

Metro | Agenda

Meeting: ATP Stakeholder Advisory Committee meeting
Date: May 9, 2013
Time: 2:30-5 p.m.
Place: Room, Metro, 600 NE Grand Ave., Portland, 97232
Purpose: SAC provide direction on preferred regional bike and pedestrian networks and focus areas

- | | |
|------|--|
| 2:30 | Meeting overview |
| 2:40 | Response and revisions from April meeting <ul style="list-style-type: none">• Design Guidelines for functional classes |
| 3:00 | Bicycle Network Evaluation Report – findings and recommended bicycle parkway network and investments focus areas. <i>SAC members provide direction on staff recommendation for regional bicycle network concept and focus areas</i> |
| 4:00 | Pedestrian Network Improvements Evaluation – results and recommended focus areas. <i>SAC members discuss the results of the evaluation, the proposed regional pedestrian network and proposed approach to focusing investments in the regional pedestrian network.</i> |
| 5:00 | Adjourn |

Upcoming

- Monday May 20 - Working group Policy recommendations and project list
- May 21- Council Worksession on recommendations/implementation activities
- May 23- Open House
- May 30- Washington County Coordinating Committee TAC
- May 31 -TPAC, update on the draft final plan
- June 10 - Washington County Coordinating Committee
- June 5 -MTAC, update on the draft final plan
- June 12 -MPAC, update on the draft final plan (do not adopt, that will be done through RTP update)
- June 13 - JPACT, update on the draft final plan (do not adopt, that will be done through RTP update)
- June 25 -Council Worksession on draft plan
- June 27 -Council Meeting, to consider a resolution of support of the plan for adoption during the 2014 RTP update

Meeting Materials available at: <ftp://ftp.oregonmetro.gov/pub/tran/ATP/> in the “May 9 SAC meeting” folder.



Date: May 9, 2013
To: ATP Stakeholder Advisory Committee (SAC)
From: Lake McTighe, Metro
Subject: Metro staff recommendations for preferred regional bicycle and pedestrian networks and investment strategies

Purpose

The purpose of this memo is to provide Metro staff recommendations to the ATP Stakeholder Advisory Committee on the preferred regional bicycle and pedestrian networks and investment strategy approaches for prioritizing projects.

Background

The SAC identified three bicycle network concepts and a principal regional pedestrian network. These networks included a variety of pedestrian and bicycle projects and were evaluated to measure increased access, safety, equity (level of investment in areas with high levels of underserved populations) and increased activity. The results of the evaluation are provided in the “Regional Pedestrian Network Flow Analysis” and “Regional Bicycle Network Evaluation” reports. The results of the analysis were used to identify the recommended regional bicycle and pedestrian networks for the final ATP and will be used to help prioritize investments for implementation.

Staff Recommendation for Regional Bicycle Network and Bicycle Parkway Corridors

Based on the evaluation of the bicycle network, staff recommends a modified spiderweb with grid elements of bicycle parkways. Remove outer ring of bicycle parkways where very little activity was demonstrated and increase density of regional bicycle parkways in areas of the region that indicate a higher level of activity and above average underserved populations. Maintain or increase current density of other planned bikeways in the region (Community Bikeways and Local Bikeways). Routes that showed volume in 2035 but are not currently identified as routes on the RTP bike network are recommended for addition to the network.

Regional Bicycle Parkway Corridors identify corridors that demonstrate a need for a high quality bicycle parkway. The corridors could be completed with the identified facilities or an alternate route (within the same corridor) that will meet the principles for the active transportation network, e.g. provide the same level of connectivity, directness, efficiency, etc.

- a) Classify the following roadway corridors as Regional Bicycle Parkways (all other roadway corridors currently identified on the RTP bike system map will be classified as Community Bikeways). Numbers correspond to maps.
 - 1. N 1st Ave.
 - 2. NW Evergreen
 - 3. TV Hwy
 - 4. 5th
 - 5. Walker
 - 6. Brookwood
 - 7. Saltzman
 - 8. Cedar Hills
 - 9. Beaverton Hillsdale

10. Hall Blvd.
11. Brockman
12. Schools Ferry
13. Multnomah
14. 99 W/Barbur Blvd.
15. SW Scholls Ferry Road.
16. Downtown Portland Parkways
17. Stafford Road
18. Wilsonville Connection
19. Lake Road
20. Powell/Foster
21. Division
22. 242nd
23. Kane/257th
24. Halsey
25. Burnside/Stark
26. SE 155th/Milmain
27. SE Clinton
28. Cully to Springwater
29. Sandy
30. Broadway/Wiedler
31. NE 29th
32. NE9th
33. Vancouver/Williams
34. Going
35. NE 16th
36. 76th
37. Springwater/I-205 Connector
38. Monroe Blvd.
39. Montana Ave.

b) Classify the following trails/paths as Regional Bicycle Parkways (all other trails will be classified as Community Trails):

- | | |
|-----|---|
| T1 | Council Creek Trail (Hillsboro to FG) |
| T3 | Rock Creek Trail |
| T4 | Beaverton Creek Trail |
| T9 | Westside Trail |
| T10 | Tualatin River Greenway Trail (segment) |
| T11 | Ice Age Tonquin Trail (segment) |
| T12 | Fanno Creek Greenway |
| T13 | Kruse Way Path |
| T15 | Hwy 26 Bike Path/Sunset Transit Center Trail |
| T18 | Lake Oswego Willamette River Greenway Trail |
| T20 | Red Electric Trail |
| T23 | I-405 Trail |
| T24 | Goose Hollow Trail |
| T25 | Portland to Lake Oswego Willamette Greenway Trail |
| T26 | Southwest Portland Willamette Greenway Trail |
| T29 | St. Johns Bridge Trail |
| T30 | North Portland Willamette Greenway |

| | |
|-----|---|
| T34 | I-5 Bridge Trail |
| T35 | Southeast Portland Willamette Greenway |
| T36 | Milwaukie LRT Trail |
| T37 | Sullivan's Gulch Trail |
| T38 | Springwater Corridor |
| T39 | Trolley Trail |
| T42 | Hawthorne Bridge |
| T42 | Steel Bridge River Walk |
| T42 | Morrison Bridge |
| T43 | I-205 Corridor |
| T45 | Oregon City Loop (segment) |
| T46 | Lake Oswego to Milwaukie Trail |
| T47 | Sunrise MultiUse Path |
| T48 | East Buttes Power Line Corridor Trail |
| T49 | Mt. Scott/Scouter Mountain Trails (segment) |
| T54 | Gresham / Fairview Trail |
| T55 | I-84 Bike Path |
| T56 | MAX Path |
| T60 | Iron Mtn. Road, Surf to Turf Trail |

- c) Add the following trails not currently on the 2035 RTP Bicycle Network to the network (these trails are part of or will be added to Metro's Regional Trails Map and Plan):

| | |
|-----|--|
| T1 | Council Creek Trail loop around Forest Grove |
| T2 | Highway 47 Trail (completed) |
| T5 | Pearl-Keeler Powerline Trail (BN Powerline Trail) |
| T13 | Kruse Way Path (gap) |
| T14 | Highway 217 Trail |
| T15 | Hwy 26 Bike Path/Sunset Transit Center Trail |
| T16 | River to River Trail |
| T21 | Terwilliger Trail |
| T31 | Columbia Slough Trail – gap in trail |
| T47 | Sunrise Multi-Use Path |
| T52 | Damascus Trails |
| T57 | Sandy River Connections (Sandy River to Springwater) |
| T58 | Beaver Creek Canyon Trail (Sandy River to Springwater) |
| T59 | Kelly Creek Greenway Trails (Sandy River to Springwater) |
| T60 | Iron Mtn. Road, Surf to Turf Trail |

Staff Recommended Approach for Prioritizing Regional Bicycle Network Investments

Staff recommends a multi-pronged approach to prioritizing bicycle projects in the region, with an overarching framework that a well-connected and complete network is necessary for achieving the region's transportation goals and six desired outcomes, so investment in bicycling needs to increase overall in all areas of the region. The bicycle network evaluation provides several tools for helping to guide bicycle investments in the future to provide the highest return on investment, invest in areas with underserved populations and address geographical equity. **Prioritization of bicycle and pedestrian projects will be coordinated and integrated.**

1. First, cycle analysis zones and projects that overlap with areas with above average percent of underserved populations identify areas where increasing bicycle facilities would help

address equity. In general, areas with above average underserved populations also have many bicycle projects planned in the Regional Transportation Plan. The Bicycle Network Evaluation report identifies cycle analysis zones that have above average underserved populations in 2010 and identifies the planned bicycle network density for those cycle analysis zones.

