5. Project Evaluation

Project Benefits

The Southeast Transportation Study includes recommendations to address the current and future transportation needs of Southeast Seattle. These recommendations, or projects, were developed to provide multiple benefits to Southeast Seattle, to Seattle as a whole, and to the larger region. A goal of this study is a transportation system that functions well on all levels – from moving freight efficiently on highways to improving safety on local residential streets.

Consistency with CIP and TSP

Seattle's Capital Improvement Program (CIP) uses a 100-point scoring system for discretionary projects that considers and weights seven major criteria:

- Safety
- Preserving and maintaining infrastructure
- Cost effectiveness or cost avoidance
- Mobility improvement
- Economic development
- Comprehensive Plan/Urban Village and land use strategy
- Improving the environment

These seven criteria and how they were used in project evaluation is discussed in the following section.

The Transportation Strategic Plan (TSP) has three major goals — Improve safety; Provide mobility and access through transportation choices; Preserve and maintain transportation infrastructure — and eleven strategies against which projects are measured:

- Make the best use of the streets we have
- Increase transportation choices
- Make transit a real choice
- Encourage walking
- Encourage biking
- Price and manage parking wisely
- Move goods and services
- Improve the environment
- Improve operations and maintenance
- Connect the region
- Leverage resources

Finally, a unique but complementary set of goals was developed for SETS that addresses the specific conditions of Southeast Seattle, including the implementation of light rail:

- Improve mobility and safety for the diverse needs of Southeast Seattle
- Improve the transportation network with a particular focus on connections to the new light rail system
- Support the growth to enhance neighborhood livability
- Make cost effective investments to maintain existing roads and build on other existing efforts
- Prioritize transportation improvements that support the City's Comprehensive Plan as well as the strategies and actions defined in the Seattle Transportation Strategic Plan Update

The combined goals, strategies and criteria of each of these have been distilled into five areas to highlight, for the purposes of public discussion, the external benefits of the SETS projects.

Following is a summary of each benefit. The project descriptions include icons as a shorthand method for showing which benefits each project will provide.

> "Most people will not routinely use alternatives to driving alone unless they have viable choices that provide advantages in terms of travel time, cost, reliability, and convenience. A balanced, well-designed transportation system that allows people to get around by transit, bicycle, and walking is critical to making livable communities."
>
> -Seattle Transportation Strategic Plan

Improves Safety

The Seattle Transportation Strategic Plan notes: "SDOT's role as manager of Seattle's transportation system is to operate and maintain this system to support public health and safety." The transportation system includes all modes of travel – cars, trucks, buses, trains, bicycles and feet.

Projects that improve safety range from the construction of a curb extension (pedestrian safety) to changing road configurations to reduce motorists' speed (vehicle safety). Since this is a high priority for the City almost all of the recommended projects improve safety.

Improves Mobility and Increases Transportation Choices

Mobility is a traditional transportation evaluation measures that historically has meant "more is more" – that is the more trips the system can accommodate the greater the benefit. By combining mobility with choices we preserve the idea that the ability to travel is important and has value, but tie it to walking, biking and transit as better choices for individuals, communities, and the environment. In Southeast Seattle, where there is a particularly high number of residents who do not own automobiles, are too young to drive, and/or are disabled, providing effective and efficient travel options is critical.

Projects that provide this benefit include improvements to streets and sidewalks connecting to light rail stations or key bus stops. Bicycle access, such as a route across I-5, also increases transportation choices.

Improves Urban Village Livability and Vitality

The Comprehensive Plan ties transportation policies to land use and neighborhood growth. Urban villages were designated in the Comprehensive Plan with the goal of creating areas that are best served by walking, cycling, and transit. Transportation policies support this by improving the infrastructure in urban villages including streets, sidewalks and bicycle facilities.

Projects that support this benefit include recommendations that support urban village strategies and enhance neighborhood connections. Projects that have an economic benefit to the community are also included.

