

Seattle Bicycle Advisory Board

April 3, 2013



AGENDA



- Draft bicycle network plan map
 - Response to public comments
 - Map refinements
- BMP draft project prioritization process
- BMP draft performance measures
- Next steps



Draft Bicycle Network Plan Map



- Public comments received about connectivity and legibility of the network plan map:
 - Map should show a connected network of highest quality facilities (all ages and abilities facilities)
 - Map needs more focus and legibility to convey how it links destinations together



Draft Bicycle Network Plan Map

- Bicycle trip generators (destination clusters): land uses that are regularly frequented by people on bikes (was used in first draft of network map)



Category

Sub-Category

High

University or College, Large Employers, Major Transit Stations, Neighborhood Businesses, Schools, Neighborhood Parks

Medium

Transit hubs, Community centers and libraries, minor destinations, large parks

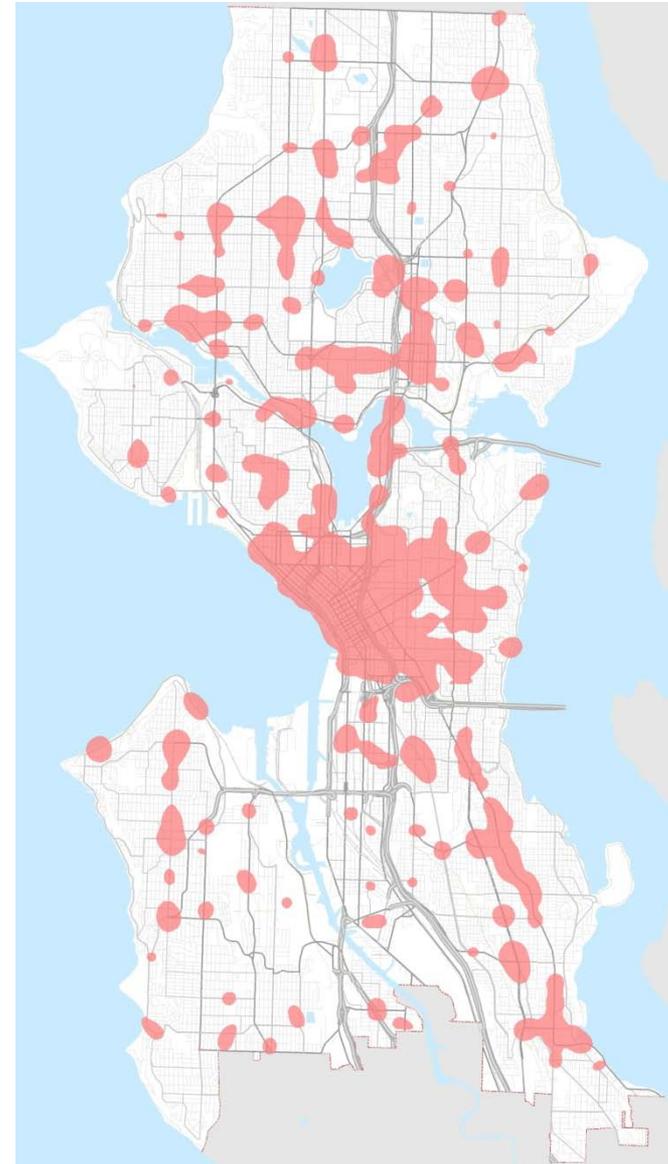
Low

Large retail, other major entertainment destinations



Draft Bicycle Network Plan Map

Destination clusters



Draft Bicycle Network Plan Map

Map refinement

Develop “Citywide Network”:

- “All ages and abilities” bicycle facilities that connect destination clusters
 - “All ages and abilities” facilities = cycle tracks, multi-use trails and neighborhood greenways

Local Connections:

- Bicycle facilities that connect to the citywide network, parallel the citywide network, or serve local destinations (schools, parks and other intra-neighborhood uses)
 - Facility types will be neighborhood greenways, bike lanes, buffered bike lanes, shared lanes (sharrows)



