Region 1 Active Transportation Needs Inventory

TAC Meeting #3

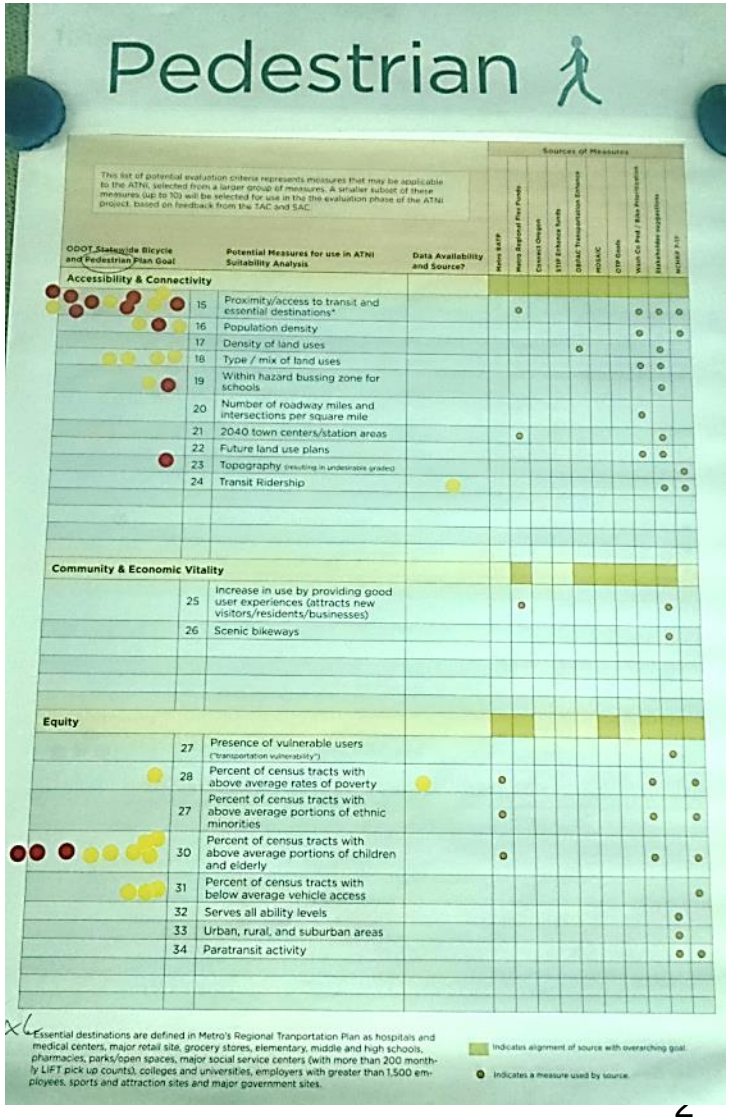
May 5, 2015

Jessica Horning
ODOT Region 1 Transit & Active Transportation Liaison

Karla Kingsley
Kittelson & Associates, Inc.

Meeting Goals

- Update on work completed to date
- TAC sign-off on eval. criteria & methodology
- Input on next steps
  - Criteria weighting
  - Spreadsheet tool



Pedestrian

This list of potential evaluation criteria represents measures that may be applicable to the ATNI, selected from a larger group of measures. A smaller subset of these measures (up to 10) will be selected for use in the the evaluation phase of the ATNI project, based on feedback from the TAC and SAC.

Sources of Measures: Metro RTP; Metro Regional Flex Funds; Connect Oregon; ESP Enhance North; OBAC Transportation Enhance; MOSAIC; OTP Goals; Wash Co. Ped / Bike Prioritization; Stakeholder suggestions; MCSAP 3.07

ODOT Statewide Bicycle and Pedestrian Plan Goal		Potential Measures for use in ATNI Suitability Analysis	Data Availability and Source?
Accessibility & Connectivity			
	15	Proximity/access to transit and essential destinations*	
	16	Population density	
	17	Density of land uses	
	18	Type / mix of land uses	
	19	Within hazard bussing zone for schools	
	20	Number of roadway miles and intersections per square mile	
	21	2040 town centers/station areas	
	22	Future land use plans	
	23	Topography (resulting in undesirable grades)	
	24	Transit Ridership	
Community & Economic Vitality			
	25	Increase in use by providing good user experiences (attracts new visitors/residents/businesses)	
	26	Scenic bikeways	
Equity			
	27	Presence of vulnerable users ("transportation vulnerability")	
	28	Percent of census tracts with above average rates of poverty	
	27	Percent of census tracts with above average portions of ethnic minorities	
	30	Percent of census tracts with above average portions of children and elderly	
	31	Percent of census tracts with below average vehicle access	
	32	Serves all ability levels	
	33	Urban, rural, and suburban areas	
	34	Paratransit activity	

*Essential destinations are defined in Metro's Regional Transportation Plan as hospitals and medical centers, major retail site, grocery stores, elementary, middle and high schools, pharmacies, parks/open spaces, major social service centers (with more than 200 monthly LIFT pick up counts), colleges and universities, employers with greater than 1,500 employees, sports and attraction sites and major government sites.

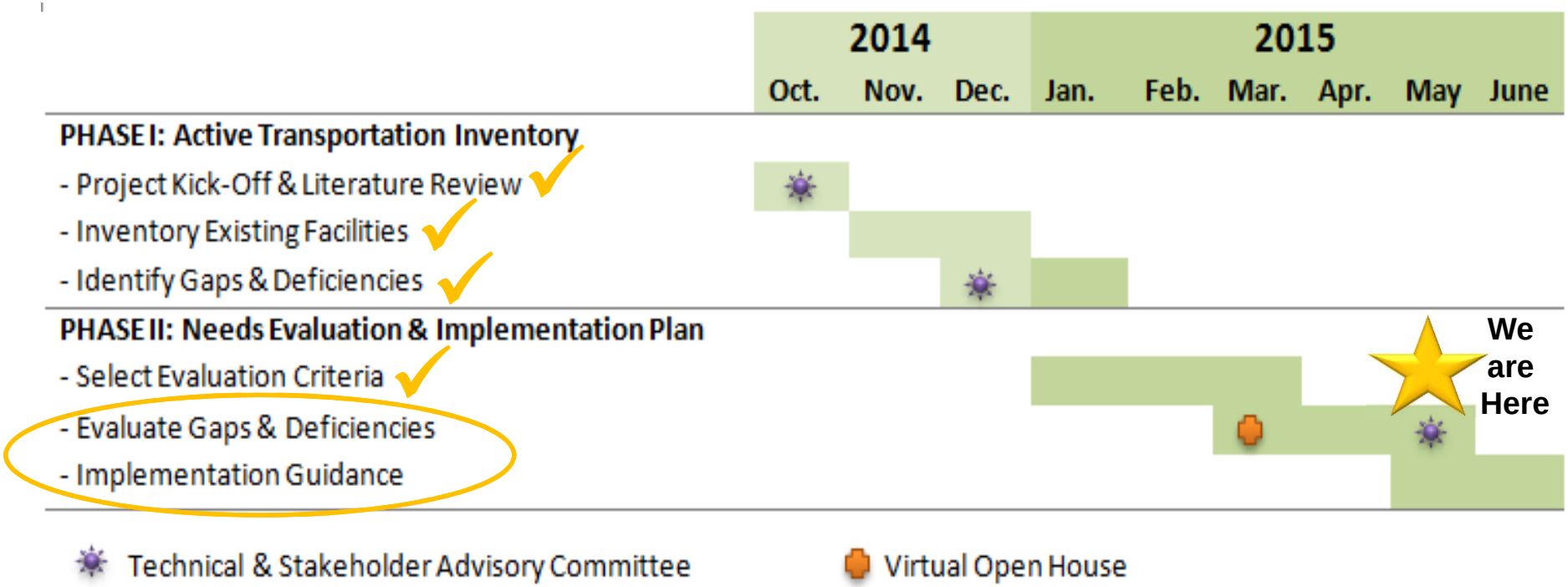
Indicates alignment of source with overarching goal.

Indicates a measure used by source.

Charge of the TAC

- Review and comment on deliverables
- Participate in ~~3~~ **4** TAC Meetings
- Liaison to your Unit
  - Ensure products are useful and implementable
  - Develop awareness and buy-in
  - Provide technical guidance, as necessary

Project Schedule & Overview



- End Products
  - Updated inventory of existing facilities, gaps, and deficiencies
  - Spreadsheet tool for grouping needs into “high”, “medium”, “low” categories
  - Implementation Guidance memo

Project Schedule & Overview

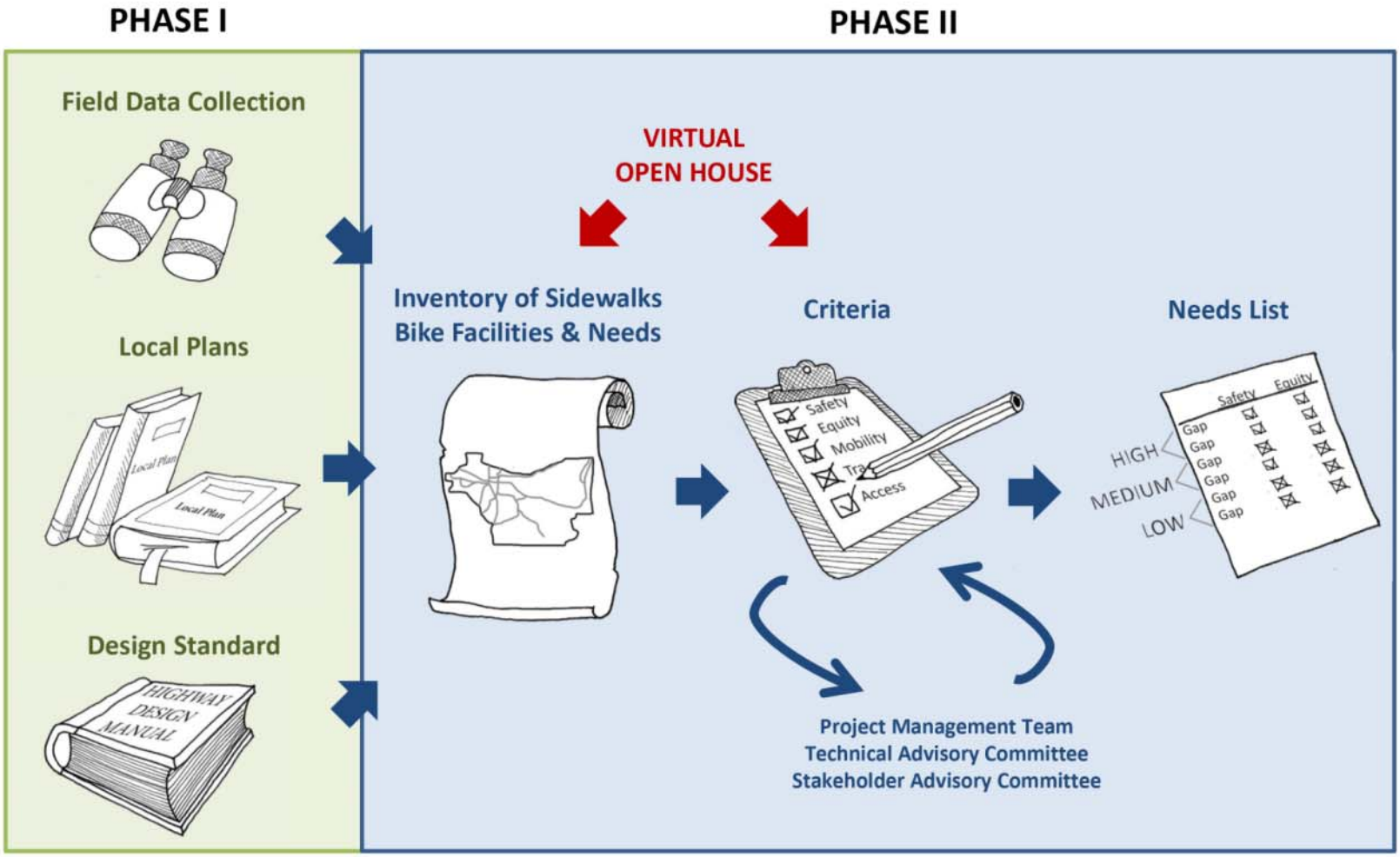
This project will…

- Complete ODOT Region 1 AT inventory
- Evaluate ODOT Gaps & Deficiencies
- Develop rough (e.g. “high/medium/low”) project need categories

This project won’t…

- Design projects
- Commit funding
- Change ODOT design standards or policy
- Evaluate local facilities (unless part of ODOT network)

