



117 Commercial Street NE
Suite 310
Salem, OR 97301
503.391.8773
www.dksassociates.com

TECHNICAL MEMORANDUM #1

DATE: November 5, 2012

TO: **Project Management Team**

FROM: Scott Mansur, P.E., PTOE
Brad Coy, P.E.
Derek Moore, E.I.T

SUBJECT: **South Willamette Street Improvement Plan - Evaluation Criteria**

P10086-012

This memorandum defines the evaluation criteria and scoring methodology that will be used to analyze alternatives developed for the South Willamette Street Improvement Plan. A point-based technical rating methodology will be used to rate how well proposed design alternatives meet measure of effectiveness criteria. By summing ratings (and weighting if desired), alternatives can be compared and prioritized. In this way, a consistent method will be used to evaluate and rank the alternatives based on how well they meet the identified goals and objectives. The ranking will be used to inform the Technical Advisory Committee, stakeholders and appointed and elected officials; however, the final recommended alternative will be based on feedback and direction from these parties.

Evaluation Criteria and Scoring Methodology

The City's Draft Transportation System Plan¹ (TSP) identifies numerous goals and objectives that guide future transportation projects and programs. These goals and objectives are based on a review of local and regional plans, the Sustainable Transportation Access Rating Systems (STARS) draft guidance document, and input from Eugene's Transportation Community Resource Group (TCRG). The goals provide broad statements that describe the desires of the Eugene community, and a list of 20 objectives is provided which are focused on achieving the goals. These objectives are separated into the following eight STARS goal categories:

- Access and Mobility (for all modes)
- Safety and Health
- Social Equity
- Economic Benefit
- Cost Effectiveness
- Climate and Energy
- Ecological Function
- Community Context

The goals and objectives in the Draft TSP provided a basis for the development of the evaluation criteria, which are intended to assess a project's potential to meet the transportation needs of the City. The evaluation criteria were then refined based on a review of planning documents more specific to the study

¹ Eugene Transportation System Plan: Existing Conditions and Deficiencies, March 2011



area, such as the South Willamette Concept Plan. The criteria are summarized in Table 1 according to the goal category they support.

Table 1: South Willamette Street Evaluation Criteria and Scoring

Criteria	Evaluation Score
Access and Mobility	
<u>Reliability</u> Improves trip reliability, consistency, comfort and convenience for all modes (walk, bike, transit, cars).	+1. Improves trip reliability 0. No change -1. Reduces trip reliability
<u>Neighborhood Connectivity</u> Increases the number of households that can safely walk, bike, or use transit services to meet basic (non-work) daily needs.	+1. Increases # of connected households 0. No change -1. Decreases # of connected households
<u>Motor Vehicle Travel Time</u> Reduces travel time between key origins and destinations for motor vehicles.	+1. Decreases travel time for motor vehicles 0. No change -1. Increases travel time for motor vehicles
<u>Alternative Mode Travel Time</u> Reduces travel time between key origins and destinations for alternative modes.	+1. Decreases travel time for alternative modes 0. No change -1. Increases travel time for alternative modes
Safety and Health	
<u>Safety</u> Improve safety and security for all users, especially for the most vulnerable; strive for zero fatalities.	+1. Improves safety for all modes 0. No change -1. Reduces safety for all modes
<u>Security</u> Improve actual and perceived sense of security (i.e. Safe driving, getting to and riding transit, walking and biking).	+1. Improves sense of security 0. No change -1. Decreases sense of security
<u>Emergency Access</u> Improves or maintains emergency response times within and through the corridor.	+1. Improves emergency response times 0. No change -1. Reduces emergency response times

Table Continued on next page.



(Continued) Table 1: South Willamette Street Evaluation Criteria and Scoring

Criteria	Evaluation Score
Social Equity	
<p><u>Equity</u> Contributes to closing the transportation access gap between the general user and populations with limited choices, such as the elderly, low income, minority populations, and people with disabilities.</p>	<p>+1. Specifically benefits populations with limited choices 0. No Change -1. Negatively impacts populations with limited choices</p>
<p><u>Economic Access</u> Improves access from residences to employment and neighborhood centers within a 20-minute walk, bike, or transit trip.</p>	<p>+1. Improves employment access 0. No change -1. Decreases employment access</p>
Economic Benefit	
<p><u>Freight Mobility</u> Provides safe, efficient, and continuous motor vehicle operation to allow timely freight movement along Willamette Street.</p>	<p>+1. Improves corridor’s freight movement 0. No Change -1. Negative impact on freight movement</p>
<p><u>Walkable/Bikeable Business District</u> Promotes a “Safe, Attractive Pedestrian Experience for Business, Shopping and Entertainment.”</p>	<p>+1. Improves business district pedestrian and bicycle experience 0. No change -1. Reduces business district pedestrian and bicycle experience</p>
<p><u>Business Vitality</u> Supports access and visibility of businesses that rely on drive-by traffic by balancing congestion with economic vitality</p>	<p>+1. Supports economic vitality 0. No change -1. Negative impact on economic vitality</p>

