



Appendix E: Alternatives Evaluation Process



MEMORANDUM

Eugene Transportation System Plan

Project Evaluation Approach

Date: January 8, 2014
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Eugene PMT, TAC, and TCRG
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Project #:10296

This memorandum describes the approach used to categorize and evaluate projects that may become the key elements of the recommended Transportation System Plan (TSP). The overall approach and categorization result from the TSP goals and objectives, and Eugene's commitment to creating a plan that supports its sustainability goals including the sustainability Triple Bottom Line (TBL; environment, equity, and economy).

The following goals developed during Phase 1 of the TSP guide this process:

- **Goal 1:** Create an integrated multimodal transportation system that is safe and efficient; supports local land use and economic development plans; reduces reliance on single-occupancy automobiles; and enhances community livability.
- **Goal 2:** Advance regional sustainability by providing a transportation system that improves economic vitality, environmental health, social equity, and well-being.
- **Goal 3:** Strengthen community resilience to changes in climate, increases in fossil fuel prices, and economic fluctuations through adaptations to the transportation networks.
- **Goal 4:** Distribute the benefits and impacts of transportation decisions fairly and address the transportation needs and safety of all users, including youth, the elderly, people with disabilities, and people of all races, ethnicities and incomes.

Consistent with the TBL and the TSP goals, the City's priorities for the transportation system (in no particular order) are:

- Safety
- Quality of the transportation facilities (ensuring comfortable environments for all modes within the overall transportation network)
- Supporting Envision Eugene's Key Transit Corridors and planned densities.
- Completing networks for all modes
- Understanding the tradeoffs associated with transportation project and network decisions

The categorized project list supports the above priorities and suggests timeframes for implementation based on complexity, likely available funding (including potential funding sources), and staff assessment of probable timelines. The five project priority categories include:

- 20 year projects,
- Beyond 20 year projects,
- Projects to complete upon development,
- Studies, and
- Operational projects.

In addition to the project lists, policy statements comprise an essential component of the TSP and will guide the City in future decision-making efforts as they relate to project prioritization, understanding trade-offs, and helping the city to progress toward achieving triple bottom line objectives. These policy statements are not evaluated in this memo but rather will be used to support the implementation of the TSP. Appendix A of this memo includes a preliminary list of policy concepts that may be included in the TSP.

Further discussion about each of the five project categories, and a description of how bicycle and pedestrian facilities will be handled, is provided below. A list of projects included in each category follows.

Bicycle and Pedestrian Projects

Specific bicycle and pedestrian projects are not proposed for inclusion in the TSP, with one primary exception as described below. Instead, the recently completed Pedestrian and Bicycle Master Plan (PBMP) will be adopted separately and incorporated by reference as part of the TSP. The TSP will reference the general types of pedestrian and bicycle projects and policies included in the PBMP and may specifically reference some of the key projects/policies, but the project list and priorities will be detailed in the PBMP. Further, the TSP will describe the relationship between the two documents and articulate that the PBMP represents the pedestrian and bicycle elements of the TSP. Supporting text/policies can provide the city the flexibility to update the PBMP over time without having to amend the TSP.

The potential for a grade-separated pedestrian/bicycle overcrossing of the Beltline Highway may be evaluated using TSP criteria and included explicitly in the TSP. This, the most expensive pedestrian and bicycle project being contemplated, fulfills a major gap in the existing pedestrian and bicycle system, and requires coordination with the street system and careful consideration of potential land use impacts.

Many of the projects identified in the TSP project lists will include pedestrian and bicycle components as part of the overall improvement and therefore be included in the TSP.

20 Year Projects and Upon Development Projects

Most of the projects in the 20 year and “upon development” categories provide incremental, local changes, and while they will improve specific areas, very few “move the dial” on achieving greenhouse gas reduction targets or other city-wide priorities. These projects will be evaluated by bundling them together to show the city-wide benefit of systematically implementing them over the 20 year planning horizon. Cost estimates and transportation modeling for the 20 year projects will help inform the evaluation discussions.