2. Second, routes that show high volumes of bicycle use in 2035 provide direction on where to invest to increase access and support growth in bicycle activity. The Bicycle Network Evaluation report lists routes that show higher volumes of bicycle travel. Looking at volumes on routes are important because it helps identify which corridors are high demand routes (some of these routes are in areas with medium to lower bicycle activity, but provide key connections).
3. Third, staff identified three types of areas to guide investments in completing the region's bicycle network. The areas were identified by looking at bicycle potential and levels of bicycle activity together. Communities across the region are at different stages of development and therefore require unique approaches to increase bicycling activity.
 - a. **Investment strategy for areas with high activity and potential for rapid growth.** These areas already have high to very high bicycling activity and have serious potential to rapidly increase bicycling activity with increased investment. "Transformative projects" such as regional bicycle parkways could lead to more trips being made by bicycle. These areas already have many "strong and fearless" bicycle riders and investments in key projects will attract the "interested but concerned".
 - b. **Investment strategy for areas with medium activity potential potential to become high activity areas.** These areas are experiencing medium levels of bicycle activity, especially in denser urban cores. In general these areas have good bicycling potential (population and employment density, land use mix, flatter terrain, connectivity) and by increasing investments in areas where there is already bicycling activity and making it safer to bicycle while simultaneously planning and designing for future transformative projects these areas could substantially increase bicycling activity.
 - c. **Investment strategy for areas with lower activity and potential for local connectivity.** These areas have lower levels of bicycling activity and may face challenges such as steep slopes, distance to job centers and other destinations in the region and lower land use density. A focus on connections to transit and increasing local connectivity within town centers, main streets and neighborhood connections to schools and local jobs and transit, increasing safety and comfort in those areas, can foster walking and bicycling and begin to build on new ways of getting around.

Staff Recommendation for Regional Pedestrian Network

Based on the pedestrian network evaluation staff recommends the following:

- a) Add frequent transit corridors not currently on the 2035 RTP Pedestrian Network as Regional Pedestrian Parkway.
- b) Add the following roadways as Pedestrian Parkway corridors (these are either proposed bicycle parkways with no parallel pedestrian route, or fill in a gap in an existing Pedestrian Parkway).
 - B-1 N 1st Ave.
 - B-2 NW Evergreen

B-5 SW Brockman/SW Beard
 B-8 SW Scholls Ferry Rd.
 B-9 SW Dosch Rd.
 B-10 SW Stafford Rd.
 B-12 SE 155th/Milmain
 B-13 SE 242nd/SE Hogan (segment)
 B-14 Sandy River to Springwater Connection (recommendation from East Metro Connections Plan)

- c) Add any regional urban arterial that is not part of the Principal Regional Pedestrian Network as Community Pedestrian Corridors. These arterials are already part of the regional street network, but have not been considered as part of the regional network. These arterials would be classified as Community Pedestrian Corridors.
- d) Add the following trails not currently on the 2035 RTP Pedestrian Network to the network (these trails are part of or will be added to Metro's Regional Trails Map and Plan):
 - T1 Council Creek Trail loop around Forest Grove
 - T2 Highway 47 Trail (completed)
 - T5 Pearl-Keeler Powerline Trail (BN Powerline Trail)
 - T13 Kruse Way Path (gap)
 - T14 Highway 217 Trail
 - T15 Hwy 26 Bike Path/Sunset Transit Center Trail
 - T16 River to River Trail
 - T19 Hillsdale to Lake Oswego Trail (ped only)
 - T21 Terwilliger Trail
 - T22 Marquam Trail
 - T28 Wildwood Trail and Forest Park Trails
 - T31 Columbia Slough Trail – gaps in trail
 - T47 Sunrise Multi-Use Path
 - T52 Damascus Trails
 - T57 Sandy River Connections (Sandy River to Springwater)
 - T58 Beaver Creek Canyon Trail (Sandy River to Springwater)
 - T59 Kelly Creek Greenway Trails (Sandy River to Springwater)
 - T60 Iron Mtn. Road, Surf to Turf Trail
- e) Classify the following trails/paths as Regional Pedestrian Parkways (all other trails will be classified as Community Trails);(all roadway corridors that are identified as the Principal Regional Pedestrian Network are classified as Pedestrian Parkways):
 - T1 Council Creek Trail
 - T3 Rock Creek Trail
 - T4 Beaverton Creek Trail
 - T9 Westside Trail
 - T10 Tualatin River Greenway Trail (segment)
 - T11 Ice Age Tonquin Trail (segment)
 - T12 Fanno Creek Greenway
 - T13 Kruse Way Path
 - T15 Hwy 26 Bike Path/Sunset Transit Center Trail
 - T18 Lake Oswego Willamette River Greenway Trail
 - T20 Red Electric Trail
 - T23 I-405 Trail

| | |
|-----|---|
| T24 | Goose Hollow Trail |
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| T37 | Sullivan's Gulch Trail |
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| T48 | East Buttes Power Line Corridor Trail |
| T49 | Mt. Scott/Scouter Mountain Trails (segment) |
| T54 | Gresham / Fairview Trail |
| T55 | I-84 Bike Path |
| T56 | MAX Path |
| T60 | Iron Mtn. Road, Surf to Turf Trail |

Staff Recommended Approach for Prioritizing Regional Pedestrian Network Investments

Staff recommends prioritizing pedestrian projects (sidewalk gaps, trail gaps, street crossings) that provide increased accesses to essential destinations to the most people, to the highest percent of the population and that also fill in gaps in areas with underserved and vulnerable populations. Prioritization should be nested in an overarching framework that a well-connected and complete network is necessary for achieving the region's transportation goals and six desired outcomes, and therefore that investment in walking needs to increase overall in all areas of the region in order to complete an incomplete network. **Prioritization of bicycle and pedestrian projects will be coordinated and integrated.**

The pedestrian network evaluation provides data to help guide investments in the future to provide the highest return on investment, invest in areas with underserved populations and address geographical equity. Staff recommends prioritizing corridors, trails and districts into tiers using the tool illustrated below. Staff recommends an access score of 4 or above, a percentage of 15% or more and an equity score of 4 or more for the first tier. Few areas meet all three thresholds. For example, using this prioritization the following three corridors are identified: #39 Stark, #56 122nd Ave and #61 Holgate. Corridors, Districts and Trails would be prioritized into 4 tiers. Cost can be included in the prioritization.

Prioritization tool example for Principal Pedestrian Corridors

| Tier | Access Score | % of Pop | Equity | Cost/person | Number | |
|-------|--------------|----------|--------|-------------|-----------|------------|
| 1 | 4 | 0.15 | 4 | 0 | 3 | 3% |
| 2 | 3 | 0.1 | 3 | 0 | 13 | 14% |
| 3 | 2 | 0.1 | 2 | 0 | 15 | 16% |
| 4 | 1 | 0.05 | 1 | 0 | <u>65</u> | <u>68%</u> |
| Total | | | | | 96 | 100% |

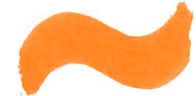
Prioritization tool example for Regional Trails

| Tier | Access Score | % of Pop | Equity | Cost/person | Number | |
|-------|--------------|----------|--------|-------------|-----------|------------|
| 1 | 4 | 0.15 | 4 | 0 | 2 | 3% |
| 2 | 3 | 0.1 | 3 | 0 | 9 | 15% |
| 3 | 2 | 0.1 | 2 | 0 | 10 | 17% |
| 4 | 1 | 0 | 1 | 0 | <u>38</u> | <u>64%</u> |
| Total | | | | | 59 | 100% |