Improves Access to Transit

Although this is similar to "Improving Mobility and Increasing Transportation Choices", this benefit is particularly important to SETS because it address one of the study goals – to improve the transportation network with a particular focus on connections to the new light rail system.

Martin Luther King Jr. Way S. is not included in this study due to enormous investment already being made to rebuild the street from end-to-end for light rail. However, projects that provide pedestrian and bicycle links to light rail and other transit-related projects are included. This includes new pedestrian-activated signals near stations, lighting improvements along corridors connecting business districts to stations, and bike lanes/sharrows leading to transit facilities.

Improves the Environment and uses Sustainable Practices

The Comprehensive Plan has a goal to "Promote healthy neighborhoods with a transportation system that protects and improves environmental quality". This can be achieved through a variety of ways including reduction of air, water, and noise pollution from vehicles; promoting alternative fuel sources; and designing streets that promote healthy environmental benefits.

Projects that support this benefit include those that significantly reduce the amount of pavement as well as projects that include significant landscaping (adding street trees).

Reduces Congestion and Delay

SETS analyzed 47 intersections and developed a level of service analysis for each intersection based on current conditions and what can be expected in the year 2030. There are a number of signalized and unsignalized intersections that currently have significant delays, and that are expected to get worse by 2030. Recommendations were made to improve several of these intersections and reduce the congestion and delay. Any intersections that were recommended for improvements also include recommendations for pedestrians and bicyclists.

Evaluating Projects

The evaluation methodology for this study builds on the goals and objectives of Seattle's Transportation Strategic Plan (TSP), SDOT's project prioritization process. It will allow proposed transportation system improvements to be evaluated in a systematic manner.

TSP goals and objectives

SDOT's major goals, established in the Transportation Strategic Plan (TSP), are to:

- Improve safety
- Provide mobility and access through transportation choices
- Preserve and maintain transportation infrastructure

The safety goal is to reduce vehicle, pedestrian and bicycle collisions.

Mobility and access goals are to: create more livable urban centers by encouraging a mode shift to transit, walking and biking; improve the movement of goods and services; promote healthy neighborhoods through a transportation system that protects and improves environmental quality; and improve mobility by reducing congestion through construction zones.

Preserve and maintain transportation infrastructure goals are: to preserve and maintain arterial pavement, bridges, and transportation control devices; and to improve the environment by protecting and enhancing the quality of the urban forest.

Projects that provide options to driving meet multiple criteria including Mobility and Comp Plan.

Consistency with CIP

Seattle's Capital Improvement Program (CIP) uses a 100-point scoring system for discretionary projects that considers and weights seven major criteria.

- Safety
- Preserving and maintaining infrastructure
- Cost effectiveness or cost avoidance
- Mobility improvement
- Economic development
- Comprehensive Plan/Urban Village and land use strategy
- Improving the environment

Evaluation Criteria for SETS

The evaluation criteria for SETS adopt the SDOT 100-point scoring system and define a project scoring process consistent with SETS goals (see previous page). The scoring process is simplified, with each project scored on a positive/negative scale, ranging from +5 to -5. This creates an ability to score a project negatively in some areas if its probable effects would be to worsen an existing situation. The table shows the maximum points that any proposed action can receive based on the weights and the point score. Very few projects will score high in all areas. A project that makes neighborhoods more livable by reducing through traffic may reduce vehicle mobility, while a project that rates high on reducing crashes may slow everyone down. For most projects, therefore, the highest total score is likely to be about half the available points.

