
- Conceptual ODOT Vision for the Parkway developed for the Bend TSP
- Bend TSP Draft Goals

Below is a list of potential Vision Elements based on these key themes. These Elements form a Vision Concept that will be presented for review and discussion as part of an online survey and a workshop meeting of the MPO's combined Policy Board and TAC. The outcomes of those efforts will shape a Working Vision that will guide the development of the Parkway Plan and will be refined through that planning process.

Attachment C

Vision Concept/Potential Elements

In 2040…

1. **The U.S. 97 Bend Parkway Corridor is part of a significant *statewide* route:** U.S. 97 continues to serve as Oregon's primary north/south route east of the Cascades, moving goods and people from border to border and serving as the transportation backbone and economic artery for communities throughout Central Oregon. It is also Oregon's primary seismic lifeline route for interstate commerce and emergency services if I-5 is closed or restricted.

2. **The U.S. 97 Bend Parkway Corridor is a significant *local* route:** The Parkway through Bend – Central Oregon's economic engine and urban hub – is still the most heavily used section of U.S. 97. In addition to its statewide function, it provides essential connections to the Bend metropolitan area, supporting a vibrant local economy.

3. **The U.S. 97 Bend Parkway Corridor is facilitating through travel:** The Parkway continues to be designated as an expressway, with a primary function of allowing travel between communities, supporting the regional economy, and providing connections to recreation areas with minimal interruptions.

4. **The U.S. 97 Bend Parkway Corridor is fully integrated into the overall Bend multimodal transportation system with strategic on/off ramps, overcrossings/undercrossings, and a strong parallel system that accommodates the community's transportation needs:** The City, Metropolitan Planning Organization, and ODOT have worked with the community to strategically plan and support changes to the area's street network, including the Parkway, to provide for multimodal access to Downtown, local businesses and neighborhoods as part of a cohesive, integrated network.

5. **Local traffic growth is accommodated on the local roadway system:** As Bend grows, the region's transportation authorities have provided the community with ~~viable alternatives~~a multi-modal transportation system that ~~to~~ meets local needs to get around and preserve the function of U.S. 97 and the Parkway.

6. **The U.S. 97 Bend Parkway Corridor is safer for all users and more efficient due to access changes** Crosswalks that are currently directly on the Parkway and some current signalized intersections have been strategically closed or upgraded to an overcrossing or undercrossing. Right-in/right-out local road accesses have been modified or closed ~~or upgraded~~ for safety.

~~7.~~ **The U.S. 97 Bend Parkway Corridor is part of a transportation system that supports active transportation modes such as walking, biking and taking ~~the bus~~transit:** The City, Metropolitan Planning Organization and ODOT have planned and supported improvements that allow more people to walk ~~and~~, bike or take other mobility devices efficiently and safely providing low stress, accessible facilities ~~for walking and biking along,~~ across~~,~~ and parallel to the Parkway.

~~8.~~7. ~~**People who bike and walk can cross the U.S. 97 Bend Parkway Corridor safely at key locations:**~~ Safety improvements have been made at key locations to allow people to cross the Parkway ~~more~~ safely and conveniently on bike and on foot.

Commented [JL1]: Moved this element up from what was element 6 to reinforce the multimodal nature of this plan.

Attachment C

Vision Development Plan

This concept will be developed through the following steps:

Process Step	Timeframe
1. PMT (Review/Refine) The PMT discussed~~s~~ and refined~~s~~ the Vision Concept (the first draft of this document).	*July 2018*
2. Online Survey Gathered public input on the Vision Elements in the Vision Concept through an online survey.	*Sept.-Oct. 2018*
3. Sounding Board (Meeting #1/2 - Review) A Bend Parkway Sounding Board, comprised of a broad range of stakeholders ~~will be~~was convened to provide input on the Vision Concept.	*Oct. 2018*
4. Policy Board/TAC Workshop (Meeting #1/4 - Review/Refine) A joint workshop with the MPO Policy Board and Technical Advisory Committee will be held to develop guidance for the development of a *Draft Working Vision* based on the Vision Concept, stakeholder input (including the results of the online survey), and feedback from the Sounding Board.	*Oct. 2018*
5. PMT (Revises) The PMT will refine the Vision Concept into a *Draft Working Vision* based on the results of the joint Policy Board/TAC workshop.	*Oct. 2018*
6. Policy Board (Meeting #2/4 - Review/Adopt) The *Draft Working Vision* will be presented to the Policy Board for adoption.	*Winter 2018*
7. PMT (Revises as needed) Following the exploration and selection of transportation solutions, the team will review, and if necessary, suggest refinements to the Working Vision.	*TBD*
8. Policy Board (Meeting #3/4 – Adopts as needed) As part of the final plan, the Policy Board and ODOT will adopt the updated final U.S. 97 Bend Parkway Vision.	*TBD*

Attachment D

US 97 Bend Parkway Corridor Vision Concept and Development Plan

Revised Draft November 20, 2018

Study Purpose and Context

The U.S. 97 Bend Parkway was constructed in phases between 1994 and 2002. At the time the region and the State intended that the Parkway serve through-traffic as a relatively free flowing bypass of the urban area. Certain Parkway design elements (such as right in, right out) were provided on an interim basis, with an intergovernmental agreement that stipulated that ODOT would close or restrict public road connections if they began to affect the safety or function of the Parkway

Since the Parkway was completed, the population of Bend has nearly doubled and phase 1 of the Parkway Plan identified significant congestion, safety and reliability issues that are impacting local and regional travel. These challenges are expected to worsen over time as more people move into the region and State, placing more pressure on the US 97 corridor. Bend itself consistently ranks as one of the fastest growing cities in the country with a population that is expected to nearly triple by 2040.

To ensure that the Parkway is able to serve anticipated growth and fulfill its regional and statewide function, it is necessary to explore viable transportation solutions. As a basis for the solutions, the team will facilitate the community and decision makers in forming a 2040 Vision for the Bend Parkway, compatible with the state's Vision for Highway 97 in Oregon.

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3. The U.S. 97 Bend Parkway Corridor is facilitating through travel: The Parkway continues to be designated as an expressway, with a primary function of allowing travel between communities, supporting the regional economy, and providing connections to recreation areas with minimal interruptions.
4. The U.S. 97 Bend Parkway Corridor is fully integrated into the overall Bend multimodal transportation system with strategic on/off ramps, overcrossings/undercrossings, and a strong parallel system that accommodates the community's transportation needs: The City, Metropolitan Planning Organization, and ODOT have worked with the community to strategically plan and support changes to the area's street network, including the Parkway, to provide for multimodal access to Downtown, local businesses and neighborhoods as part of a cohesive, integrated network.
5. Local traffic growth is accommodated on the local roadway system: As Bend grows, the region's transportation authorities have provided the community with a multi-modal transportation system that meets local needs to get around and preserve the function of U.S. 97 and the Parkway.
6. The U.S. 97 Bend Parkway Corridor is safer for all users and more efficient due to access changes Crosswalks that are currently directly on the Parkway and some current signalized intersections have been strategically closed or upgraded to an overcrossing or undercrossing. Right-in/right-out local road accesses have been modified or closed for safety.
7. The U.S. 97 Bend Parkway Corridor is part of a transportation system that supports active transportation modes such as walking, biking and taking transit: The City, Metropolitan Planning Organization and ODOT have planned and supported improvements that allow more people to walk, bike or take other mobility devices efficiently and safely providing low stress, accessible facilities across and parallel to the Parkway. Safety improvements have been made at key locations to allow people to cross the Parkway safely and conveniently on bike and on foot.

Vision Development Plan

This concept will be developed through the following steps:

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8. Policy Board (Meeting #3/4 – Adopts as needed) As part of the final plan, the Policy Board and ODOT will adopt the updated final U.S. 97 Bend Parkway Vision.	*TBD*

Atttachment E

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US 97 Parkway Plan

REVISED TECH MEMO #2 SUMMARY: EXISTING CONDITIONS

DATE: August 14, 2018

TO: US 97 Parkway Plan Project Team

FROM: John Bosket, PE | DKS
Aaron Berger, PE | DKS
Amanda Deering, EIT | DKS
Kamilah Buker, EIT | DKS

P17008-001

The purpose of this memorandum is to summarize existing transportation conditions for US 97 and the US 97 Bend Parkway through the city of Bend. The existing conditions memo includes a description of the geometric characteristics, frequencies and types of access provided, traffic controls, modes of travel served, traffic volume characteristics, conditions for walking and biking, safety conditions, levels of congestion, and the reliability of travel times through the corridor. A summary of the key findings from this memorandum is provided below.

SUMMARY OF KEY FINDINGS

Existing Transportation Facilities

- US 97 through the study corridor is classified as a Statewide Highway and has been designated as a part of the National Highway System, a Federally Designated Truck Route, a State Freight Route and Reduction Review Route, and an Expressway. The segment south of Robal Road to south of the Murphy Road interchange has also been designated as a Bypass.
- Sidewalk coverage is sparse, but bicycle facilities are present along most of the corridor.
- Speed limits range between 45 and 65 mph.
- The northbound and southbound travel lanes are physically separated through most of the study corridor. The approximately 3.4-mile segment of highway between Tumalo Place and Grandview Drive includes only a striped median of about 10 feet in width.
- From Empire Avenue to Reed Market Road, the average interchange spacing is approximately one mile, which is significantly shorter than ODOT's 1.9-mile interchange spacing standard for urban expressways.
- Approximately two-thirds of the highway corridor has substandard shoulder widths.
- Approximately 30 regional transit buses travel along US 97 every weekday.

Traffic Volume *(Updated in Phase 2)*

- Traffic volumes in the south half of the corridor have more seasonal variability with a steeper increase in traffic during the summer. This likely indicates a higher recreational proportion of traffic compared to the more commuter-oriented traffic profile in the north half of the corridor.
- During a typical weekday, traffic volumes peak sharply in the morning around 7:00 AM, decrease until about 10:00 AM, then gradually increase and peak again around 5:00 PM.
- PM peak traffic volumes are significantly higher than those in the AM peak.
- The Central Study Area experiences the greatest traffic volumes (nearly 49,000 vehicles per day), while the South Study Area experiences the lowest (about 19,000 vehicles per day).
- Travel pattern analysis using the Bend-Redmond travel demand model shows that on average 40% of trips on US 97 in Bend are local trips within Bend and 50% of trips using US 97 have either an origin or destination in Bend. On average, only 10% of trips on US 97 are through trips, meaning they start and end outside of Bend. This finding indicates that vehicles on US 97 are exiting and entering the Parkway frequently throughout the corridor to complete local trips.

Multimodal Analysis *(Updated in Phase 2)*

- The at-grade pedestrian crossings at Reed Lane, Badger Road, and Pinebrook Boulevard appear to be appropriately controlled (Rectangular Rapid Flashing Beacons) for the low measured pedestrian demand. However, if even a modest increase in pedestrian demand were realized, a higher level of protection would be warranted, such as a signal or beacon with red indication. Since one of the project goals is to "Facilitate the use of multimodal travel options"[1], this should be considered in the future.
- The distances on US 97 between pedestrian and bicycle crossing opportunities range from 900 to 4,500 feet, with an average of 2,000 feet. Crossings in the North Study Area are most widely spaced. From Butler Market Road to Murphy Road, where crossing demand is likely highest, the average distance between crossings is approximately 1,650 feet (about 1/3 mile). In urban areas, the desired spacing for pedestrian and bicycle accessways commonly ranges from 500-800 feet, where practical.
- Bicycle crossings at interchange ramps are difficult to complete, especially at off-ramps where exiting vehicles can often be difficult to recognize from through vehicles due to late activation of turn signals.
- For northbound bicycles, the crossing at the northbound US 20 to Sisters loop ramp does not have sufficient sight distance, requiring the cyclist to estimate vehicle proximity by sound.
- Portions of US 97 currently have bike lanes, but the Level of Traffic Stress (LTS) experienced is still very high because riders are adjacent to high-speed traffic. Physical separation between people biking and motorized traffic would be required to make US 97 a comfortable place to ride a bike.

[1] US 97 Parkway Plan Goals and Objectives, May 9, 2017 Final

- Signalized crossings of US 97 tend to result in lower Levels of Traffic Stress for people biking, while unsignalized crossings result in moderate Levels of Traffic Stress.
- The entire corridor was rated as having Medium to High stress pedestrian environments. High stress environments are present where no sidewalks exist or where sidewalks are curb-tight with no buffer from high-speed traffic. Where planter strips were present, the pedestrian stress was reduced to Medium because of the added buffer the planter strips provide separating people walking from motor vehicles.
- Unsignalized crossings of higher speed roadways (45 mph or greater) resulted in the highest levels of traffic stress for pedestrians.