Projects that are to be completed upon development are those that are likely needed as properties in the urban growth boundary develop or redevelop. The timing of these projects is uncertain and they are unlikely to be advanced by the city in the absence of specific private development activities. Typically, these projects address only localized multimodal transportation needs associated with newly developing or redevelopment areas. These projects will be included in the transportation modeling and the cost estimating but most are not of the scale/nature that will inform the evaluation discussions.

The list of “upon development” projects reflects City staff’s current understanding of likely priorities in these areas. At the time that specific land use applications are submitted, additional or different provisions may be required as conditions of approval based on the specifics and timing of the actual development application. Further, the projects in this category may be funded through a variety of sources, such as urban renewal, proportionate sharing (based on level of anticipated impact of a specific development), etc.

Projects Beyond 20 Years

Projects beyond 20 years are still important to consider, as they are the larger more complex projects, or projects that could address future transportation issues that are not yet problematic. This provides a clear path for the City to work towards beyond the immediate plan priorities. Inclusion of projects in the beyond 20 year category provides the city flexibility to re-evaluate priorities and to pursue a variety of funding opportunities that may arise over the life of the TSP. In terms of projects beyond 20 years, the regional land use and transportation model may be used to provide a sensitivity analysis on the traffic benefits/impacts of a new river crossing in Eugene. No other beyond 20 year projects will be modeled.

Study Projects

Study projects are those that need further analysis prior to identifying a specific project for implementation and inclusion within the TSP.

Operational Projects

Operational projects are typically intersection-related improvements that are individually lower in cost than other projects being contemplated and generally do not require right-of-way acquisition. The TSP is not all-inclusive of the operational projects the city will pursue over the life of the TSP. Rather, these projects represent those that the city can pursue to improve the operational efficiency of specific intersections and roadways. Further, a list of Transportation System Management and Options (TSMO) strategies will be included in the TSP to assist city staff and policy makers in future discussions regarding capital funding/project priorities.

PROJECT EVALUATION CRITERIA

Evaluation criteria are used to differentiate and identify trade-offs among feasible ideas and determine how well a project meets TSP objectives. To be most effective, these criteria should be measurable and well-defined. This ensures a common understanding of each criterion's meaning, and allows for a clear comparison among different ideas. The TSP criteria listed in Appendix B are organized by project objective, nested into the following eight categories:

1. Safety and health
2. Social equity
3. Access and mobility for all modes
4. Community context
5. Economic benefit
6. Cost effectiveness
7. Climate and energy
8. Ecological function

Evaluation questions are provided for each objective. Each project is evaluated in response to these questions to determine how it meets the objective. The following rating scale is used.

Evaluation Results Rating Scale

●	The project idea addresses the criterion and/or makes substantial improvements in the criteria category
◐	The project idea partially addresses the criterion and/or makes moderate improvements in the criteria category
○	The project idea does not support the intent of, provides minor or incidental benefit and/or negatively impacts the criteria category
N/A	The project idea neither meets nor does not meet intent of criterion. The project idea has no effect, or criterion does not apply

NEXT STEPS

Draft project lists, by category, will be discussed with the TCRG in February 2014 for refinement/revision. A more detailed evaluation of the 20 year projects that result from this meeting(s) will inform discussions about trade-offs and a recommended set of projects for inclusion into the TSP by project category.

The project lists are shown below. A preliminary assessment of the 20 year projects relative to the evaluation criteria follows the lists.

PROJECTS WITHIN 20 YEARS

Figure 1 shows these projects.