Evaluation Criteria	Score	Weight	Maximum Points
Safety and Security	-5 to +5	4	20
Mobility	-5 to +5	3	15
Infrastructure Preservation/ Maintenance	-5 to +5	3	15
Cost-effectiveness and Implementation Feasibility	-5 to +5	3	15
Comprehensive Plan / Urban Village Strategy	-5 to +5	3	15
Improve the Environment	-5 to +5	2	10
Economic Development	-5 to +5	2	10
Total Points			**100**

Evaluation Criteria Definitions

Safety and Security

For SETS, safety and security will address both crashes, which are emphasized in the SDOT Project Prioritization Criteria, and improvements through urban design and program improvements. The criteria for safety by mode are:

Pedestrians

- Incorporate crime prevention through environmental and streetscape design principles
- Minimize cut-through traffic on residential streets.
- Provide appropriate separation between pedestrians, bikes and vehicles
- Provide safe pedestrian crossings
- Reduce barriers to pedestrian travel
- Improve safety for children traveling and playing on neighborhood streets

Bicyclists

- Improve facilities for bicyclists
- Improve surface conditions on bike routes: pavement, drainage and storm drain covers, street debris
- Address intersections where vehicles' and bicyclists' usage and conflict is high
- Increase education\awareness about cyclists' rules and rights

Vehicles

- Address high collision locations
- Improve drivers' visibility
- Reduce vehicle/pedestrian/cyclist conflicts

Bicyclists often opt to ride on sidewalks because they feel safer. This can create conflicts with pedestrians.

Transit

- Incorporate crime prevention through environmental and streetscape design principles
- Provide safe access to and from light rail stations and bus stops

Mobility

The mobility score gauges a project or program's capacity to move pedestrians, cyclists, transit, vehicles, and freight.

All Modes

- Move large numbers of system users across all modes
- Enhance and increase pedestrian, transit and bicycle travel options
- Make bicycling, walking and transit more attractive and competitive with SOV travel
- Address the special mobility needs of disabled, immigrants, children and elderly populations

Pedestrians

- Enhance the comfort of pedestrian travel, particularly for walking-dependent populations
- Improve pedestrian access to key activity centers such as transit facilities, commercial centers, schools, parks, community and cultural facilities
- Improve pedestrian connectivity between and within the neighborhoods and the urban village centers in the study area
- Reduce barriers to pedestrian travel such as barriers posed by drainage and other infrastructure deficiencies
- Improve safety for children traveling on neighborhood streets

Bicyclists

- Improve facilities for bicyclists
- Improve surface conditions on bicycle routes: pavement, drainage and storm drain covers, street debris
- Address intersections where vehicle and bicyclist usage and conflict is high
- Increase education\awareness about bicyclists' rules and rights
- Improve bicycle connectivity between and within the neighborhoods and the urban village centers in the study area

Vehicles

- Maintain vehicle throughput on arterial streets
- Improve roadway and intersection geometry to reduce collisions, speeding, and weaving movements
- Improve wayfinding for drivers such as street signage and regulatory signage

Freight

- Improve arterial freight routes
- Improve roadway and intersection geometry to accommodate trucks and necessary truck turning movements
- Improve truck loading facilities for deliveries to businesses and stores
- Improve/maintain connectivity among freight routes

Transit

- Improve access to / from transit stops and stations
- Improve quality of transit stops, including safety, comfort and convenience
- Improves speed and reliability of transit vehicles
- Improve bus stop performance for buses, such as reducing merge time

Infrastructure Preservation/ Maintenance

- Improve the condition of the sidewalks and streets designated for improvements including related drainage improvements
- Reduce the backlog of deferred maintenance of sidewalks and streets

Projects providing access to bike and pedestrian paths meet many of the evaluation criteria.

Cost-Effectiveness & Implementation Feasibility

- Have a high cost-benefit ratio (Note: SETS will not calculate a detailed cost-benefit ratio for each project. This will be a qualitative assessment.)
- Have a high probability that it would be financed with outside funding sources such as federal and state grants, and private contributions
- Have a high probability that it would be directly implemented by other agencies such as King County Metro, Sound Transit, or WSDOT in the next ten years
- Have a high probability that it would be financed with existing City funding resources
- Have a high probability that it would be funded with new funding sources that would require approval by City Council

Support Comprehensive Plan and Urban Village Strategy

- Support adopted Neighborhood Plans, Station Area Plans and Urban Village strategy
- Support housing growth and businesses by providing improved transportation access (pedestrians, transit and vehicles) for customers, employees and residents