ACTIVE TRANSPORTATION NEEDS INVENTORY PROCESS



What We've Accomplished So Far

PHASE I

Field Data Collection

What We've Accomplished So Far

PHASE I

Field Data Collection

Local Plans

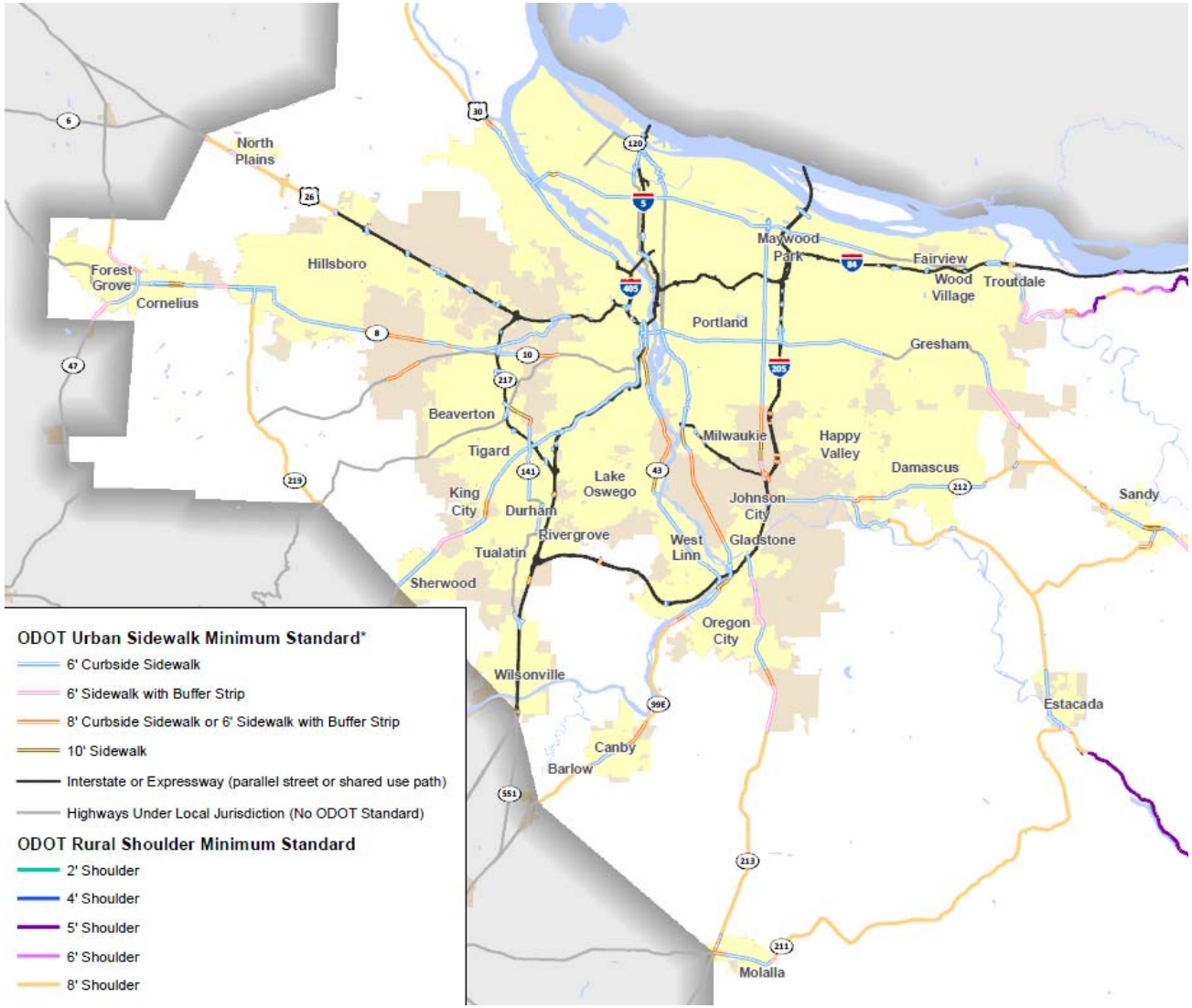
What We've Accomplished So Far

PHASE I

Field Data Collection

Local Plans

Design Standard



What We've Accomplished So Far

PHASE I

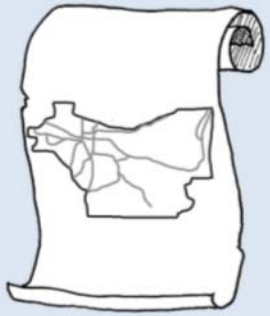
Field Data Collection

Local Plans

Design Standard

PHASE II

Inventory of Sidewalks
Bike Facilities & Needs



Oregon Department of Transportation
ODOT TransGIS

What We've Accomplished So Far

PHASE I

Field Data Collection

Local Plans

Design Standard

PHASE II

"Gap"
No existing facility

"Substandard"
Existing facility, doesn't meet ODOT minimum standard

"Meets Standard"
Existing facility, meets ODOT standard

Identified Need in Adopted Local Plan*

**Can apply to areas that are a Gap, Substandard, or Meets Standard*

What We've Accomplished So Far

PHASE I

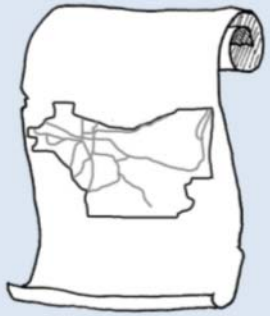
Field Data Collection

Local Plans

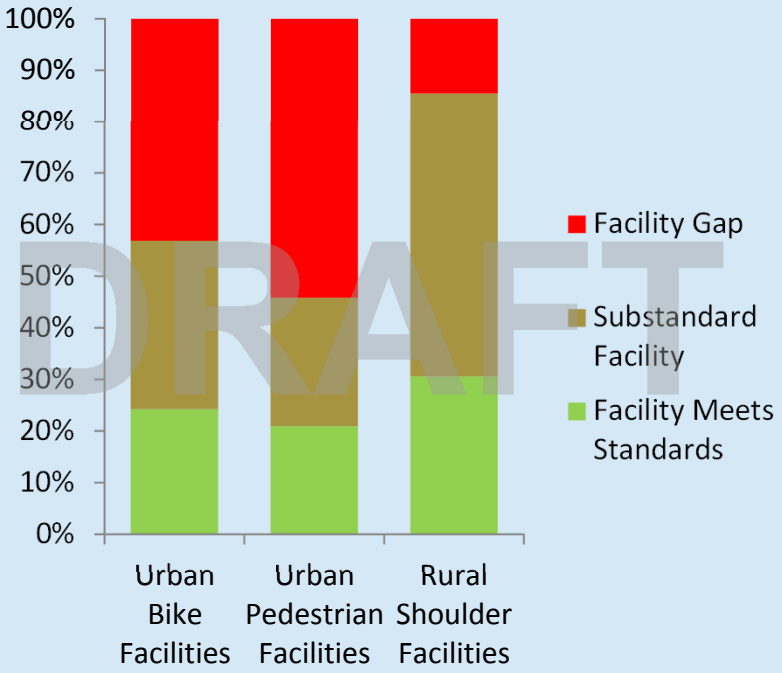
Design Standard

PHASE II

Inventory of Sidewalks Bike Facilities & Needs

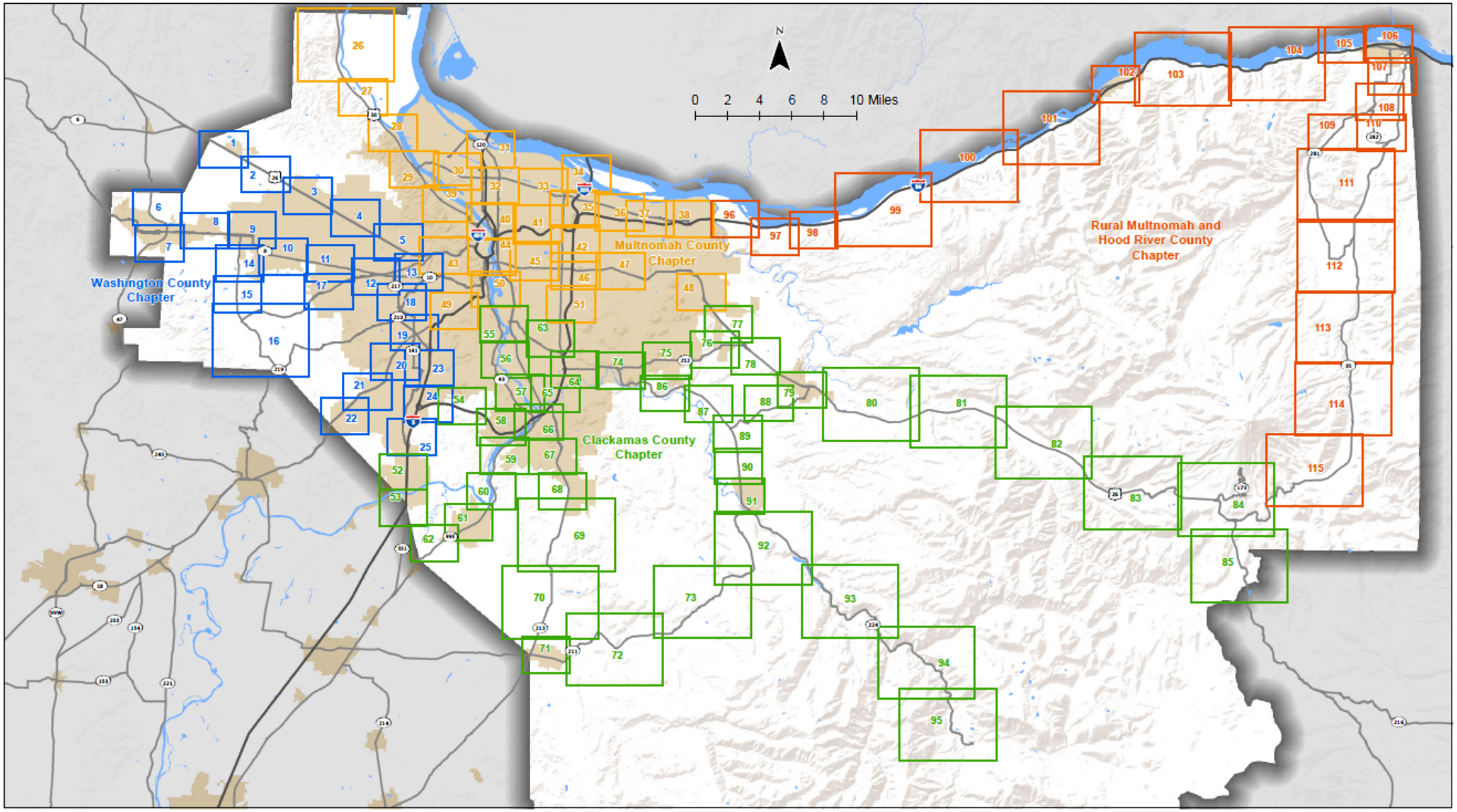


Preliminary Estimates of Region 1 Active Transportation Inventory



DRAFT

Region 1 Ped/Bike Facilities Atlas



Urban Areas

Map Book Pages Index

Region 1 Ped/Bike Facilities Atlas

Map 19
Washington County
Bicycle Facility Data

- Enhanced Pedestrian Crossing
- ODOT Traffic Signals
- Transit Stop
- Local Jurisdiction Crossing or Intersection Needs

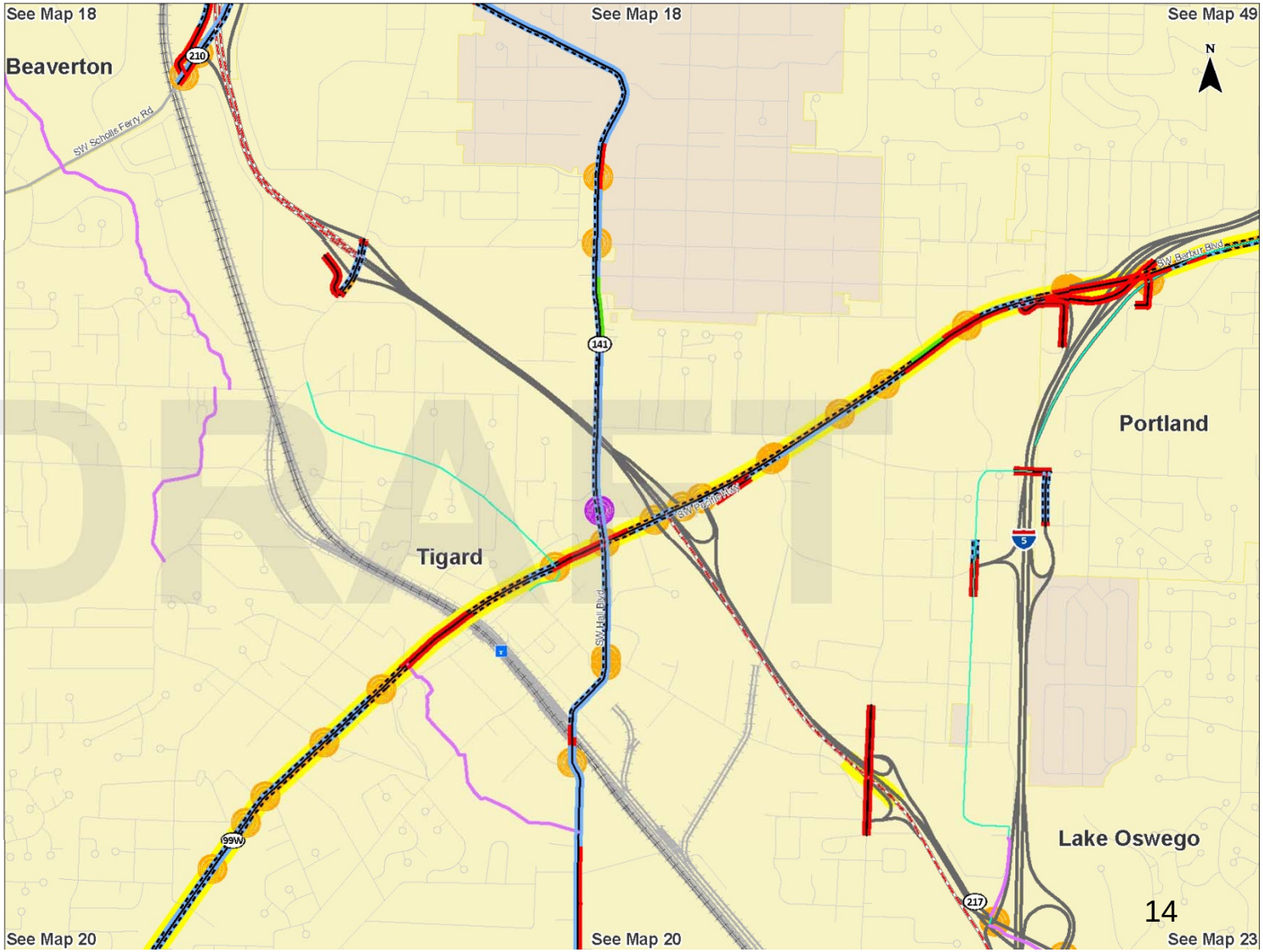
Urban Facilities

- Bicycle Gap
- < 5 Feet
- 5 - 7.5 Feet
- 8 and Greater Feet
- Substandard Facility