Safety Analysis *(Updated in Phase 2)*

- Most crashes occur in the 12:00 PM to 6:00 PM period, which corresponds with the peak in traffic volumes.
- Weekdays experience more crashes than weekend days.
- November and December experience significantly more crashes than the other months.
- Approximately 58 percent of all crashes resulted in only property damage.
- Most crashes for a road condition of either wet, snow, or ice occur in the months of November, December, and February. These account for half of the total crashes during those months.
- From 2011-2015 there were two fatal crashes, five severe injury (level 'A') crashes, four bicycle-involved crashes, and two pedestrian-involved crashes.
- The segments of US 97 between the north city limits and Robal Road and between Powers Road and the Murphy Road interchange have recently experienced crash rates higher than the statewide average. The removal of the traffic signal at the Pinebrook Boulevard intersection and the Murphy Road interchange construction project may have influenced the crash rate in the latter segment.
- 19 of the 29 study intersections were flagged as safety focus locations, including the three top 10 percent SPIS sites at Cooley Road, Powers Road, and Pinebrook Boulevard (may have been recently mitigated). Table 1 shows which study intersections were flagged as safety focus areas and why.
- Of the four locations on the Parkway (US 20 to Murphy Road) where existing deceleration lane lengths are shorter than ODOT's standard design at the posted travel speed, two include the at-grade intersections with Powers Road. The at-grade intersections of Southbound US 97 to Lafayette Avenue and Southbound US 97 to Hawthorne Avenue have deceleration lane lengths that are sufficient at 45 mph, but not at 55 mph. The at-grade intersections of Southbound US 97 to Truman Avenue, Southbound US 97 to Badger Road, Northbound US 97 to Badger Road, and Northbound US 97 to Reed Lane do not have deceleration lanes.
- The difficulty of getting up to mainline speeds and safely merging from at-grade intersections on the Parkway is a commonly expressed concern. The existing at-grade intersections on the Parkway do not have acceleration lanes. If acceleration lanes were provided at at-grade intersections to help merging traffic get up to speed, lengths up to 960 feet would be desired.

- Most interchanges on the Parkway have adequate acceleration lane lengths with the exceptions of Northbound US 97 at Division Street, Colorado Avenue, and Revere Avenue.
- Pedestrians experience a high level of exposure to high-speed traffic over most the corridor due to lack of sidewalks or other pedestrian facilities. Short segments of southbound US 97 do have sidewalks near Nels Anderson Place, Revere Avenue, Wilson Avenue, and Pinebrook Boulevard. Both sides of US 97 have sidewalks from around Reed Market Road to Pinebrook Boulevard.
- Except for a small segment of a separated shared use path on southbound US 97 from Murphy Road to Romaine Village Way, people riding bicycles experience a high level of exposure to high-speed traffic due to a lack of physically separated facilities.
- An HSM predictive analysis was performed to determine a baseline collision rate for comparison with future safety improvement alternatives. This predictive analysis resulted in 126 expected crashes (59 fatal or injury, 67 property damage only) under existing conditions compared with a historic five-year average of 103 crashes (43 fatal or injury, 60 property damage only) along the entire US 97 corridor in Bend.

Table 1: Intersections Flagged as Safety Focus Areas

Int. No.	Intersection Name	Reason Intersection was Flagged as Safety Focus Area			
		High Intersection Crash Rate	Overrepresentation of a Crash Type	Top 10% SPIS Site	High Segment Crash Rate
1	US 97 & Tumalo Pl	Not Flagged			
2	US 97 & Cooley Rd		Rear-end	x	x
3	US 97 & Robal Rd		Rear-end		x
4	US 97 & Nels Anderson Pl		Rear-end		
5	Bend Pkwy SB On-Ramp & Empire Blvd		Turn		
6	Bend Pkwy NB Ramps & Empire Blvd	Not Flagged			
7	US 20 & Empire Blvd	Not Flagged			
8	US 20 & Butler Market Rd	x			
9	Bend Pkwy SB Off-Ramp & Butler Market Rd		Turn		
10	Bend Pkwy NB On-Ramp & Butler Market Rd	Not Flagged			
11	Bend Pkwy SB On-Ramp/Division St & 3rd St	Not Flagged			
12	Bend Pkwy SB Ramps & Revere Ave		Turn		
13	Bend Pkwy NB Ramps & Revere Ave	x	Turn		
14	Bend Pkwy & Lafayette Ave		Rear-end		
15	Bend Pkwy & Hawthorne Ave		Rear-end		
16	Bend Pkwy SB Ramps & Colorado Ave		Angle & Turn		
18	Bend Pkwy & Truman Ave	Not Flagged			
19	Bend Pkwy SB Ramps & Reed Market Rd	Not Flagged			
20	Bend Pkwy NB Ramps & Reed Market Rd	x	Angle & Turn		
21	Bend Pkwy & Reed Ln	Not Flagged			
22	Bend Pkwy SB Ramps & Powers Rd		Rear-end		x
23	Bend Pkwy & Powers Rd		Rear-end	x	x
24	Bend Pkwy NB Ramps & Powers Rd		Turn		x
25	Bend Pkwy & Badger Rd		Rear-end		x
26	Bend Pkwy & Pinebrook Blvd[2]	x		x	x
27	US 97 & Ponderosa St		SS-O		
28	US 97 SB Ramps & Baker Rd	x			
29	US 97 NB Ramps & Knott Rd	Not Flagged			

[2] In 2015, this intersection was reconstructed to allow only right-in and right-out turning movements, which may have mitigated the high crash rate.

Corridor Operations Analysis *(Updated in Phase 2)*

- There is a significant amount of congestion at study intersections during the PM peak hour, with eight of the 17 unsignalized intersections and eight of the 11 signalized intersections on the US 97 corridor failing to meet adopted mobility targets (i.e., they experience a V/C ratio greater than 0.85). Four of the 11 unsignalized intersections and one of the five signalized intersections paralleling the corridor also fail to meet adopted mobility targets.
- Aggressive driver behavior at many unsignalized intersections during the peak hour was noted in the field, resulting in short gap acceptance.
- Southbound traffic at the Bend Parkway Southbound On-Ramp/Division Street & 3rd Street intersection queues significantly, impacting upstream queues at the Mt Washington and OB Riley intersections.
- Recent improvements to the US 97/Murphy Road interchange removed one of the southbound to eastbound movements from the Parkway. This appears to have increased the southbound jug-handle volume at the Parkway/Powers Road intersection. During the PM peak hour, the southbound jug-handle movement was observed to queue back around the loop ramp and occasionally back up the Parkway to Powers Road. Southbound traffic on the Parkway would then queue back to near Reed Lane. This condition should be solved in the long-term following the completion of the rest of the ramps at Murphy Road.
- Many interchange ramp connections to the Parkway are estimated to be operating near capacity during the summer peak hours. This is specifically true in the southbound direction between Division Street and Colorado Avenue and in the northbound direction between 3rd Street and Empire Avenue.
- Under peak summer conditions US 97 & Cooley Road operates near capacity and fails to achieve the ODOT mobility target. Operations at this intersection are heavily influenced by commuter and recreational travel between Bend and Redmond. Queuing issues were observed for the southbound, eastbound, and westbound approaches.
- Capacity deficiencies were found at US 97 & Robal Road, with southbound queues sometimes extending to Cooley Road and northbound queues extending south of the US 20 interchange. The northbound left turn movement exceeds storage capacity.
- US 97 & Nels Anderson Place operates at capacity during the PM peak hour. Queue storage is an issue for eastbound right traffic attempting to turn onto southbound US 97.
- Both the Division Street and Butler Market Road intersections with US 20 (3rd Avenue) fail to meet mobility targets. Simulation analysis shows queuing issues at these locations: southbound through and on-ramp movements at US 20/Division Street/US 97 Southbound On-Ramp, westbound left and through movements at US 20/Butler Market Road, and the eastbound right turn at US 20/Butler Market Road.
- At US 97 Northbound & Southbound Ramps & Colorado Avenue the conflict between the high demand unsignalized eastbound left turn from Colorado Avenue and the westbound right turn and through movements on Colorado Avenue causes queuing issues that extend nearly half a mile on Colorado Avenue.

- The high volumes at the US 97 Southbound Ramps & Reed Market Road intersection result in southbound right turns spilling back into the mainline ramp. However, the back of the ramp queue remains more than a safe stopping distance (SSD) from the gore point of the off-ramp.
- The high volumes at the US 97 Northbound Ramps & Reed Market Road intersection result in northbound right turn vehicles spilling back into the safe sight distance part of the ramp gore.
- The eastbound queue spillback at US 97 & Powers Road extends west, blocking through the US 97 southbound off-ramp onto Powers Road.
- US 97 & Baker Road/Knott Road ramp terminals and US 97 at Truman, Lafayette, and Hawthorne all experience aggressive driver gap selection behavior, which minimizes the queue spillback impacts and keeps the queues within storage areas.
- 4th Avenue & Butler Market Road experiences significant westbound queues, indicating that the intersection is operating at or near capacity.
- 4th Avenue & Revere Avenue operates near capacity, with queue storage deficiencies at southbound right, eastbound through, and westbound left turn movements.
- The Brookswood Road/Bond Street/Reed Market Road roundabout appeared to be operating at capacity under average weekday conditions but operates at capacity under peak summer conditions. The two critical movements are eastbound and southbound.
- 3rd Avenue & Reed Market Road experiences heavy east-west traffic during the PM peak, with Reed Market Road serving as one of the primary east-west connections across the city. The most significant queuing issues are for the northbound left and through, southbound left, and eastbound through movements.
- The Brookswood Boulevard & Powers Road roundabout experiences some brief but heavy queuing on the southbound approach during the peak 15 minutes of the peak hour but operates well below capacity for the remainder of the PM peak hour.
- There is poor travel time reliability (i.e., travel times vary and can be difficult to predict) on US 97 near Cooley Road/Robal Road and near Powers Road.
- The AM and PM peak hours tend to have less reliable travel times, especially in the North Study Area.
- Even during the peak hours, travel time reliability remains relatively good in the Central Study Area.
- There is a strong correlation between incidents or collisions and an increased average travel time during the PM peak hour. A comparison to weather data was less conclusive, as only half of the segments show higher travel times when precipitation was recorded on that day.

Attachment F

US 97 Parkway Plan Phase 2

Summary of Technical Memorandum #4 - Future Conditions

September 28, 2018

DRAFT

Prepared for:

Oregon Department of Transportation

Prepared by:

WSP DKS

The purpose of this memorandum is to describe "No Build" transportation conditions in the year 2040 for US 97 and the adjacent city street network through Bend. This builds off previous tasks by applying many of the same analysis methods and performance measures used to describe existing conditions (see Technical Memorandum #2) to the forecasted traffic volumes for the year 2040 (see Technical Memorandum #3).

A summary of the key findings from this memorandum is provided below, with further information included in the subsequent sections.

1.0 Summary of Key Findings

1.1 Future Transportation Network

- The regional travel demand model indicates high growth throughout the project limits, with especially high growth at the north and south ends of the analysis area.
- High level travel demand model analysis indicates that the 2040 travel demand on US 97 will exceed the peak hour capacity, while all major east-west connections within the project limits will also operate near or over capacity.
- Daily demand to peak hour capacity analysis indicates likely trip diversion due to congestion on US 97, Empire Boulevard, and Reed Market Road.
- Travel pattern analysis using the Bend-Redmond travel demand model shows that on average 43% of trips on US 97 in Bend in 2040 are local trips (begin and end in Bend) within the city and another 47% of trips using US 97 have either an origin or destination in Bend. This is generally consistent with findings for existing conditions, except for the segment south of Badger Road where the percent of local trips on US 97 increases dramatically (21% to 41%) due to future growth in the southeast UGB expansion area. On average, only 10% of trips on US 97 are through trips, meaning they start and end outside of Bend.

1.2 Multimodal Analysis

- In the future 2040 No Build scenario, the only planned improvement that would significantly change the Bicycle LTS findings from existing conditions is the new traffic signal on Empire Boulevard at the US 97 Southbound Ramp Terminal. Signalization of this intersection would improve the estimated level of traffic stress from Low (LTS 2) to Lowest (LTS 1).
- There are no physically separate bicycle facilities planned for the US 97 mainline and travel speeds are assumed to remain high. Therefore, the Bicycle LTS on the mainline will continue to be high.
- As with the Bicycle LTS analysis, the only planned improvement by 2040 that would significantly change the Pedestrian LTS findings from existing conditions is the new traffic signal on Empire Boulevard at the US 97 Southbound Ramp Terminal. This crossing was rated as having a High (LTS 4) level of traffic stress under existing conditions but improves to a Low (LTS 2) level of traffic stress with signalized control.

- The other three intersections found to have a High Pedestrian level of traffic stress under existing conditions will continue to have high levels of traffic stress under the 2040 No Build condition. These include: 3rd Street/ US 97 Northbound Ramp, Baker Road/ US 97 Southbound Ramps, and Knott Road/ US 97 Northbound Ramps.
- In addition to these, the Pedestrian LTS worsens from Medium (LTS 3) to High (LTS 4) at the intersection of Colorado Avenue/ US 97 Northbound Ramps due to an increase in traffic volumes at this unsignalized crossing.
- The 2040 No Build assessment of Pedestrian LTS on the US 97 mainline is unchanged from existing conditions, with levels of stress ranging from Medium to High.
- An analysis of US 97 crossing needs for people walking and biking that included factors such as the current quality of crossings (e.g., level of traffic stress), distance between crossing opportunities, potential demand resulting from adjacent land uses, crash history, and alignment with the City's low-stress network has identified a number of strategic locations for improvements that would provide low-stress crossings in the corridor at an average spacing of less than ½-mile.

1.3 Safety Analysis

- A predictive crash analysis was performed using Highway Safety Manual Part C procedures to determine a baseline crash frequency for comparison with future safety improvement alternatives.
- A comparison of expected crashes under 2040 No Build conditions and existing conditions indicated a growth in crash frequencies by 20% for locations where the only change between existing and future conditions is traffic volumes.