West Eugene EmX	
1	The West Eugene EmX extension along West 6th, 7th, and 11th Avenues is funded and underway.
River Road	
2	Improve frequent transit service and multimodal travel along River Road
3	Include a new corridor terminus with bus transfers and auto and bike parking near River Road and Randy Pape Beltline Interchange
Coburg Road	
4	Improve frequent transit service and multimodal travel along Coburg Road and transit connections to Springfield
5	Investigate transit route options for access into downtown via or around the Ferry Street Bridge
MLK	
6	Improve or maintain frequent transit service and multimodal travel along Martin Luther King Jr. Boulevard to Centennial Boulevard in Springfield
30th/Amazon	
7	Provide continued improvements to transit (frequency, service hours, transfers) to achieve frequent transit service and improved multimodal travel in this corridor between downtown and Lane Community College, including 30 th Avenue.
Beltline Expressway Management Plan Recommendations¹	
8	Provide improvements to Beltline Highway, Delta Highway and arterial street system in the vicinity as documented in the Beltline Facility Plan (adoption pending Spring/Summer 2014).
Urbanization of Existing Streets²	
9	Upgrade Bertelsen from 18 th Avenue to Bailey Hill Road
10	Upgrade Bethel from Highway 99 to Roosevelt
11	Upgrade the north/south section of County Farm Loop
12	Upgrade W 11 th from Terry to Green Hill
13	Upgrade Hunsaker Lane/Beaver Street (county has STIP-U funding for a planning/preliminary design study for this project)
14	Upgrade Jeppesen Acres Road from Gilham to Providence

¹ Specific improvements will be incorporated into draft TSP once the Facility Plan has been finalized and adopted. These projects are evaluated using the criteria established for the Beltline Facility Plan and are not evaluated using the TSP criteria.

² These types of projects may include new pedestrian facilities, bicycle facilities, turn/travel lanes, curb/gutter, drainage treatments needed to align with current city standards and/or policies. Often, these types of projects are referred to as “urban upgrades

Other Projects	
15	Reconstruct Franklin Boulevard as a multi-way boulevard between Walnut Street and Onyx Street
16	Add lanes on the Randy Pape Beltline from Roosevelt to W 11 th and provide intersection improvements at the Beltline/W 11 th and Beltline/Roosevelt intersections
17	Provide grade-separated crossing of the Beltline Highway for pedestrian and bicycle travel in the vicinity of York or Park
18	Add center turn lane on Martin Luther King Boulevard between Parkway West and Centennial Loop West

PROJECTS BEYOND 20 YEARS

Figure 2 shows these projects.

Urbanization of Existing Streets³	
30 ⁴	Upgrade Summit Drive from Fairmont to Floral Hill Drive
31	Upgrade Van Duyn Road from Western Drive to Harlow Road
Intersection Projects	
32	Provide improvements to address safety and congestion at the Highway 99/Roosevelt Blvd. intersection
Beltline Corridor	
33	Improve frequent transit service along the Randy Pape Beltline corridor – with a possible Crescent Avenue route.
River Crossings	
34	Address an aging Ferry Street Bridge structure (replace in kind, no expansion)
NW Expressway	
35	Provide improvements to provide facilitate freight along the NW Expressway corridor

³ These types of projects may include new pedestrian facilities, bicycle facilities, turn/travel lanes, curb/gutter, drainage treatments needed to align with current city standards and/or policies. Often, these types of projects are referred to as “urban upgrades”.

⁴ There are no Projects 19-29; these project numbers are held in reserve in case more TSP projects are added.

PROJECTS TO COMPLETE UPON DEVELOPMENT

Figure 3 shows these projects.

Local Connectivity	
40 ⁵	Connect Hyacinth Street between Irvington Drive and Lynnbrook Drive
41	Provide connection between Gilham Road and County Farm Road
42	Extend W 13th Avenue from Bertelsen to Dani Street
43	Provide connection between Enid and Awbrey
44	Extend Colton Way south past Royal Ave to connect with the future extension of Legacy
45	Extend Legacy South past Royal Ave to connect to Roosevelt Blvd. (Roosevelt extension)
46	Construct collectors and other facilities within Crow Road area needed to serve future demand/development
Urbanization of Existing Streets⁶	
47	Upgrade Arrowhead Street from Irvington Drive to Barstow Ave
48	Upgrade Awbrey Lane from Prairie Rd to Hwy 99W
49	Upgrade Bailey Hill Road south from Warren Street to the UGB
50	Upgrade Beacon Drive East from River Rd to Scenic Drive
51	Upgrade County Farm Loop West to east section
52	Upgrade Dillard Road from 43 rd Avenue to UGB
53	Upgrade Fox Hollow Road South from Donald to UGB
54	Upgrade Prairie Road from Maxwell to Beltline
55	Upgrade River Loop #1 from River Rd to Dalewood St
56	Upgrade River Loop #2 from River Rd to Burlwood Street
57	Upgrade Royal Ave from Terry St to Greenhill Rd
58	Upgrade Scenic Drive between River Loop #2 to Beacon Drive East
59	Upgrade Spring Creek Drive from River to Scenic Drive
60	Upgrade Wilkes Drive from River Rd to River Loop #1
61	Upgrade Willow Creek Road south from 18 th Avenue to UGB