Improve the Environment

- Improve air quality
- Reduce noise
- Provide positive impacts to critical natural areas
- Include sustainable design features such as natural drainage systems

Economic Development

- Provides access to business districts and/or employers
- Provides infrastructure to support new employment

Project Evaluation Results

The evaluation criteria were applied to the projects in a multi-step process. Early in the study, project staff and community members identified over 500 potential "actions" , based on past studies and new work. "Actions" included specific projects and programs, as well as general ideas to improve transportation in the area. This list was then narrowed, by combining overlapping actions and by eliminating those that had already been completed or were currently underway. Projects that did not meet the specific goals of the Southeast Transportation Study or had few benefits were eliminated. The project team conducted a needs assessment, resulting in the addition of more actions. Actions were given consistent descriptions and renamed 'projects'. The remaining projects were then developed in more detail, in cooperation with a broad cross-section of SDOT staff, and discussed with members of the Core Community Team and other stakeholders. This was an ongoing, iterative process as projects were refined and modified.

Core Community Team Project Evaluation

Sixty-three projects were ultimately formally submitted to the Core Community Team (CCT) for review and comment. At that time, the project cost estimates had not yet been prepared and CCT members did not have cost information to inform their ratings. In response to CCT comments and suggestions, some projects were refined and modified.

SDOT Project Evaluation

After the final project list revisions subsequent to the CCT review, the project team then prepared preliminary cost estimates for each of the projects. The cost methodology is detailed in the Technical Summaries section of this report, and the estimates are included on the project sheets.

SDOT evaluated each project on the seven evaluation criteria, with a possible maximum score of 100. Project descriptions, cost estimates, and preliminary project designs provided the basis for the evaluation.

High/Medium/Long-Term

The projects were arrayed from the highest scoring to lowest scoring, and assigned an overall priority of High, Medium or Long-term, with roughly a third of the projects in each category. It's important to note that a rating of "long-term" is relative; all of the SETS recommended projects are "above average" because projects that were "below average" were screened out earlier in the process.

Project Ranking and Implementation

If funds are available, all of the projects merit implementation. The recommended order of implementation is included in the table below. Because of funding constraints and other issues, not all projects will be implemented in the short-term and, of those that are, the projects will not be implemented in perfect priority order. It is likely that some projects with a lower rating may be implemented before projects with a higher rating, particularly where a project can be leveraged with other work scheduled to be done in the same location, for example a repaving project.

Table 5: Project Rankings in Priority Order

Project #	Location	Rating
29	Rainier Ave. S: Complete Street	High
16	Renton Ave. S. & 51st Ave. S. / S. Roxbury St.	High
26	Rainier Ave. S. & S. Genesee St.	High
32	Rainier Ave. S: Hillman City	High
24	Rainier Ave. S. & MLK	High
41	Rainier Ave. S: 52nd Ave. S. to Ithaca Pl. S.	High
3	Beacon Ave. S. & S. Lander St. / 16th Ave. S. / 17th Ave. S.	High
22	Rainier Ave. S. & 23rd Ave. S.	High
30	Rainier Ave. S. & 39th Ave. S.	High
40	Rainier Ave. S. & 51st Ave. S. / Sturtevant Ave. S.	High
25	Rainier Ave. S. & S. Walden St.	High
7	Beacon Ave. S: 14th Ave. S. to S. Stevens St.	High
10	S. McClellan St: 23rd Ave. S. to Rainier Ave. S.	High
27	Rainier Ave. S. & S. Oregon St.	High
2	15th Ave S. - Beacon Ave. S. to S. Stevens St. (assumes four-way stop, not traffic signal)	High
42	Rainier Ave. S. & Seward Park Ave. S.	High
43	Rainier Ave. S. & 57th Ave. S.	High
5	Beacon Ave. S. & 17th Ave. S.	High
8	43rd Ave. S. & S. Othello St.	High
55	Wilson Ave. S. & S. Dawson St.	High