Draft Bicycle Network Plan Map

Map refinement

- Deviating from facility designation criteria to ensure continuation of highest quality facility type
- Desire to have a “smartly aspirational” network map
- Some connections will require neighborhood greenways to act as a part of the citywide network
- Identify “heroic” projects—projects that would eliminate a major gap, but could be complicated or expensive to build (e.g., new I-5 crossing)



Draft Prioritization Framework

Creating dedicated funding categories

**Project
categories**

Citywide Network

Local Connections



Draft Prioritization Framework

Allocating funds for near term goals

Project categories	Near term strategy: Increasing all ages and abilities ridership through connected facilities
Citywide Network	<ul style="list-style-type: none">• Completing/upgrading high-demand segments• Closing system gaps
Local Connections	<ul style="list-style-type: none">• Intra-neighborhood connectivity• Intersection improvements• Connections to Citywide Network



Draft Prioritization Framework

Allocating funds for near and long term goals

Project categories	Near term strategy: Increasing all ages and abilities ridership through connected facilities	Longer term strategy: Completing Seattle's connections
Citywide Network	<ul style="list-style-type: none">• Completing/upgrading high-demand segments• Closing system gaps	<ul style="list-style-type: none">• Projects with strategic challenges (e.g., funding, feasibility, or political issues) or major modal tradeoffs
Local Connections	<ul style="list-style-type: none">• Intra-neighborhood connectivity• Intersection improvements• Connections to Citywide Network	<ul style="list-style-type: none">• Inter-neighborhood connectivity



Draft Prioritization Framework



Ranks projects by agreed upon criteria in 5 Themes:

- Safety
- Equity
- Ridership
- Livability
- Connectivity



- Each theme scored up to 20 points
 - Total 100 possible



Draft Prioritization Framework

Safety

Theme or Category	Definition	Measurement Methodology	Score	Data Source	Notes
Enhance SAFETY	Addresses location with bike crash history and emphasis on vulnerable roadway users	A link or intersection with a cyclist fatality in the last 3 years	10	SDOT GIS	Responsive
		A link or intersection with 2 or more crashes in the last 3 years	5		
		A link or intersection with 1 crash in the last 3 years	3		
Enhance SAFETY (Local Roadway Evaluation)	Enhances cyclist safety by promoting travel on streets that typically have lower speeds and motor vehicle volumes	Facility receives full points if a local roadway will be upgraded to a neighborhood greenway.	10	SDOT GIS	Used for roadways classified as local.



Draft Prioritization Framework

Safety

Theme or Category	Definition	Measurement Methodology	Score	Data Source	Notes
Enhance SAFETY	Addresses location with bike crash history and emphasis on vulnerable roadway users	A link or intersection with a cyclist fatality in the last 3 years	10	SDOT GIS	Responsive
		A link or intersection with 2 or more crashes in the last 3 years	5		
		A link or intersection with 1 crash in the last 3 years	3		
Enhance SAFETY (Arterial Roadway Evaluation)	Addresses locations or streets that are associated with greater cyclist stress and more severe cyclist / motorist crash potential by considering higher motor vehicle volumes described as Average Daily Traffic (ADT)	Roadway ADT > 15,000	5	SDOT GIS	Predictive - 10 potential points between speed / ADT metrics. Used for roadways classified as arterials.
		Roadway ADT 8,000 - 15000	3		
		Roadway ADT < 8,000	1		
	Addresses locations / corridors with a higher potential for cyclist / motorist crashes of greater severity by considering posted or 85th percentile travel speed (best available data)	Roadway is signed, or has an 85th percentile travel speed equal to or greater than 35 mph	5	SDOT GIS	Predictive - 10 potential points between speed / ADT metrics. Used for roadways classified as arterials.
		Roadway is signed at, or has an 85th percentile travel speed equal to or greater than 25 mph	3		
		Roadway is signed at, or has an 85th percentile travel speed equal to or less than 25 mph	1		



Draft Prioritization Framework

Equity

Theme or Category	Definition	Measurement Methodology	Score	Data Source	Notes
Address EQUITY	Project serves populations that are historically underserved including minority populations, households below poverty level, people under 18, people over 65, or households without access to an automobile.	Each indicator will be broken into quartiles. Census tracts reporting falling into the top quartile for each metric will receive 4 points, for a potential maximum of 20 points.	20	Equity analysis developed for the State of Seattle Bicycling Report	
			16		
			12		
			8		
			4		
			0		