⁵ There are no projects 36-39; these project numbers are held in reserve in case more TSP projects are added.

⁶ These types of projects may include new pedestrian facilities, bicycle facilities, turn/travel lanes, curb/gutter, drainage treatments needed to align with current city standards and/or policies. Often, these types of projects are referred to as “urban upgrades”

EWEB Property Improvements	
62	<p>Provide improvements to facilitate the EWEB Riverfront Development, which may include:</p> <ul style="list-style-type: none">-Intersection improvements at 4th Avenue/Coburg Road: Signalize westbound right-turn movements on 4th Avenue and northbound through movements on Coburg Road (southbound movements would remain unsignalized)-Provision of a relocated highway-railroad crossing, in alignment with the existing 8th Street improvements including track panels, lights, gates, audible warning devices, and upgraded railroad track detection as required by ODOT Rail and/or Union Pacific Railroad-Relocation of the existing signal closest to the 8th Avenue/Hilyard Street intersection to align with the relocated railroad crossing at the existing 8th intersection-Provision of a northbound right-turn lane that will offer storage for vehicles queued on Hilyard Street during train passage.-Provide a new street connection from the overall site to High Street, about 100 feet north of 5th.

Figure 4 combines all three categories of projects: Projects Within 20 Years, Projects Beyond 20 Years, and Projects to Complete Upon Development.

STUDY PROJECTS

11th and 13th Avenues	
If 6 th and 7 th Avenues become too congested to accommodate West Eugene EmX Service, study the need for re-routing along 11 th and 13 th Avenues	
Local Connectivity	
Extend Beaver Street north to Wilkes Drive (which is outside Urban Growth Boundary). Would be joint project with County and would require an exception to Oregon’s Statewide Planning Goals if provided as a street serving all modes; a goal exception would not be required if it is only a pedestrian and bicycle facility or located inside the UGB.	
Improvements to North-South Travel/Circulation south of Downtown	
Evaluate north/south circulation options on the Oak/Pearl and Hilyard/Patterson couplets	
River Crossings	
Study ways to increase capacity over the Willamette River to address bridge crossing congestion issues.	
University of Oregon	
Explore ways to provide better multimodal connections between the University of Oregon/Franklin Boulevard area and the Autzen Stadium/Duck Village/Chase Gardens area	
I-105 Ramps	
Analyze options to address weaving, operational and safety considerations at the I-105 southbound off-ramp onto W 6 th Avenue	

The Beltline Facility Plan is currently underway and should be completed prior to the TSP adoption. The Facility Plan includes recommendations to the Beltline Highway, Delta Highway and adjacent arterial street system to improve safety and the long-term functionality of the Highway between River Road and Coburg Road. This study is a precursor to the National Environmental Policy Act (NEPA) process for the implementation of future projects. The recommendations from the Facility Plan will be incorporated by reference into the TSP.

OPERATIONAL PROJECTS

A sample of possible operational projects is listed below.

NW Expressway
Provide intersection improvements at the NW Expressway and Beltline ramp termini intersections
Arterial Corridor Management
Upgrade traffic signals along key corridors and at key intersections to implement Transportation System Management and Operations (TSMO) strategies that increase the efficiency of the arterial system.
Other Projects
Convert 8 th to two-way between High and Washington
Complete conversion of Lawrence Street to 2-way between 6 th and 13th
Complete conversion of Charnelton to 2-way for the entire length
Safety improvements at Fifth and Seneca

20 YEAR PROJECT EVALUATION

A draft evaluation of the 20 year projects is shown below. Appendix B provides further details on the evaluation criteria.