Table Continued on next page.



(Continued) Table 1: South Willamette Street Evaluation Criteria and Scoring

Criteria	Evaluation Score
Cost Effectiveness	
<p><u>Fundability</u> Available funding sources exist to implement projects in a timely fashion.</p>	<p>+1. Funding sources are available 0. Feasible costs, but no identified funding -1. High costs and no funding expected</p>
<p><u>Asset Management</u> Favors the enhancement and maintenance of existing systems over system expansion.</p>	<p>+1. Enhances existing transportation system 0. Minimal enhancement or expansion -1. Expands transportation system</p>
<p><u>Project Benefits</u> Optimizes benefits relative to public, private and social costs over the life-cycle of the project</p>	<p>+1. Provides maximum benefits 0. Minimal benefits -1. Provides no benefits</p>
Climate and Energy	
<p><u>Reduce Vehicle Miles Traveled (VMT)</u> Improves the corridor as an attractive area without having to drive. Increases mode share for walk, bike, and transit thus reducing greenhouse gases and fossil fuel consumption.</p>	<p>+1. Reduces VMT 0. No change -1. Increases VMT</p>
<p><u>Pedestrian Facilities</u> Adds sidewalks and crosswalks that fill in system gaps, improve system connectivity, removes obstructions and are accessible to all users.</p>	<p>+1. Improves pedestrian facilities 0. No change -1. Negative impact on pedestrian facilities</p>
<p><u>Bicycle Facilities</u> Adds bikeways that fill in system gaps, improve system connectivity, and are accessible to all users.</p>	<p>+1. Improves bicycle facilities, including bike lanes 0. No change -1. Negative impact on bicycle facilities</p>
<p><u>Transit Facilities</u> Improves transit facilities and accessibility to transit stops (for all users) along and near the corridor.</p>	<p>+1. Improves transit facilities 0. No change -1. Negative impact on transit facilities</p>

Table Continued on next page.



(Continued) Table 1: South Willamette Street Evaluation Criteria and Scoring

Criteria	Evaluation Score
Ecological Function	
<u>Stormwater Design</u> Transportation improvements lower the rate of storm water runoff and improve water quality.	+1. Minimizes storm water runoff 0. No change -1. Increases storm water runoff
<u>Landscape Design</u> Reduces the urban heat island through landscape design, less pavement, and increased tree canopy.	+1. Reduces heat island 0. No change -1. Increases heat island
Community Context	
<u>Community Vision and Land Use</u> Supports implementation of Envision Eugene land use and growth management goals and A <i>Community Climate and Energy Action Plan for Eugene</i> .	+1. Supports Envision Eugene 0. No change -1. Conflicts with Envision Eugene
<u>Transportation Planning Compatibility</u> Compatible with City's transportation plans (TSP, Long Range Transit Plan, and Pedestrian and Bicycle Master Plan [PBMP])	+1. Compatible with City transportation plans 0. Has little or no impact (or has offset impacts) -1. Not compatible with City transportation plans

The scoring methodology can be applied in one of the following three ways:

1. **Equal weight for each criteria**– The evaluation scores for all criteria are summed to determine the overall evaluation score. This method allows a goal category with more supporting criteria to have a larger influence on the overall score.
2. **Equal weight for each goal category**– Each of the eight categories receives an equal weight. In this method, evaluation scores for each criterion under a particular goal category would be averaged to determine one score for each goal category. They would then be summed to arrive at an overall evaluation score.
3. **Stakeholder feedback to determine weight**– Feedback from stakeholders would be solicited to help determine the weight of each goal category. Criteria scores for a particular category would be averaged and the weight would then be applied.

Typically, scoring methods involve either 1 or 2 or a combination of both for verification. However, if stakeholder input is provided to allow for weighting of project goals, then method 3 could also be applied.