
























Proposed Improvements

-  Bicycle lanes, 6ft wide
-  Bicycle lanes, 5ft wide, colored
-  Sharrow pavement markings
-  1 Bike Box
-  2 Cross Bike
-  3 New signal/ pedestrian or HAWK
-  4 Bike detection for existing signal
-  5 Curb Extensions
-  6 Speed bumps
-  7 Median refuge
-  8 Diverter/ diversion-traffic calming
-  9 Off-set turn lanes
-  10 Active beacons
-  11 Signal timing change
-  12 Driveway closure
-  13 Intersection capacity improvement
-  # Subject to further technical feasibility assessment
-  # Subject to further public involvement
-  Diversion/ Traffic calming
-  Stop sign added
-  Stop sign removed
-  Designated Bikeway
-  Recommended northern bikeway connection to NE Alameda St

SE 53rd Ave at Burnside
Restrict northbound and southbound turn movements off of E Burnside St

TESTING:
These changes will be tested and evaluated first prior to final implementation, with additional public involvement.

North end connection from NE Alameda to Hancock/ Tillamook Bikeway

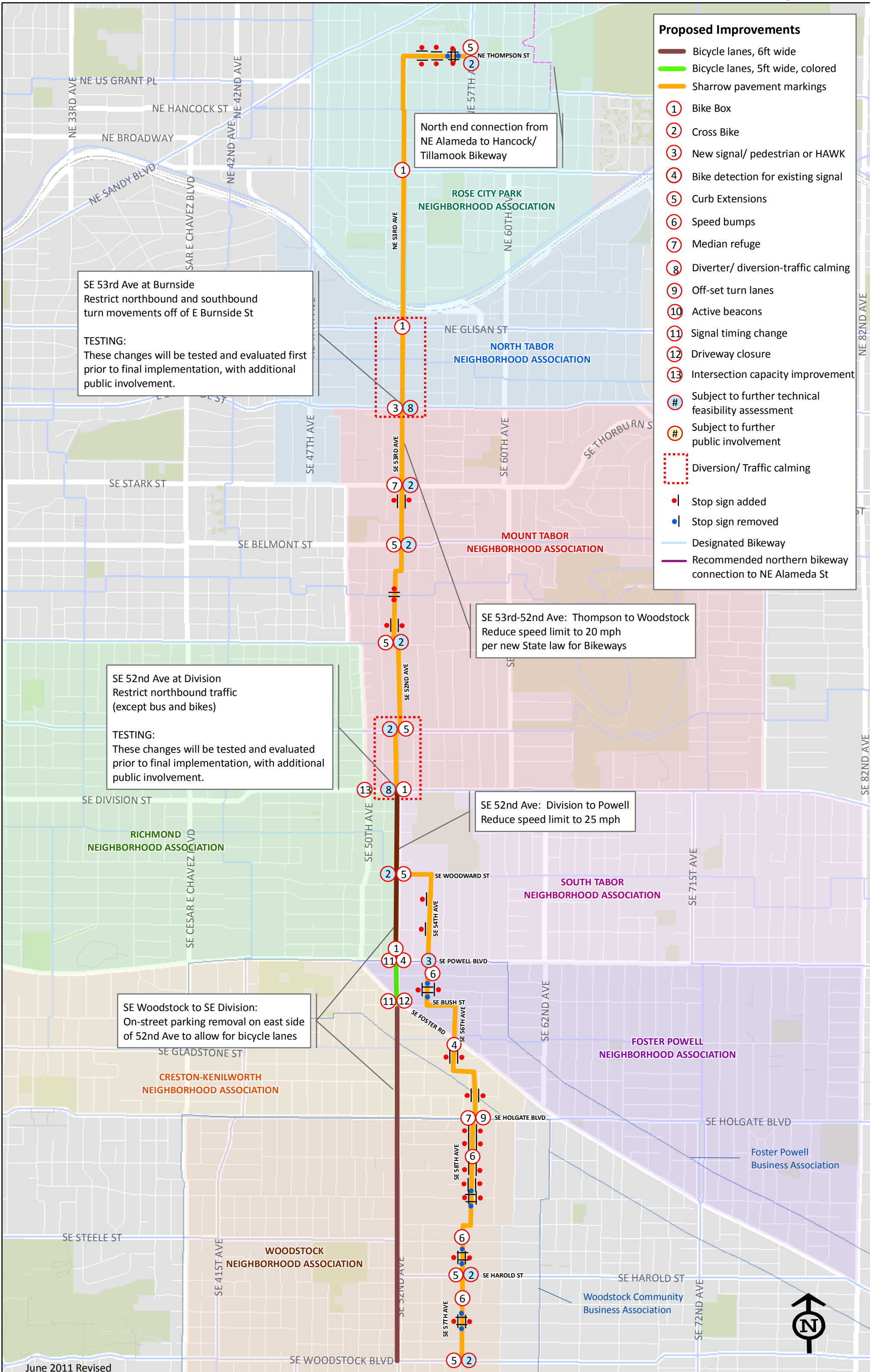
SE 53rd-52nd Ave: Thompson to Woodstock
Reduce speed limit to 20 mph per new State law for Bikeways

