Region 1 Active Transportation Needs Inventory

TAC & SAC Meetings

January 13 & 20, 2015

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ODOT Region 1 Transit & Active Transportation Liaison

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Meeting Goals

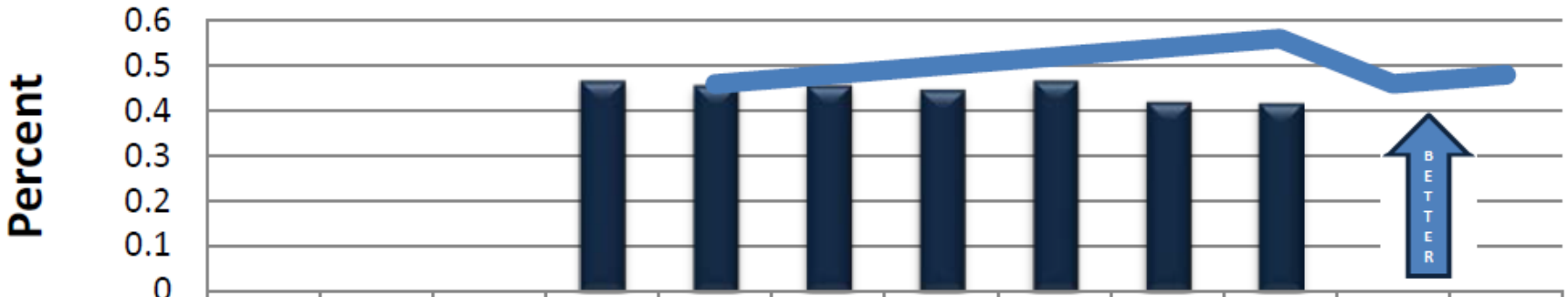
- Update on work completed to date
- TAC sign-off on methodology
  - Close out "Phase 1"
- Identify evaluation criteria to use for "Phase 2"

Charge of the TAC

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

Why is this project needed?

Bike Lanes and Sidewalks - Percent of urban state highways with bike lanes and sidewalks

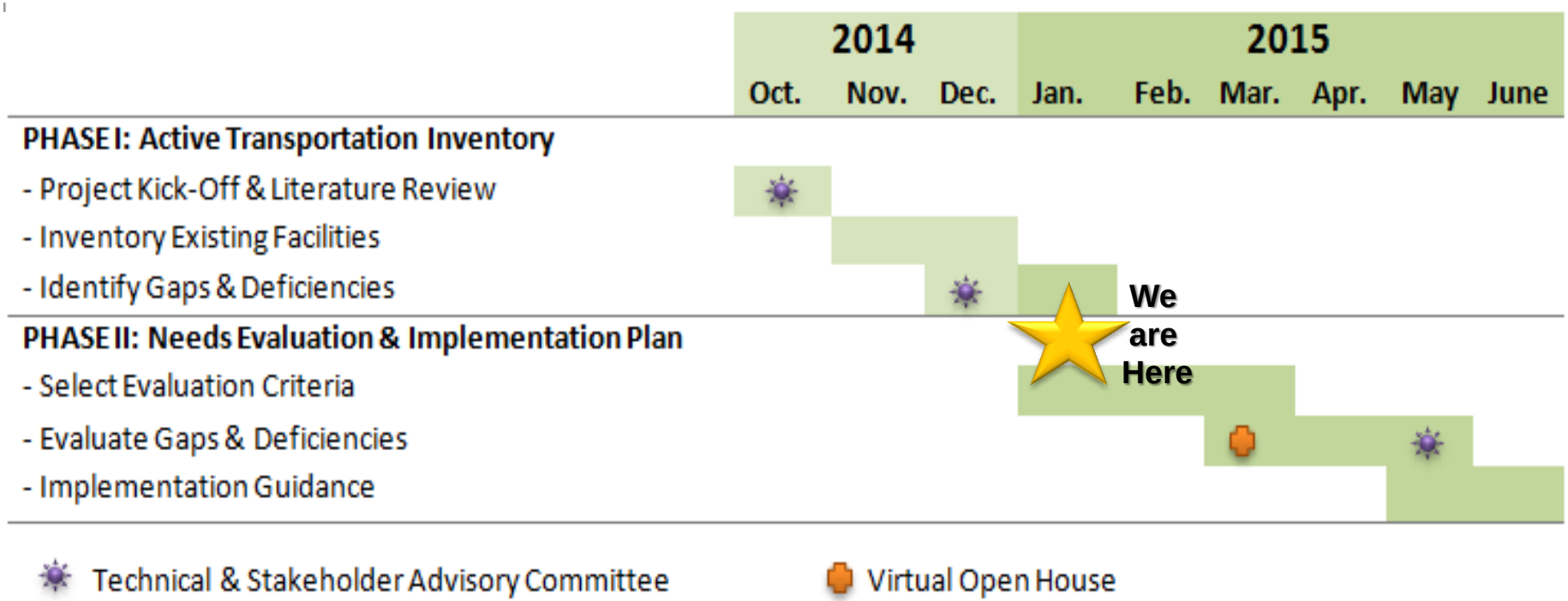


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Actual				47%	46%	46%	45%	47%	42%	42%		
Goal					46%	48%	50%	52%	54%	56%	46%	48%

"Current funding levels are inadequate to complete the biking and walking facilities on the state system by the 2030 Oregon Transportation Plan target date."

