G. Prioritization Memo



MEMORANDUM PRIORITIZATION PROCESS AND PRIORITIZED PROJECTS

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City of Beaverton

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Project: Beaverton Active Transportation Plan

Subject: Prioritization Process and Prioritized Projects

INTRODUCTION

Prioritizing projects is an important part of the planning process. An overall prioritized project list will help the city know which projects to allocate money to first, when available. This memorandum provides information about how the prioritization factors and criteria were chosen, how they were applied to identify network priorities, and then described the proposed prioritized projects to complete the proposed bicycle and pedestrian networks from the Design Memo.

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- Prioritized Project Lists and Maps (Task 4.5)

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CHOOSING PRIORITIZATION FACTORS AND EVALUATION CRITERIA

Project prioritization and evaluation criteria were established by the project team through input from the advisory committees and virtual open house. At the second round of advisory committee meetings, the project team received feedback about the prioritization and evaluation factors and criteria. The Community Advisory Committee (CAC) members were each given 10 stickers to place on a board to rank five prioritization factors. The results of the ranking are as follows:

Safety: 29

Demand/Access: 35

Equity: 19

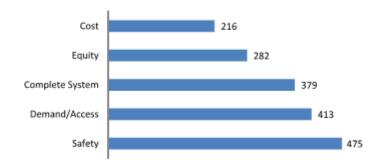
• System Completeness: 23

General Cost: 4

Additionally, the virtual open house participants were given the same prioritization factors to rank between. Participants were given 15 points to assign among the factors and could assign up to 5 points per category. The following chart shows the results of the virtual open house prioritization activity.

Project Priorities

How do we decide what to do first? Where do we spend our limited funds? Participants had 15 points to assign and could assign up to 5 points per category.



Discussions with the CAC, the results of the virtual open house activity, and a general understanding of project goals informed the decision to base project prioritization equally based on the factors of safety, demand/access, system completeness, and equity. Cost was not included as a prioritization factor for several reasons. It was prioritized significantly less than all other factors by both the CAC and virtual open house participants, and project cost for the city is highly dependent upon types of funding available from other sources, and therefore was not included as a prioritization factor.

The Technical Advisory Committee (TAC) provided input to inform the prioritization criteria. The following were identified by the project team before the TAC meeting as criteria to include based on a general understanding of project goals:

Crash history

- Proximity to transit stops
- Proximity to essential destinations
- Transportation equity index
- Presence/condition of bicycle or pedestrian facility

In addition, the following list presents the prioritization criteria that were given stickers by the TAC members, as well as the number of stickers that each received. Those that are bold are included as evaluation criteria within the prioritization factors selected through the CAC/virtual open house processes. Those not bold include an explanation for why the criteria were not included in the prioritization process.

- Level of Traffic Stress/crash risk factors (volumes, speeds, number of lanes, etc): 8
- Downtown area (written in): 1
 - The TAC decided that the plan encompasses the entire city and therefore does not prioritize certain locations.
- Fills gaps in otherwise complete surrounding network: 6
- Addresses community-identified barrier: 2
 - This received few votes, and community identified barriers will be used to develop the project list rather than to help prioritize projects.
- Improves pedestrian/bicycle route directness: 1
 - o This received few votes and was also not included because it would deprioritize projects on parallel routes, which was found to be important to many TAC and CAC members.
- Proximity to regional trails network: 1
 - o This received few votes and will not be used on its own but is included in other measures.
- Distance between existing crossing opportunities: 3
 - Will be used in the prioritization of crossings only, not in prioritization of bicycle or pedestrian segment projects
- Competitive for funding sources: 1
 - Not included due to obscurity in ranking- not sure which projects would be more competitive for funding sources, especially with feedback and concentration on "funding buckets"

In previous TAC and CAC meetings and project management team meetings, it was also decided to use proximity to schools as a prioritization criterion. The list of factors and evaluation criteria that were used for prioritization are as follows:

- Safety
 - High priority safety segments and intersections (based on Equivalent Property Damage Only calculations)
 - Level of Traffic Stress (LTS)
- Demand
 - Presence of bicycle facility
 - Proximity to transit
 - Proximity to essential destinations
 - Proximity to schools
 - Connectivity

- o Fills gaps in otherwise complete surrounding network
- Existing conditions
 - o Distance between crossing opportunities
- Equity
 - Transportation Equity Index

SCORING

The NCHRP 803 Active Transportation Priority Tool was used during the prioritization process. Within the tool, the user inputs a score or ranking for each project for each evaluation criteria. The tool then provides an overall score to each project; this score represents the project's overall priority. There is also the option to weigh the factors differently; however, all factors were weighted evenly. Each project was assigned a score for each evaluation criteria, and then the score was scaled from 0-10 to make the scoring consistent and remove the opportunity for evaluation criteria to be scored disproportionately according to their scale. The scoring method utilized is summarized in the following table.