SE 52nd Ave at Division
Restrict northbound traffic (except bus and bikes)

TESTING:
These changes will be tested and evaluated prior to final implementation, with additional public involvement.

SE 52nd Ave: Division to Powell
Reduce speed limit to 25 mph

SE Woodstock to SE Division:
On-street parking removal on east side of 52nd Ave to allow for bicycle lanes



Interim Bike Box Criteria

5/6/11

Outcome of 5/6/11 meeting with Burchfield, Geller, Wardrip,
Machado, Raisman, Sullivan, Tower

Bike Box Pavement Markings

POLICY: Bike boxes are used to reduce right hook crashes at high conflict signalized intersections. They may also be used on Neighborhood Greenways (Bike Boulevards) to provide bicycle priority.

Bike boxes may be used on approaches to signalized intersections where one or more of the following conditions are met:

- 1) There is a combination through-right turn lane for automobiles to the left of a through bicycle lane and the cross-product of peak hour right-turning automobiles with through and right-turning bicycles equals 5,000 or more.
- 2) The crash history indicates an average of two or more reported crashes over a five-year period of a type susceptible to correction by use of bike box.
- 3) Bike priority is desired in the form of a queue jump on a shared lane roadway.
- 4) Engineering judgment indicates that a bike box would improve the safety of an approach due to complexity of intersection geometry, high percentage of right-turning large vehicles, or other factors.

May 24, 2011

NE/SE 50's Bikeway Project DRAFT: Proposed North End Connection to Hancock/ Tillamook Bikeway

- Bicycle Master Plan Network
- DRAFT NE/SE 50s Bikeway alignment
- ⋯ Proposed 50s Bikeway:
SB to EB/ WB to NB Hancock Bikeway
Connection Options