ODOT Key Performance Metrics Report, May 2014

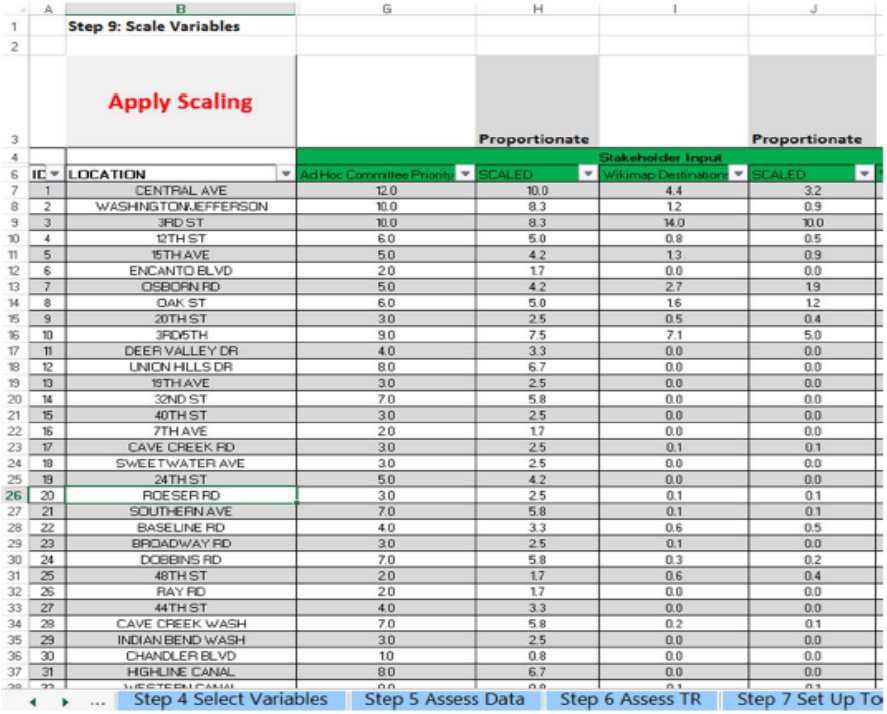
Project Schedule & Overview



Project Schedule & Overview

Project Management Team	Technical Advisory Committee	Stakeholder Advisory Committee
•Key ODOT staff •Meets bi-weekly •Regular project guidance and decision-making	•ODOT Tech Center representatives •3 group meetings •Guide & review deliverables, build agency awareness	•Local jurisdiction staff and advocacy reps •Interviews, 2 meetings and Virtual Open House •Guide & review deliverables

- End Products
  - Updated inventory of existing facilities, gaps, and deficiencies
  - "Needs Assessment" spreadsheet tool for grouping needs into "high", "medium", "low" categories
  - Implementation Guidance memo
  - Pre-scoping "cut sheets" for up to 10 projects



Step 9: Scale Variables

Apply Scaling

ID	LOCATION	Ad Hoc Committee Priority	Proportionate SCALED	Stakeholder Input: Wikimap Destinations	Proportionate SCALED
1	CENTRAL AVE	12.0	10.0	4.4	3.2
2	WASHINGTON/JEFFERSON	10.0	8.3	1.2	0.9
3	3RD ST	10.0	8.3	14.0	10.0
4	12TH ST	6.0	5.0	0.8	0.5
5	15TH AVE	5.0	4.2	1.3	0.9
6	ENCANTO BLVD	2.0	1.7	0.0	0.0
7	OSBORN RD	5.0	4.2	2.7	1.9
8	OAK ST	6.0	5.0	1.6	1.2
9	20TH ST	3.0	2.5	0.5	0.4
10	3RD/5TH	9.0	7.5	7.1	5.0
11	DEER VALLEY DR	4.0	3.3	0.0	0.0
12	UNION HILLS DR	8.0	6.7	0.0	0.0
13	19TH AVE	3.0	2.5	0.0	0.0
14	32ND ST	7.0	5.8	0.0	0.0
15	40TH ST	3.0	2.5	0.0	0.0
16	7TH AVE	2.0	1.7	0.0	0.0
17	CAVE CREEK RD	3.0	2.5	0.1	0.1
18	SWEETWATER AVE	3.0	2.5	0.0	0.0
19	24TH ST	5.0	4.2	0.0	0.0
20	ROESER RD	3.0	2.5	0.1	0.1
21	SOUTHERN AVE	7.0	5.8	0.1	0.1
22	BASELINE RD	4.0	3.3	0.6	0.5
23	BROADWAY RD	3.0	2.5	0.1	0.0
24	DOBBINS RD	7.0	5.8	0.3	0.2
25	48TH ST	2.0	1.7	0.6	0.4
26	RAY RD	2.0	1.7	0.0	0.0
27	44TH ST	4.0	3.3	0.0	0.0
28	CAVE CREEK WASH	7.0	5.8	0.2	0.1
29	INDIAN BEND WASH	3.0	2.5	0.0	0.0
30	CHANDLER BLVD	1.0	0.8	0.0	0.0
31	HIGHLINE CANAL	8.0	6.7	0.0	0.0