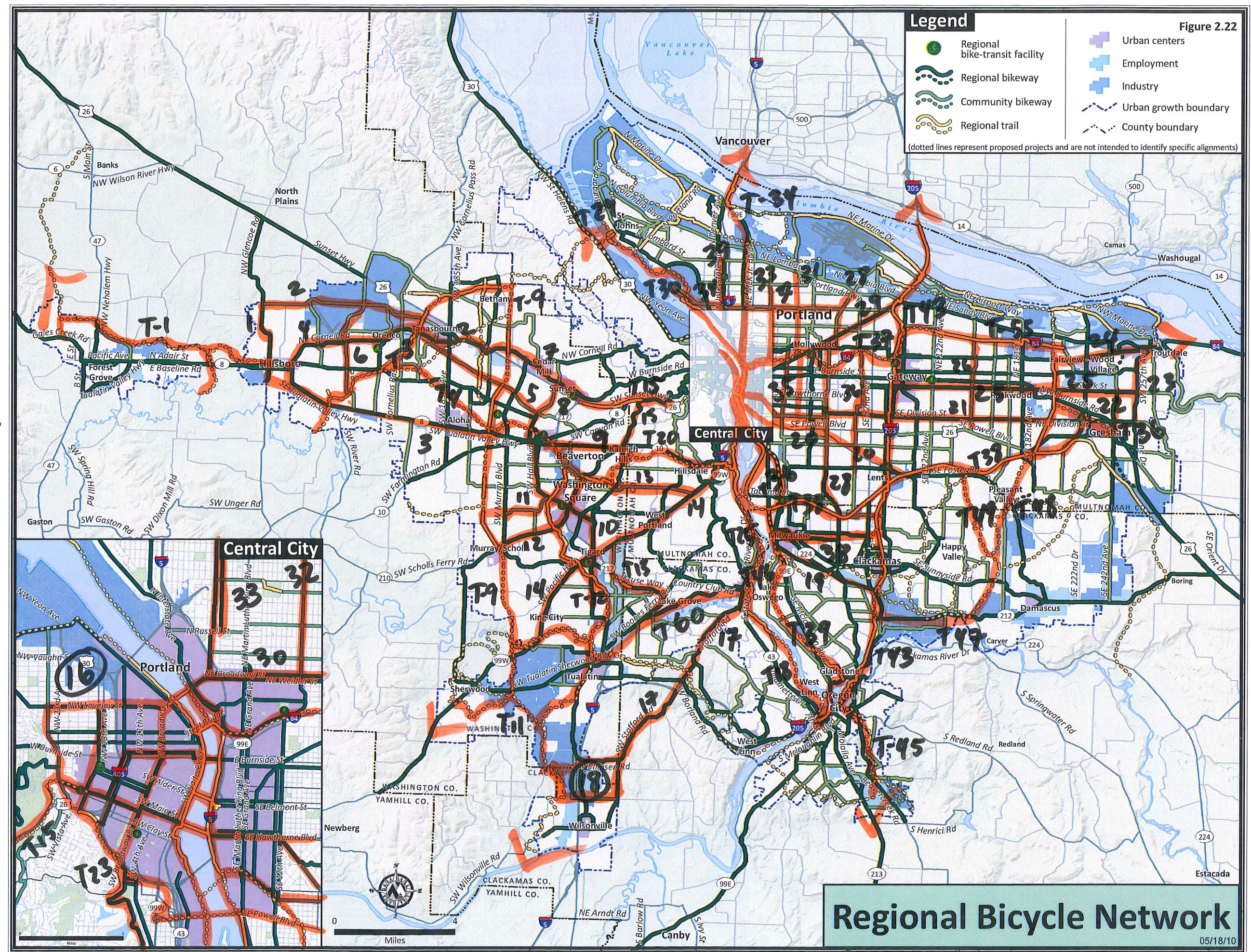
Prioritization tool example for Pedestrian Districts

| Tier | Access Score | % of Pop | Equity | Cost/person | Number | |
|-------|--------------|----------|--------|-------------|-----------|------------|
| 1 | 4 | 0.15 | 4 | 0 | 8 | 11% |
| 2 | 3 | 0.1 | 3 | 0 | 8 | 11% |
| 3 | 2 | 0.05 | 2 | 0 | 24 | 32% |
| 4 | 1 | 0 | 1 | 0 | <u>34</u> | <u>46%</u> |
| Total | | | | | 74 | 100% |