1.4 Corridor Operations Analysis

- Nearly all Parkway and non-Parkway study intersections fail to meet mobility targets in 2040. Most of the intersections not only fail to meet mobility targets, but also fail to provide sufficient capacity to serve the forecasted volume.
- The Cooley Road Interim Improvements at US 97 identified in the 2014 MTP Update meet mobility targets through 2025 and provide sufficient capacity to serve the forecasted demand through 2035. A southbound right turn lane at the northern Cooley Road and US 97 intersection would likely allow the Interim Improvements to serve the future 2040 demand.
- The US 97 and Robal Road intersection provides less than 70% of the capacity needed to serve the 2040 demand.
- The US 97/Empire Boulevard/US 20/3rd Street area experiences large volume growth, and the improvements for this area included in the 2014 MTP update do not provide nearly enough capacity for the forecasted demand.

- The portions of the Parkway south of Empire Boulevard are only able to serve approximately 83% of the forecasted seasonal demand, based on simulation results.
- The capacity failures at the Reed Market interchange ramp terminals appear to cause the largest bottleneck in the system, generating long queues for both northbound and southbound US 97. The capacity failures at the ramp terminals are accelerated by capacity constraints at the 3rd Street and Reed Market intersection.
- The Powers Road intersection fails to provide sufficient capacity for the northbound and southbound movements on US 97.
- All right-in/right-out intersections queue extensively on the minor street approaches.
- Congestion at all interchange ramp merging, diverging, and weaving areas on the Parkway will worsen by 2040. In fact, 10 of the 15 mainline/ramp junctions analyzed are projected to have insufficient capacity to serve the traffic demand. This could result in more bottleneck locations on the Parkway mainline, diversion of traffic to adjacent city streets, and an increased duration of congestion.
- In the northbound direction, the stretch of interchange ramp merging and diverging areas on the Parkway mainline failing to meet the adopted mobility target will extend from the Colorado Avenue on-ramp to the Empire Boulevard off-ramp.
- In the southbound direction, all analyzed interchange ramp merging and diverging areas on the Parkway mainline from Division Street to Colorado Avenue will fail to meet the adopted mobility target.

1.5 Travel Time Reliability Analysis

- In general, travel time reliability will get worse for most segments on the US 97 corridor when comparing existing to future no build conditions. Key locations that showed significant deterioration in the future include Clausen Road to Cooley Road, Robal Road to the US 20 interchange, and Hawthorne Avenue to the Colorado Avenue interchange.
- Corridor travel times on US 97 are projected to increase by as much as 25 minutes throughout the PM peak period by the year 2040.

US 97 Parkway Plan, Survey Summary

October 24, 2018 – **DRAFT**

Overview

The primary purpose of the survey was to obtain public feedback to confirm the findings in the US 97 Parkway Study Existing Conditions Report and to gather public feedback on elements that will inform discussion of a Parkway Plan Vision Statement at upcoming Sounding Board, Technical Advisory Committee, and Policy Board meetings.

The survey also included several questions intended to gather feedback and identify possible improvements to bicycle and pedestrian routes adjacent to the Parkway.

A link to the online survey was advertised via direct email on September 7, 2018. The link was distributed to the Bend MTP/TSP Interested Parties list, all Bend neighborhood associations, Sounding Board membership, and the Metropolitan Planning Organization interested parties list. The link was also shared via a press release and was the subject of an article in the Bend Bulletin.

Feedback Summary

As of October 9, the survey had received **1,799 responses**. Nearly 90% of participants indicated that they were Bend residents who use the Parkway multiple times per week or more. Most respondents reported regularly accessing the Parkway from Empire Blvd, Revere Ave, Colorado Ave, Reed Market Rd, and Powers Rd. While most respondents indicated that they usually get around using a car (alone or with others), roughly a third also reported walking and/or riding bikes.

Existing Conditions

Questions about existing conditions were broken down by northern, central, and southern segments. Respondents in the northern segment reported the most concerns about traffic congestion as well as concerns with the number and timing of traffic signals impeding the flow of traffic. Respondents in the central segment (between Empire Ave. and Reed Market Rd) reported merging traffic as their most significant concern and reported the highest levels of concern about speeding. Traffic issues in the southern segment (south of Reed Market Rd) were present but less severe than in the central and northern segments. Traffic signals were the most frequently mentioned problem in this segment, though they were not as significant of a concern as in the northern segment.

Respondents were asked for feedback about the performance of seven key intersections under study. Roughly half of respondents reported that they "always" or "usually" encounter safety or mobility problems at each of the study intersections listed in the north and central segments, with fewer safety and mobility problems associated with the intersections in the southern segment. Hawthorne Avenue elicited the highest levels of concern of any intersection under study.

A high number of respondents consistently rated the lack of comfortable walking, bicycling, and crossing options on the Parkway as "always a problem" and a significant number of commenters repeatedly called for removing bicycle and pedestrian facilities from the Parkway altogether because they feel that they are unsafe, unused, or because they were negatively impact the flow of vehicle traffic. Many respondents who identified as bike users

also supported the idea of creating new separated bike and walking facilities, as they find many of the existing alternatives to the Parkway to be impractical, unsafe, or inaccessible.

Vision

Respondents were asked to provide feedback on "Vision Elements" that will inform the development of a Vision Statement. While a majority of respondents supported each of the Elements as stated, many open ended comments seemed to express confusion about how a vision statement would be used. Comment themes related to the Vision Elements included: using more aspirational language and a shorter timeframe; clarifying ambiguous terms; and incorporating more specific and prescriptive solutions (see below).

Respondents expressed concerns about changes that would:

- reduce the ability of local traffic to use the Parkway;
- negatively impact downtown because of reduced access;
- allow unsafe bicycle and pedestrian facilities on and along the Parkway; or
- further inhibit the flow of traffic.

Some respondents were skeptical that there are or will ever be viable alternatives to using the Parkway, or that the parallel (local) system can support demand.

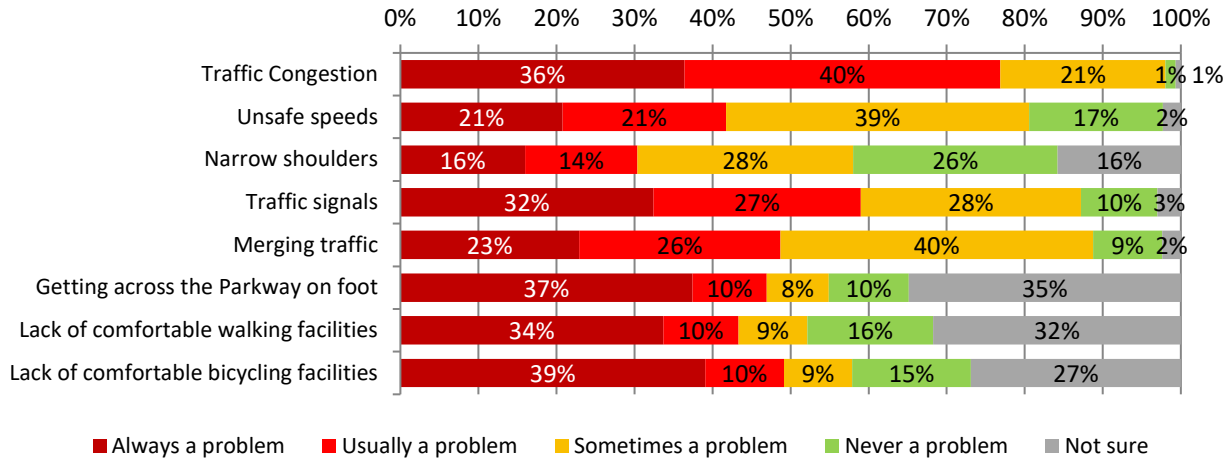
Solutions

Although not specifically solicited, respondents recommended a number of solutions throughout the survey that they felt would help address traffic and mobility issues. The most common recommendations included: formally designating the Parkway as a higher speed limited access freeway; removing stop signals from parkway; creating a separate bypass to allow through-traffic to travel around the city; removing bicycle and pedestrian facilities from the Parkway altogether; and providing over- or under-crossings to facilitate east-west travel for cars, bikes, and pedestrians. Respondents also provided various site-specific recommendations to lengthen turn lanes and merging lanes.

Survey Questions

*Q1: What are your concerns about the **NORTHERN section** of the US 97 Parkway (north of Empire Ave.)?*

1,793 respondents answered this question.



Observations: Traffic congestion was described as the most significant issue in the northern section, with over 75% of respondents describing it as "always" or "usually" a problem. Less than 1% of respondents were "unsure" about traffic congestion in this section. Of the three segments, the northern segment had the highest perceived problem with traffic signals, with 69% reporting that they are "always" or "usually" a problem. Concerns about crossing, walking, or biking along the Parkway were polarized, with the majority of respondents either feeling that these issues are "always a problem" or else being "not sure".

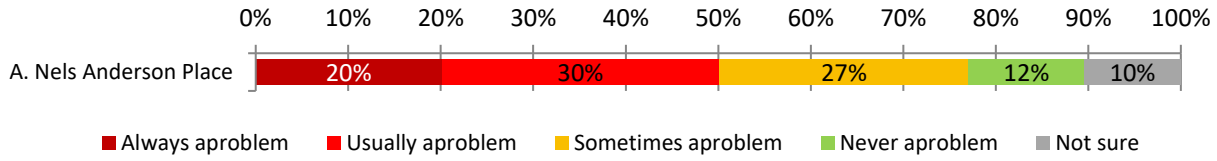
Are there other significant issues in this section?

632 respondents provided follow-up information.

- 152 comments concerned **biking and/or walking**. Most of these comments described the dangerous conditions on the Parkway and/or the need to separate people who ride bicycles and walk from vehicles.
- 111 comments were addressed **traffic signals**, with most respondents indicating that they felt the signals were responsible for creating delays and congestion and should be removed.
- 97 respondents commented on **speed**. While some felt that the speed limits in this segment should be increased, others thought that speeds should be lowered because merging lanes are too short and it is dangerous to have merge with high-speed traffic. Respondents noted that few drivers observe the posted 45 MPH speed limit and most drive closer to 60 MPH. Drivers also cited lax enforcement of existing speed limits.
- 89 comments referred to **merging and turn lanes**. Many noted to the problems with left-hand turn lanes feeling unsafe, creating conflicts with fast-moving traffic, and causing delays. Merging lanes were generally perceived as too short. Additional right-turn exit lanes were called for at some locations.
- 65 comments referred to **shopping center** and commercial development access. Access is often difficult and turning traffic (particularly northbound traffic turning left) creates to backups on the Parkway. The amount of development was described as problematic and a cause of congestion. There is an unsafe mix of people who are slowing down and turning combined with people who want to move through quickly.
- Recommended **solutions** tended to focus on adding a separate bypass, more capacity/lanes, adjustments to signal timing or removing stoplights, lengthening merge lanes, and making better use of the roadway median. Addressing the poor connection between US20 and US 97 was described as difficult and a reason for backups and delays.

Q2: How often do you encounter safety or mobility problems at this location?

1,770 respondents answered this question.



Observations: Half of respondents reported experiencing safety or mobility issues at Nels Anderson Place.

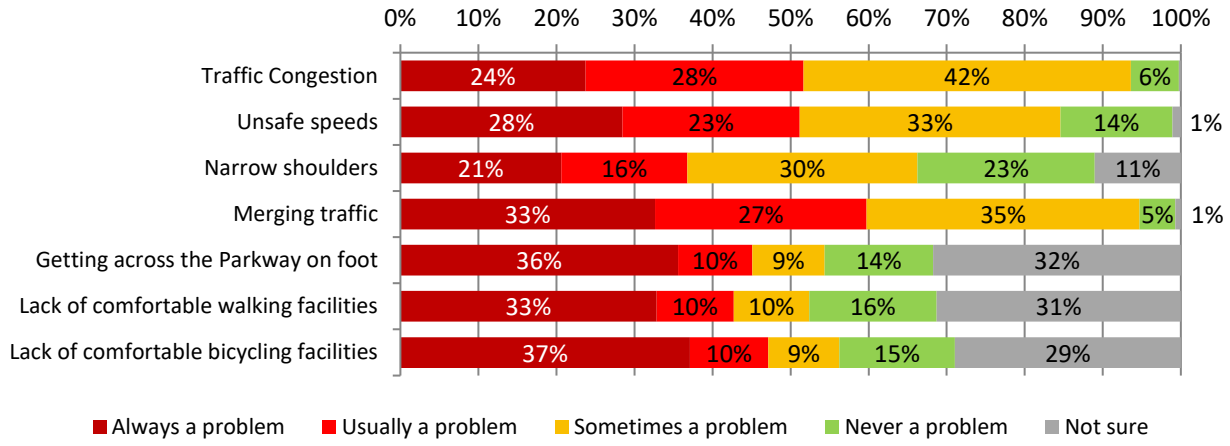
Are there other significant issues in this section?

An open ended comment option was not included for this location. The responses below are extracted from Question 1.

- From US 97 northbound, turning east onto Nels Anderson is not as problematic as turning west into the shopping area.
- The northbound Nels Anderson left-turn pocket should be lengthened to prevent backups onto US 97.