continued on the following page

Table 5, continued: Project Rankings in Priority Order

Project #	Location	Rating
13	MLK: S. Bayview St. to S. McClellan St.	Medium
51	Bicycle access across I-5	Medium
47	S. Oregon St. & Columbian Way S. / 15th Ave. S.	Medium
6	Beacon Ave. S. & S. Stevens St.	Medium
12	S. College St: 22nd Ave. S. to Rainier Ave. S.	Medium
17	Rainier Ave. S. & S. Dearborn St.	Medium
38	Rainier Ave. S. & Fisher Pl. S.	Medium
39	Rainier Ave. S. & 52nd Ave. S. / Mapes Walkway	Medium
48	Beacon Ave. S. & Columbian Way S.	Medium
11	S. McClellan St: Rainier Ave. S. to Mt. Baker Blvd.	Medium
28	Rainier Ave. S: S. Genesee St. to S. Alaska St.	Medium
49	Beacon Ave. S. & S. Orcas St.	Medium
31	Rainier Ave. S. & 42nd Ave. S. / S. Brandon St.	Medium
36	Rainier Ave. S. & S. Rose St. / Wabash Pl. S.	Medium
9	Renton Ave. S. & 43rd Ave. S.	Medium
45	Pedestrian scale lighting along Rainier Ave. S.	Medium
14	S. Alaska St: Rainier Ave. S. to MLK	Medium
1	Beacon Ave. S. & 14th Ave. S.	Medium
33	Rainier Ave. S. & S. Graham St. / 46th Ave. S.	Medium
19	Rainier Ave. S. & S. Massachusetts St.	Medium
52	31st Ave. S: Yesler Way to S. McClellan St.	Medium
4	Beacon Ave. S. & S. McClellan St.	Long-term
57	S. Graham St. & 39th Ave. S, 42nd Ave. S, 44th Ave. S.	Long-term
23	Rainier Ave. S. & S. Walker St.	Long-term
44	Rainier Ave. S. & Cornell Ave. S.	Long-term
21	Rainier Ave. S. & 22nd Ave. S., S. Holgate St. and S. Plum St.	Long-term
37	Rainier Ave. S. & S. Thistle St. / Rainier Pl. S.	Long-term
35	Rainier Ave. S. & S. Holly St.	Long-term
18	Rainier Ave. S. & I-90 ramps	Long-term
20	Rainier Ave. S. & 21st Ave. S., S. State St. and S. Grand St.	Long-term
58	Seward Park Ave. S: S. Dawson St. to Rainier Ave. S.	Long-term
34	Rainier Ave. S. & S. Morgan St. / 47th Ave. S	Long-term
15	57th Ave. S. near S. Fletcher St.	Long-term
61	Waters Ave. S: 57th Ave. S. to S. Ryan St.	Long-term
60	Renton Ave. S. & S. Ryan St.	Long-term
54	S. McClellan St. & Mt. Baker Blvd.	Long-term
50	Swift Ave. S. & I-5 NB ramp, S. Graham St., Albro Pl. S.	Long-term
53	23rd Ave S: S. Waite St. to S. College St.	Long-term
59	Renton Ave. S. & 44th Ave. S. / S. Thistle St.	Long-term
56	Seward Park Ave. S. & S. Juneau St.	Long-term
46	S. Spokane St: Columbian Way S. to 23rd Ave. S.	Long-term

Core Community Team Project Evaluation Results

Sixty-three draft project recommendations were sent to 25 members of the Core Community Team (CCT) for evaluation. Over one dozen individuals representing Southeast Seattle organizations responded.

CCT members were asked to rate projects as "high", "medium", or "low" and to prioritize their top five projects. CCT members were encouraged to rate as many or as few projects as they wished; many chose to evaluate only projects located in a geographic area they are familiar with. CCT members were also encouraged to comment on the project recommendations, in addition to their ratings. Most comments supported the projects. In some instances project recommendations were revised to reflect feedback from CCT members.