Step 4 Select Variables | Step 5 Assess Data | Step 6 Assess TR | Step 7 Set Up To

What We've Accomplished So Far

- Stakeholder Interviews
  - 21 stakeholder meetings
  - Over 215 people
  - Recurring themes
    - Crossings
    - ADA
    - Policy & design standards
    - Local coordination
- Virtual Open House in March & ongoing outreach

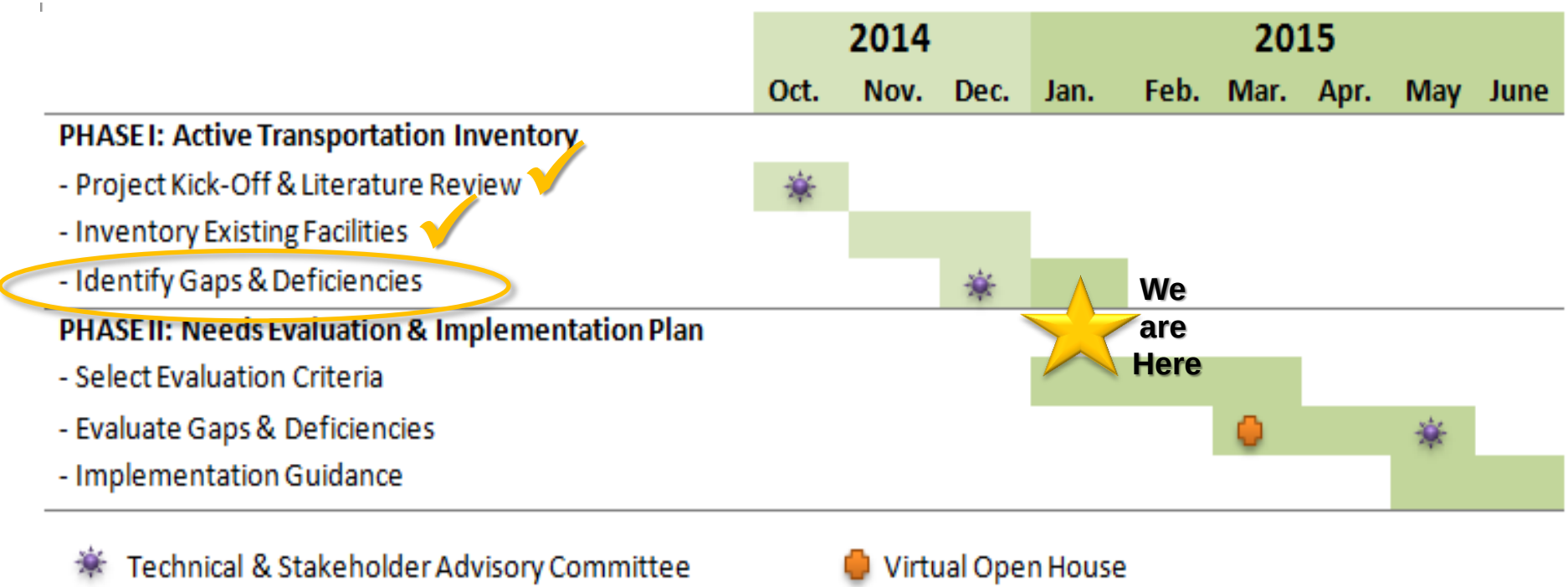
What We've Accomplished So Far

- Data Collection
  - Field Inventory
    - Frontage roads and collectors
    - Urban areas not included in previous inventories
  - "Enhanced" crossings
  - Integrating RICS data for shoulder facilities
  - Draft Ped & Bike Atlas

What We've Accomplished So Far

- Local Plan Review
  - Identified approx. 300 ped/bike "needs" on ODOT facilities in local adopted plans
  - Asked local staff to QA/QC existing inventory maps and project lists

Project Schedule & Overview



Identifying "Needs" - Framework

Tier 1: "Gap"

No Facility Present

Tier 2: "Functional Deficiency"

Existing facility, doesn't meet ODOT minimum standard

Tier 3: "Plan Deficiency"