20-Year Project Evaluation

Project	Safety & Health	Social Equity	Access & Mobility for All Modes	Community Context	Economic Benefit	Cost Effectiveness	Climate & Energy
Improve frequent transit service and multimodal travel along key corridors							
River Road	●	●	●	●	●	◐	●
Coburg Road							
MLK							
30 th /Amazon							
Urban Upgrades							
Bertelsen							
Bethel (Hwy 99 to Roosevelt)							
County Farm Loop (north-south)							
W 11 th (Terry to Greenhill)	○	○	◐	●	○	◐	○
Hunsaker Lane/Beaver Street							
Jeppesen Acres Road (Gilham to Providence)							
Other Projects							
Reconstruct Franklin Blvd	○	○	●	●	●	●	○
Beltline Improvements (Roosevelt – W 11 th)	◐	○	●	●	●	◐	○
Pedestrian/Bike Bridge over Beltline	◐	●	◐	●	○	○	◐
Add center turn lane on Martin Luther King Boulevard between Parkway West and Centennial Loop West	○	○	○	●	●	●	○
Operational Projects							
Implement TSMO and Other Operational Improvements	◐	○	○	●	●	●	●
Pedestrian and Bicycle Master Plan							
Implement PBMP Priorities	●	●	●	●	●	●	●

Note: Ecological Benefit has not been assessed at this time.

Rating Scale:

- The project idea addresses the criterion and/or makes substantial improvements in the criteria category
- ◐ The project idea partially addresses the criterion and/or makes moderate improvements in the criteria category
- The project idea does not support the intent of, provides minor or incidental benefit and/or negatively impacts the criteria category

APPENDIX A – POLICY CONCEPTS

In addition to the goals, objectives, and project lists, the TSP will contain a set of policies. A policy is a statement adopted to provide a consistent course of action, moving the community towards attainment of its goals. The policies describe how the City will make future decisions. The following list reflects topics that could be addressed by policies in the TSP.

- Implement the Frequent Transit Network described in the Regional Transportation System Plan. Coordinate the Frequent Transit Network with Envision Eugene's Key Transit Corridors.
- Recommend a corridor-study approach to the key transit corridors in which multiple modes and access management, as well as future growth and urban design, can be addressed comprehensively. Incremental improvements may take place, but a comprehensive approach is preferred. In this context, "access management" includes physical barriers, such as median islands, that prohibit left turns from the travel lanes.
- Recognize the Pedestrian and Bicycle Master Plan (PBMP) as the guiding document for pedestrian and bicycle improvements and programs.
- Provide/support good bicycle and pedestrian connections to frequent transit lines.
- Introduce a "Complete Streets Network" by providing safe access by all modes between residences and employment, shopping, transit, and to meet daily needs. [Or use 20-minute neighborhood characterization.] Prioritize projects and programs that improve access near Key Transit Corridors and between residences, employment centers, and daily services.
- Work with emergency responders to keep Response Routes functional.
- Support better utilization of Northwest Expressway as a freight corridor and to provide improved general access to the River Road/Santa Clara neighborhoods.
- Roundabouts will be considered as a generally preferred design option *early* in a design process. The actual design and review process and roundabout standards can be developed administratively. [Note: this does not mean that we will necessarily implement roundabouts, but this policy acknowledges that roundabouts are in our toolbox and the public should not be surprised if they are installed.]
- LOS-type standards that are used as a development review tool must be balanced and inclusive to address multiple modes of travel and quality of life issues that auto-focused LOS standards do not capture.
- Cross-over easements (from property to property) should be considered in future code amendments to facilitate access management and minimize the need for as many driveways.
- Support multimodal access into the downtown and other concentrated employment areas through the use of Transportation Management Associations and other innovative techniques that reduce demand for automobile travel at times of peak congestion.
- Review the parking code so that automobiles are not favored over other modes (when facilities for other modes are present). Example: reduce or eliminate the requirement for a minimum number of parking spaces along Key Transit Corridors.
- Improve multimodal connections between neighborhoods and the frequent transit network. [example: bike-share facilities and bike lockers at transit stations]
- Support and incorporate the Eugene Airport Master Plan into the TSP.