*Q3: What do you feel are the most significant problems affecting the **CENTRAL section** of the US 97 Parkway (between Empire Ave. and Reed Market Rd.)?*

1,686 respondents answered this question.



Observations: Merging traffic was reported as usually or always a problem by 60% of respondents, and has some of the lowest number of responses indicating that this is "never a problem" (5%). Traffic congestion and unsafe speeds were also perceived as significant issues. As in the north section, concerns about crossing, walking, or biking along the Parkway were polarized, with the majority of respondents either feeling that these issues are "always a problem" or else being "not sure".

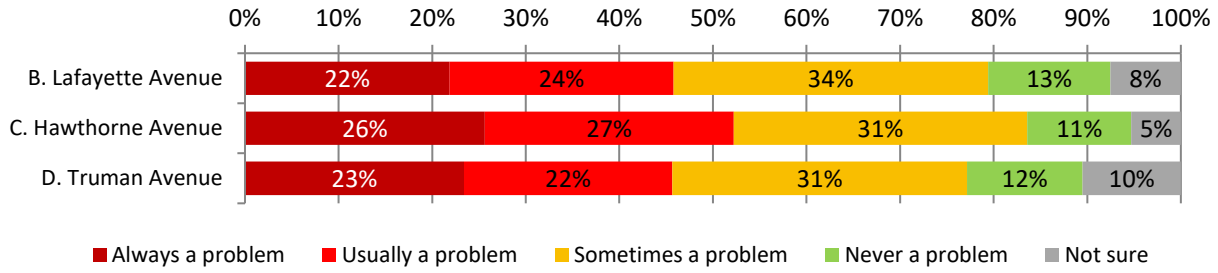
Are there other significant issues in this section?

606 respondents provided follow-up information.

- 240 comments referred to **exits, ramps, and access points**. Existing entrances and merge lanes are perceived as too short. Exits and off-ramps are perceived as having too few lanes and often back up onto the Parkway. Many commenters noted frequent slowing and vehicle stopping associated with signalized intersections and access points. Some comments perceived that it is more problematic to enter the Parkway than to exit at these locations while others felt that slowing down traffic to turn off the Parkway is also unsafe. Several noted that there are fewer northbound exits than southbound exits in this segment.
- 185 comments referred to **biking and/or walking**. The majority of these comments referred high vehicle speeds and the dangerous conditions on the Parkway and/or the need to separate people who ride bicycles and walk from cars and vehicles. Several comments noted how the Parkway divides the City for all modes, but particularly for bikes and pedestrians.
- 140 comments referred to **vehicle speed**. This section was perceived as particularly bad for speeding, with several respondents noting that the design of this segment encourages faster driving. Many commenters felt that the posted speed limits are too low. Enforcement of speed limits was cited as inconsistent.
- 120 comments specifically referred to **merging** with most noting that there is not enough merging distance in this section and it is unsafe.

Q4: How often do you encounter safety or mobility problems at the following locations?

1,671 respondents answered this question.



Observations: Roughly half of respondents reported safety and mobility issues at the specified locations. Hawthorne Ave. was perceived as the most problematic out of all the intersections under study, with 53% reporting that it is "always" or "usually" a problem.

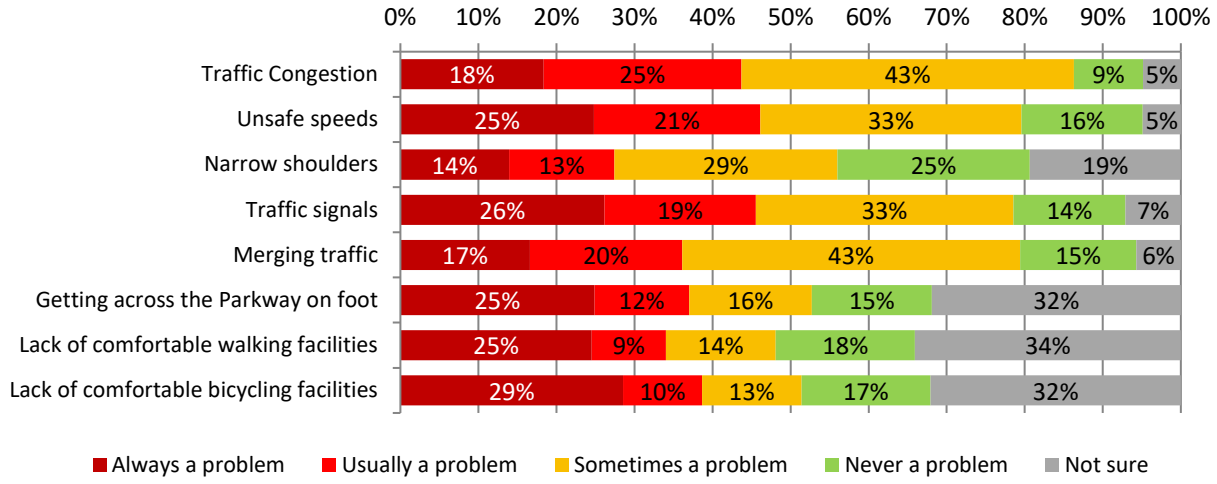
Please describe any concerns or problems.

576 respondents provided follow-up information.

- **General Comments**: Most respondents felt that these locations feel dangerous due to the sharp turn required to access the Parkway and the limited acceleration and deceleration space available. While some commenters favored closing these access points altogether, others raised concerns about impacts to downtown businesses and to other already congested local streets or if these access points are changed. Most agreed that safety related updates are needed. As in Question 3, many respondents reiterated concerns about speeding vehicles contributing to making these exits unsafe. Traffic exiting the Parkway was often described as less problematic than merging traffic.
- **Hawthorne (110 comments)**: Southbound access to the Parkway is problematic due to the sharp turn and lack of merging/acceleration lane. There are often no breaks in traffic flow to allow safe merging. There were a number of concerns that this street is an important exit from the Parkway and provides important access to the downtown parking structure.
- **Lafayette (84 comments)**: Southbound access to the Parkway is difficult and unsafe due to the lack of acceleration and deceleration lanes. While commenters agreed it is problematic, many noted that Lafayette provides important access to downtown.
- **Truman (109 comments)**: Access to US 97 is problematic here due to a lack of acceleration or deceleration lanes. Commenter also reported poor visibility when merging onto US 97. Truman provides important access to the Old Mill.

*Q5: What do you feel are the most significant problems affecting the **SOUTH section** of the US 97 Parkway (south of Reed Market Rd.)?*

1,621 respondents answered this question.



Observations: While still significant issues, traffic congestion, unsafe speeds, traffic signals, and merging were not perceived as problematic in the south as in other segments. While slightly less polarized than in the north and central segments, a majority of respondents still feel that crossing, walking, or biking along the Parkway in this section is "always a problem" or are otherwise "not sure".

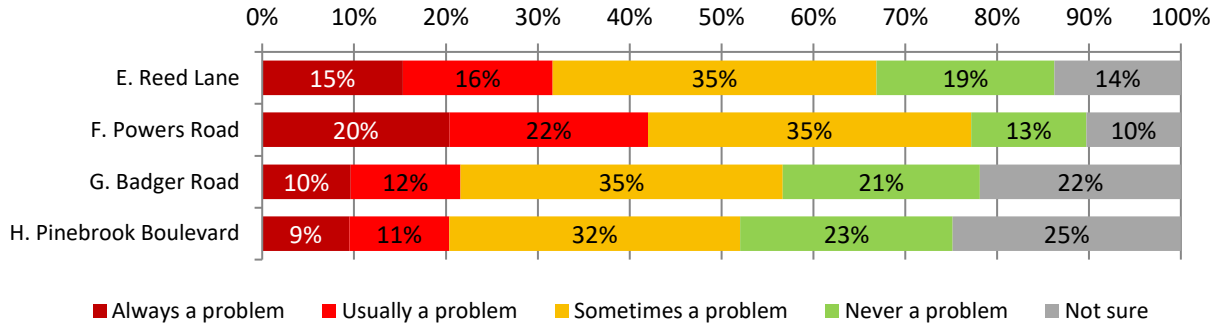
Are there other significant issues in this section?

475 respondents provided follow-up information.

- 135 respondents referred to **bicycle and/or pedestrian facilities** in this segment. The vast majority of these commenters felt that bike and pedestrian facilities are inappropriate on the Parkway, either because they are unsafe or because these facilities slow down traffic.
- 108 commenters noted **crosswalks.** Many commenters felt that existing crossings are unsafe because traffic is moving fast and/or does not stop, or that crosswalks are generally not appropriate on a Parkway. Many called for over- or under-crossings as an alternative. Some commenters raised concerns about the safety and effectiveness of the flashing lights at crosswalks, while others felt that the flashing beacons have helped create safer crossing options.
- 116 comments mentioned **traffic signals** as problematic in this section. Many described stop lights as incongruous with the Parkway as a "freeway". The signal/intersection at Powers Rd was mentioned as particularly problematic for creating congestion.
- 75 respondents referred to access issues at **Murphy Road** and **south of Powers Road**. Most concerns noted the lack of a southbound exit and northbound on-ramp at Murphy Road and the general a lack of southbound off-ramps after Powers Road.
- 51 respondents mentioned **vehicle speed**. Most commenters felt that current speeds are too low and often poorly enforced.

Q6: How often do you encounter safety or mobility problems at the following locations?

1,611 respondents answered this question.



Observations: Powers Road was perceived as "always" or "usually" a problem by the most respondents (42%). The other locations identified in this segment were perceived as the least problematic out of all the intersections.

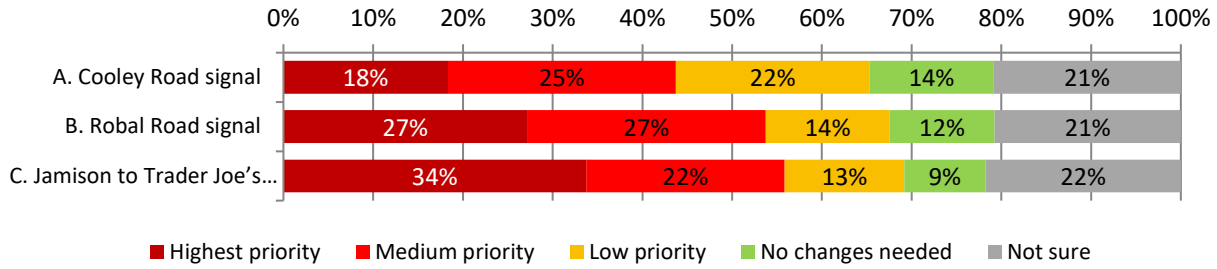
Please describe any concerns or problems.

270 respondents provided follow-up information.

- **General Comments**: As in Question 5, many commenters expressed concerns about bike and pedestrian facilities on the Parkway. As in other segments, commenters described the need for longer on and off-ramps and merge lanes due to vehicle speeds. Many raised concerns about the design of the Murphy Road interchange and the lack of a southbound exit or northbound entrance there.
- **Reed Lane (24 comments):** Some commenters perceived Reed Lane as little used and less of a problem at this time, others felt it is unsafe due to the lack of an adequate deceleration and acceleration lane.
- **Powers (84 comments):** Many commenters noted congestion problems at Powers Road. As in Question 5, commenters felt that the traffic light at Powers is part of the problem. Several comments called for developing a full interchange at Powers and providing an overcrossing for east-west traffic. Several respondents noted sightline and visibility issues here, possibly due to the southwest jug-handle and the location of a retaining wall.
- **Badger (16 comments):** Commenters noted the lack of acceleration and deceleration lanes here, which make the sharp turns on and off the Parkway dangerous when traffic is moving fast.
- **Pinebrook (17 comments)**: As at Badger road, commenters noted the lack of acceleration and deceleration lanes, which make the sharp turns on and off the Parkway dangerous when traffic is moving quickly.

*Q7: Where is there the greatest need for improved bicycle and pedestrian crossings in the **northern** segment of the Parkway? Choose one per row.*

1,468 respondents answered this question.



Observations: The Robal Road crossing and the crossing from Jamison to Trader Joe's were perceived as the highest priority by over half of respondents. The Jamison to Trader Joe's crossing received the most high and medium priority ratings of any crossing.

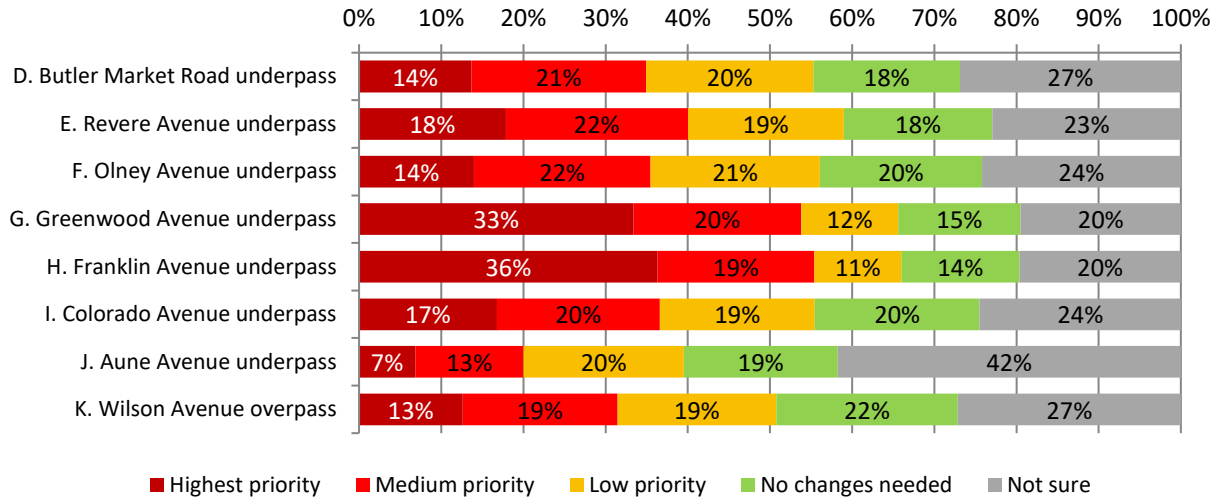
Other location not listed?