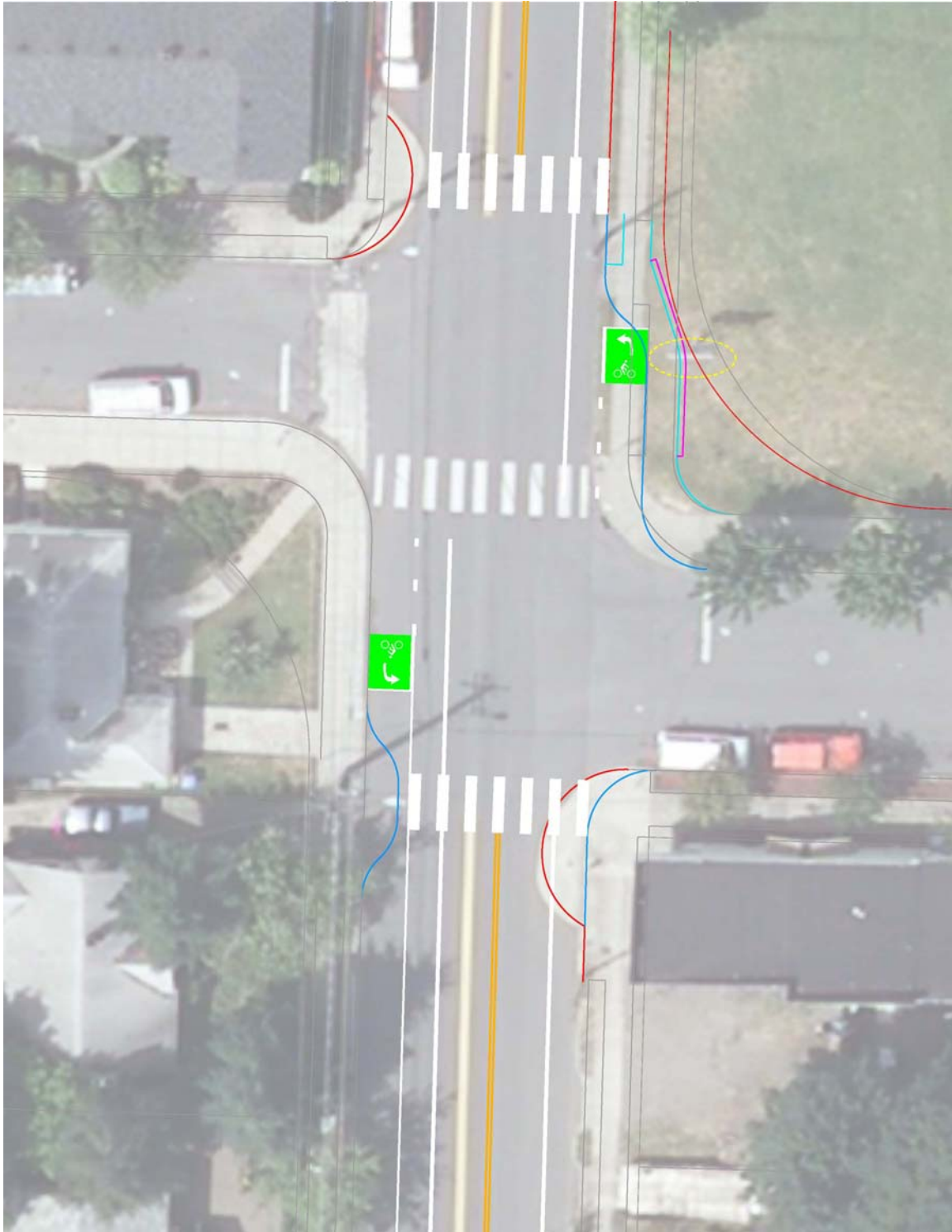


DRAFT: Proposed NE 57th Ave crossing treatment
NE/SE 50's Bikeway Project
5/24/2011