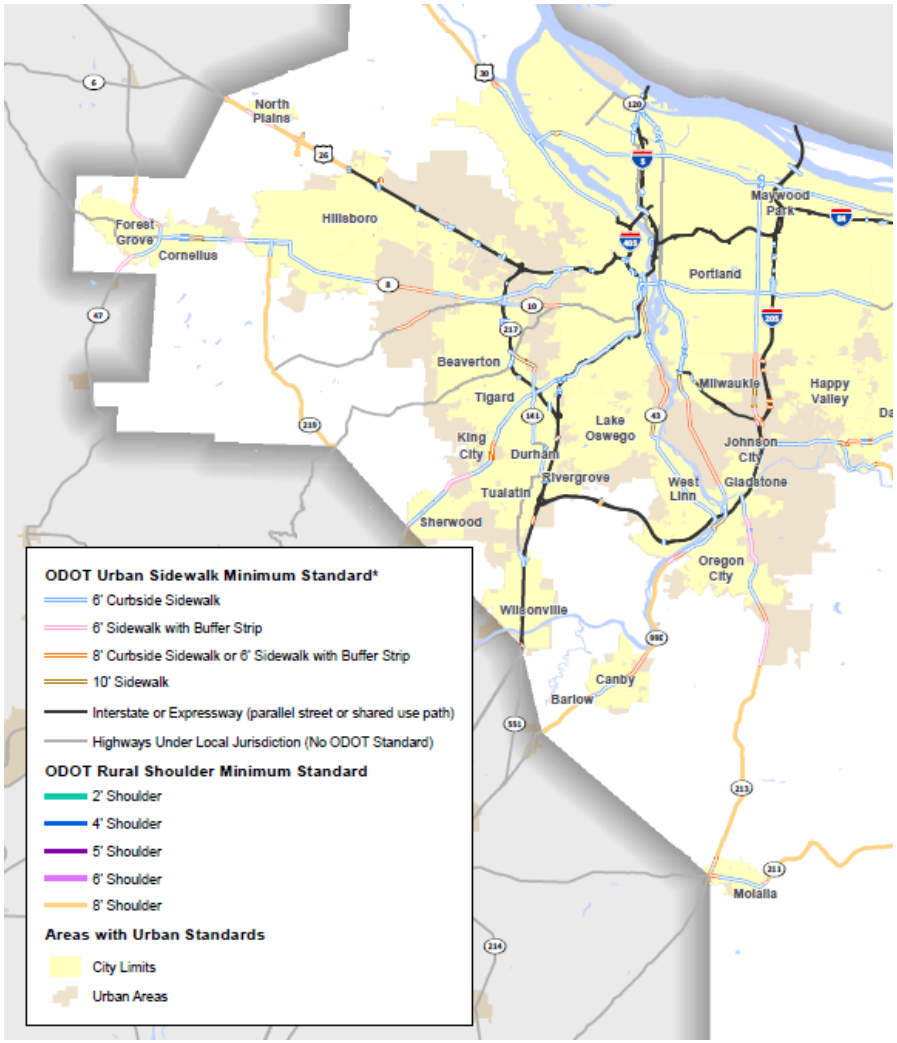
Existing facility, meets ODOT minimum standard, doesn't meet adopted TSP cross section

Identifying "Needs" - Methodology

- Tier 1:
  Review existing inventory, Digital Video Log, and aerials for gaps

- Tier 2:
  Apply HDM minimum standards to existing facilities

- Tier 3:
  Map projects from local plans

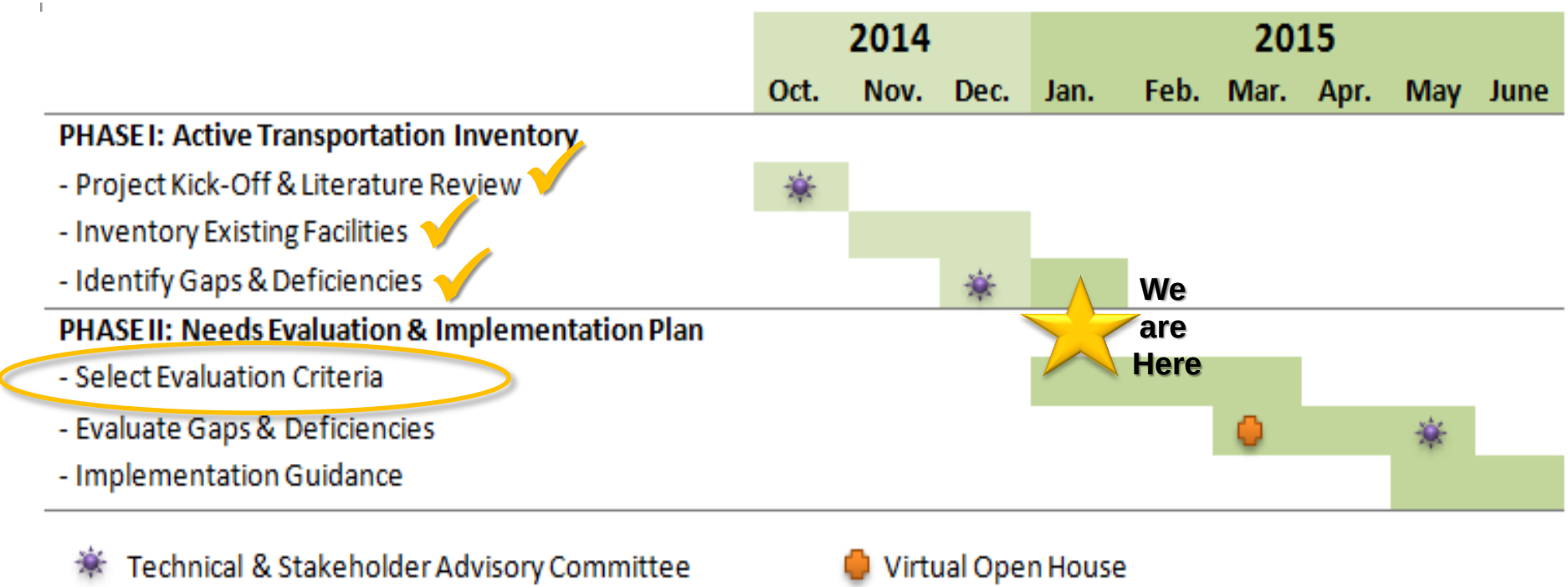


Discussion

- Questions or comments about methodology?
- Most useful ways to make maps & data available?
- TAC Request
  - Check areas with recent projects to help QA/QC Inventory