- Support more frequent, higher speed passenger rail between Eugene and Portland, Seattle, and Vancouver, BC. Retain a passenger rail station in downtown Eugene.
- Support freight by rail.
- Support ongoing improvements to the Amtrak Station, such as:
 - Provide transit service closer to Amtrak Station
 - Add two rail sidings to benefit freight and passenger rail.
- Reduce dependence on single-occupant automobile travel. Provide options and choice for those who do not, cannot, or choose not to own or drive a vehicle alone. Priority shall be given for safety improvements, starting with the most vulnerable (pedestrians).
- Support reasonable and reliable travel times for freight and movement of goods in the Eugene-Springfield region. (existing TSP policy)
- Promote intermodal linkages for connectivity and ease of transfer among all transportation modes [existing TSP policy], including intermodal transfers for freight (e.g., air, rail, and trucks).
- Use technologies to provide dependable, real time freight scheduling and corridor congestion management (e.g., messages to smart phones about expected delays, alternate routes).
- Use technologies and services to reduce reliance on privately owned automobiles (e.g., bike share, car share, ride share, telecommute).
- Explore methods of removing crashed and stalled vehicles from travel lanes more quickly.
- Re-evaluate street design standards to promote complete multi-modal street networks and provide context sensitive design options.
- Consider methods to finance filling gaps in the sidewalk network (ex: to connect new development to the broader street network and transit, gaps in developed areas with limited potential to provide sidewalks in the near term, etc.).
- Explore alternate measures to the standard Levels of Service (LOS and V/C) to describe function of streets, such as reducing time of delay, total corridor (rather than intersection) travel times, and average travel delay (rather than peak hour/peak 15 minutes).
- Support County improvements to 30th Avenue and Gonyea Road (outside of the UGB).
- Support the Regional Transportation Options Program.

APPENDIX B – EVALUATION CRITERIA

1. Safety and Health

Project Objectives	Evaluation Criteria
1. Double the percentage of pedestrian, bicycle, and transit trips by the year 2035.	Will the project or program substantively improve city-wide mode split, as reported as percentage of commute trips taken by pedestrians, cyclists, and transit?
2. Improve community health by increasing physical activity as part of the transportation system.	Is the project or program likely to increase walking or bicycling?
3. Support the reduction in quantities of harmful airborne pollutants associated with transportation.	What is the project or program's ability to reduce airborne pollutants, based on available LRAPA7 data on criteria pollutants?
4. Improve safety and security for all users, especially for the most vulnerable; strive for zero fatalities.	What is the project's ability to reduce fatalities and injuries? Will the project address known safety concern areas, provide safe and attractive pedestrian and/or bicycle facilities, and address areas that are otherwise considered unsafe? (Combined assessment)

2. Social Equity

Project Objective	Evaluation Criteria
1. Use future transportation investments to reduce or eliminate disparities between neighborhoods in access, economic benefits, safety, and health.	What impacts does the project or program have on areas with greater proportions of low income, minority, youth and/or elderly population than the city as a whole?

⁷ LRAPA, Lane Regional Air Protection Agency measures particulate matter (PM2.5) and ozone.

3. Access and Mobility for All Modes

Project Objective	Evaluation Criteria
1. Foster neighborhoods where 90 percent of Eugene residents can meet most daily needs without relying heavily on an automobile.	Does the project or program improve access to typical daily destinations within a 20-minute walk, bicycle trip, or bus ride?
2. Improve the comfort and convenience of travel, especially for walking, bicycling, carpooling, and riding transit.	Does the project or program improve the comfort, safety, or convenience for walking, cycling, carpooling, or riding transit? This could include filling a gap in a sidewalk or bicycle facility, a carpool program to reach new customers, or improving safety or comfort while waiting for the bus.
3. Maintain a network of Emergency Response Streets to facilitate prompt emergency response.	Does the project improve roadway network connectivity for Emergency Response Streets?
4. Complete safe, comfortable, and direct sidewalk and bikeway networks between key destinations, transit stops, and residential areas.	Does the project idea add bicycle and pedestrian facilities linking key destinations, transit stops, and in residential areas?
5. Support Lane Transit District's efforts to provide high-capacity, frequent transit service, on the Frequent Transit Network.	Does the project add or enhance frequent transit to primary transit network, connect to primary transit network, or facilitate the ability to implement or add transit on identified future and existing transit routes? Does the project reduce or remove delays on existing transit service? Does the project increase the reliability of existing or future transit service?