177 respondents provided follow-up information.

- **General comments:** Many commenters noted concerns about bikes and pedestrians on the Parkway and recommend new overcrossings as a way to avoid traffic impacts while improving safety.
- 14 commenters noted the need for improved crossings and/or strategies to address growth in pedestrian traffic associated with **shopping centers**. Some suggested a pedestrian overcrossing here.
- 13 commenters noted the need for improved crossings of **Highway 20** and **Empire**.

*Q8: Where is there the greatest need for improved bicycle and pedestrian crossings in the **central** segment of the Parkway?*

1,436 respondents answered this question.



Observations: The Greenwood and Franklin under-crossings were rated as the highest priority in this segment and among three highest priority crossings overall. A relatively high number (42%) or respondents were not sure about the Aune Avenue underpass.

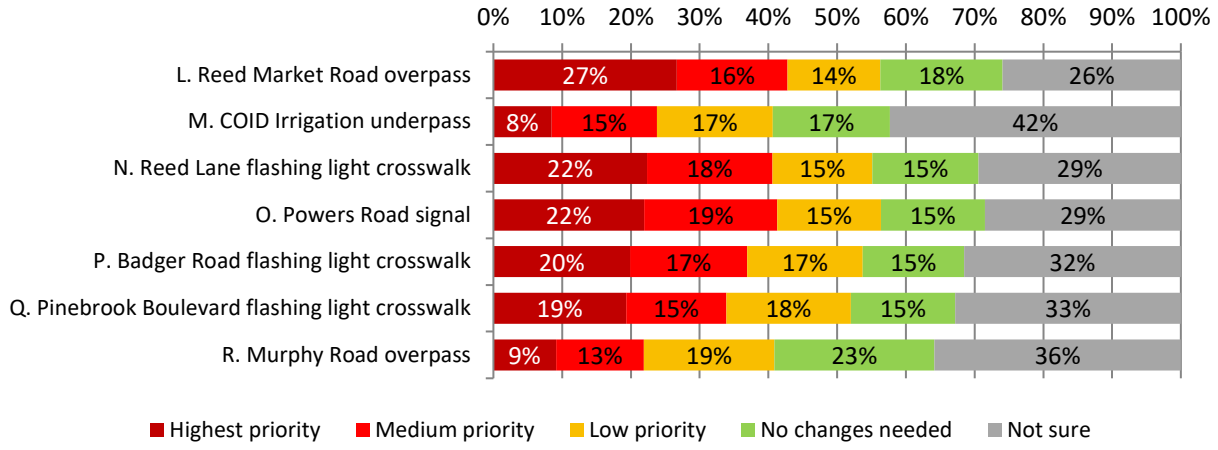
Other location not listed?

143 respondents provided follow-up information.

- **General comments:** Many commenters reiterated concerns about bikes and pedestrians on the Parkway and recommend new overcrossings as a way to avoid traffic impacts while improving safety. While some respondents perceived the crossings in this section to be adequate because of available under-crossings, many said they were unaware of some of these facilities, and others said that they felt unsafe using the under-crossings due to homeless camping, poor lighting, and unsanitary conditions.
- **Franklin & Greenwood** (28 comments) were described as heavily used crossings, though many commenters said they feel unsafe in these underpasses for the reasons mentioned above.
- **Crossing the railroad** (12 comments) was mentioned as a general concern for all modes in this segment.
- **Hawthorne** (7 comments) was suggested as a possible location for a multi-use overcrossing.
- **Lack of safe crossings of on- and off-ramps** adjacent to the Parkway were described (2 comments) as a barrier to east-west pedestrian travel. Examples included the northbound Parkway exit to Reed Market Road and the northbound on-ramp at Butler Market Road.

*Q9: Where is there the greatest need for improved bicycle and pedestrian crossings in the **south** segment of the Parkway?*

1,410 respondents answered this question.



Observations: Familiarity with available crossing options decreased in the southern segment, though most of the crossings were still described as high or medium priority by close to half of respondents who provided a rating. Respondents reported less familiarity with the COID underpass. The Reed Market Road overpass was rated as the highest priority for improvement in this section.

Other location not listed?

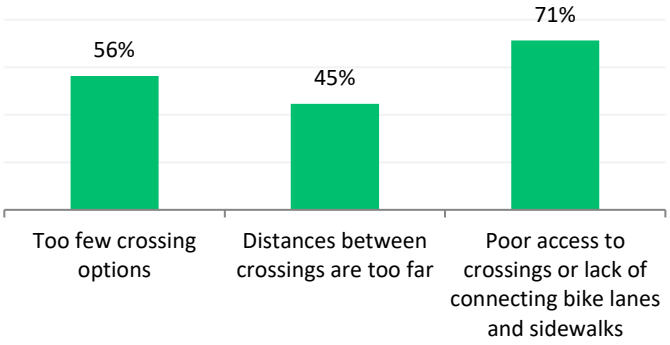
109 respondents provided follow-up information.

- **General comments**: Respondents reported less familiarity with crossings in this segment. As in other segments, commenters noted concerns about bikes and pedestrians on the Parkway and recommend new overcrossings as a way to avoid traffic impacts while improving safety.
- **Crosswalks and flashing beacons** (32 comments) in this section were often described as "inappropriate" for a parkway and were perceived as creating problems for through-traffic while being dangerous for pedestrians due to high vehicle speeds. Several commenters noted that the flashing lights seem to remain on for too long, or they appear to malfunction. Two commenters said they felt the beacons make the crossings safer.
- **Reed Market Road** (10 comments) was described as a heavily used crossing. Several described the overcrossing and ramp crossings as dangerous.
- **COID underpass** (6 comments) may be underutilized and has some safety issues related to transients and poor lighting.
- **Ponderosa Street** (1 comment) was mentioned as an additional location in need of improvement.

Q10: What are the main issues that currently limit east-west bike and walking travel across the Parkway?

1,047 respondents answered this question.

Observations: Most (71%) of respondents reported that a lack of access to crossings and connecting bike lanes and sidewalks was the main limitation impacting bike and walking travel across the Parkway.



Other?

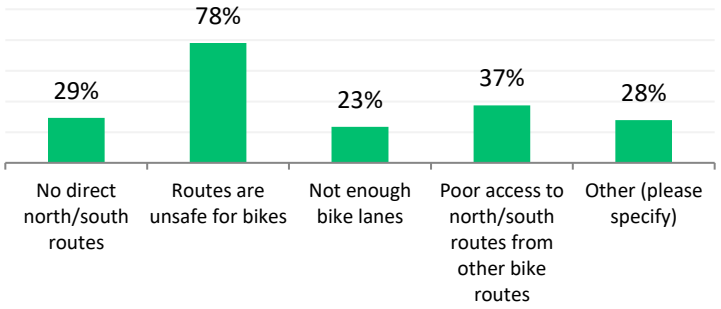
318 respondents provided follow-up information.

- **Over- and/or under-crossings** (79 comments) were frequently mentioned as preferred alternatives to existing at-grade crossings. Commenters also flagged safety issues due to homeless camping, poor lighting, and debris in existing under-crossings such as at Franklin and Greenwood.
- **General safety for bikes and pedestrians** (40 comments) was a common theme. Driver behavior (speeding or not yielding to crosswalk users), high speeds, and high traffic volumes were cited as major reasons commenters feel unsafe. While some respondents specifically called out existing crossings as feeling unsafe, other comments did not clearly distinguish between issues that affect travel *across* the Parkway from travel *along* the Parkway.
- **Other issues** included poor separation from traffic and a general lack of dedicated paths (15); narrow lanes or shoulders (10); few crossing options for any mode (9); gravel and debris on roadways (8); poor lighting (particularly at under-crossings) (5); connections to busy roads on either side of the Parkway; and a lack of signage telling bikes and pedestrians where to go (1).

Q11: Currently the Parkway is marked with bike lanes, but these are highly stressful bike routes because of high speeds, narrow width, and conflicts with merging and exiting vehicles. What are the main issues that limit north/south bike travel to the west or east of the Parkway? Check all that apply.

1,275 respondents answered this question.

Observations: Based on the "Other" responses below, it is possible that some respondents misread the question as asking about issues that limit travel *on* the Parkway. While safety and traffic were noted as significant off-Parkway issues, a misreading of the question may partially account for the relatively high number of respondents (78%) who cited "Routes are unsafe for bikes".



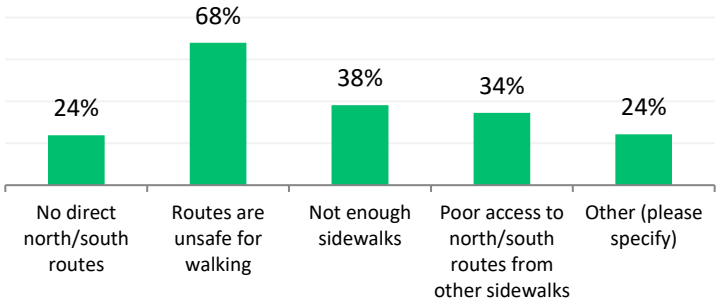
Other?

354 respondents provided follow-up information.

- **General comments**: Nearly half of commenters responded as if this question were asking about bike travel *on* the parkway and reiterated many of the concerns about mixing bikes with high speed traffic.
- **Congestion on city streets and a lack of viable north/south corridors** was a common theme. Commenters specifically mentioned Wall, Harmon, 8th, 14th, 15th, and 27th as having high speeds and traffic volumes with poor separation from vehicles. 3rd was cited as a possible north/south route but was described as having too many signals and no bike lanes north of Greenwood.
- **Other general issues** impacting north/south bicycle travel included: gravel and cinders, glass, storm drains, and snow in bike lanes; street design that encourages higher vehicle speeds; too narrow bike lanes; a lack of physical barriers or separation from traffic along bike routes; blind off-ramps; poor lighting at night; and driver behavior.
- Commenters suggested that there should be more **separated bike paths and bike routes** that use lower traffic side streets. Suggested alternatives included: 2nd, 3rd, 4th, Brookswood, and Brosterhouse.

Q12: Currently the Parkway has some segments of sidewalk, but these are highly stressful routes because of high speeds, limited landscape buffering, and discontinuous sidewalks. What are the main issues that limit how you use north/south travel routes on foot to the east or west of the Parkway? Explain below.

1,214 respondents answered this question.



Observations: As in Question 11, roughly half of open ended comments were framed as if this question were asking about pedestrian travel *on* the parkway. This may partially account for the high number (68%) of "routes are unsafe for walking" responses, though the open ended comments did include a number of safety related concerns about access and a lack of sidewalks.

Other?

294 respondents provided follow-up information.

- Commenters raised **general issues** similar to as in Question 11 (issues impacting bike travel) including: fast moving vehicles on local streets; conflicts with vehicles exiting the Parkway; inadequate separation from vehicles; debris, gravel, and snow on sidewalks; and a lack of adequate street lighting. Commenters also noted problems with noise, exhaust fumes, and a lack of attractive landscaping.
- Some commenters noted a general lack of **sidewalks**, poor sidewalk conditions, non-contiguous sidewalks, and a lack of new sidewalks accompanying new construction. Some noted that bicycles use often use sidewalks because it is unsafe to bike in the roads.
- Commenters noted a general **lack of contiguous walking corridors**. Examples included: 2nd (no sidewalks from Colorado to Wilson) and 3rd (difficult to cross and stressful between Butler Market and Underwood).
- Commenters suggested that there should be **more separated walking paths, trails, and overcrossings** of high traffic streets**.** Possible north/south routes mentioned: 1st, 2nd, 3rd (or routes parallel to 3rd), and Reed Market to downtown.

Vision Elements Overview

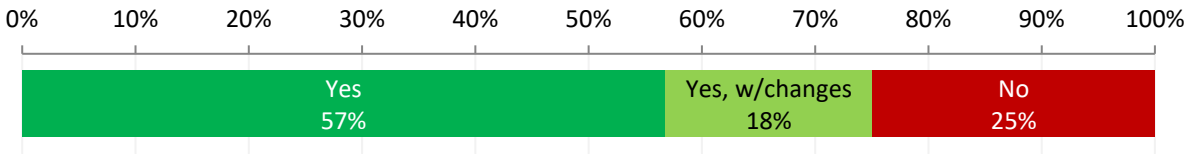
Questions 13-17 asked respondents to react to proposed "Vision Elements" which will help shape a Vision Statement that will inform the evaluation of possible solutions. In each case a majority of respondents supported each Element as stated, though many offered broad suggestions or comments that were applicable to all of the Elements, or that apply to the project more generally.