Evaluation Criteria	Score	Scaled Score
High EPDO location	Yes or No	10 or 0
Level of Traffic Stress (only used in prioritizing bicycle segment projects)	1, 2, 3, 4	3 (rounded from 2.5), 5, 8 (rounded from 7.5), 10 Non-existent roadways were given score of 10; roadways with not enough data to perform an LTS analysis were given a priority of 5
Presence/condition of pedestrian facility (only used in prioritizing pedestrian segment projects)	Gap (both sides)	10
	Gap (one side), impassable deficiency (one side)	9
	Impassable deficiencies (both sides)	8
	Gap (one side), passable deficiency (one side)	7
	Gap (one side), meets standard (one side)	6
	Impassable deficiency (one side), passable deficiency (one side)	5
	Passable deficiencies (both sides)	2 Locations with not enough data to perform a complete analysis were assumed to have passable deficiencies on both sides and given a priority of 2
	Passable deficiency (one side), meets standard (one side)	1
	Meets standard (both sides)	0
	Gap (both sides)	10
	Gap (one side), deficiency (one side)	8
Presence/condition of bicycle facility (only used in prioritizing bicycle segment projects)	Gap (one side), meets standard (one side)	6
	Deficiencies (both sides)	4
	Deficiency (one side), meets standard (one side)	2
	Meets standard (both sides)	0
Proximity to transit	Within .10 miles	10
	Within .25 miles	6
	Within .5 miles	3
	Beyond .5 miles	0

Proximity to essential destinations	Heat map	0-10
Proximity to schools- not including preschools or private schools	Within .10 miles	10
	Within .25 miles	6
	Within .5 miles	3
	Beyond .5 miles	0
Connectivity- Fills gaps in otherwise complete surrounding network (only used in prioritizing bicycle and pedestrian segment projects)	Connects to facilities on both sides	10
	Connects to facilities on one side	5
	Does not connect to other facilities	0
Distance between crossing opportunities (only used in prioritizing crossing projects)	Crossing distance	0-10
Transportation Equity Index	Currently on a scale of 1-7	0-10

These scaled scores for each prioritization criteria were then applied within the NCHRP 803 Active Transportation Priority Tool to create an overall prioritized list of facilities.

ACTIVE TRANSPORTATION PROJECTS

Needs

The attached *Bicycle Infrastructure Needs Map* and *Pedestrian Infrastructure Needs Map* identify the type of improvements necessary to complete the envisioned bicycle and pedestrian networks.

Priorities

As described above, each existing and future bicycle and pedestrian facility in the planned networks was assessed for each criterion and given a score on a zero to ten point scale. Each factor was given equal weight in the prioritization process regardless of how many criteria were evaluated for each factor. The result was a separate bicycle and pedestrian prioritization score for each existing and future facility segment. These scores ranged from approximately 90 to 350 and were then divided into groups of high, medium, and low priority projects.

The attached *Bicycle Prioritization Map* and *Pedestrian Prioritization Map* identify the priority and prioritization score for each facility by mode.

Projects

The projects necessary to complete the planned networks were identified for City, County, and ODOT facilities. Projects on City facilities are shown in the following tables and the *Sidewalk and Bicycle Facility Project Map, Neighborhood Bikeway Project Map,* and *Neighborhood Sidewalk Infill Map*. Tables describing the projects and their priority are attached by jurisdiction.

Next Steps

The projects and priorities in this memorandum will be reviewed by City staff and the Project Management Team (PMT) before being incorporated into the Draft Active Transportation Plan which will be shared with the project Technical Advisory Committee (TAC), Project Advisory Committee (PAC), Transportation Commission, and Bicycle Advisory Committee in early August prior to being shared with the public at an Open House and a joint worksession of the Planning Commission and City Council in September.