BREAK

Project Schedule & Overview



Evaluating Needs

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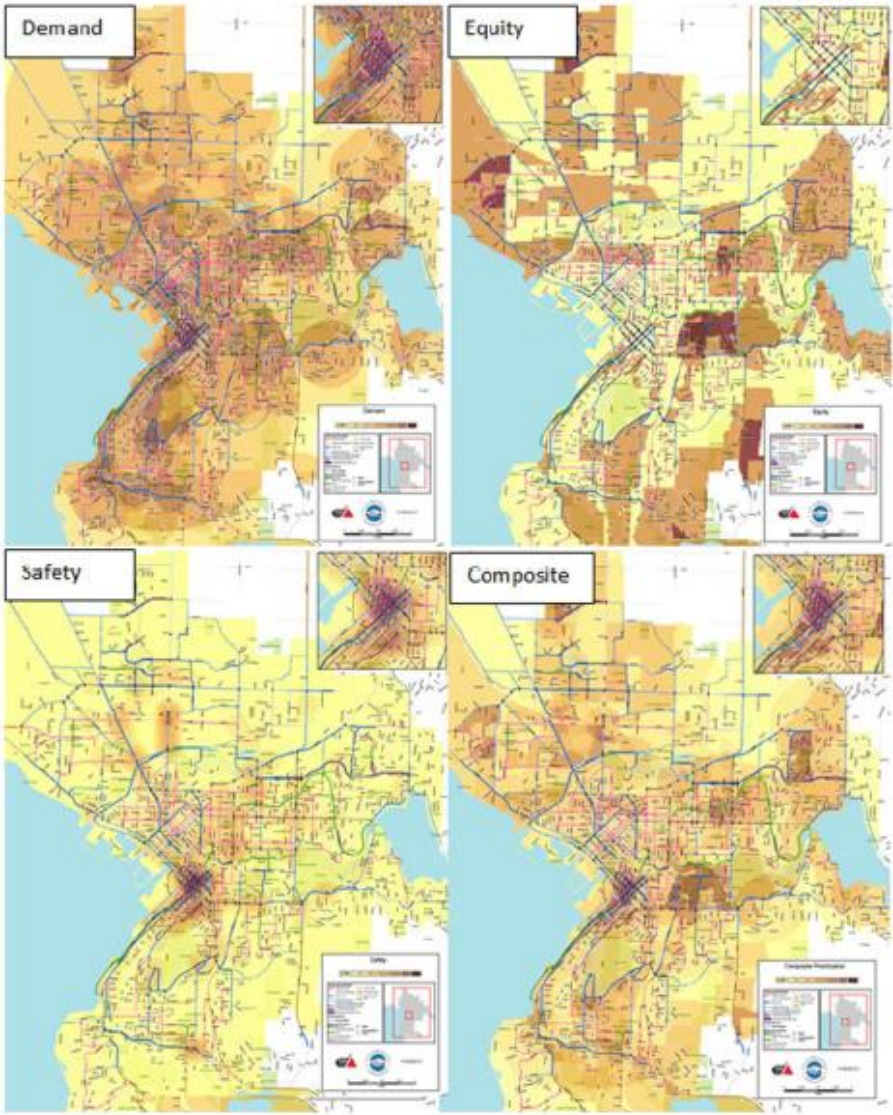

Selecting Evaluation Criteria

Goal

What is important to consider?

e.g. Safety

Evaluation Criterion

How do we measure that?

e.g. Ped/Bike Crash Frequency

Goal/Factor comparison

Statewide Bike/Ped Plan Goals	NCHRP 7-17 Prioritization Factors
Safety	Safety
Mobility & Efficiency	Existing Conditions
Accessibility & Connectivity	Demand
Community & Economic Vitality	Connectivity
Equity	Equity
Health	Compliance
Sustainability	Opportunities
Strategic Investment	Constraints
Coordination, Cooperation, & Collaboration	Stakeholder Input