Rural Facility

- No Shoulder
- 1 - 3 Ft Shoulder Width
- 4 - 5.5 Ft Shoulder Width
- 6 - 40 Ft Shoulder Width
- Substandard Facility

- Regional Multi-Use Paths (Metro RLIS data)
- Local Jurisdiction Need
- Interstate/Freeway/Expressway with No Parallel Route
- Parallel Facility
- ODOT Facility - Expressways or Interstates
- ODOT Facility - Non-Expressways
- Highways Under Local Jurisdiction
- MAX, WES and Streetcar
- Heavy Railroad
- City Boundaries
- Urban Growth Boundaries
- Urban Areas



Region 1 Ped/Bike Facilities Atlas

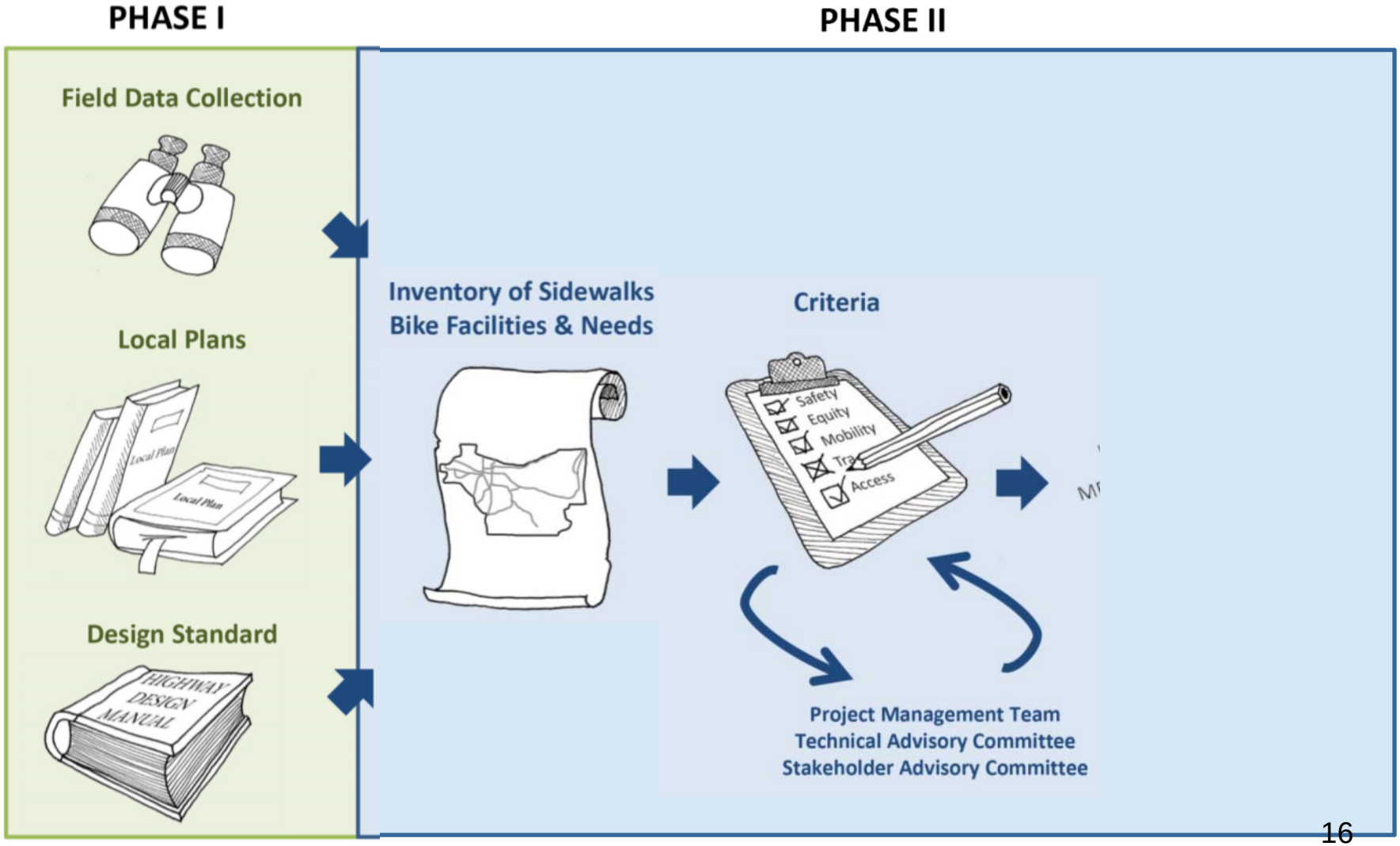
- Complete draft atlas will be posted on project website after TAC meeting

  www.oregon.gov/ODOT/ATNI

- TAC Request:
  - Please review and add comments on format or inventory to comment log on share drive:

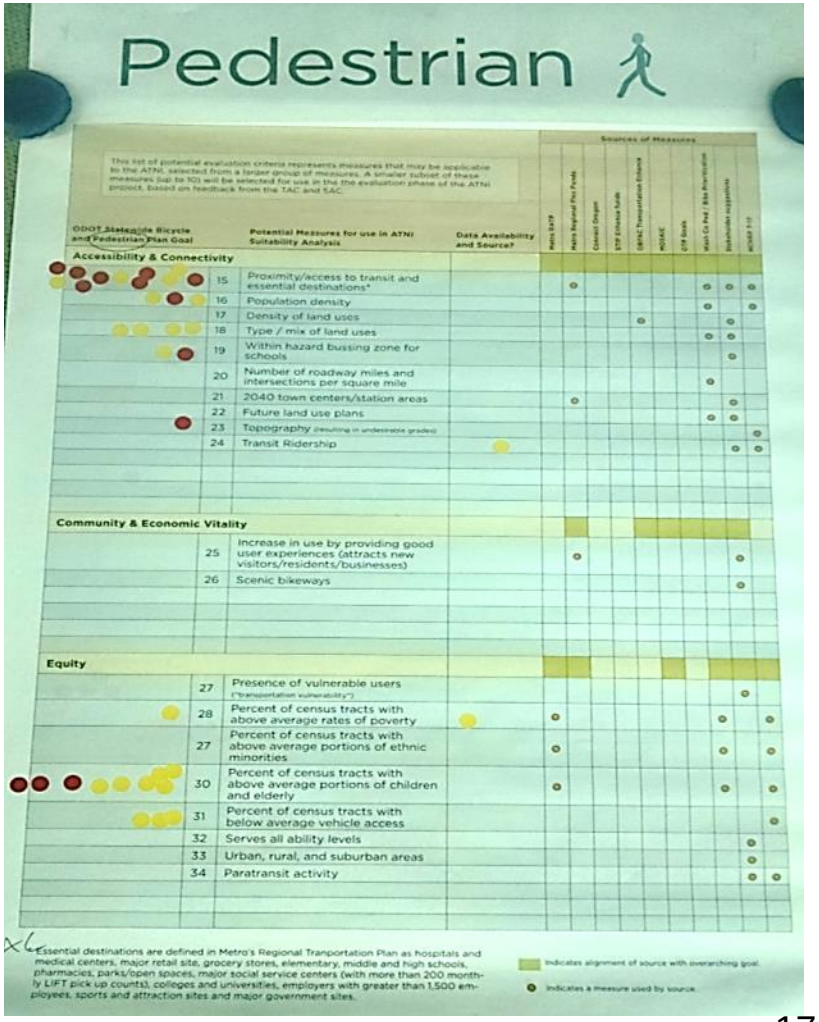
    \\7d1050jh\share\Active_Transportation

What We've Accomplished So Far



TAC/SAC Criteria Selection Exercise

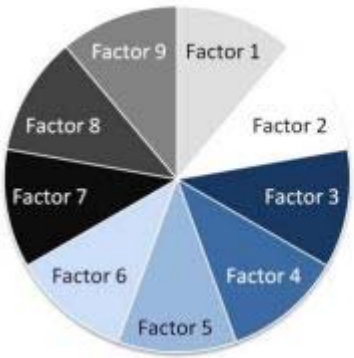
DRAFT Statewide Bike / Ped Plan Goals
Safety
Mobility & Efficiency
Accessibility & Connectivity
Community & Economic Vitality
Equity
Health
Sustainability
Strategic Investment
Coordination, Cooperation, & Collaboration



Top Criteria Selected by TAC / SAC
Crash History: # ped/bike-involved crashes
Crash Risk: Index of risk factors (e.g. vehicle speed, AADT, number of lanes)
Fills gap in network (prioritize locations with no alternate route, if possible)
Access to Transit
Proximity to other "Essential Destinations" (schools, hospitals, etc.)
Transportation Disadvantaged and Vulnerable Users (poverty, ethnic minorities, vehicle access, children & elderly)
In local jurisdiction plans

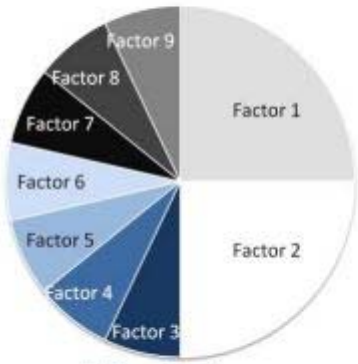
Weighting?

Weighting



Nine Factors
Equally Weighted

Four Factors
Equally Weighted



Nine Factors
Factors 1 and 2weighted more heavily

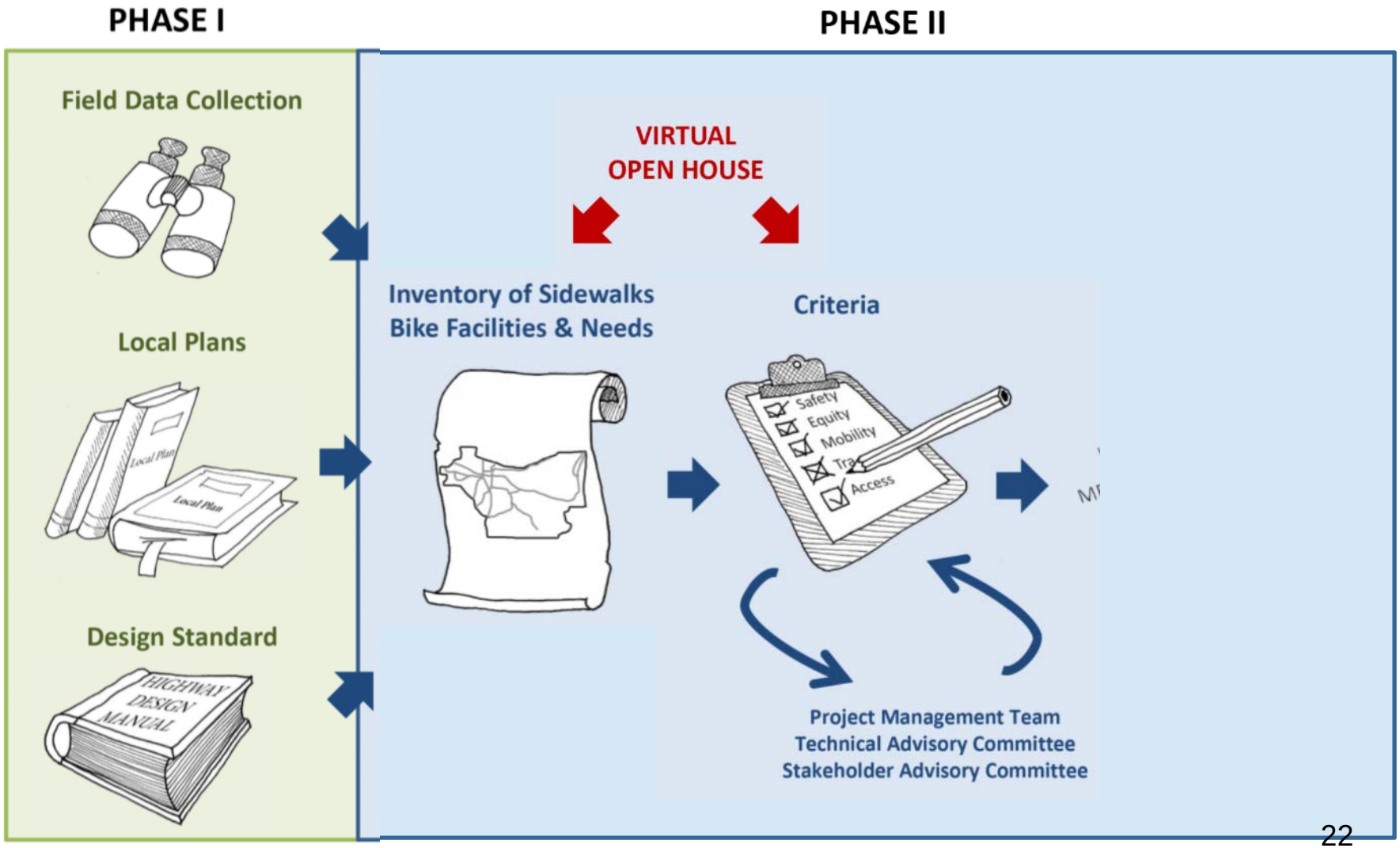
Four Factors
Factor 1 weighted more heavily