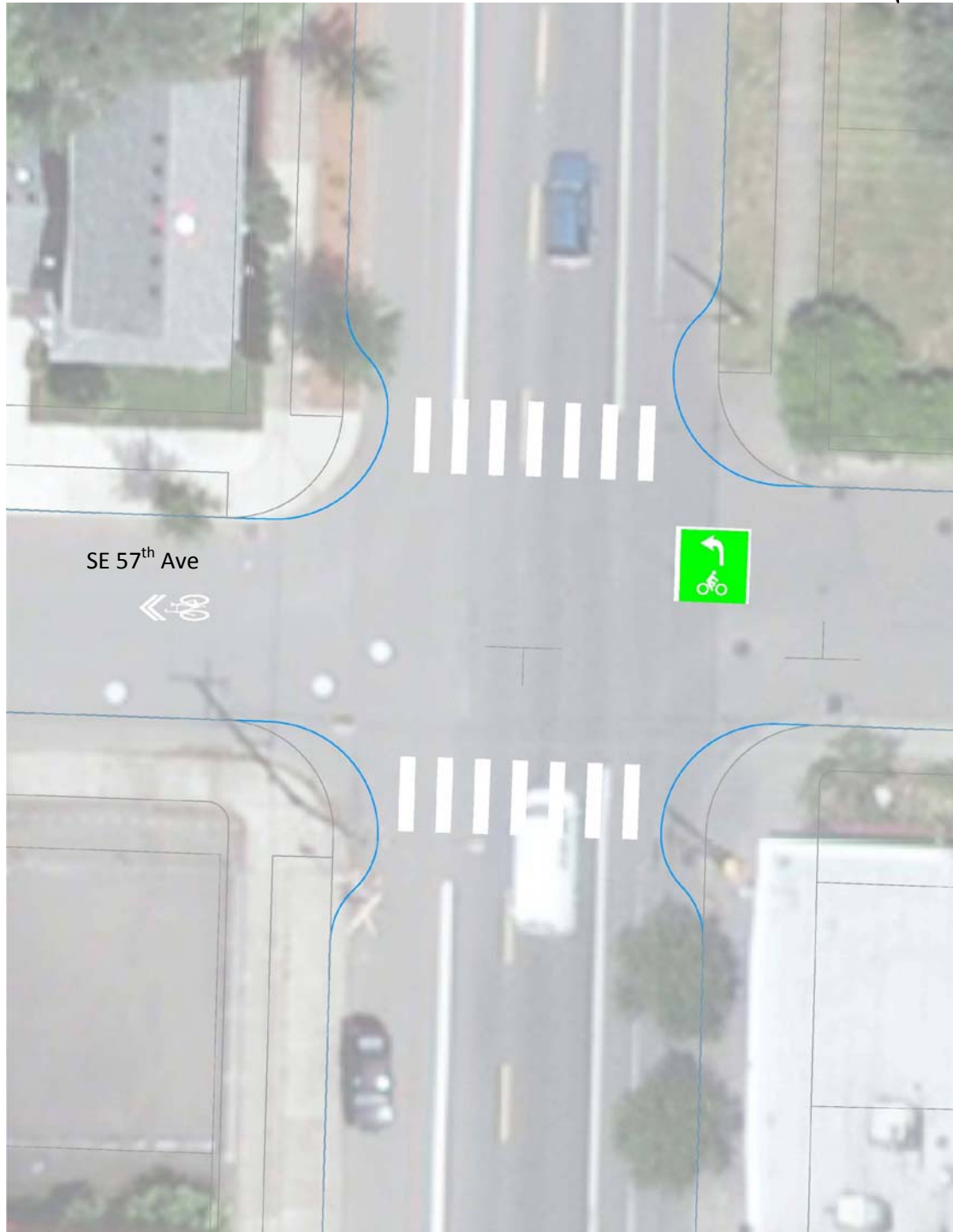
NE 57th Ave crossing treatment

DRAFT: Proposed SE 52nd Ave/ SE Woodward crossing treatment
NE/SE 50's Bikeway Project
5/24/2011



SE 52nd Ave/ SE Woodward crossing treatment

DRAFT: Proposed SE Woodstock / 57th Ave Crossing
NE/SE 50's Bikeway Project
5/24/2011