There were no prescribed evaluation criteria for CCT members to follow. Members were asked to consider the study's purpose and goals and had previously been briefed on the SDOT evaluation criteria.

The study's goals are to:

- Improve mobility and safety for the diverse needs of Southeast Seattle.
- Improve the transportation network with a particular focus on connections to the new light rail system.
- Support the growth to enhance neighborhood livability.
- Make cost effective investments to maintain existing roads and build on other existing efforts.
- Prioritize transportation improvements that support the City's Comprehensive Plan as well as the strategies and actions defined in the Seattle Transportation Strategic Plan Update.

The Purpose and Goals were achieved by a strategy to focus planning efforts in the following areas:

- Within ½ mile of Link light rail stations
- Major commercial/residential hubs – Urban Villages
- Major east-west connectors
- Major north-south roadways
- MLK along the light rail route is not included because street improvements are already underway

The following organizations/community members submitted project evaluations:

- Seattle Bicycle Advisory Board
- Filipino Community Center
- Columbia City Business Association
- Rainier Beach Merchants Association
- HomeSight
- Rainier/Othello Safety Association
- Douglass Chappell, Beacon Hill
- Rainier Chamber of Commerce
- Hillman City Business Association
- Hillman City Neighborhood Group
- South Beacon Hill Neighborhood Association

The following projects received the most "High" ratings:

No.	Location	Project Description
45	Pedestrian lighting along Rainier Ave. S.	Improve safety with pedestrian lighting along corridor
17	Rainier Ave. S. & S. Dearborn St.	Reduce delay, improve safety and add bicycle/pedestrian access at congested High Collision Location
22	Rainier Ave. S. & 23rd Ave. S.	Improve safety at High Collision Location
24	Rainier Ave. S. & Martin Luther King Jr. Way S.	Improve safety at intersection
29	Rainier Ave. S: S. Alaska St. to S. Cloverdale St.	Convert four-lanes to three-lanes and construct Complete Street
32	Rainier Ave. S: S. Lucille St. to S. Mead St. (Hillman City)	Add urban design features and improve pedestrian safety in business district
47	S. Oregon St, Columbian Way S, & 15th Ave. S.	Improve safety at High Collision Location
16	Renton Ave. S. & 51st Ave. S./S. Roxbury St.	Construct roundabout at High Collision Location

However, when asked to rank the top five projects, the results are different. Project #29, Convert Rainier Ave. S. from four-lanes to three-lanes and construct a Complete Street between S. Alaska St. and S. Cloverdale St. received the highest number of top rankings (#1) of all projects. Weights were applied to the ranking order (#1 project received 5, #2 project received 4, etc). Below are the top ten weighted projects.

No.	Location	Project Description
29	Rainier Ave. S: S. Alaska St. to S. Cloverdale St.	Convert four-lanes to three-lanes and construct Complete Street
3	Beacon Ave. S. & S. Lander St.	Modify street to create public plaza and designate one-way street
32	Rainier Ave. S: S. Lucille St. to S. Mead St. (Hillman City)	Add urban design features and improve pedestrian safety in business district
2	15th Ave. S: Beacon Ave. S. to S. Stevens St.	Calm traffic and add urban design in corridor with High Accident Location
33	Rainier Ave. S. & S. Graham St./46th Ave. S.	Improve safety at High Collision Location
26	Rainier Ave. S. & S. Genesee St.	Improve safety at High Collision Location
41	Rainier Ave. S: 52nd Ave. S. to Ithaca Pl. S.	Improve safety and accessibility in urban village corridor
10	S. McClellan St: 23rd Ave. S. to Rainier Ave. S.	Add missing sidewalk link
17	Rainier Ave. S. & S. Dearborn St.	Reduce delay, improve safety and add bicycle/pedestrian access at congested High Collision Location
43	Rainier Ave. S. & 57th Ave. S.	Improve safety at intersection