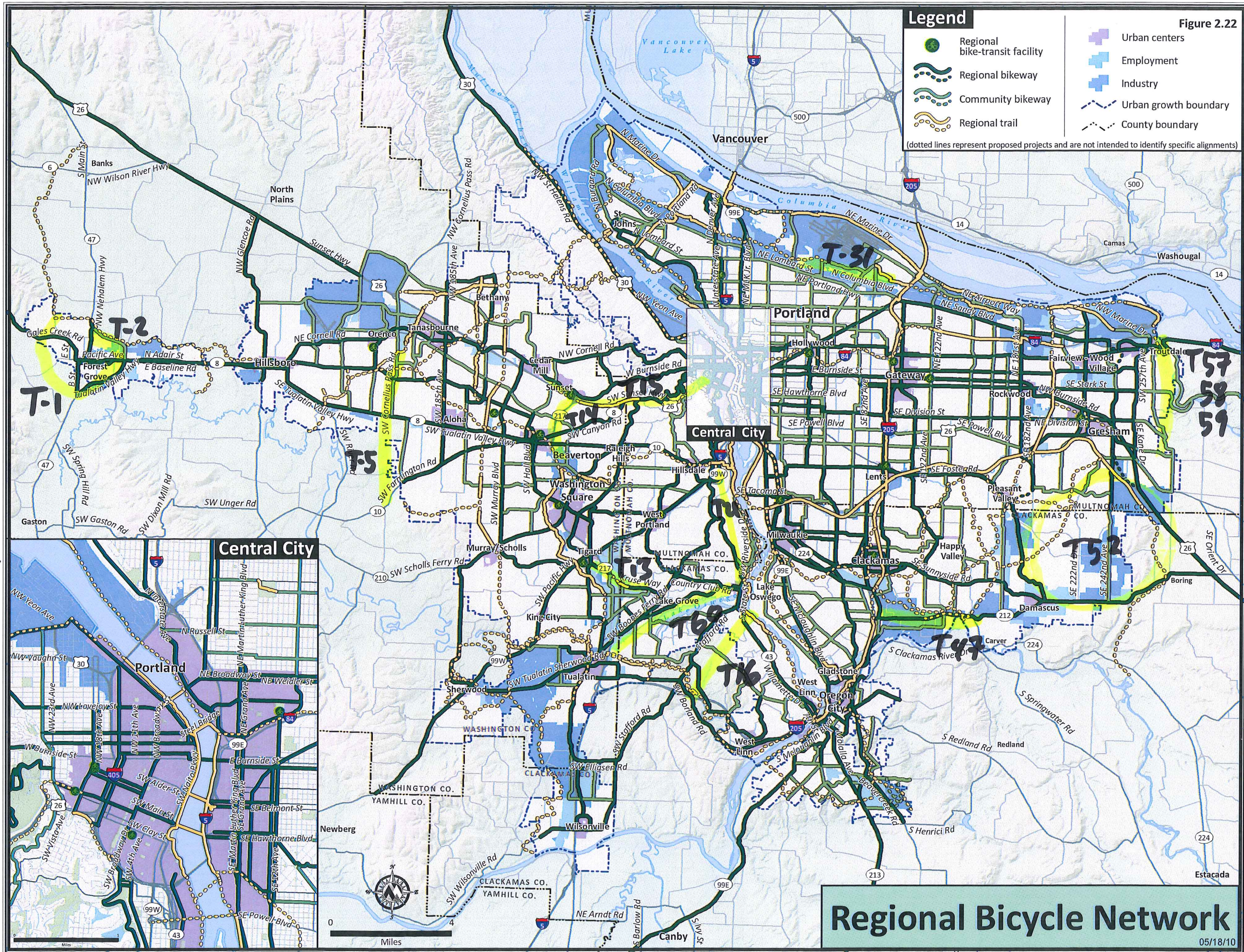
MAY 2013



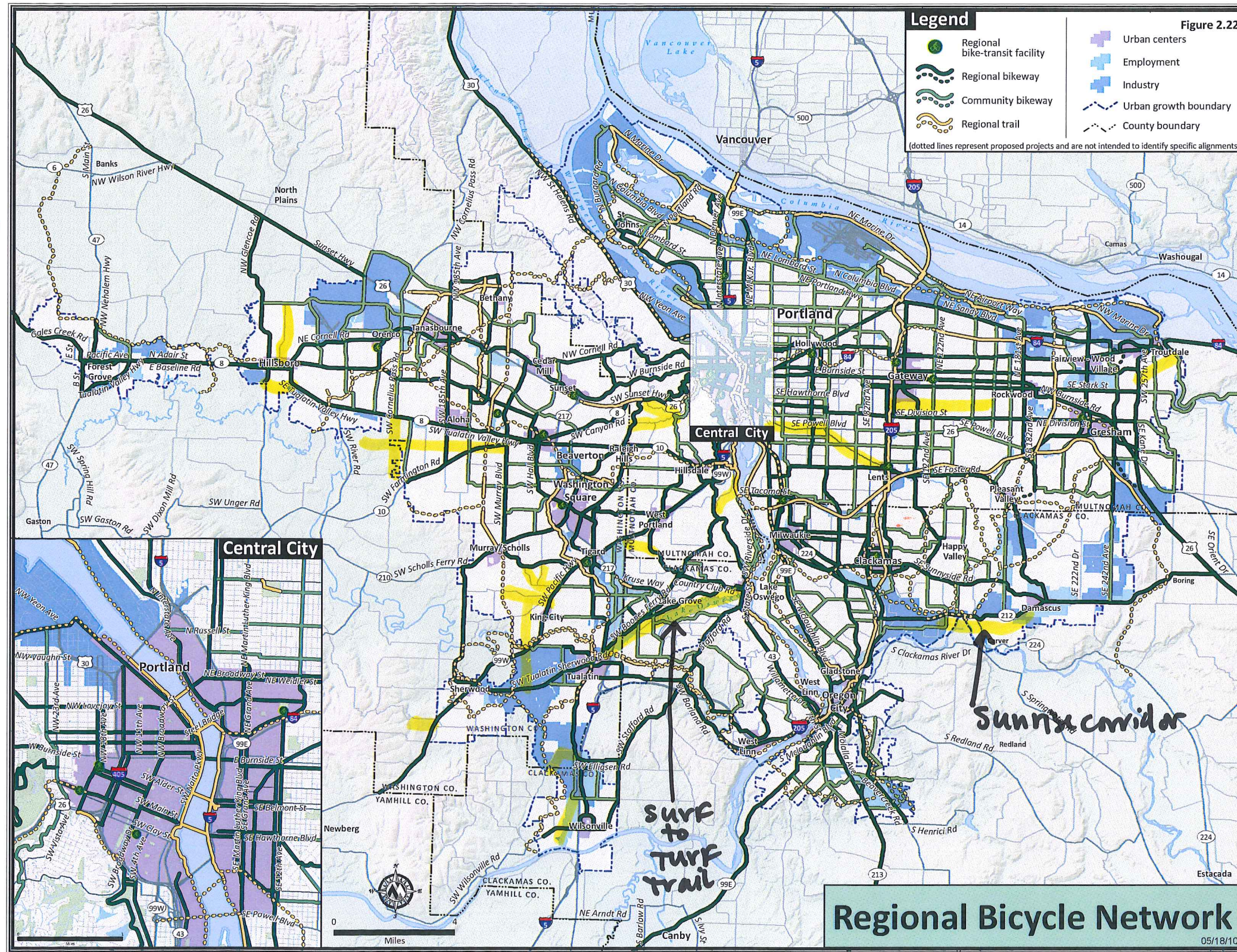
Staff recommended
Bicycle
Parkway
Corridors



~
TRAILS
ADDED
TO
Bicycle
Network

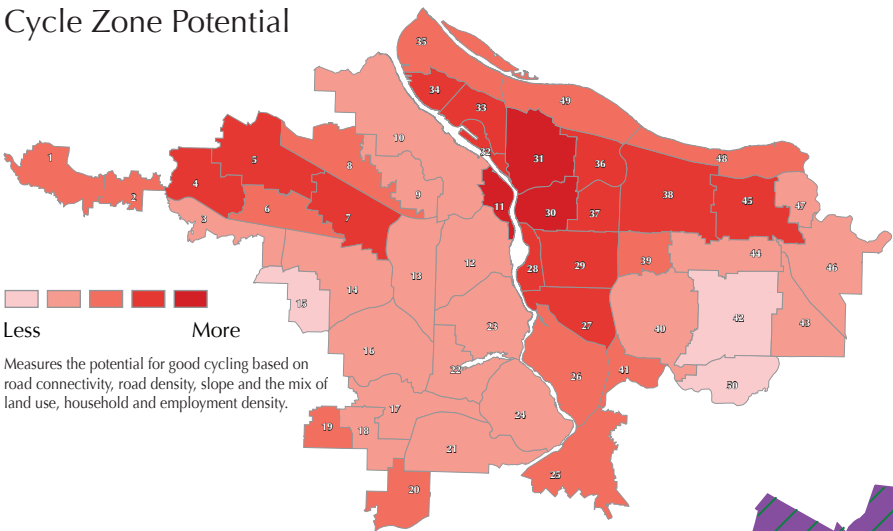


Routes
showing bicycle
volumes in
2035, but
not identified
on regional
bicycle
network