Goal/Factor comparison

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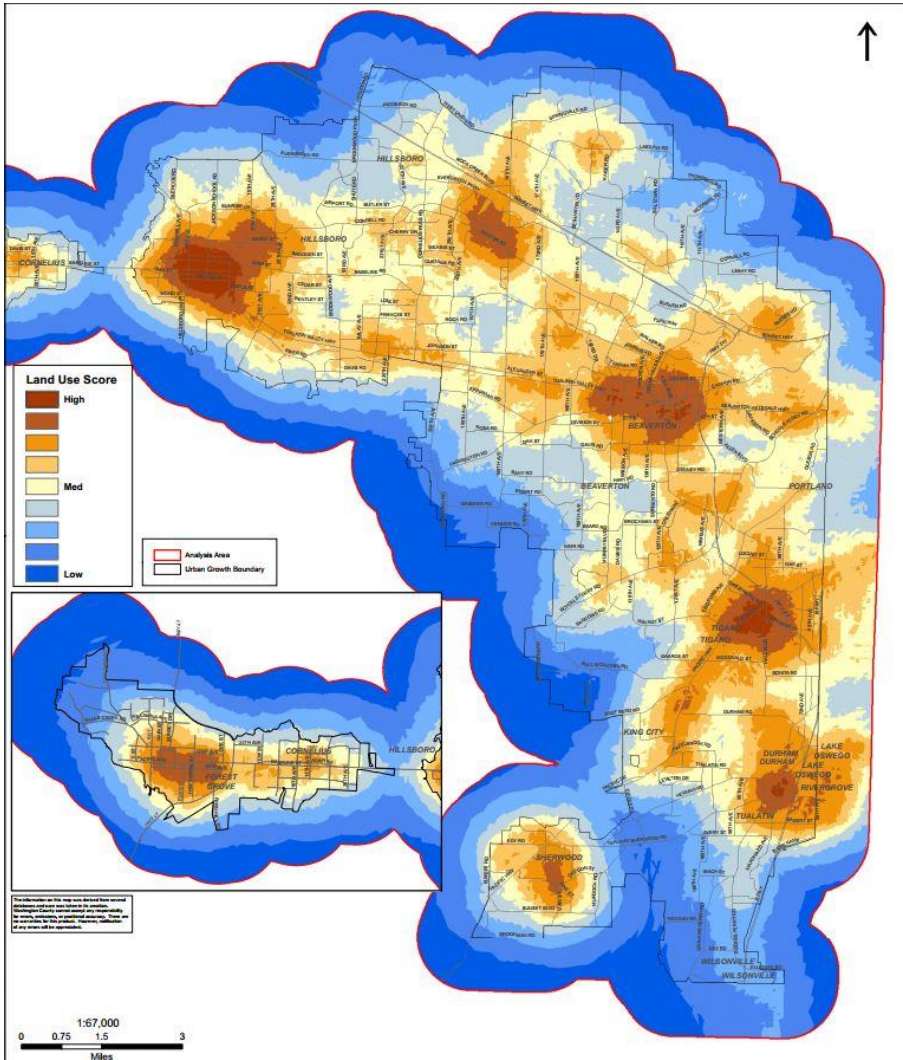
Evaluation Criteria

- What makes a good criterion?
  - Objective
  - Easy to understand
  - Data is available (for entire Region)
  - Helps differentiate between needs
  - Doesn't "double count" benefits
  - Clear link to agency goals
    - Don't need to have a criterion for each goal

Example – Washington County

Bicycle/Pedestrian Needs Prioritization: **Land Use**

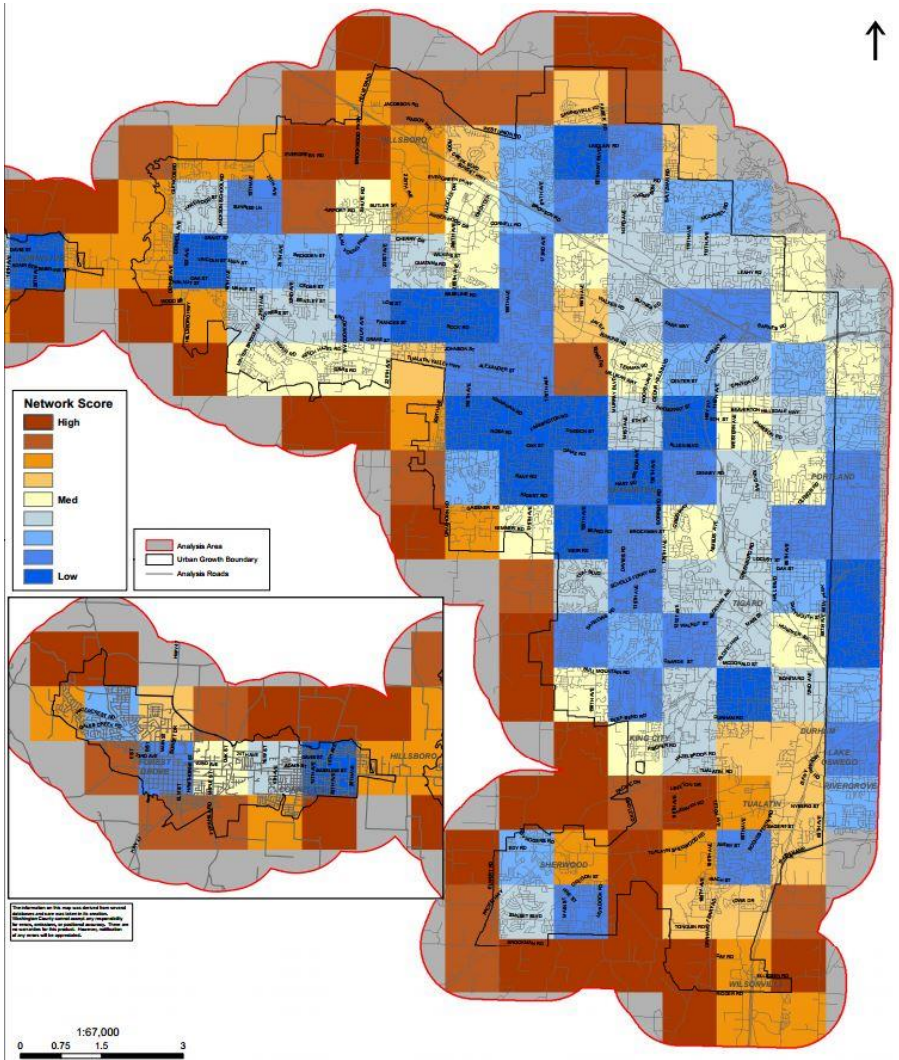
- Population density
- Proximity to transit
- Proximity to other essential destinations