4. Community Context

Project Objective	Evaluation Criteria
<p>1. Ensure consistency between transportation investments and all relevant adopted and accepted local plans, such as:</p> <ul style="list-style-type: none"> - Envision Eugene, - A Community Climate and Energy Action Plan for Eugene, - Airport Master Plan, - Long Range Transit Plan, - Pedestrian and Bicycle Master Plan, etc. 	<p>Yes/No – Is project consistent with current planning efforts?</p>

5. Economic Benefit

Project Objective	Evaluation Criteria
<p>1. Support redevelopment priorities by promoting compatible transportation investments along key transit corridors and in core commercial areas, including downtown.</p>	<p>Does the project or program reduce duration or level of delay, or increase twenty minute multi-modal access along key transit corridors and near core commercial areas?</p>
<p>2. Encourage infrastructure and programs that allow residents to reduce expenditures on fuel and vehicle use.</p>	<p>Does the project or program reduce vehicle miles traveled and/or improve speed consistency?</p>
<p>3. Support predictable travel times between key origins and destinations for high priority trips such as transit and regional freight movement.</p>	<p>Does the project or program improve travel time reliability along key transit and freight corridors (as applicable)?</p>
<p>4. Increase access to employment centers via foot, bike, and transit, while improving the quality of the traveling experience.</p>	<p>Does the project or program improve the likelihood of employees walking, bicycling, or riding transit to major employment centers?</p>
<p>5. Support access and visibility of businesses that rely on drive-by traffic by balancing congestion with economic development goals.</p>	<p>Does the project or program remove a large percentage of potential customers for a major commercial center? Does the project or program make it prohibitively difficult to access commercial areas by all modes?</p>

6. Cost Effectiveness

Project Objective	Evaluation Criteria
1. Optimize benefits relative to public, private, and social costs over the plan's time horizon.	Does the project or program benefit the other seven categories compared to the costs (public, private and social) of the project or program?
2. Maximize the efficiency and life of the current transportation system.	To what extent does the project or program use and take advantage of existing network, preserve or maintain existing facilities, or modernize existing facilities to function more optimally?
3. Favor transportation investments that have potential funding for both implementation and ongoing maintenance.	How competitive is the project or program to receive funding from existing funding sources and potential future funding sources?

7. Climate and Energy

Project Objective	Evaluation Criteria
1. Focus on transportation programs and projects that help to: a. reduce total community-wide fossil fuel use by 50% by 2030 b. reduce vehicle miles traveled per capita by 10% by the year 2020 c. reduce community-wide greenhouse gas emissions 10% below 1990 levels by 2020	What is the potential for the project or program to affect mode split (away from cars) and/or reduce VMT? What is the potential for the project or program to improve speed consistency (without substantially reducing travel time) and thereby reduce GHG emissions?

8. Ecological Function

Project Objective	Evaluation Criteria
1. Improve water quality and lower the rate of stormwater runoff from transportation infrastructure.	What is the net change in impervious surface area (e.g., total width of facility, including sidewalks or other impervious features) associated with the project? Does project incorporate mitigation, such as runoff detention and filtration opportunities?
2. Reduce the urban heat island caused by paving that absorbs and re-radiates heat.	What is the amount of net additional paved surface? Does the project incorporate mitigation, such as additional tree canopy? What is the ROW availability and potential impacts to landscaping strips? Is the increase able to be mitigated?
3. Foster transportation investments that avoid damaging and improve habitat areas, where possible.	Does the project or program increase or decrease the functionality or quality of habitat areas?