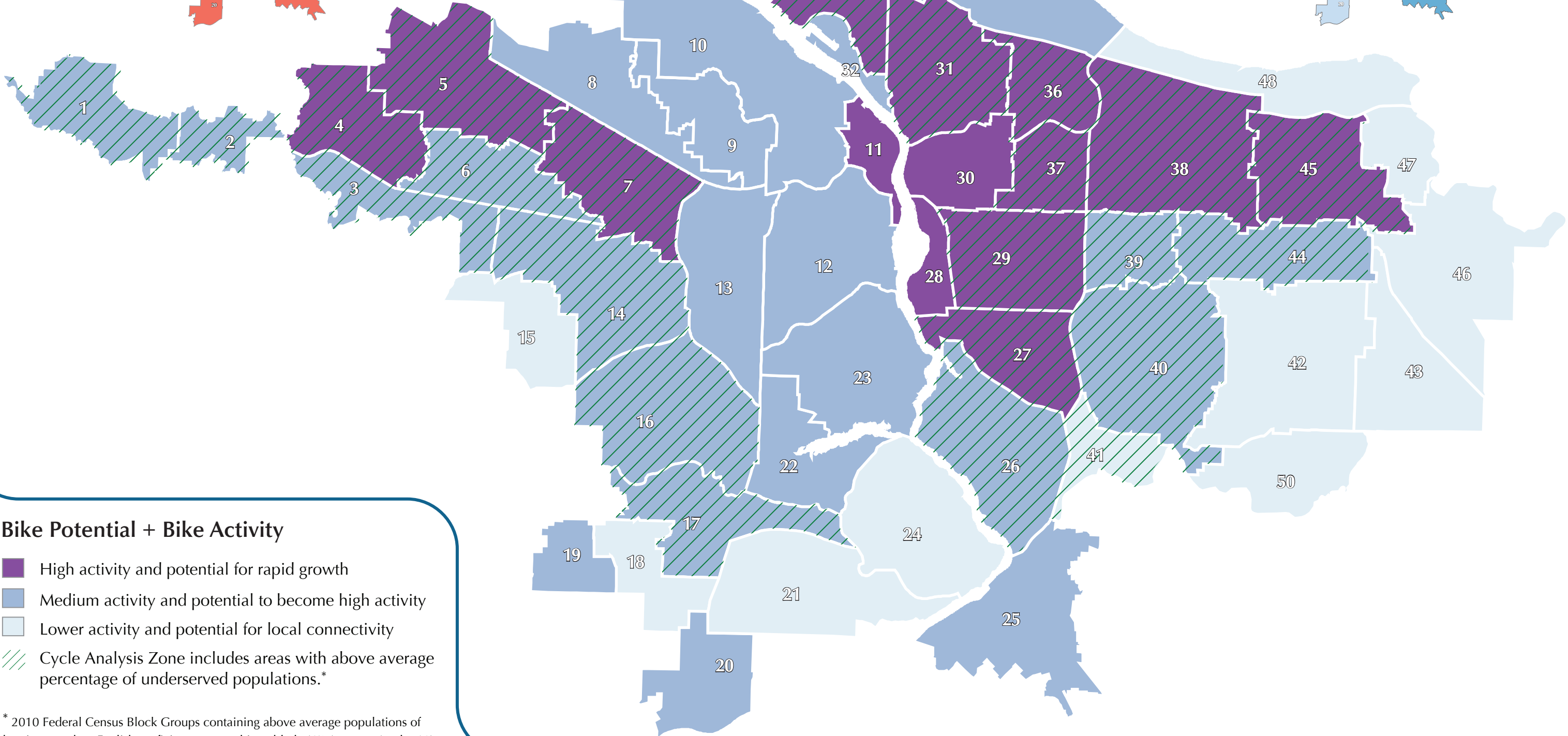
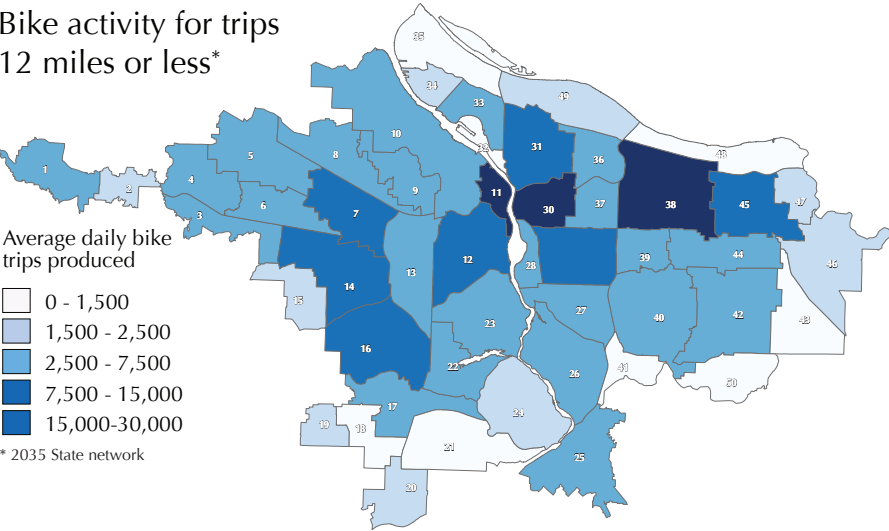


Bike Potential and Activity

Cycle Zone Potential



Bike activity for trips 12 miles or less*



* 2010 Federal Census Block Groups containing above average populations of low income, low-English proficiency, non-white, elderly (65+) ,young (under 18)

recommended
Roadway
Corridor
additions to
RTP Ped

Active Transportation Plan

Regional Pedestrian Network Principal Pedestrian Corridors and Districts

Pedestrian Network Concept

Planned RTP Pedestrian Network (current)

RTP off-street paths



RTP on-street corridors



RTP pedestrian districts



Potential corridors

Off-street paths



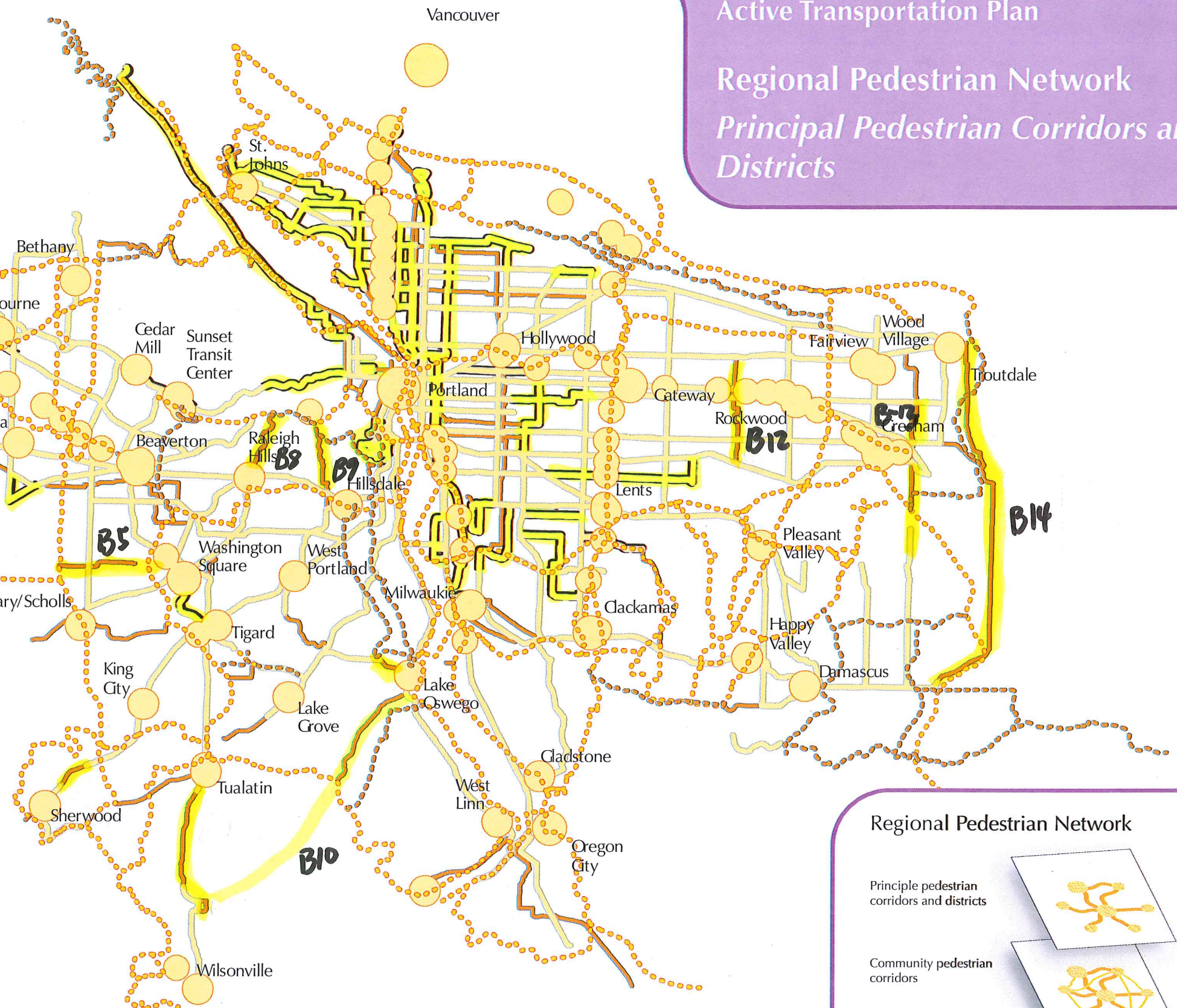
Frequent transit corridors



Bicycle parkway concepts

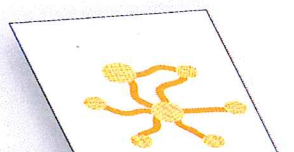


A connected network of on and off-street corridors anchored by pedestrian districts that provide access to transit and key destinations in the region. Pedestrian districts are the region's urban centers where pedestrian activity is highest. Principal on-street corridors mirror frequent transit routes. Multi-use and pedestrian only trails provide off-street corridors, connecting to the on-street network, transit and nature. All regional bicycle parkways are also principal regional pedestrian corridors. The principal pedestrian network provides the spine for regional pedestrian corridors and local pedestrian corridors to make a complete regional pedestrian network.