Example – Washington County

Bicycle/Pedestrian Needs Prioritization: **Street Network**

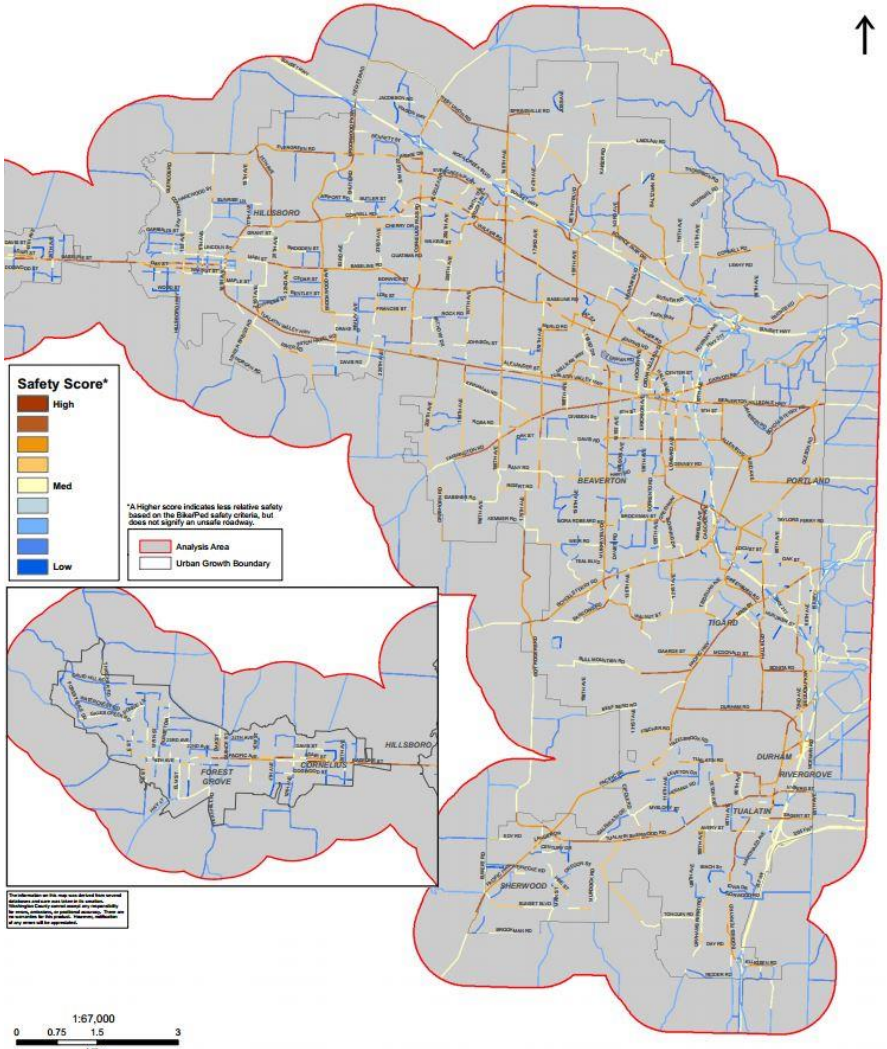
- Number of roads and intersections per square mile