Common themes from open ended feedback included:

- Many respondents appeared to be unclear about the purpose of a Vision Statement or how the Vision Elements would be used. A number found the use of vague language, lack of specific solutions, and framing the statements as occurring "In 2040" to be confusing. Some respondents perceived that only one of the Vision Elements would be selected as the final vision statement instead of the final vision being assembled from all of the individual Elements.
- Many comments expressed that the Elements themselves should be more ambitious, with changes occurring sooner (before 2040) and *exceeding* (not simply accommodating or meeting) existing needs.
- Commenters often recommended specific solutions which were also not specifically relevant to the theme of the vision Element in question. The most common ideas have been listed at the end of this section.
- Many of the respondents who objected to the vision elements were primarily skeptical that the Elements were achievable.

Q13: "In 2040, local traffic growth is accommodated on the local roadway system: As Bend grows, the region's transportation authorities have provided the community with viable alternatives to meet local needs to get around and preserve the function of U.S. 97 and the Parkway." ***Do you support this vision element as stated?***

1,272 respondents answered this question.



Observations: This Element received outright support from 57% of respondents. While this was the lowest level of support of all the proposed Elements, some of the concern may have been due to respondents not knowing that issues not included in this Element would be addressed in other Vision Elements to follow.

Reasons for opposition or suggested changes:

495 respondents provided follow-up information.

- There is some **skepticism** (64 comments) that this Element is achievable and doubt that the local network will ever be able to support local needs without increasing local congestion. Some felt that "viable alternatives" such as biking and walking are not realistic due to weather and entrenched habits. Others felt that local improvements place an undue burden on the City, or that improvements to support capacity will not be funded.
- 61 comments referred to the **Parkway as a bypass or limited access highway**. Some suggested that the Element could more strongly reflect that the primary function of the Parkway is to serve the needs of cars and freight.
- **Language is too vague** or unspecific (37 comments). Some respondents were not clear what terms like "viable alternatives" or "local needs" referred to. It may be helpful to be more explicit about who will be served by the Parkway and the local roadway system, i.e. through-travelers or local traffic and businesses.
- 34 comments described the Parkway as an **important local** and were concerned that this Element implies that the Parkway will not serve local needs in the future. Some commenters suggested that the Parkway *should* be part of a local solution as many people depend on it for access to Downtown and other locations.
- **Other modes and transportation options** should be included (25 comments). If "traffic" also includes cars, bikes, walking, and transit, then these should be called out more explicitly.
- The statement should be **more aspirational and should happen sooner than 2040** (24 comments). Some suggested that the language should describe *exceeding* future needs.

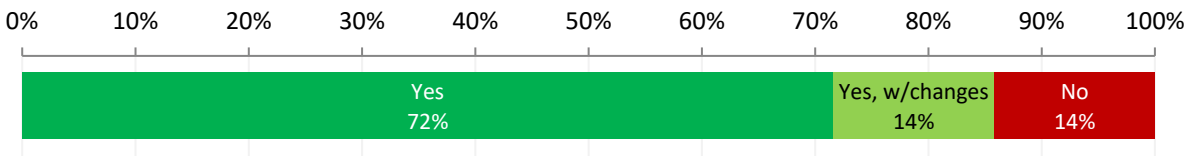
Public suggestions for wording changes

- "...to meet local needs to *efficiently* get around..."
- "... preserve the function *and safety* of U.S. 97..."

Q14: "In 2040, the U.S. 97 Bend Parkway Corridor is safer and more efficient due to access changes: Crosswalks that are currently directly on the Parkway and some current signalized intersections have been strategically closed or upgraded to an overcrossing or undercrossing. Right-in/right-out local road accesses have been closed or upgraded."

Do you support this vision element as stated?

1,289 respondents answered this question.



Observations: 72% of respondents supported this element as stated.

Reasons for opposition or suggested changes:

236 respondents provided follow-up information.

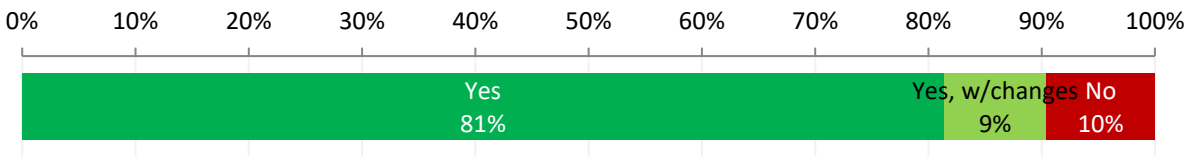
- 93 comments expressed concerns about **access changes**, primarily due to the potential impacts to downtown and local businesses. Many felt that closing access points will put additional pressure on local streets and make the Parkway more of an East/West barrier within the city. Many commenters suggested that accesses should be "upgraded" instead of closed, though some questioned what this actually would mean. A small number of respondents called for *increasing* the number of access points and accepting slower speeds as a tradeoff necessary for access. Some respondents were confused about what "right-in/right-out" means and how it impacts traffic flow. Some respondents only opposed closing right-in (traffic exiting the Parkway) because they feel it helps alleviate congestion, and many commenters said that they did not feel that right-in/right-out turns were as problematic as traffic signals.
- 44 comments referred to **bicycling and/or walking**. Most of these (39) referred to either removing bikes and pedestrian facilities from the parkway or otherwise providing separate facilities. Several referred to adding language that would emphasize how changes support alternative (non-car) transportation.
- 38 comments referred to **over- and/or under-crossings**. Most of these comments were favorable, with many commenters who had concerns with access changes or existing crosswalks expressing support. Several comments raised concerns about unsafe under-crossings; others had concerns about under-used over-crossings.
- 21 commenters felt that the **changes need to happen sooner** than 2040.

Public suggestions for wording changes

- Add: *"...while providing convenient, safe, and frequent access between both sides of the parkway by local roads, bikeways, and sidewalks*."

Q15: "In 2040, the U.S. 97 Bend Parkway Corridor is fully integrated into the overall Bend multimodal transportation system with strategic on/off ramps, overcrossings/undercrossings, and a strong parallel system that accommodates the community's transportation needs: The City, Metropolitan Planning Organization, and ODOT have strategically planned and supported changes to the area's street network, including the Parkway, to provide for multimodal access to local businesses and neighborhoods as part of a cohesive, integrated network." ***Do you support this vision element as stated?***

1,262 respondents answered this question.



Observations: This Element received the highest level of outright support, with 81% in favor as stated.

Reasons for opposition or suggested changes:

213 respondents provided follow-up information.

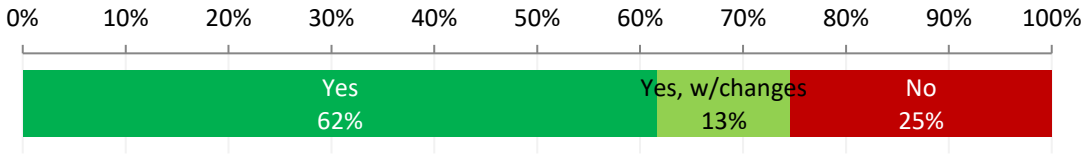
- 33 comments referred to **bicycling and/or walking**. Most (20 comments) referred to either removing bikes and pedestrian facilities from the parkway or otherwise providing separate facilities. Several referred to adding language that would emphasize how changes support alternative (non-car) transportation. It was unclear to some respondents whether a "strong parallel system" includes bike, pedestrian, and transit facilities.
- 22 comments referred to the general **wording of the Vision Element**. Some felt that the statement is too vague; others had concerns with the number of "buzz" words used. Commenters sought clarification on terms such as "fully integrated;" "multimodal"; and "parallel system."
- While generally supportive of the premise, 19 commenters were **skeptical** that this Element is achievable. Several commenters expressed doubt about developing a "strong parallel system", others did not feel that the City and ODOT will be able to work together.
- 14 commenters felt that the **changes need to happen sooner** than 2040.
- 13 comments emphasized that the purpose of the Parkway is to **move cars and trucks quickly**.

Public suggestions for wording changes

- Include a reference to "*safety*" or "*safe network*".
- "*...accommodates the community's 'intra- and inter-city' transportation needs*."
- Add "*the community*" as one of the listed partners in planning future changes.
- Add: *"The Parkway does not separate but rather unifies our community including east west corridors, including improvements for people who bike and walk."*

Q16: "In 2040, the U.S. 97 Bend Parkway Corridor is part of a transportation system that supports active transportation modes such as walking, biking and taking the bus: The City, Metropolitan Planning Organization and ODOT have planned and supported improvements that allow more people to walk and bike efficiently and safely providing low stress, accessible facilities for walking and biking along, across, and parallel to the Parkway." ***Do you support this vision element as stated?***

1,255 respondents answered this question.



Observations: 62% of respondents supported this element as written.

Reasons for opposition or suggested changes:

411 respondents provided follow-up information.

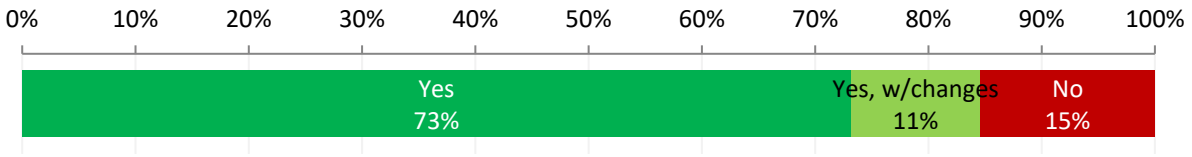
- 241 comments referred to biking and/or walking, with a significant majority expressing that **biking and walking "along" US 97 is undesirable** and alternatives are needed elsewhere. Many suggested removing the word "along" from the Vision Element.
- 44 comments focused on the **use of the Parkway and local roads by cars**, and noted that they were not addressed in this Element. Many of the commenters did not want active transportation improvements to negatively impact automobile travel.
- 21 comments referred to **other transportation options** and many suggested using language that is inclusive of other modes such as scooters, wheelchairs, Segways, tricycles, and skateboards. The term "mass transit" or "shared mobility" was suggested instead of "bus". Carpooling and services such as Uber and Lyft should also be considered.

Suggested wording changes

- *"... accessible facilities for walking and biking ~~along,~~ across, and parallel to the Parkway."*

*Q17: "In 2040, people who bike and walk can cross the U.S. 97 Bend Parkway Corridor safely at key locations: Safety improvements have been made at key locations to allow people to cross the Parkway more safely on bike and on foot." **Do you support this vision element as stated?***

1,252 respondents answered this question.



Observations: This Element received the second highest level of outright support, 73%.

Reasons for opposition or suggested changes:

282 respondents provided follow-up information.

- 91 commenters referred to walking and/or biking, with most expressing that **biking and walking on US 97 is undesirable** and alternatives (such as over/under-crossings) are needed.
- 87 comments referred to **over- and under-crossings**. These comments were primarily supportive and focused on to improving safety without impacting vehicle travel on the Parkway. Many of these comments sought the removal of signals and crosswalks that impact through travelers.
- 30 comments focused on the **use of the Parkway and local roads by cars**, and noted that they were not addressed in this Element. Many of the commenters did not want active transportation improvements to impact automobile travel.
- 14 commenters referred to the use of the term **"Key locations"**. Some felt that this was too unspecific and will result in crossings being too far apart. Several noted that the spacing of access can significantly impact bike and pedestrian access.

Suggested wording changes

- Change "key locations" to: "*all locations*;" "*frequent and convenient locations*;" "*locations no more than a mile apart*;" or "*at over/under-passes.*"
- Include a reference to "wheelchair" access.
- Add: "*...while providing convenient, safe, and frequent access between both sides of the parkway by local roads, bikeways, and sidewalks*."
- Need to be able to cross "*conveniently*" and/or "*easily*" as well as safely.

Q18: In addition to the elements described above, is there anything else that should be included in the vision?
369 respondents answered this question.

- 91 comments referenced **bikes and/or walking**. Common recommendations included: promoting biking and walking and implementing changes to make these realistic transportation options; creating a safer network of bike and walking paths throughout the city away from high traffic roads; and facilitating easier and safer crossings of the Parkway. Of the 91 comments, 24 comments specifically called for removing bike and pedestrian facilities from the Parkway due to safety concerns and/or the impact on cars.
- 71 comments called for a **bypass** or similar solution that would allow through-traffic to avoid downtown Bend, typically by traveling to the north and east of the city. 18 of these comments specifically referenced a need for an improved connection between US 97 and Highway 20.
- 42 respondents referred to issues with **vehicle speed**. 25 responses called for reducing the speed limit for safety and/or doing a better job of enforcing posted speeds. Most comments agreed that people do not drive the posted speed limit. 15 comments called for increasing posted speeds.
- 33 comments called for explicitly designating the Parkway as a **limited access highway** designed to move vehicle traffic through Bend.
- 32 comments referred to including or emphasizing other **transportation options**, such as public transit, rail, options for wheelchair users and people with disabilities, electric bikes and scooters, and autonomous vehicles. One comment called for adding "*efficient integration with local non-motorized transit corridors*." Another comment specifically called for a transit oriented vision element: "*In 2040, the U.S. 97 Bend Parkway Corridor will have capacity or a plan to accommodate growth in Bend and that State of Oregon until the year 2080. This includes plans for fixed-route transit to supplement and provide an alternate mode to driving on the US 97 Bend Parkway*."
- 25 comments called for **removing stop lights** from the Parkway due to their perceived impact on congestion and traffic flow.
- 19 comments sought additional roadway **capacity** for vehicles to accommodate future growth.
- 17 comments referenced Parkway **aesthetics.** These comments noted that trash is often a problem and suggested attractive median treatments; more trees and plantings; limiting billboards and visual clutter; and finding ways to include cultural and artistic elements into the Parkway design.
- **New elements to consider** or emphasize further within the Vision Elements included: land use, commitment to interagency coordination, commitment to implementing existing plans and projects; support for commercial traffic and freight; support for interstate travel; impacts to local business; commitment to community involvement in solutions; and affordability.