Relative impact of factors if weighted differently

Criteria Weighting Exercise

Evaluation Criteria	Crash History	Crash Risk	Access to Transit	Access to Essential Destinations	Serves Transpo. Disadvantaged	Fills a Gap	In Local Plan
Crash History							
Crash Risk	Crash History or Crash Risk						
Access to Transit	Crash History or Access to Transit	Crash Risk or Access to Transit					
Access to Essential Destinations	Crash History or Access to Essential Destinations	Crash Risk or Access to Essential Destinations	Access to Transit or Access to Essential Destinations				
Serves Transpo. Disadvantaged	Crash History or Serves Transpo. Disadvantaged	Crash Risk or Serves Transpo. Disadvantaged	Access to Transit or Serves Transpo. Disadvantaged	Access to Essential Destinations or Serves Transpo. Disadvantaged			
Fills a Gap	Crash History or Fills a Gap	Crash Risk or Fills a Gap	Access to Transit or Fills a Gap	Access to Essential Destinations or Fills a Gap	Serves Transpo. Disadvantaged or Fills a Gap		
In Local Plan	Crash History or In Local Plan	Crash Risk or In Local Plan	Access to Transit or In Local Plan	Access to Essential Destinations or In Local Plan	Serves Transpo. Disadvantaged or In Local Plan	Fills a Gap or In Local Plan	

What We've Accomplished So Far



Virtual Open House

- 3 Weeks (Mar 30 - Apr 19)
- Notifications
  - OR Active Trans. Summit
  - ODOT Press Release
  - Project & BPAC Email Lists
  - Safe Routes to School, OR Walks, BTA newsletters
  - Twitter
  - BikePortland article
- Translation Assistance
  - IRCO hotline – Spanish, Russian, Chinese, Korean

ODOT wants your input on walking & biking!

The ODOT Region 1 Active Transportation Needs Inventory is a pilot project that will help ODOT strategically:

1. Identify gaps in walking and biking facilities (e.g. sidewalks, bike lanes, paths) on ODOT highways
2. Identify areas where future investments may provide the greatest benefits for all users.

Visit www.oregon.gov/ODOT/ATNI by **April 19, 2015** to participate in our Virtual Open House and to:

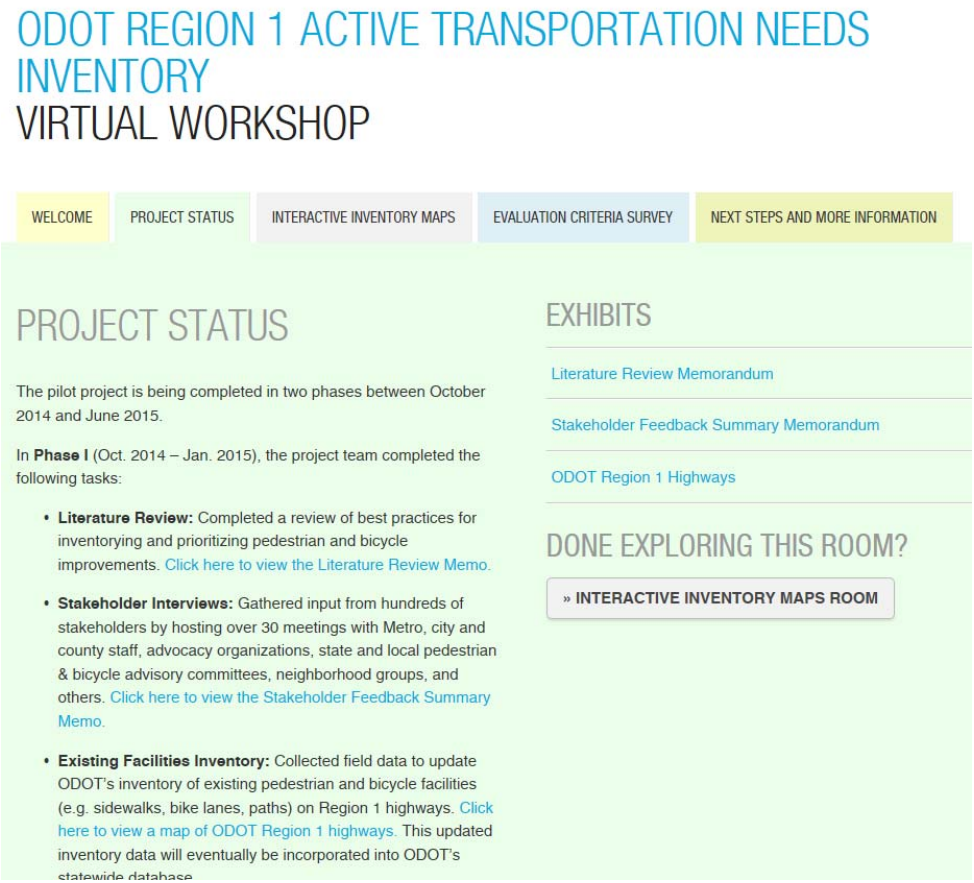
- Learn more about the project.
- Let us know what locations need improvement.
- Give feedback on "criteria" to evaluate walking and biking needs.

Participate in our Virtual Open House at:
www.oregon.gov/ODOT/ATNI

Oregon Department of Transportation

Virtual Open House

- Project Background
- Interactive Map
  - Is our inventory correct?
  - What locations are priorities for you?
- Criteria Survey
  - How should we weight criteria?
  - Other important criteria?



ODOT REGION 1 ACTIVE TRANSPORTATION NEEDS INVENTORY
VIRTUAL WORKSHOP

WELCOME | PROJECT STATUS | INTERACTIVE INVENTORY MAPS | EVALUATION CRITERIA SURVEY | NEXT STEPS AND MORE INFORMATION

PROJECT STATUS

The pilot project is being completed in two phases between October 2014 and June 2015.

In **Phase I** (Oct. 2014 – Jan. 2015), the project team completed the following tasks:

- **Literature Review:** Completed a review of best practices for inventorying and prioritizing pedestrian and bicycle improvements. Click here to view the Literature Review Memo.
- **Stakeholder Interviews:** Gathered input from hundreds of stakeholders by hosting over 30 meetings with Metro, city and county staff, advocacy organizations, state and local pedestrian & bicycle advisory committees, neighborhood groups, and others. Click here to view the Stakeholder Feedback Summary Memo.
- **Existing Facilities Inventory:** Collected field data to update ODOT's inventory of existing pedestrian and bicycle facilities (e.g. sidewalks, bike lanes, paths) on Region 1 highways. Click here to view a map of ODOT Region 1 highways. This updated inventory data will eventually be incorporated into ODOT's statewide database

EXHIBITS

Literature Review Memorandum

Stakeholder Feedback Summary Memorandum

ODOT Region 1 Highways

DONE EXPLORING THIS ROOM?

» INTERACTIVE INVENTORY MAPS ROOM

Interactive Map Tool

ODOT REGION 1 ACTIVE TRANSPORTATION NEEDS INVENTORY

The comment period for this map is now closed.

You can click the items in the "Layers" box on the map to "show" and "hide" them.

PEDESTRIAN FACILITIES

Gap
No existing facility

Substandard
Facility doesn't meet ODOT minimum standards

Meets Standard
Facility meets ODOT minimum standards

Identified Need in Local Plan
Improvement identified in adopted local plan

Shared Use Path
Off-street facility serving bicycles and pedestrians

Interstate, Freeway, or Expressway
Should be served by parallel route or shared-use path.

CROSSINGS

Existing Enhanced Crossing
Crossing with some treatment, such as a crosswalk marking, signal, rapid flash beacon, or median island

Crossing Need from Local Plan
A crossing need has been identified in a local jurisdiction plan for this location

View a list of existing comments →

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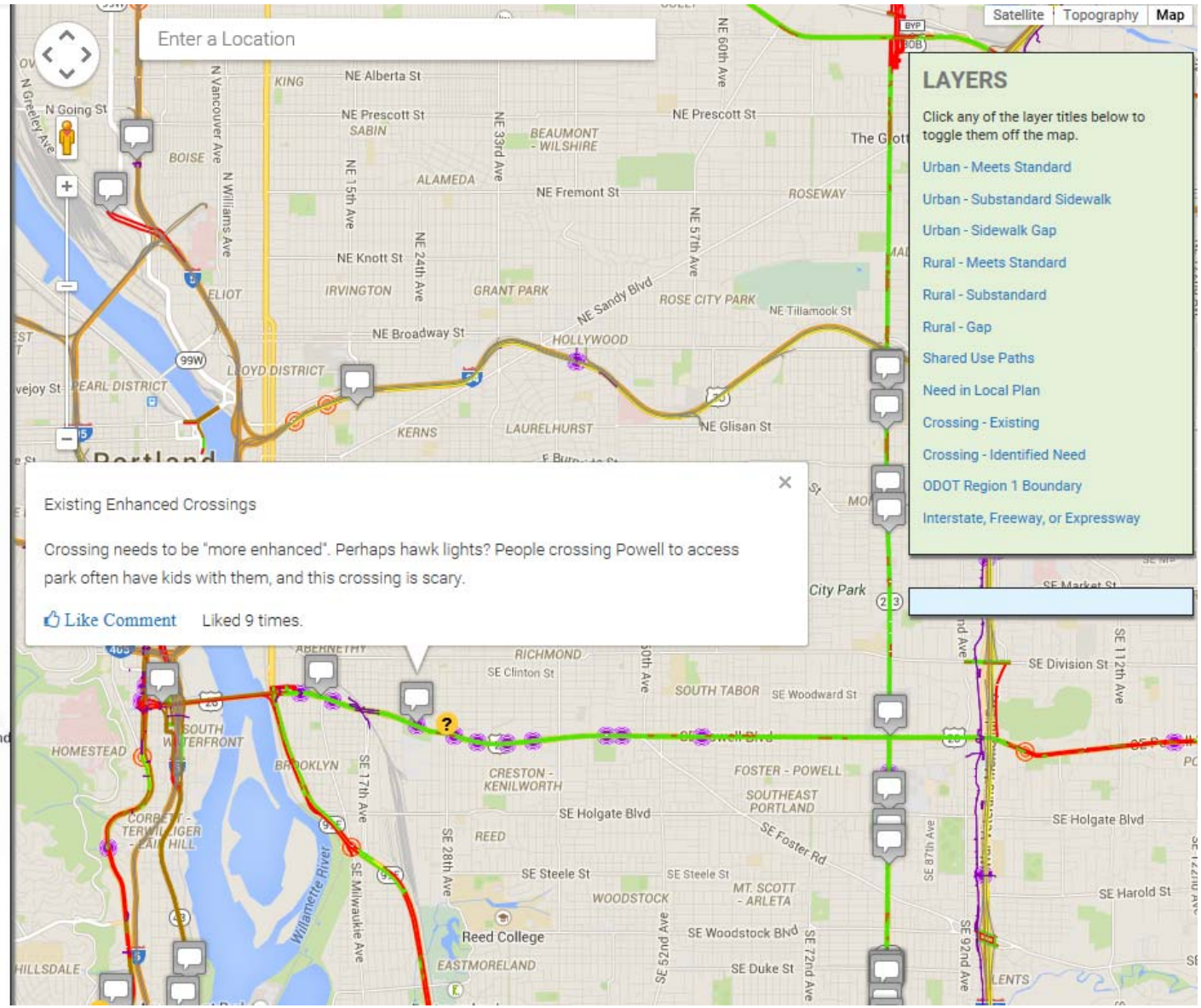
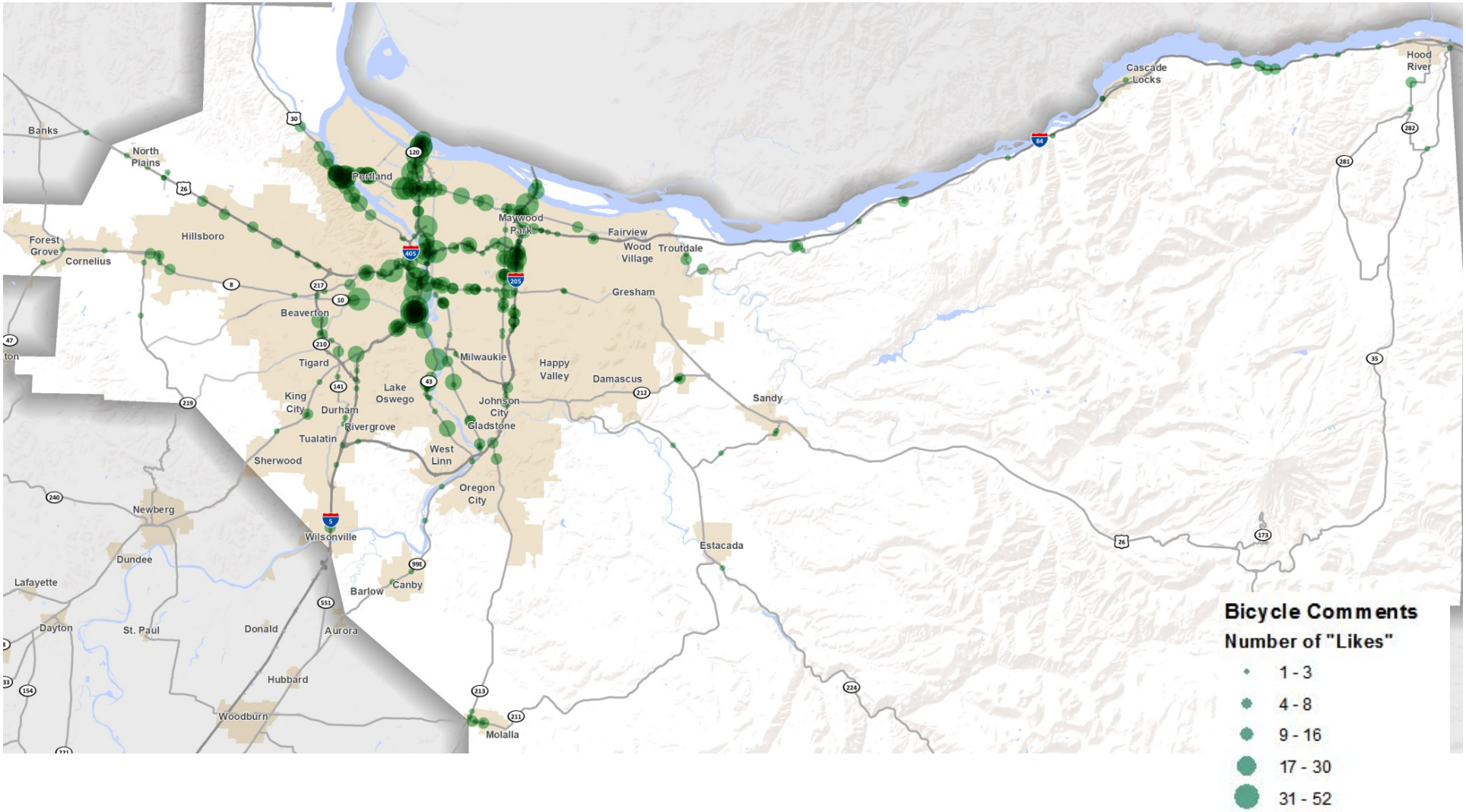