Example – Washington County

Bicycle/Pedestrian Needs Prioritization: **Safety**

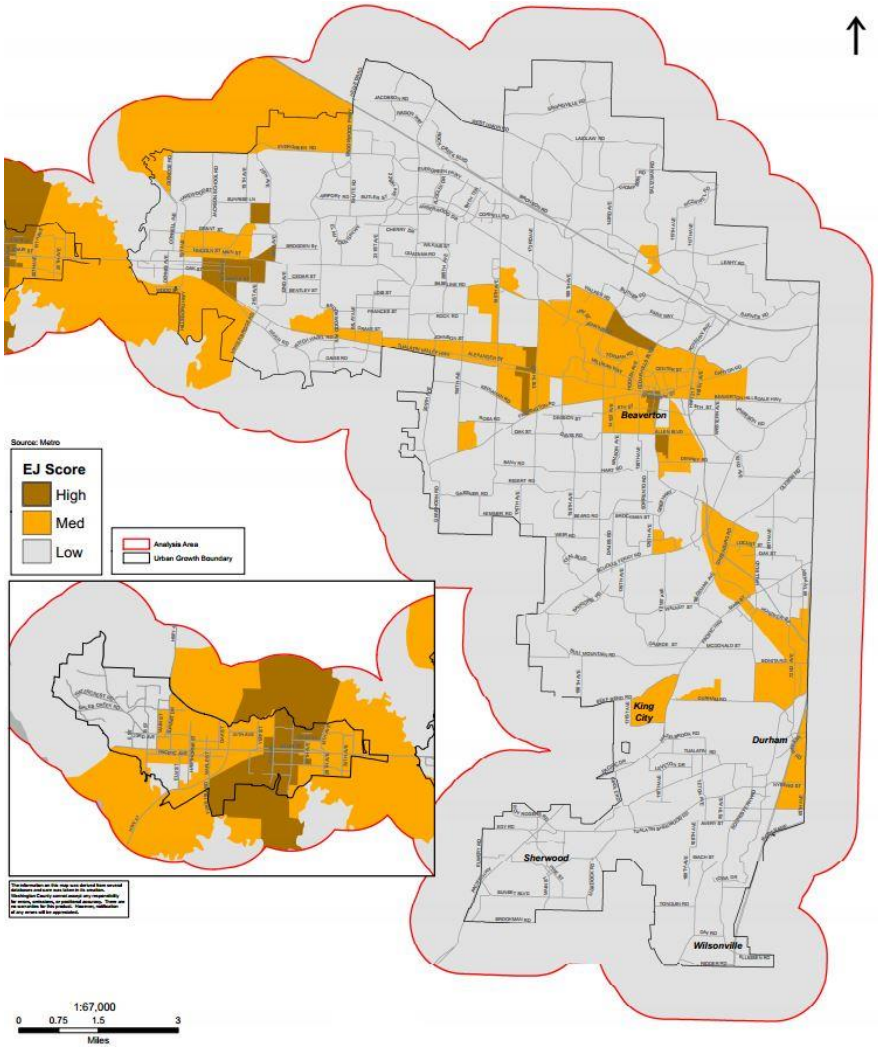
- Number of crashes
- Traffic volumes
- Truck route



Example – Washington County

Bicycle/Pedestrian Needs Prioritization: **Social Equity**

- Metro's equity index (including areas with high ethnic minorities, poverty, children, and elderly)



Evaluation Criteria for ATNI

- Need Tiers (1-3) will be used as criterion

- Scope includes evaluating <u>up to 10 additional criteria</u>
  - Selected based on TAC, SAC, and public input
  - Recommendation made by PMT
  - Confirmed by management

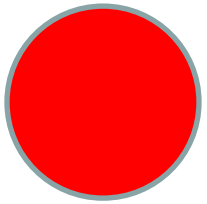
- Can use different criteria to evaluate pedestrian and bicycle needs, where appropriate

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.

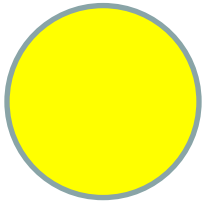
ODOT Statewide Bicycle and Pedestrian Plan Goal		Potential Measures for use in ATNI Suitability Analysis	Data Availability and Source?	Sources of Measures									
				Metro RATP	Metro Regional Flex Funds	Connect Oregon	STIP Enhance funds	OBPAC Transportation Enhance	MOSAIC	OTP Goals	Wash Co Ped / Bike Prioritization	Stakeholder suggestions	NCHRP 7-17
Safety													
	1	Number of crashes (by severity; ped/bike involved)		●					●		●	●	●
	2	Level of Traffic Stress										●	●
	3	Vehicle speeds										●	●
	4	Average Daily Traffic									●	●	●
	5	Number of lanes										●	●
	6	Truck route									●		
	7	Presence of crossings (signalized or enhanced)											●
	8	Crash rates					●					●	●
	9	"Cost" of crashes (PDO equivalent analysis)										●	
	10	Presence or width of shoulder											●
	11	Existing bike facility width											●
	12	Existing sidewalk width											●

Selecting ATNI Evaluation Criteria

- Sticker exercise
  - Separate criteria for ped/bike
  - Stickers for high/lower priority criteria



= Highest priority criteria



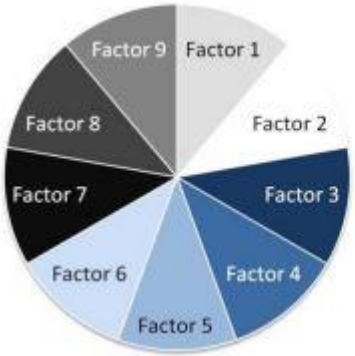
= Important (but lower priority) criteria

Results: Top Criteria Selected

Pedestrians	Bicycles

Weighting Criteria?

Weighting Criteria



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

Weighting Criteria

- Criteria weights identified in March/April
  - Selected based on TAC, SAC, and public input
  - Recommendation made by PMT
  - Confirmed by management
- Additional TAC/SAC input on weighting via email or survey monkey before next meeting
- Weighting can easily be adjusted in spreadsheet tool

Next Steps

- SAC Meeting – January 20
- Finalize data collection & map books
- Map initial evaluation criteria
- Virtual Open House – March
- Draft evaluation spreadsheet - April
- Next TAC & SAC Meetings - May

Questions?

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