Draft Prioritization Framework

Increasing Ridership

Theme or Category	Definition	Measurement Methodology	Score	Data Source	Notes
Increase RIDERSHIP	Project provides a bicycle connection to clusters of bicycle friendly destinations as defined in the Bicycle Master Plan.	Areas scores in the highest scoring quartile (25%) for connections to clusters of bicycle friendly destinations.	10	SDOT GIS - Activity node analysis used during bike network development	Considers large employers
		Areas scores in the second highest scoring quartile (25%) for connections to clusters of bicycle friendly destinations.	7		
		Areas scores in the third highest scoring quartile (25%) for connections to clusters of bicycle friendly destinations.	4		
		Areas scores in the lowest scoring quartile (25%) for connections to clusters of bicycle friendly destinations.	1		
Increase RIDERSHIP	Project provides connections to areas with high population density.	Areas scores in the highest scoring quartile (25%) for population density.	10	2010 Census block level population data	
		Areas scores in the second highest scoring quartile (25%) for population density.	7		
		Areas scores in the third highest scoring quartile (25%) for population density.	4		
		Areas scores in the lowest scoring quartile (25%) for population density.	1		



Draft Prioritization Framework

Livability

Theme or Category	Definition	Measurement Methodology	Score	Data Source	Notes
Enhance LIVABILITY by serving the greatest spectrum of riders	The project will reach the greatest number of riders, but recognizes that all bike facilities provide a measureable benefit to at least some bicyclists.	New installation or upgrade to cycle track, neighborhood greenway, or trail	10	SDOT GIS	This serves as a proxy for perception of safety.
		Facility would install a new buffered bike lane or upgrade an existing bike lane to a buffered bike lane.	7		
		Installation of new bike lanes or upgrade from existing shared lane markings.	4		
		Installation of new shared lane markings.	1		
Enhance LIVABILITY by providing a health benefit	The project will provide a health benefit for people in areas with the greatest reported health needs, represented by obesity rates, physical activity rates (self-reported) and diabetes rates.	Each health indicator will be broken into quartiles. Health reporting areas falling into the top quartile for each metric will receive 3 points, for a potential maximum of 9 points (plus one de facto point for all projects).	10	King County Community Health Indicators	Data is reported by Health Reporting Areas; Seattle is divided into approximately 15 districts. Most recent data available is 2009 or 2010.
			7		
			4		
			1		



Draft Prioritization Framework

Connectivity

Theme or Category	Definition	Measurement Methodology	Score	Data Source	Notes
Enhance CONNECTIVITY	The facility will remove a barrier or close a system gap in the bicycling network.	Project is included on the heroic project list AND makes a connection to/on the citywide network	10	SDOT GIS	
		Project is on the heroic project list OR makes a connection to / on the citywide network	5		
		Project is NOT on the heroic project list and does not connect to the citywide network	0		
Enhance CONNECTIVITY	The facility will make a connection that will immediately extend the bicycle network.	A link or intersection that connects 2 or more existing bike facilities	10	SDOT GIS	
		A link or intersection that extends an existing bike facility	5		
		Project does not extend an existing bike facility	0		



Draft Prioritization Framework

Secondary Criteria used as tie breakers, to make annual corrections for geographic distribution, or to accommodate special circumstances

Suggested Annual Evaluation Criteria	
Potential to Leverage Other Funding	Initiating project now will help secure funding
Policy Directive	Project specified by policy or council
Community Interest	Local community has expressed interest in bicycle infrastructure improvements
Geographic balance	Project improves the balance of bicycle funding to be spent among geographic sectors of the City. Project expands the percentage of Seattle residents living within ¼ mile of a bicycle facility



Draft Performance Measures



- Relates back to the overall policy framework
 - Five goals:
 - Ridership, safety, connectivity, equity, and livability
- Many of the goals (and potential measures) serve the interest in increasing ridership (and diversity of ridership)
- Approach to performance measures intended to be outcome based (ridership increase), not output based (miles of facilities built)