Frequently Noted Ideas and Suggestions

Recommended solutions that were not specifically relevant to the theme of the Vision Element where they were suggested above have been listed below.

Frequent recommendations included:

- Fully converting the Parkway to a **higher speed limited access highway** with no stop-lights, and improved freeway-style on- off-ramps.
- **Removing bikes and pedestrian facilities** (bike-lanes, crosswalks, sidewalks, flashing beacons, etc.) from the Parkway entirely, either because these facilities are (or feel) unsafe, or because they negatively impact vehicle traffic flow.
- **Removing all stoplights** from the Parkway to improve traffic flow.
- Providing **underpasses and/or ADA-compliant overpasses** and bridges to provide for east/west travel for cars, bikes and pedestrians.
- Creating a new **east-side bypass** to allow traffic to more easily pass through the area and/or allow the Parkway to remain useable for local access.
- Providing a means to **access Highway 20** without requiring the use of the Parkway.
- Providing **longer deceleration and merge lanes** to improve safety.

Q19: Do you have anything else to share with the project team?

332 respondents answered this question.

- 80 comments referred to **biking and/or walking**. About half of the comments expressed a desire for removing bike/ped facilities from the Parkway or providing separate bike/ped facilities elsewhere.
- 33 comments referred to **vehicle speed**. Most (20) commenters called for better enforcement of existing speed limits and/or reducing speed limits to improve safety on the Parkway. 7 comments called for increased speed limits. Several noted that it is often impractical to reduce speed to posted limits due to the speed of traffic, and the design of the Parkway does not make it obvious what the speed is supposed to be. Several commenter suggested strategies such as speed cameras or providing wider shoulders for police to stop vehicles safely.
- 33 comments called for a **bypass** to allow through traffic to more easily pass around congested areas. Many of these comments called for an improved connection between US 97 and Highway 20; whether through a bypass or better interchange.
- 23 comments prioritized **driving and/or the Parkway as a facility for cars**. These commenters felt that the Parkway should be treated as a limited access highway with higher speed.
- 22 comments called for **removing stoplights from the Parkway.** Many of these commenters requested supported over- or under-crossings to accommodate pedestrian and bicycle travel.
- In addition to calling for fixes to many location specific comments (see Appendix A for a complete list), respondents offered some **general recommendations**: widening shoulders for safety and emergency parking; using more solid barriers on the Parkway; making better use of the Parkway median; improving signage to encourage drivers to use the left lane; adding speed bumps and/or street trees to slow down traffic; using 27th St./Knott as an eastern Parkway; installing "yield" signs at onramps; adding more exits to relieve congestion; lengthening merge lanes; improving signage for tourists; providing better maintenance of bike lanes to encourage use; and improving Parkway lighting.

Tell us about you

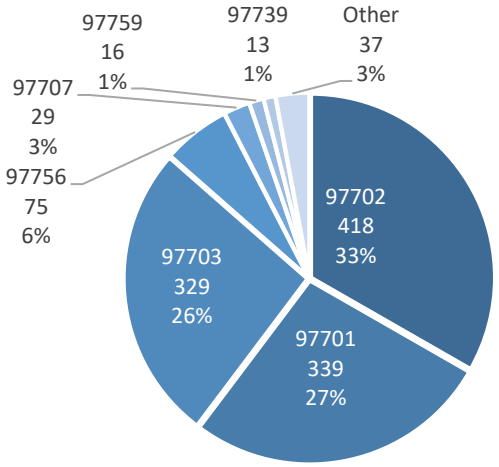
Q20: Contact information

This question asked for contact information if respondents wished to be added to the project interested parties list. 413 respondents answered this question.

Q21: What is the zip code of your primary residence?

1,257 respondents answered this question.

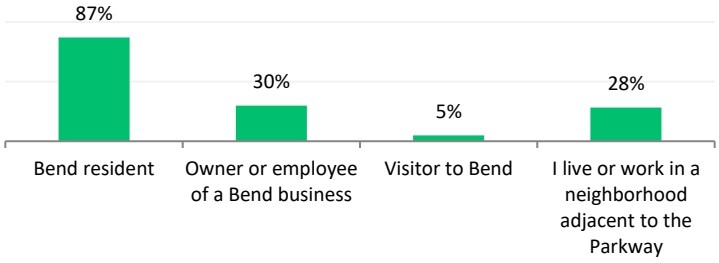
Observations: 86% of participants indicated that they live in 97703, 97701, and 97702.



Q22: How would you describe yourself? Check all that apply.

1,341 respondents answered this question.

Observations: 87% of respondents identified as Bend residents. 30% identified as owners or employees of a Bend Businesses, and roughly 30% identified as living or working adjacent to the Parkway. Only 5% of participants indicated that they were visitors to Bend.

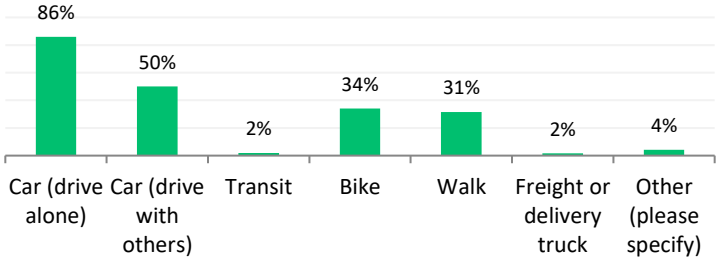


Q23: How do you usually get around? Check all that apply.

1,356 respondents answered this question.

Observations: While a significant majority of respondents said that they usually drive alone, roughly one-third said that they usually bike or walk.

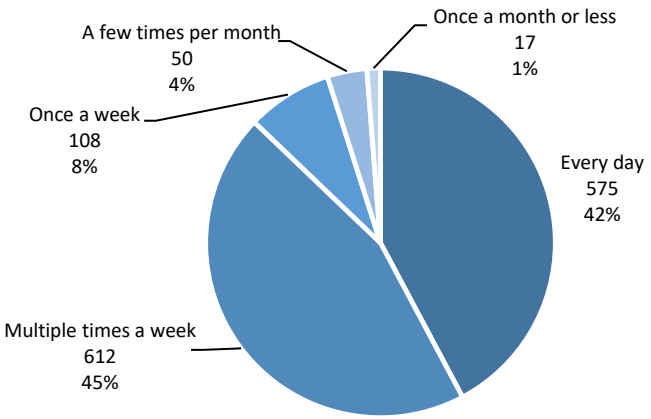
The most popular "other" modes not covered by these options included: motorcycles, scooters and skateboards, RVs.



Q24: How often do you use the Bend Parkway? Choose one.

1,362 respondents answered this question.

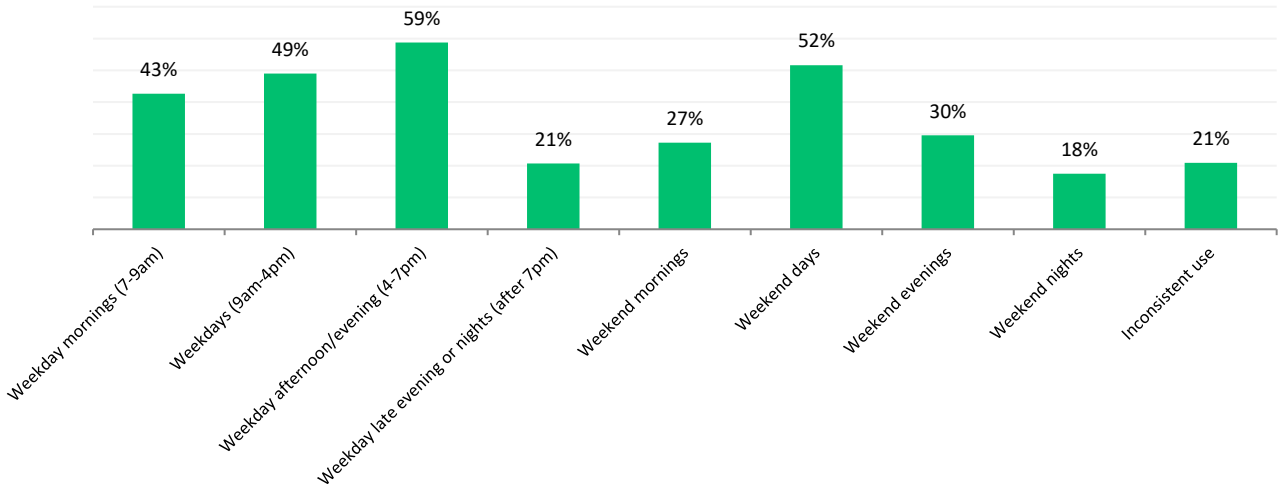
Observations: A significant majority (87% of respondents) indicated that they use the Parkway multiple times per week or more.



Q25: When do you usually use the Parkway? Check all that apply.

1,342 respondents answered this question.

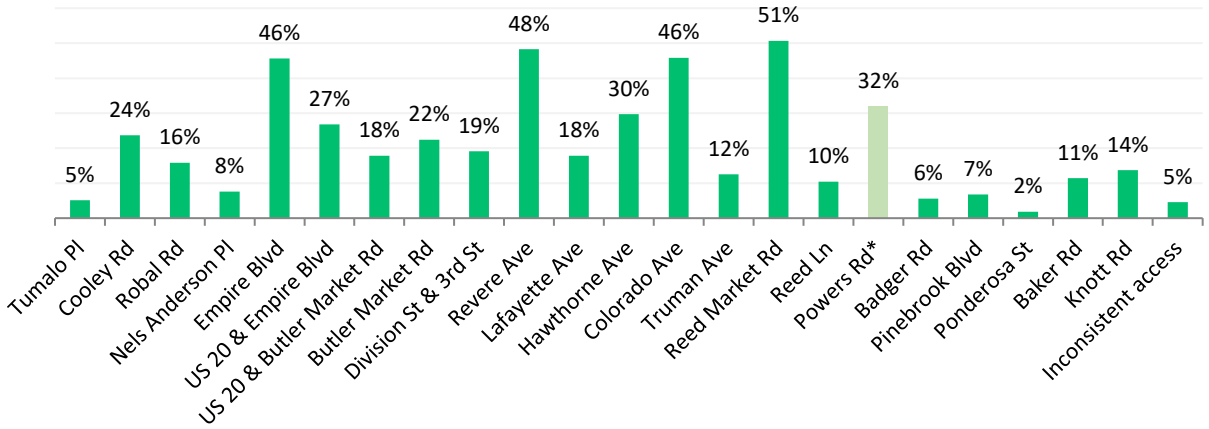
Observations: Respondents represented a range of Parkway use times. Most respondents (59%) reported using the Parkway on weekday afternoons (4-7pm), followed by weekend days (52%) weekdays between 9am-7pm (49%), and weekday mornings between 7-9am (43%). Nights, evenings, and weekend mornings were the least popular times.



Q26: Where do you usually access or exit the Parkway? Check all that apply.

1,337 respondents answered this question.

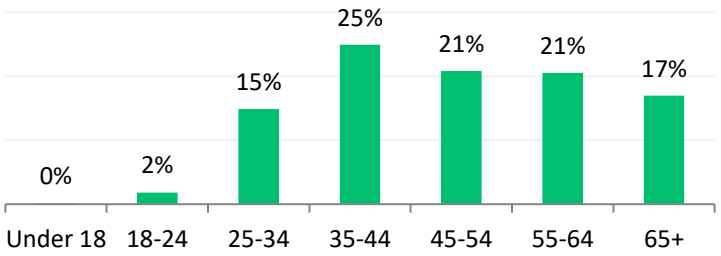
Observations: Most respondents reported accessing the Parkway from Empire Blvd, Revere Ave, Colorado Ave, Reed Market Rd, and Powers Rd. (Powers Rd was initially omitted from this list and added as an option on 9/10 after the survey had been live for three days. The number of Powers Rd users is likely higher than what is shown here.)



Q29: What is your age?

990 respondents answered this question.

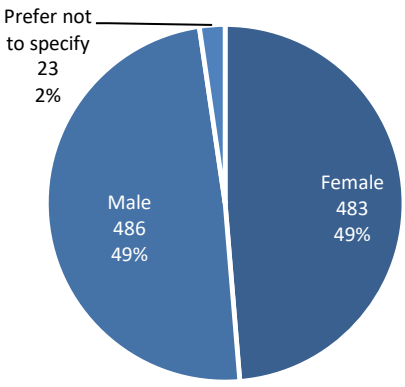
Observations: Respondents represented a relatively even distribution of ages, with slightly less representation from persons under 35 and over 65.



Q30: What gender do you identify with?

992 respondents answered this question.