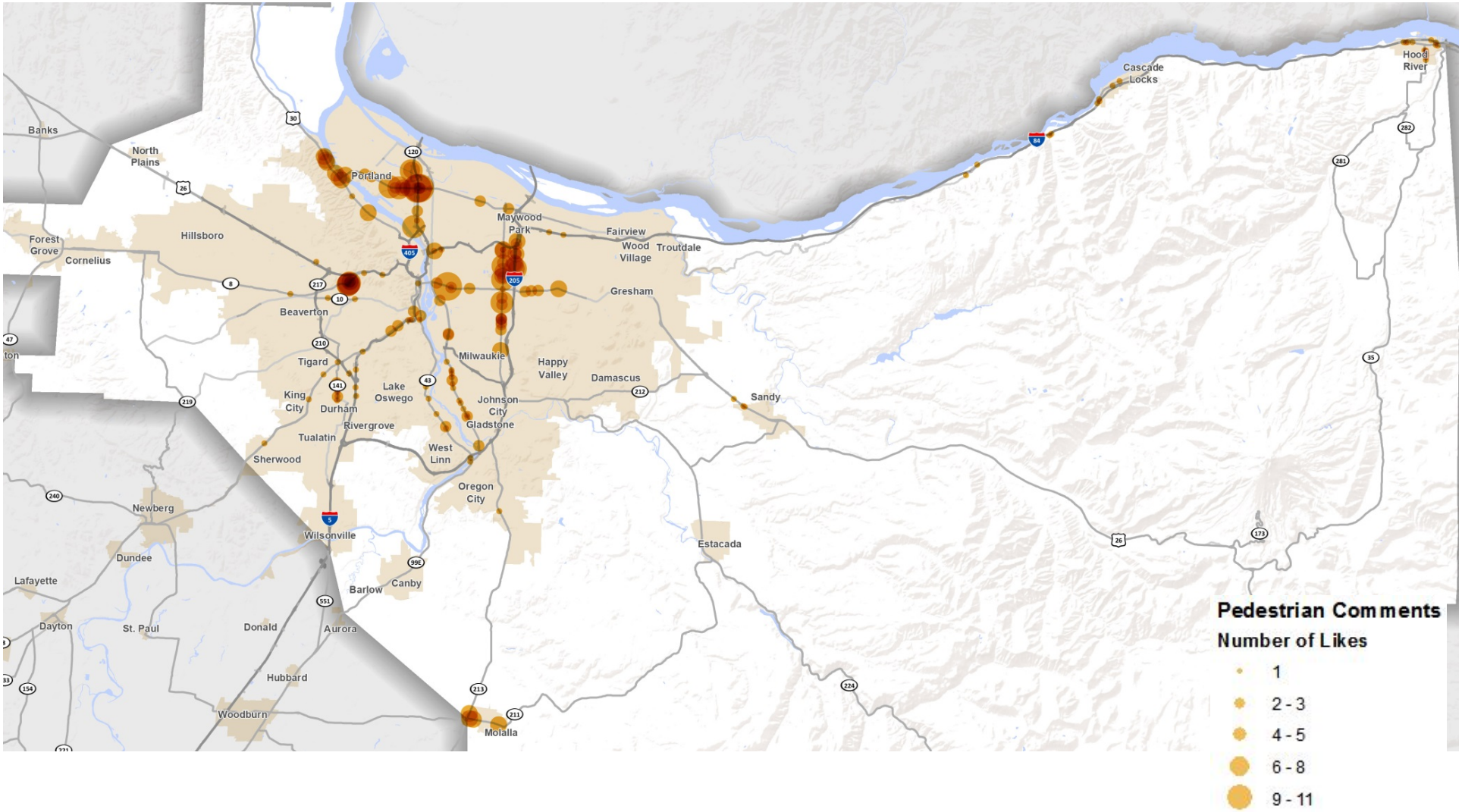
Interactive Map Comments

	Comments	"Likes"
Bicycle	359	1757
Pedestrian	197	268

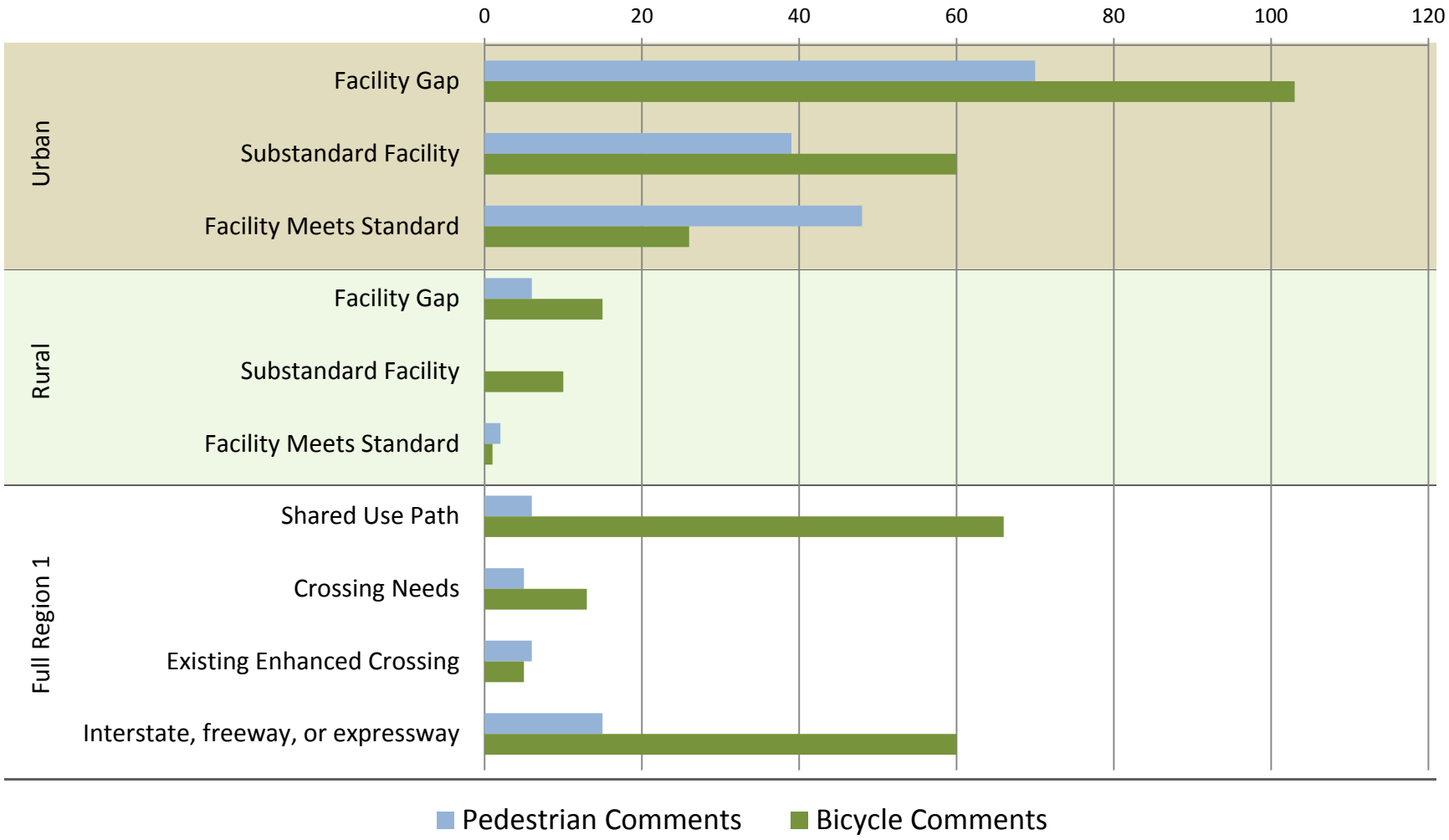
Comments and Likes - Bike



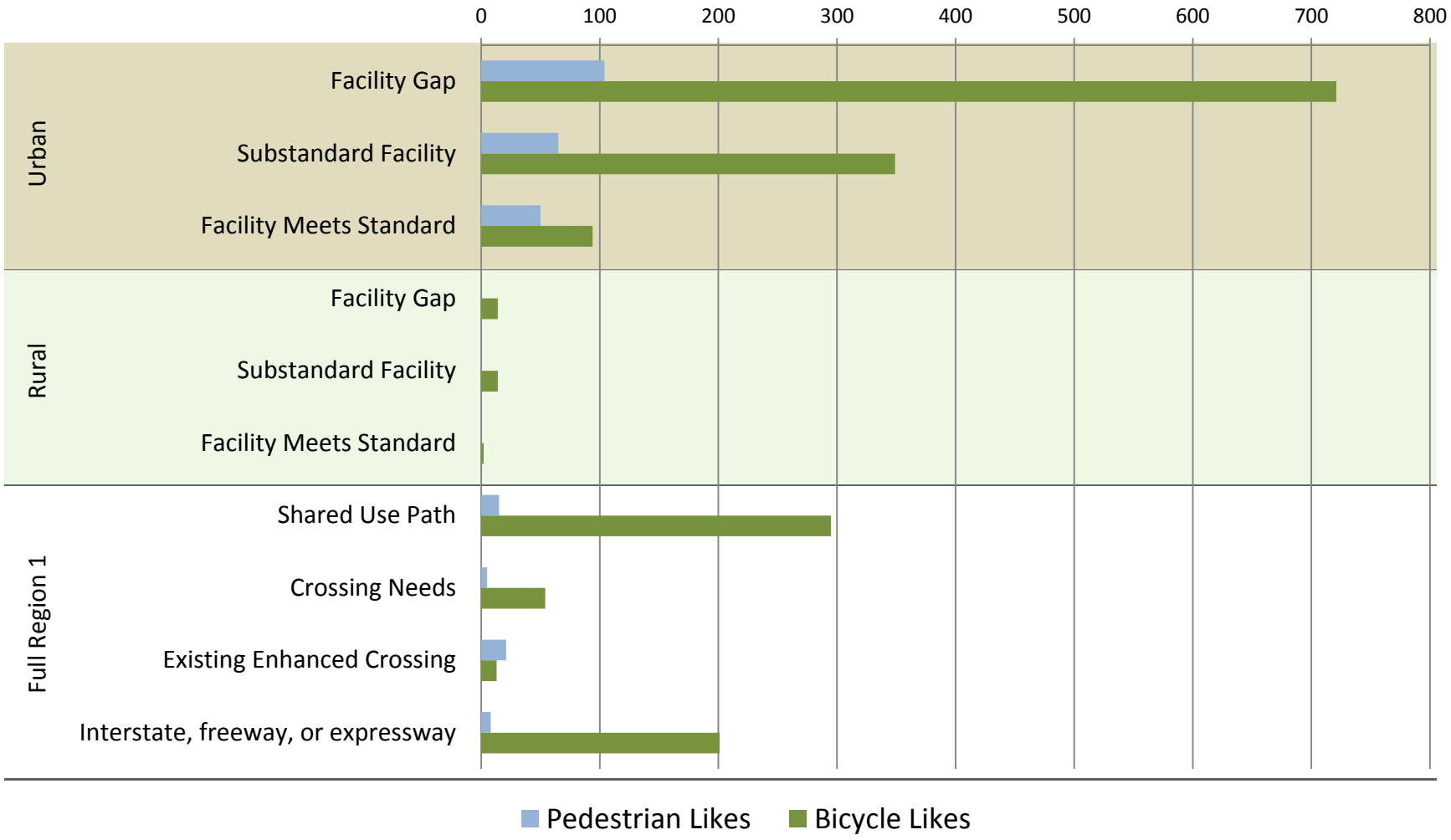
Comments and Likes - Pedestrian



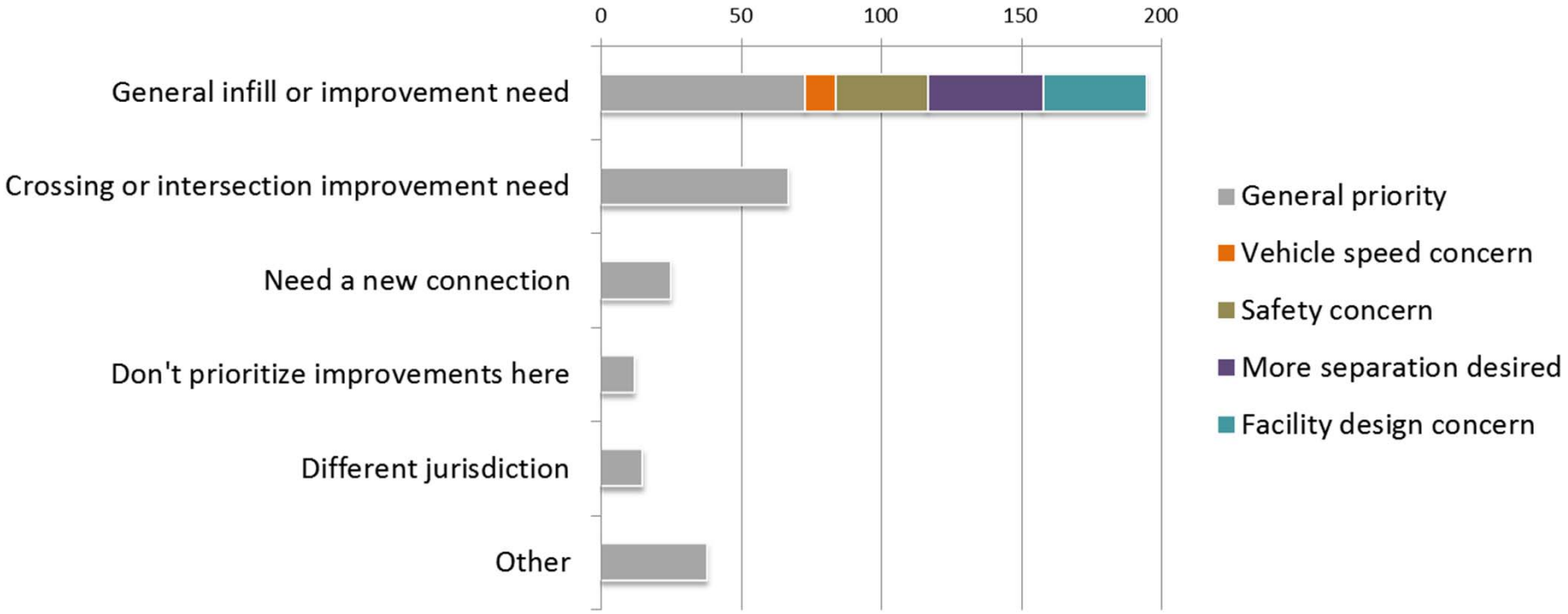
Interactive Map Comments



Interactive Map Comment "Likes"

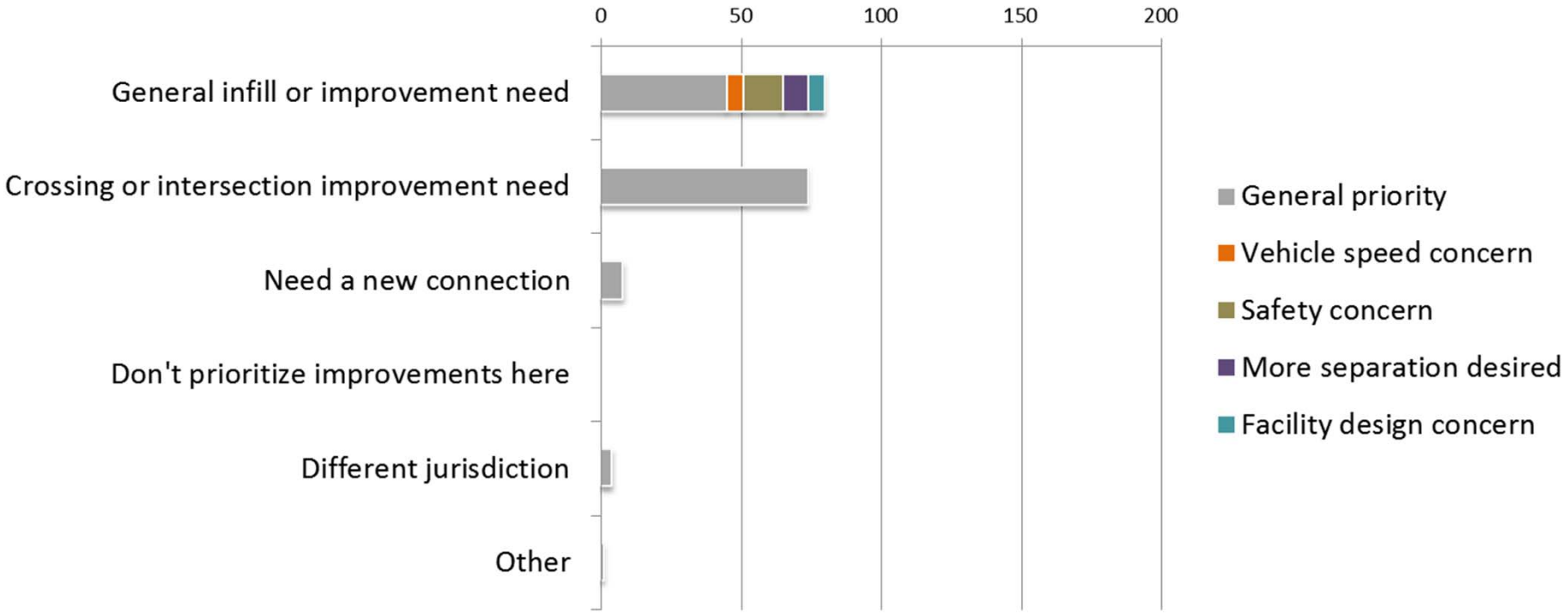


Interactive Map Comments - Bike