SE Woodstock / SE 57th Ave crossing treatment

May 24, 2011
revised June 29, 2011

NE/SE 50s Bikeway Project DRAFT Implementation Strategy

Phase I: Construction as part of existing federal funding

Phase II: Construction pending additional funding

<i>Recommended Improvement</i>	<i>Location</i>	<i>Federal funding issues</i>	<i>Other Issues</i>	<i>Phase I</i>	<i>Phase II</i>
DIRECT ROUTE					
'Sharrow' pavement markings	NE Thompson to SE Division				
Destination signage	NE Thompson to SE Woodstock				
Reduce speed limit to 20 mph	NE Thompson to Division		(1)		
Curb extensions	NE 57 th / Thompson				
Cross-bike	NE 57 th / Thompson	(2)			
Bike Box	NE Halsey/53 rd Ave	(6)	yes		
Bike Box	NE Glisan/53 rd Ave	(6)	yes		
Semi-diverters	NE 53 rd and SE 53 rd / Burnside				
Signal	NE 53 rd / Burnside				
Median islands	SE Stark/ 53rd				
Cross-bike	SE Stark/ 53rd	(2)			
Curb extensions	SE Belmont/ 53rd				
Cross-bike	SE Belmont/ 53rd	(2)			
Curb extensions	SE Hawthorne/ 52 nd Ave				
Cross-bike	SE Hawthorne/ 52 nd Ave	(2)			
Curb extensions	SE Lincoln/ 52 nd Ave				
Cross-bike	SE Lincoln/ 52 nd Ave	(2)			
Bus accessible semi-diverter	SE Division-Lincoln/ 52 nd Ave				
Bike Box	SE Division/52 nd Ave	(6)	yes		
Addition of right hand turn lane at east approach	SE Division/50 th Ave				
6' Bicycle lanes	SE Division to Woodstock/ 52 nd Ave				
Crossing treatment	SE Woodward/ 52 nd Ave				
Speed bumps	SE Division-Powell/ 52 nd Ave		(3)		
Reduce speed limit to 25 mph	SE 52 nd Ave, Division to Powell		(4)		
Bicycle signal detection	SE Powell/ 52 nd Ave				
Signal timing	SE Powell/ 52 nd Ave				
Bike Box	SE Powell/52 nd Ave	(6)	yes		

<i>Recommended Improvement</i>	<i>Location</i>	<i>Federal funding issues</i>	<i>Other Issues</i>	<i>Phase I</i>	<i>Phase II</i>
Colored bicycle lanes	SE Powell-Foster/ 52 nd Ave		(5)		
Signal timing	SE Foster/ 52 nd Ave				
Driveway closure	SE Foster/ 52 nd Ave				
Bike Boxes	All other signalized intersections: Foster, Holgate, Woodstock	(7)	yes		
NEIGHBORHOOD ROUTE					
'Sharrow' pavement markings	SE Woodward to Woodstock				
Destination signage	SE Woodward to Woodstock				
Reduce speed limit to 20 mph	SE Woodward to Woodstock		(1)		
Signal	SE Powell/ 54th		(8)		
Speed bumps	SE 54 th / Powell to Bush				
Bicycle signal detection	SE Foster/ 56 th Ave				
Median island	SE Holgate/ 58 th Ave				
Off-set turn lanes	SE Holgate/ 58 th Ave				
Speed bumps	SE 58 th Ave/ Holgate to Harold				
Curb extensions	SE Harold/ 58 th Ave				
Cross-bike	SE Harold/ 58 th Ave	(2)			
Speed bumps	SE 57 th Ave/ Harold to Woodstock				
Curb extensions	SE Woodstock/ 57 th Ave				
Cross-bike	SE Woodstock/ 57 th Ave	(2)			
Bike Boxes	All signalized crossings	(7)	yes		

Notes:

- (1) Speed limit change: Pending passage of state legislation (HB3150) for bikeways (20 mph) and establishment of Portland Bureau of Transportation (PBOT) standards for implementation.
- (2) Cross bike: Not currently in Manual of Uniform Traffic Control Devices (MUTCD), therefore not eligible for federal funding. PBOT design criteria not yet established. Retain in recommendation pending approval of PBOT design criteria and available non-federal funds.
- (3) Speed bumps: Though currently not supported by the Fire Bureau, retain in project recommendation if pending testing fire friendly' speed bump design for Emergency Response routes is successful.
- (4) Speed limit change: contingent on Oregon Dept of Transportation approval (~1 year process).
- (5) Still requires formal approval of PBOT design exception.
- (6) Bike boxes: Current draft PBOT design criteria for installation support the locations identified. Use without the green paint is allowable under the MUTCD.
- (7) Bike boxes: Retain in recommendation for future re-evaluation if criteria are changed. Provide green paint to locations installed as part of Phase I upon approval through MUTCD.
- (8) Pending approval from ODOT.