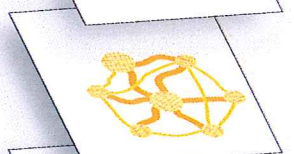


Regional Pedestrian Network

Principle pedestrian
corridors and districts



Community pedestrian
corridors



Local pedestrian
corridors

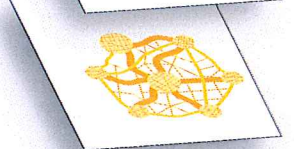


Figure 2.12

Legend

- Principal arterial
- Major arterial
- Minor arterial
- Rural arterial
- Urban centers
- Employment
- Industry
- Urban Growth Boundary
- County Boundary

(dotted lines represent proposed projects and are not intended to identify specific alignments)

A proposed I-84/US 26 corridor refinement plan will define the long-term mobility strategy for this area.

The Damascus TSP and OR 212 corridor study will provide further direction for solutions in this corridor.

The I-5/99W corridor refinement plan has made a recommendation (Alternative 7 - with conditions) for new arterials in this area.

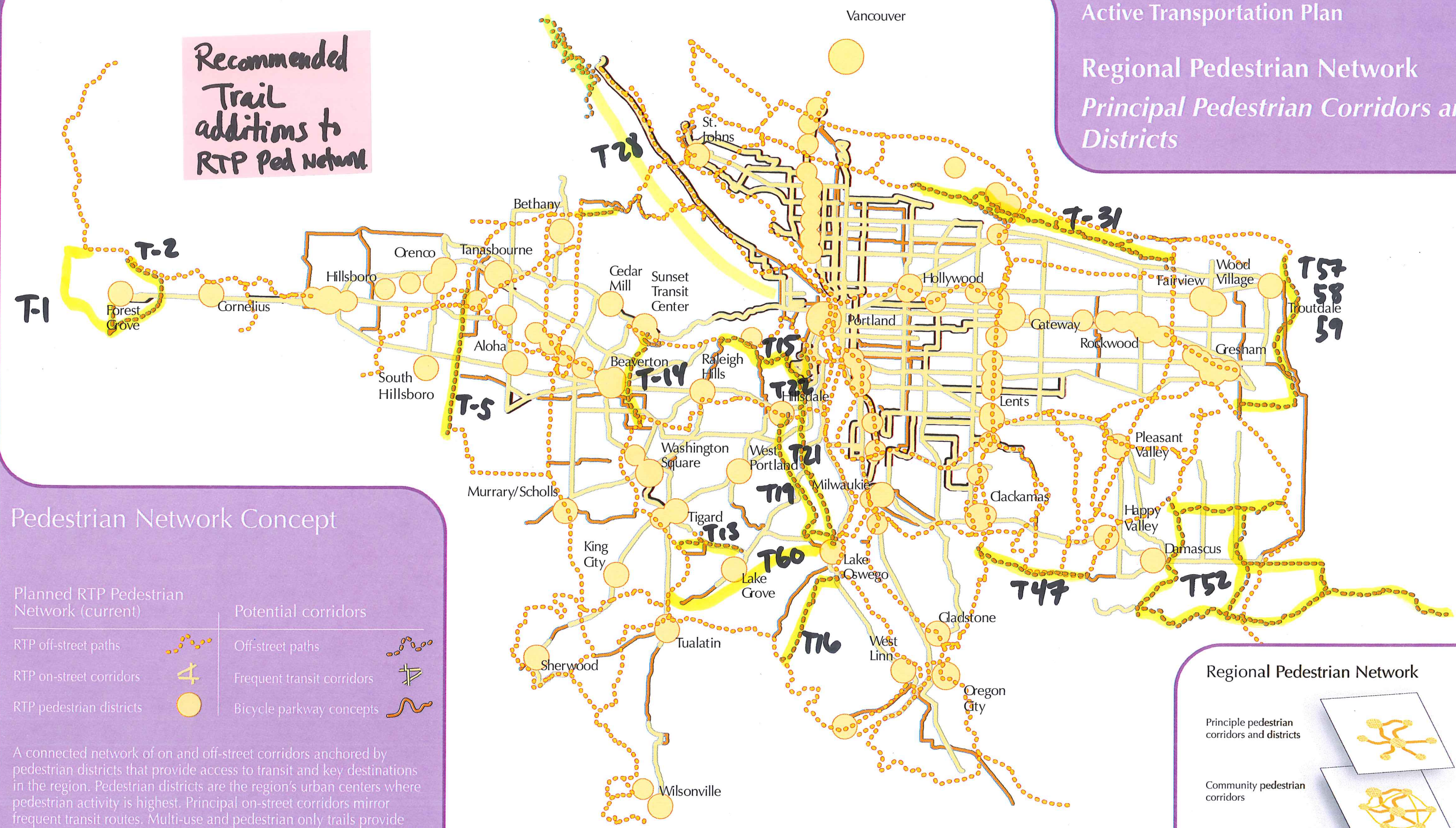
Arterial and Throughway Network

Active Transportation Plan

Regional Pedestrian Network

Principal Pedestrian Corridors and Districts

Recommended
Trail
additions to
RTP Ped Network

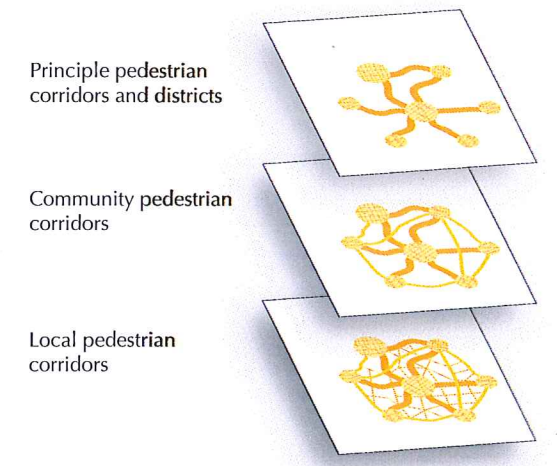


Pedestrian Network Concept

| Planned RTP Pedestrian Network (current) | | Potential corridors | |
|--|--|----------------------------|--|
| RTP off-street paths | | Off-street paths | |
| RTP on-street corridors | | Frequent transit corridors | |
| RTP pedestrian districts | | Bicycle parkway concepts | |

A connected network of on and off-street corridors anchored by pedestrian districts that provide access to transit and key destinations in the region. Pedestrian districts are the region's urban centers where pedestrian activity is highest. Principal on-street corridors mirror frequent transit routes. Multi-use and pedestrian only trails provide off-street corridors, connecting to the on-street network, transit and nature. All regional bicycle parkways are also principal regional pedestrian corridors. The principal pedestrian network provides the spine for regional pedestrian corridors and local pedestrian corridors to make a complete regional pedestrian network.

Regional Pedestrian Network



Active Transportation Plan

Regional Pedestrian Network

Principal Pedestrian Corridors and Districts

Regional Parkway Trails

Pedestrian Network Concept

Planned RTP Pedestrian Network (current)