**Other includes maintenance need, wayfinding need, freeway removal, install trail counters, thank you / good job, and fund improvements to city routes instead.*

Interactive Map Comments – Ped



**Other includes maintenance need, wayfinding need, freeway removal, install trail counters, thank you / good job, and fund improvements to city routes instead.*

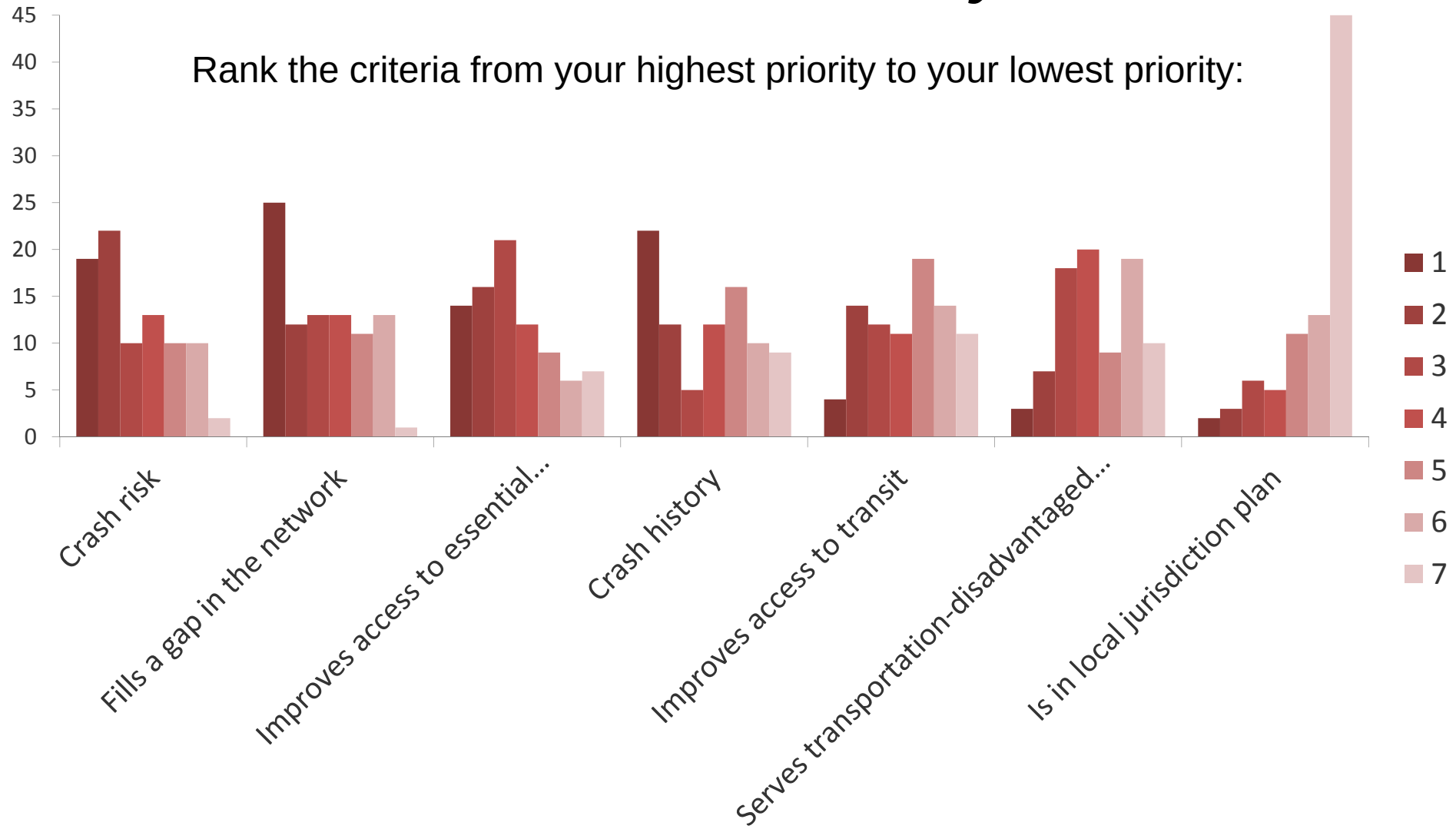
Evaluation Criteria Survey

- Suggestions for criteria
  - Cost
  - Alternative routes
  - Recreational routes
  - Connections to trails