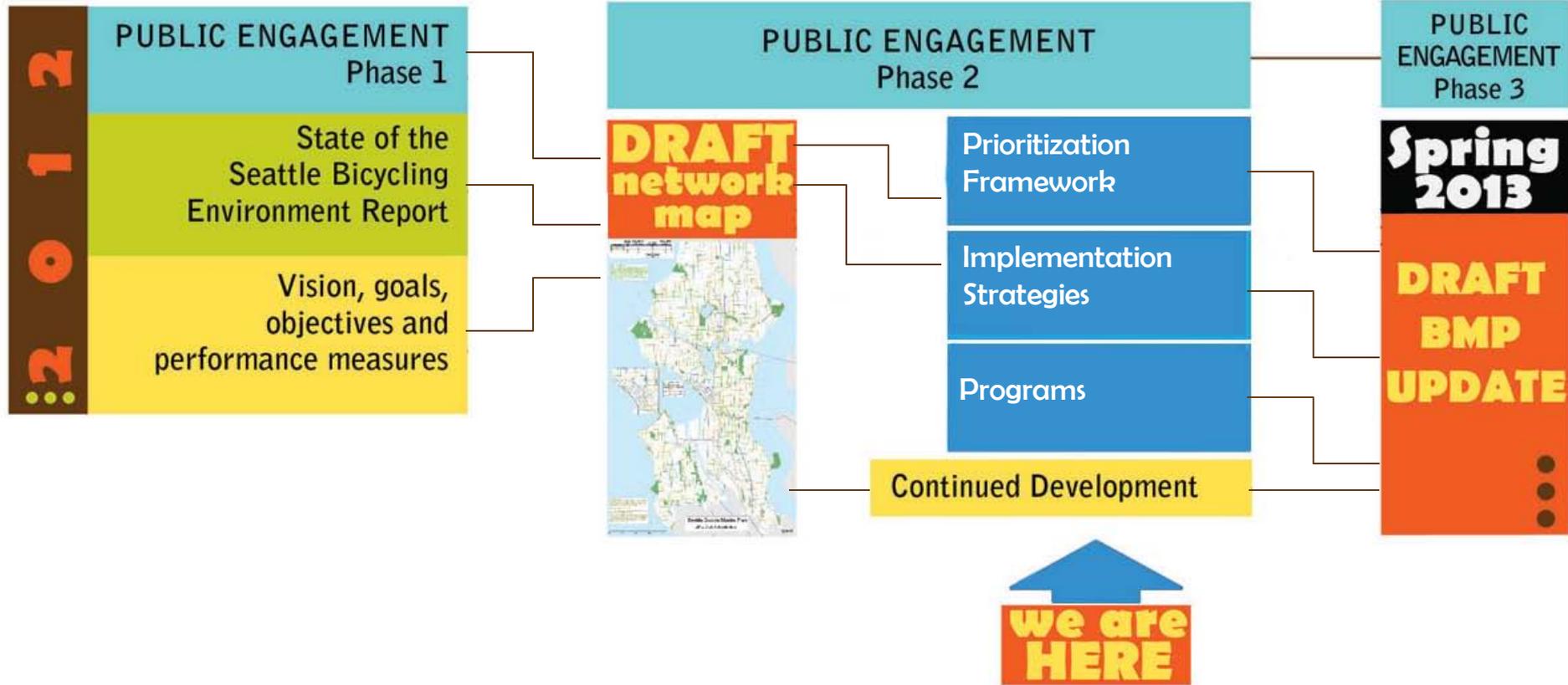
Draft Performance Measures



- Performance Measures require:
 - A defined metric, or measure, that can be quantified
 - Reliable data now (for baseline) and in the future (for tracking progress)
- Revisions in response to SBAB comments on March 6:
 - Consider many data sources for measuring safety (bicycle collision rate)
 - Add new performance measure around connectivity
 - Consider new measure around eliminating gaps, or creating connected travel sheds
 - Define demographic groups to track for increased ridership



BMP Update Roadmap



Next Steps

- Draft BMP update released in late May/early June
 - Need to discuss SBAB review process
- Public engagement phase 3: June - July
- Council review and adoption of BMP update: August - September