RTP off-street paths



RTP on-street corridors



RTP pedestrian districts



Potential corridors

Off-street paths



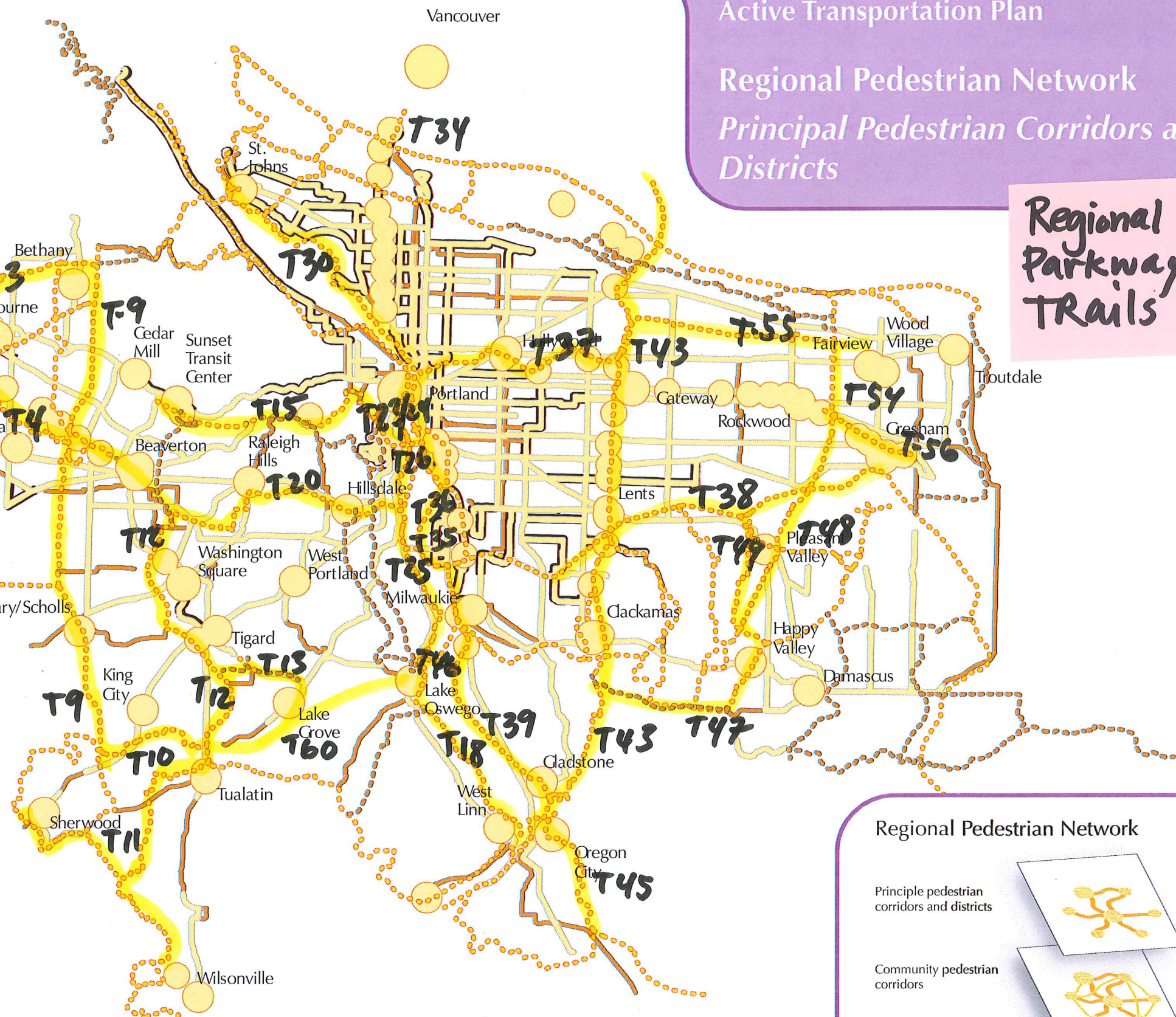
Frequent transit corridors



Bicycle parkway concepts

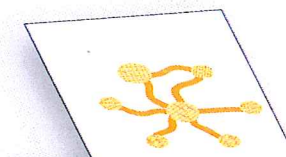


A connected network of on and off-street corridors anchored by pedestrian districts that provide access to transit and key destinations in the region. Pedestrian districts are the region's urban centers where pedestrian activity is highest. Principal on-street corridors mirror frequent transit routes. Multi-use and pedestrian only trails provide off-street corridors, connecting to the on-street network, transit and nature. All regional bicycle parkways are also principal regional pedestrian corridors. The principal pedestrian network provides the spine for regional pedestrian corridors and local pedestrian corridors to make a complete regional pedestrian network.

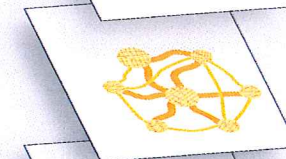


Regional Pedestrian Network

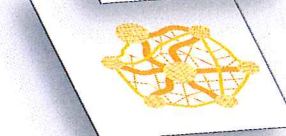
Principle pedestrian corridors and districts