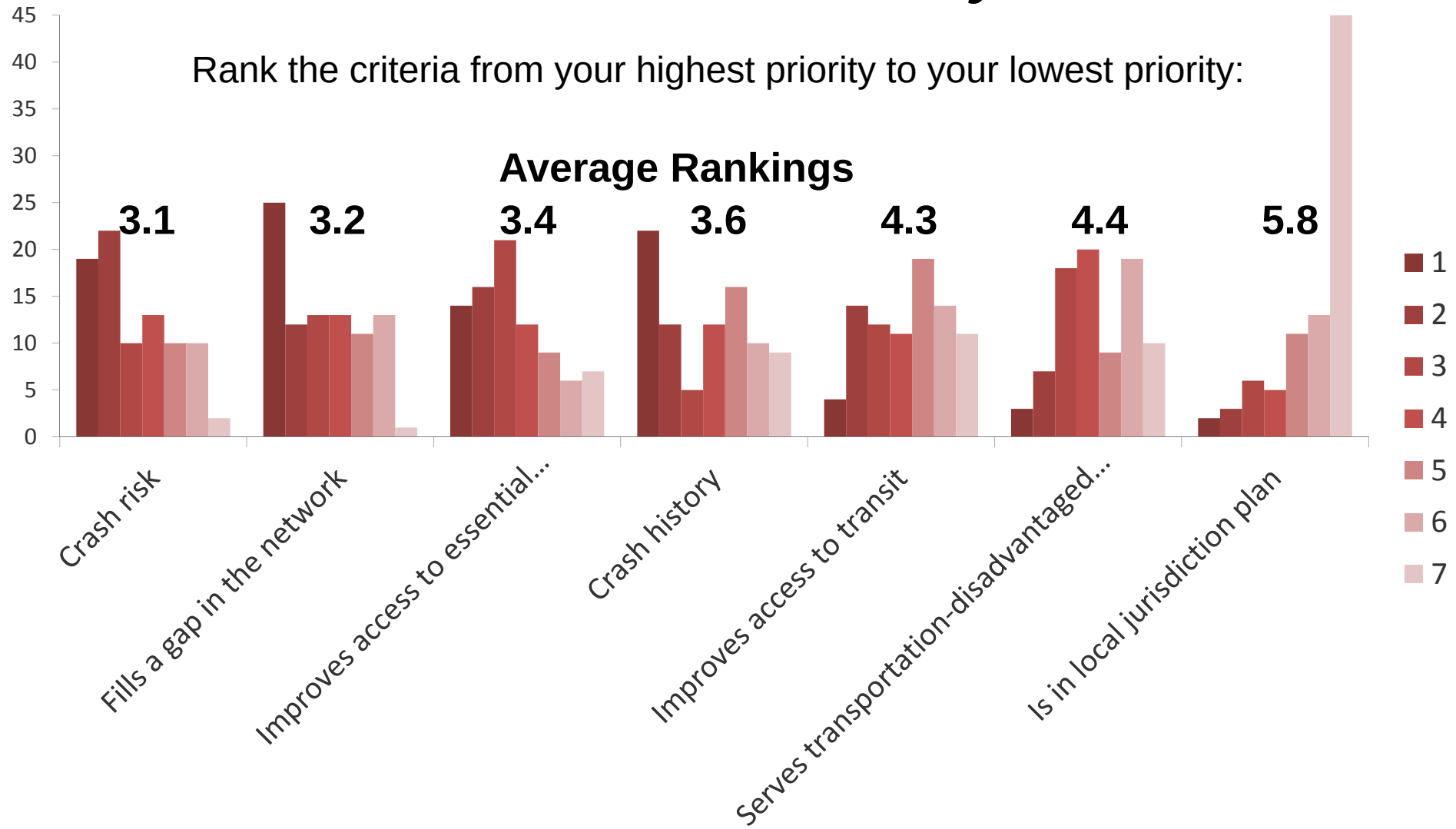
"Major bike routes such as a Scenic Bikeway or an Adventure Cycling Association route. And ensure it's safe to ride to off road trail systems for example on HWY 26 to Sandy Ridge Trail System."

"Total cost associated with each measure."

Evaluation Criteria Survey - Rank



Evaluation Criteria Survey - Rank

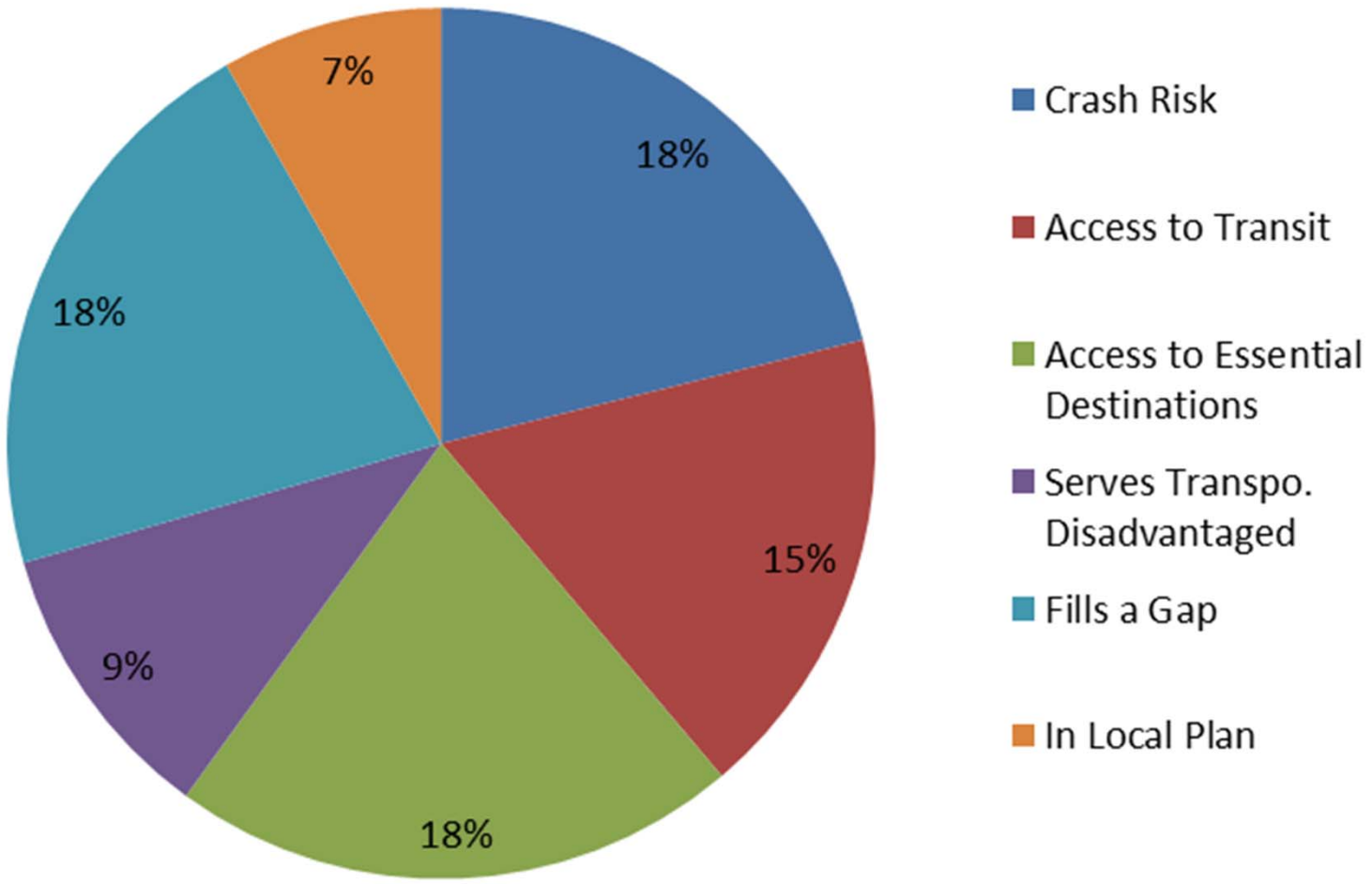


Weighting Criteria Exercise

Exercise Results:

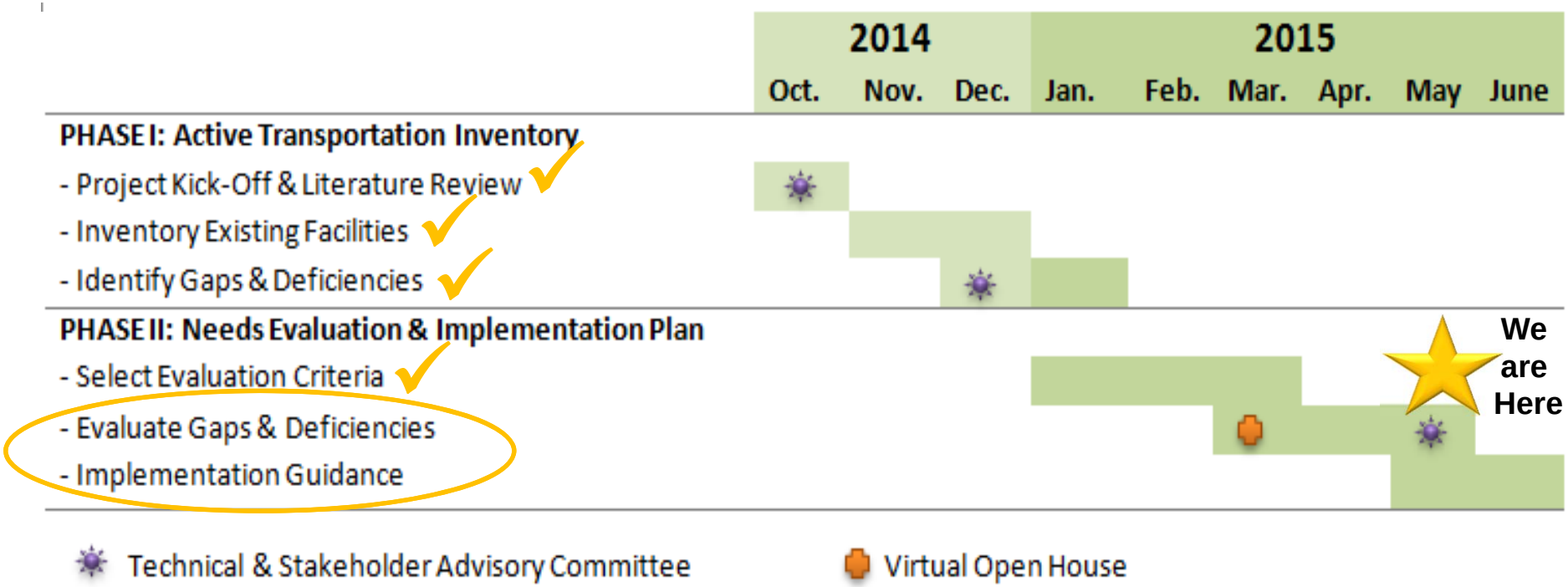
Evaluation Criteria	Rank	Weight
Crash History	2	17%
Crash Risk	1	18%
Access to Transit	3	15%
Access to Essential Destinations	1	18%
Serves Transpo. Disadvantaged	4	9%
Fills a Gap	1	18%
In Local Plan	5	7%

- Weighting recommendation made by PMT based on TAC, SAC, and public input
- Confirmed by management
- Weighting can easily be adjusted in spreadsheet tool

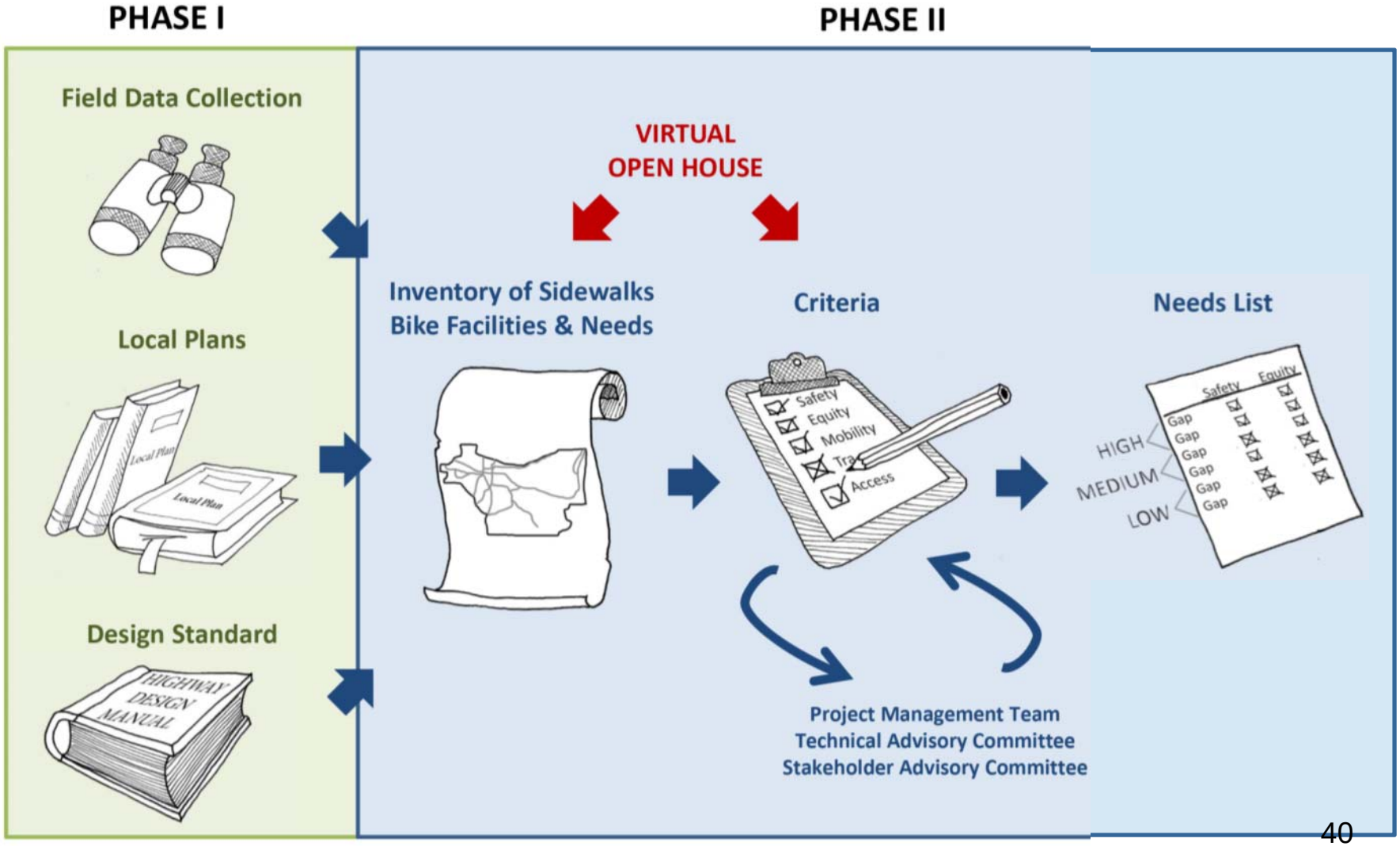

7%
18%
18%
15%
9%
18%
Crash Risk
Access to Transit
Access to Essential Destinations
Serves Transpo. Disadvantaged
Fills a Gap
In Local Plan