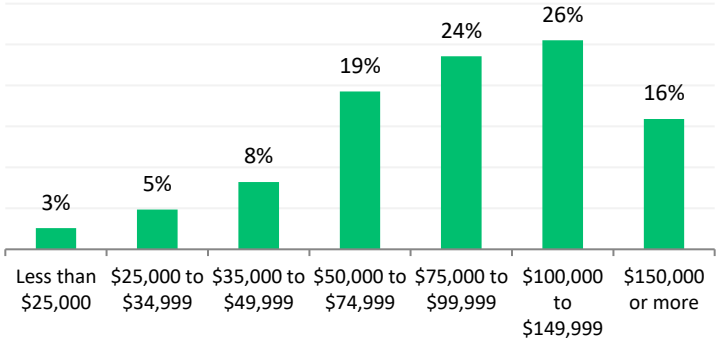
Observations: Respondents were evenly distributed between male and female.



Q31: What was your total household income before taxes during the past 12 months?

924 respondents answered this question.

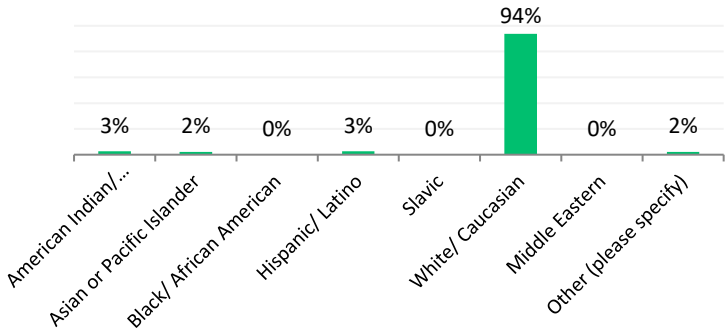
Observations: Respondents represented a range of incomes, though a majority of reported earning more than the Bend median household income ($52,471/year).



Q32: What race or ethnicity do you identify with?

953 respondents answered this question.

Observations: 94% of respondents identified as "White/Caucasian", which is slightly overrepresented compared to 2016 census data (86%).



Q33: What languages do you speak at home?

976 respondents answered this question.

99% of respondents reported that they speak English at home, with 4% speaking Spanish. Other reported languages (2%) included German, French, Italian, Dutch, Finnish, Korean, Chinook, and Chetco.

Attachment H

US97 Parkway Plan Sounding Board Meeting #1
ODOT Region 4
Deschutes River Conference Room
Friday, October 12, 2018
3:00 PM-5:00 PM

Attendees: Brent Landels (COAR), Devin Lewis (BPD), James Beauchemin (BANA), Hardy Hanson (CTAC),
Richard Ross (OBNA), Moey Newbold (COLW), Sid Snyder (CTAC), Mindy Aisling (Downtown Bend), Katy Brooks (Bend Chamber).

Via Telephone: Josh Geary (FedEx), Deirdre Nauman (MVNA), Andrea Breault (CET), Kathleen Martin (SEBNA).

Staff: Bridget Wieghart (WSP), Jeanne Lawson (JLA), Dave Hirsch (ODOT), Jill Eckenrode (ODOT), Amanda Deering (DKS), Rick Williams (ODOT), Tyler Deke (BMPO).

Notes:
Rick Williams kicked off the meeting by welcoming the group and leading group introductions. He provided a brief overview of the Parkway Plan purpose and need, and overview of the planning process.

Jeanne Lawson provided an overview of the Sounding Board's charge and general meeting protocols.

Sid Snyder asked if it is within the purview of this group to change the way 97 is used? Jeanne Lawson responded that use is adopted by US and State, certain usage is and needs to be in alignment with State and Federal designations.

Richard Ross stated that Bend is serving as a supply depot for all of Eastern Oregon. Lots of freight traffic feeding into HWY20, other freight-ways. Bridget Wieghart agreed and noted that lots of traffic is regional and/or long distance but may well have an origin or destination in the Bend area. Bend has the highest freight traffic levels on US 97.

Rick Williams discussed the need for doing the plan at this point in time. He referenced how completed planning efforts (US 97 North Corridor EIS and Murphy Road Refinement Plan) were being incorporated into the Parkway Planning effort and that ODOT and the City of Bend are working for consistency between the Parkway Plan and City of Bend TSP. Final Parkway Plan will be adopted by OTC, Bend MPO and City of Bend.

Moey Newbold asked what if the plan doesn't get adopted by City or OTC? Rick Williams said the planning process includes lots of coordination in order to ensure the result is supported.

Bridget Wieghart provided an overview of the Project schedule, key milestones and opportunities for public involvement. Richard Ross stated that he thinks the public input is thin. He has concerns that the plan will have many effects on Bend and recommended that perhaps you put info kiosks in groceries or other places where there is a lot of traffic in the corridor

supplemental to planned online open houses. Rick Williams responded that once the investment strategy is in draft form, we will have more localized info deployed.

Sid Snyder asked if there is an ODOT technical advisory committee. Rick Williams said that there are in house project delivery team meetings (including the City and other local agencies) but the MPO TAC and Policy Board serve as project advisory/decision making committees. Jeanne Lawson stated that input will be incorporated into the joint MPO Policy Board/TAC meeting.

Bridget Wieghart reviewed maps showing congestion, crash locations and delay statistics from the existing and future condition reports. Tyler Deke noted that the peak ADT numbers on usage are a bit dated and the summer peak is 65K.

Rick Williams provided an example of future congestion/back-ups on the Parkway associated with the Reed Market south-bound off-ramp.

Sid Snyder asked what does 30HW mean. Dave Hirsch responded that the 30 highest hour is the highest peak generating window. Our software tools are very robust, allowing us to look at the system as a whole. Map is very reflective of volume increases.

Hardy Hanson asked if the queuing is multi-directional or one direction. Rick Williams responded that the queuing will occur in both directions but will be worse in the peak direction.

Bridget Wieghart discussed RIRO access points on the Parkway. FHWA estimates about 12 secs to find a gap and get up to speed. On the Parkway the gap is closer to 5 seconds.

Bridget Wieghart discussed overall Parkway safety and outlined bike and pedestrian level of stress.

Devin Lewis stated that Bend PD would favor grade-separated bike & pedestrian crossings of the Parkway. Rick Williams noted that ODOT's goal is have no signalized at grade ped crossings. Moey Newbold stated there are no bike lanes on some roadways coming off of the Parkway.

Bridget Wieghart discussed the range of potential solutions for the Parkway. Rick Williams followed Bridget's comments by noting that adding lanes would be very expensive. Adding additional shoulder width would help with incident management.

Devin Lewis noted that the Bend PD has discussed the need to change the center median to barrier. Over the median crashes are increasing on the Parkway. Areas with barrier in place, at the South end of the Parkway to Lava Butte, are seeing fewer fatalities. He asked if there is a chance of revisiting the concept of having barrier on the Parkway. Rick Williams responded that yes, replacing median with barrier is on the table.

Brent Landels responded to ITS wayfinding by stating the he does not see the purpose of letting people know how long it will take. That just causes them to jump to a local route that will be overwhelmed. Dave Hirsch stated that part of our system will take in data from the entire network to assist with congestion and advisories on how long for certain routes. Bridget Wieghart said that travel times will be provided for alternate routes, so the driver can make a comparison. This is helpful in other places. Jeanne Lawson asked if it is not the case that the

signs also provide a calming aspect for users. Dave Hirsch further responded that the more info people have the better. Trip Check is what we're building off of.

Sid Snyder asked if the system going to be adaptive/real time? Dave Hirsch responded that we will use the best we have at the time and this will include real time information.

Rick Williams made a comment regarding walking and biking solutions. ODOT is working closely with the City to remove bike and ped on the Parkway and instead focus on the City's proposed low impact network. He referenced the City's interest in a possible Hawthorne overcrossing

Rick Williams noted that there is more detail in the full reports and appendices which are available if requested.

Sid Snyder asked if it is it possible to have an eastern bypass. Rick Williams responded by noting that it would be very expensive to construct an eastern bypass for the 10% of through traffic and it would be a better use of public funds to invest in the existing system.

Brent Landels asked how much of our gas taxes get spent locally. Rick Williams stated that Oregon is a recipient state, versus a donor state of Federal gas tax Oregon usually uses our state gas tax as a match for Federal funds or for routine maintenance and operations. Jeanne Lawson noted that the state gas tax funds are not distributed to local areas by how much they put in. However, Portland generates the most so other areas receive more than they put in.

Katy Brooks indicated that the Chamber is looking at how to make Bend a Smart City with tools to integrate technology and transportation (smart alerts, etc.). There will be factors that add to options that are not necessarily adding concrete. Dave Hirsch said that there is a Deschutes County ITS plan update in the works – one of the pieces is the smart cities aspect. Nothing to share today, but it is part of the whole process.

Jim Beauchemin asked regarding the intersections – are we thinking about moving them to nearby locations that may work better? Rick Williams responded that there really aren't many options for that as most of the intersections will be overcapacity in future.

Brent Landels asked does the modeling reflect the density of land use. Rick Williams responded yes.

VISION

Jeanne Lawson noted that the first three vision elements are assumed.

Assumed Vision 1/8: In 2040 the U.S. 97 Bend Parkway Corridor is part of a significant statewide route
No group objections/comments.

Assumed Vision 2/8: In 2040 the U.S. 97 Bend Parkway Corridor is a significant *local* route
No group objections/comments.

Assumed Vision 3/8: In 2040 the U.S. 97 Bend Parkway Corridor is facilitating through travel

Richard Ross asked why not say "facilitating through and long distance travel?"

Proposed Vision Element 4/8: In 2040 local traffic growth is accommodated on the local roadway system

Hardy Hanson stated the vision statement might need to be redefined given it's not working now and probably not going to work in the future. Perhaps give it a more defined purpose. Is there capacity or potential for Express Lanes/Dedicated through lanes?

Moey Newbold said I'm ok with it as a 'vision' but not sure it's possible to provide alternatives

Brent Landels stated that Reed Mkt was woefully underbuilt to handle East/West traffic. There is no street to handle east/west overflow. He thinks a vision that isn't truly viable is silly.

Yes – 5
Acceptable with modifications - 3
Dislike – 1 (Brett)

Rick Williams said try not to think of it in terms of current systems but as a vision for the future.

Sid Snyder asked if it would that include adaptive, new technologies vs. only new bridges and roads? Dave Hirsch & Rick Williams both responded with yes.

Bridget Wieghart noted that this is the vision element that received the least support in the survey as well. People were concerned whether the parallel system would be built out.

Proposed Vision Element 5/8: In 2040 the U.S. 97 Bend Parkway Corridor is safer and more efficient due to access changes

Yes – 6
Acceptable with modifications - 3
Dislike – 1 Richard Ross

Sid Snyder asked to clarify that some right ins might remain open while some right outs might be closed.

Richard Ross stated that additional language is needed. As written, it is missing the economic and social impact of closings. Access to downtown and the Old Mill district is critical. Closing some accesses will cause out of direction impacts on residential neighborhoods. Jeanne Lawson added that perhaps it is a separate vision element (e.g. #6) is needed to address this.

Brett Landels added that closed and upgraded RIRO intersections are opposites. Jeanne Lawson said that this came up in survey too. We need to clarify what we mean by upgrade.

Proposed vision element 6/8: In 2040 the U.S. 97 Bend Parkway Corridor is fully integrated into the overall Bend multimodal transportation system with strategic on/off ramps, overcrossings/under crossings, and a strong parallel system that accommodates the community's transportation needs.

Yes - 12
Acceptable with modifications - 1
Dislike- 0

Kathleen Martin added that she is having issues with the potential of funds being expended off of the Parkway.

Proposed Vision Element 7/8: In 2040 the U.S. 97 Bend Parkway Corridor is part of a transportation system that supports active transportation modes such as walking, biking and taking the bus.

Jeanne Lawson noted the need to clarify language "along the parkway".

Yes – 11
Acceptable with modifications – 1
Dislike – 0

Proposed Vision Element 8/8: In 2040 people who bike and walk can cross the U.S. 97 Bend Parkway Corridor safely at key locations.

Sid asked whether it can be slightly broader than that (other than bike and foot. (i.e. Segway's, scooters).

Moey wondered whether we could add something about safely and comfortably cross (i.e. clean-up some places that are not comfortable to use right now {Franklin underpass}

Yes – 12
Not Great-1
Dislike -0

Deirdre Nauman said I would reword to: "…… safely cross" vs. comfortably and safely cross. Comfort needs to be defined. Jeanne Lawson responded that we will take this input but where there is disagreement and don't expect to reach consensus on every issue.

Kathleen Martin added that we would have to be a lot of infrastructure built to protect peds and bikes

Mindy Aisling stated that we need more info on what it means to the DT Bend. Concerned if people can't get downtown. Richard concerned about traffic diverting into downtown neighborhoods that shouldn't be.

Brett Landels asked whether there are plans to fix Murphy ramps. Rick Williams responded yes but it needs additional planning work and coordination between the City and ODOT.

Jim Beauchemin asked if we are we looking at additional interchanges. Rick Williams responded that it is a possibility in a few locations, such as Powers and Murphy although the density of interchanges is already high in some portions of the Parkway.

Hardy Hanson asked what are the general design criteria in terms of how long an improvement is expected to last. Is it 5 years out? 6 years out?

Deirdre Nauman said she would remove the term "more" as a modifier to safely. We should provide for safe pedestrian and bicycle movement.

Meeting Adjourned