BREAK

Project Schedule & Overview



Applying the Evaluation Criteria

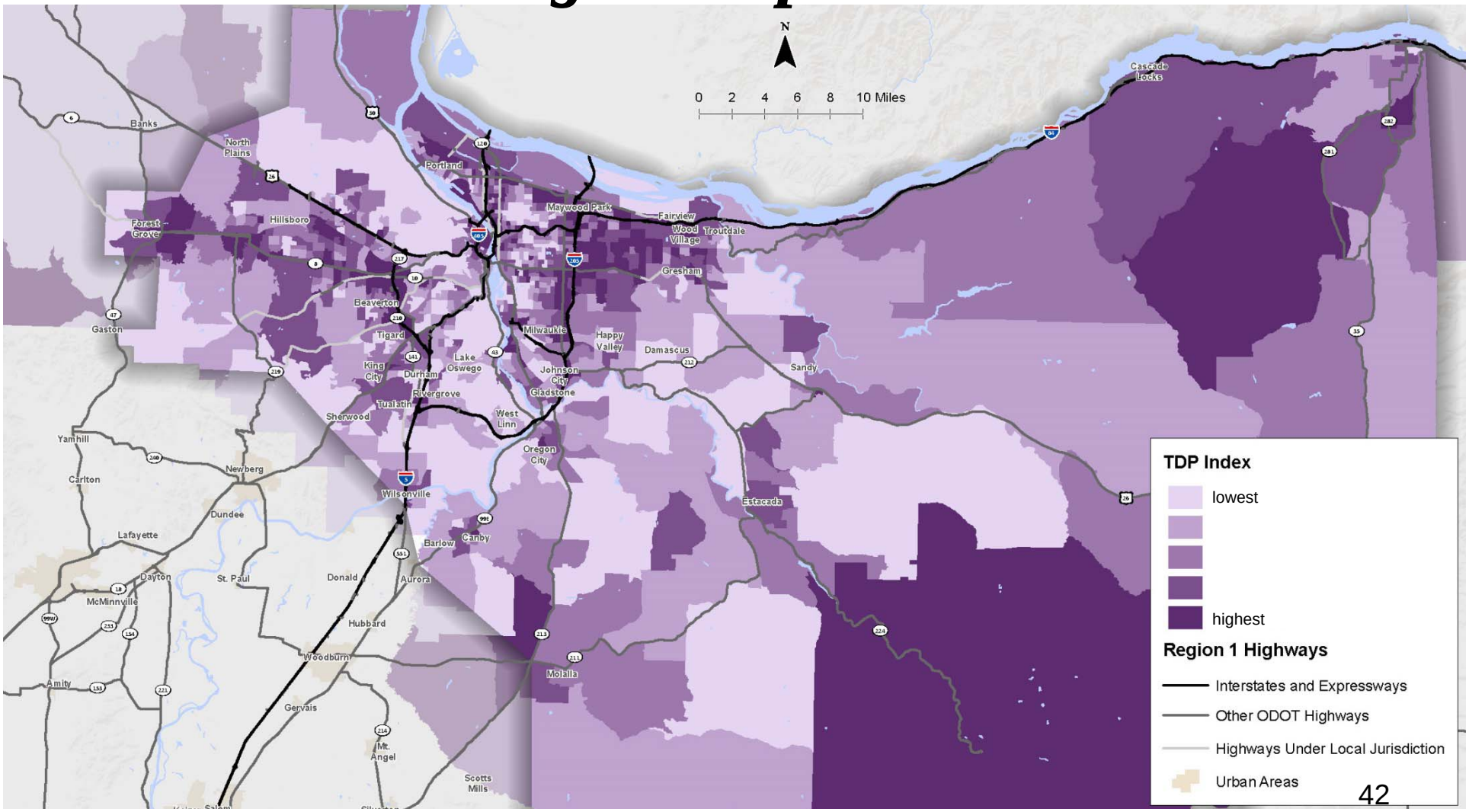


Applying the Evaluation Criteria

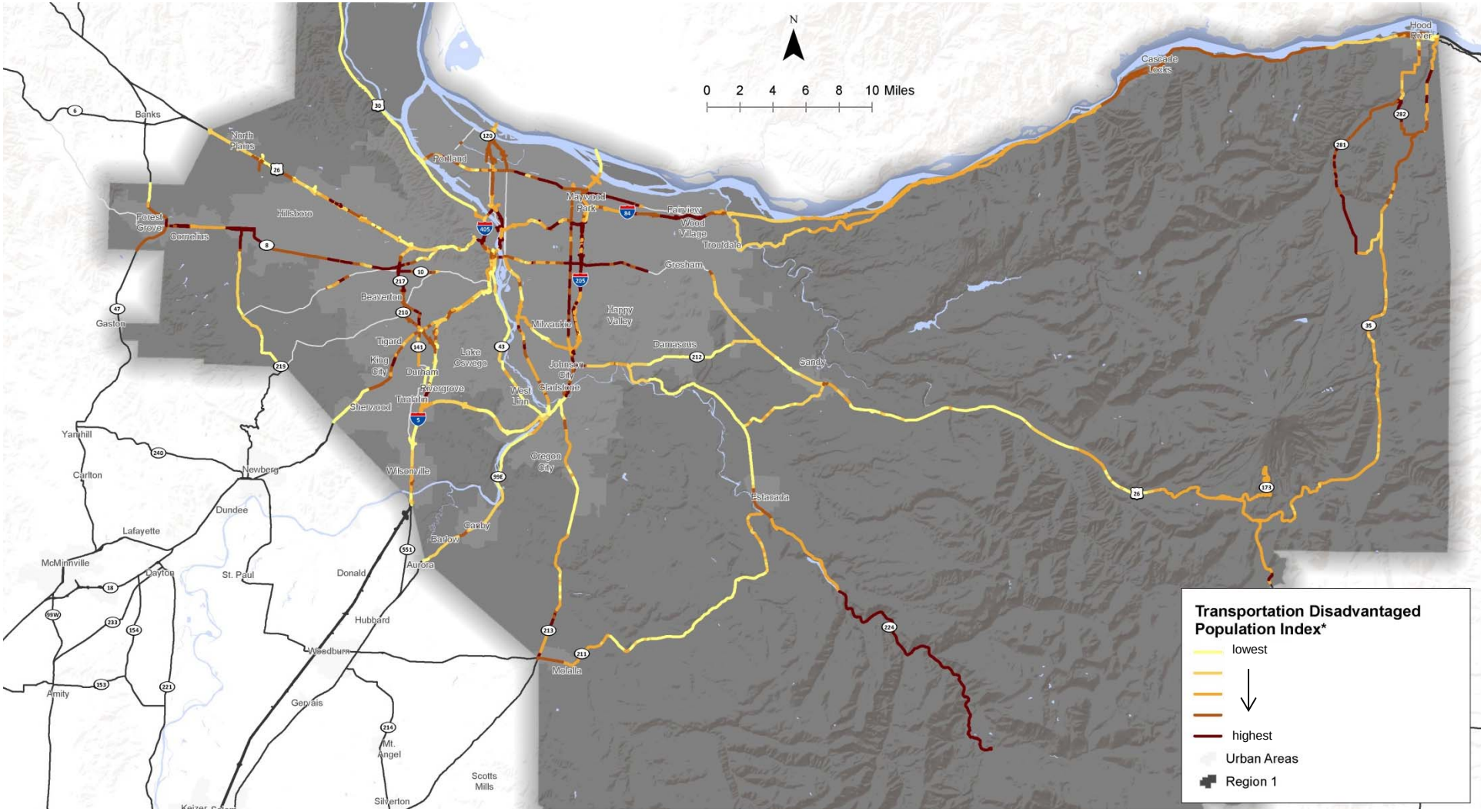
			Gap #1					Deficiency #1			Gap #2
	Segment milepost	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
Criterion Score	Crash History	20	0	0	0	160	60	0	11	0	0
	Crash Risk	2	2.6	2.6	2.6	3.4	2.4	2.2	2	2	2
	Access to Transit	10	10	10	10	16	16	16	10	10	10
	Access to Essential Destinations	9	9	6	6	6	12	12	12	6	6
	Serves Transportation Disadvantaged	1.65	1.65	1.65	1.94	1.94	1.94	1.94	2.11	2.2	2.2
	Fills a Gap	0.5	0.5	0.5	0.8	0.5	0.5	0.5	0.3	0.3	0.3
	In Local Plan	1	1	1	1	1	1	1	1	0	0

Example data, for demonstration purposes only.
For evaluation process, criteria will be scaled so that they are comparable and weights will be applied.

Criteria Maps – Transportation Disadvantaged Population Index



Criteria Maps – Transportation Disadvantaged Population Index



The NCHRP 7-17 Research Process

- Literature review
- Survey
- Interviews with transportation agencies
- Feedback from NCHRP panel
- Pilot tests

ATNI "Criteria" & NCHRP 7-17 "Factors"

NCHRP 7-17 Prioritization Factors	ODOT ATNI Evaluation Criteria
Safety	Crash History
	Crash Risk
Demand	Access to Transit
	Access to Essential Destinations
Connectivity	Fills a Gap
Equity	Transportation Disadvantaged
Stakeholder Input	In Local Plan
Compliance	
Existing Conditions	
Constraints	
Opportunities	

Criteria selected by TAC and SAC

ATNI "Criteria" & NCHRP 7-17 "Factors"

NCHRP 7-17 Prioritization Factors	ODOT ATNI Evaluation Criteria
Safety	Crash History
	Crash Risk
Demand	Access to Transit
	Access to Essential Destinations
Connectivity	Fills a Gap
Equity	Transportation Disadvantaged
Stakeholder Input	In Local Plan
Compliance	Gaps & Deficiencies Evaluation
Existing Conditions	
Constraints	
Opportunities	

Criteria selected by TAC and SAC

NCHRP 7-17 Prioritization Factors	ODOT ATNI Evaluation Criteria
Safety	Crash History
	Crash Risk
Demand	Access to Transit
	Access to Essential Destinations
Connectivity	Fills a Gap
	No Alternate Route
Equity	Transportation Disadvantaged
Stakeholder Input	In Local Plan
Compliance	Gaps & Deficiencies Evaluation
Existing Conditions	Presence of shoulder
Constraints	Costs
Opportunities	

Other Potential Criteria

Weight	NCHRP 7-17 Prioritization Factors	ODOT ATNI Evaluation Criteria
	Safety	Crash History
		Crash Risk
	Demand	Access to Transit
		Access to Essential Destinations
	Connectivity	Fills a Gap
		No Alternate Route
	Equity	Transportation Disadvantaged
	Stakeholder Input	In Local Plan
	Compliance	Gaps & Deficiencies Evaluation
	Existing Conditions	Presence of shoulder
	Constraints	Costs
	Opportunities	

Other Potential Criteria

Active Trans Priority Spreadsheet Tool

- Preview Tool

- Example segments
  - Urban center
  - Small city mainstreet
  - Suburban arterial
  - Rural highway

Active Trans Priority Spreadsheet Tool

- Questions?

- Can we use the spreadsheet tool as is?

Next Steps

- SAC Meeting – May 12
- Finalize Region 1 Ped/Bike Atlas - May
- Complete GIS evaluation - May
- Draft evaluation spreadsheet
  - Electronic draft for TAC review – June 1
  - Comments due Mon. June 8 (noon)
- Next TAC Meetings – June 10
  - Discuss Prioritization Spreadsheet results
  - Draft Implementation Guidance

Questions?

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