Community pedestrian corridors



Local pedestrian corridors





ATP Recommended Networks and Proposed Approach to Prioritization



Stakeholder Advisory Committee
May 9, 2013



Lake McTighe
Senior Transportation Planner
Regional Transportation Planning




Metro | *Making a great place*

Functional Classifications and Design Guidelines



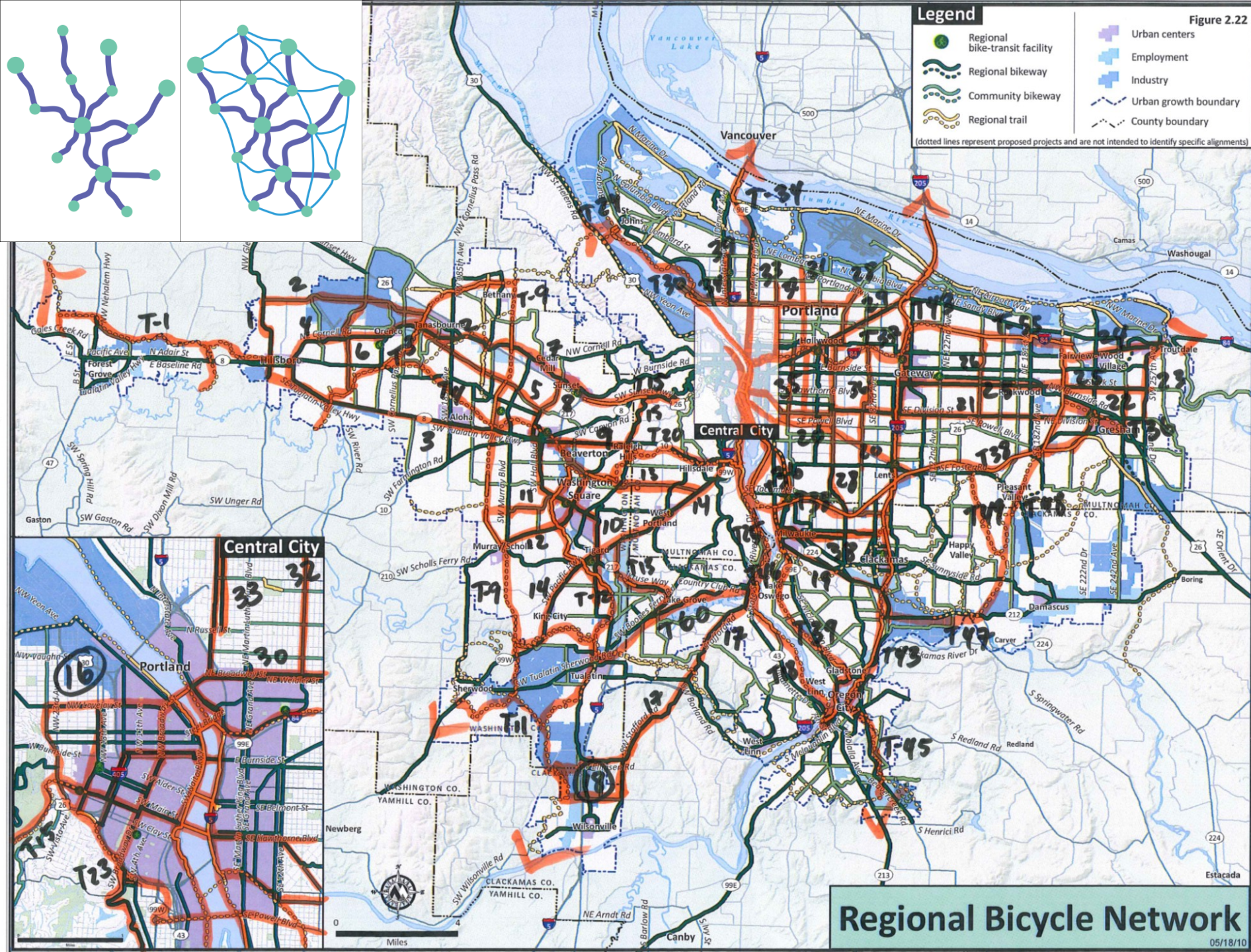
Metro | *Making a great place*



Bicycle Network Evaluation: Recommended Network and Approach to Prioritization



Figure 2.22



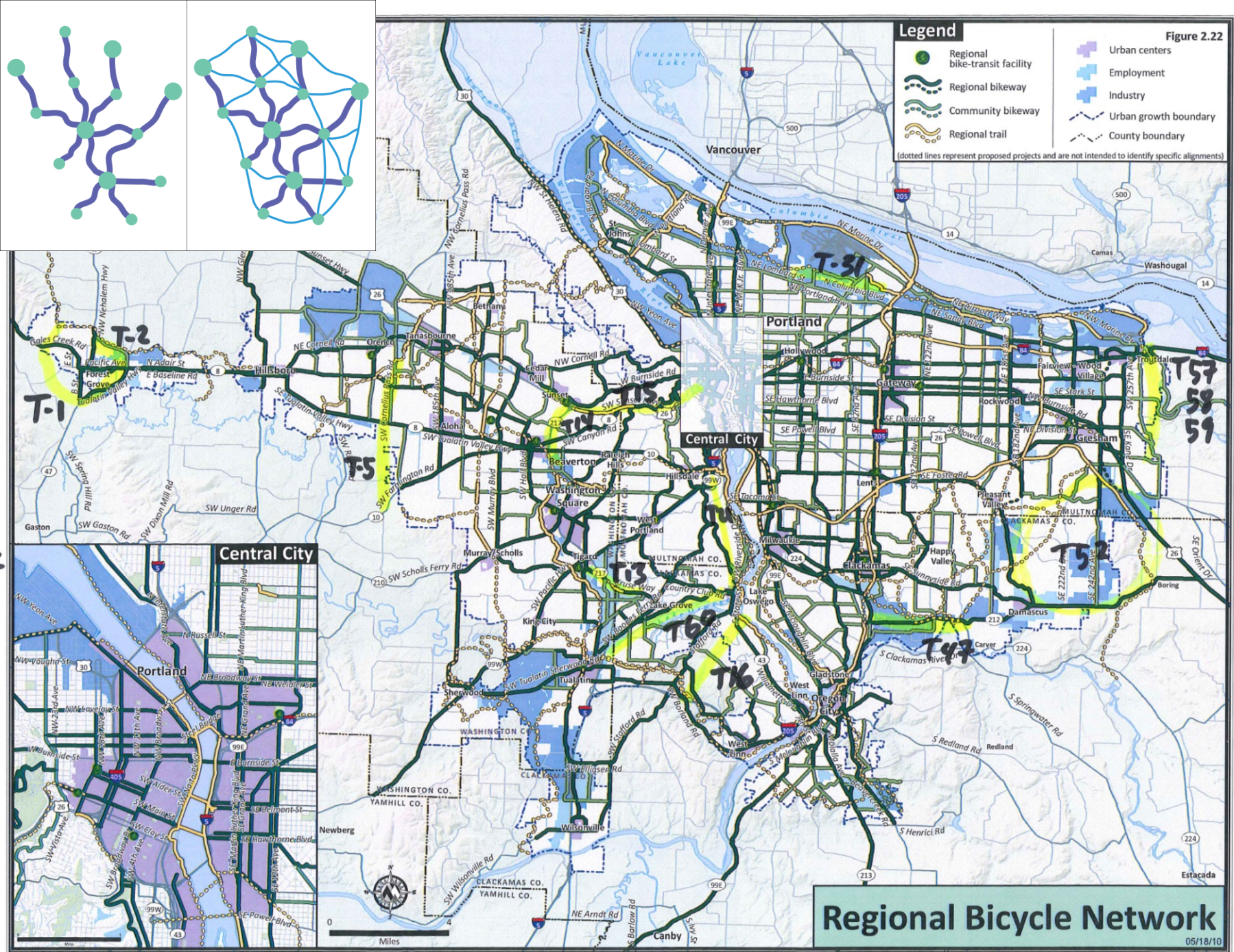
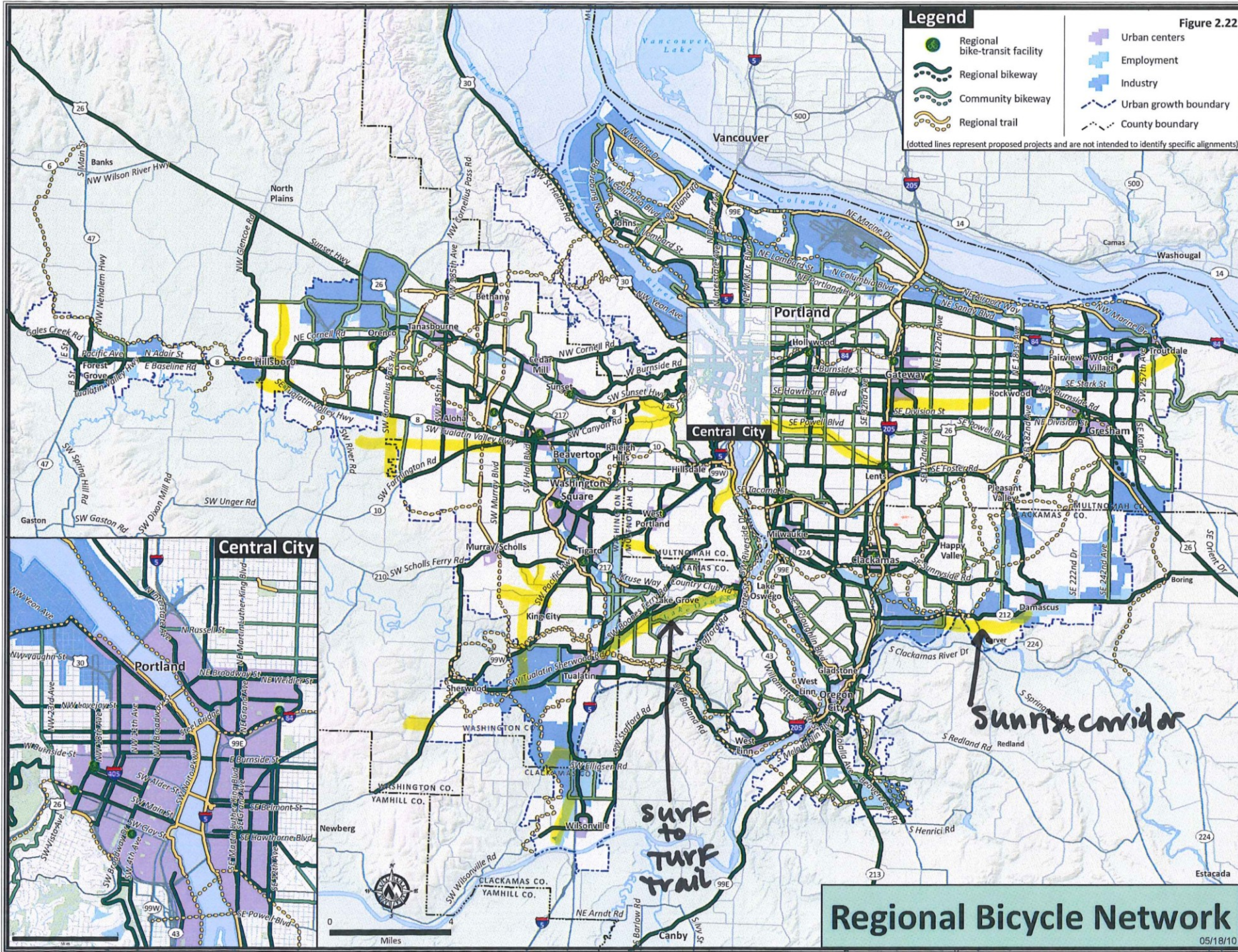


Figure 2.22

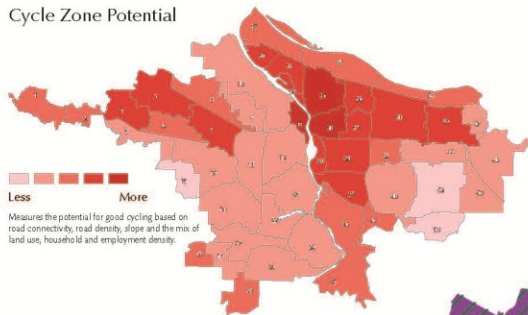
Legend

- Regional bike-transit facility
 - Regional bikeway
 - Community bikeway
 - Regional trail
 - Urban centers
 - Employment
 - Industry
 - Urban growth boundary
 - County boundary
- (dotted lines represent proposed projects and are not intended to identify specific alignments)



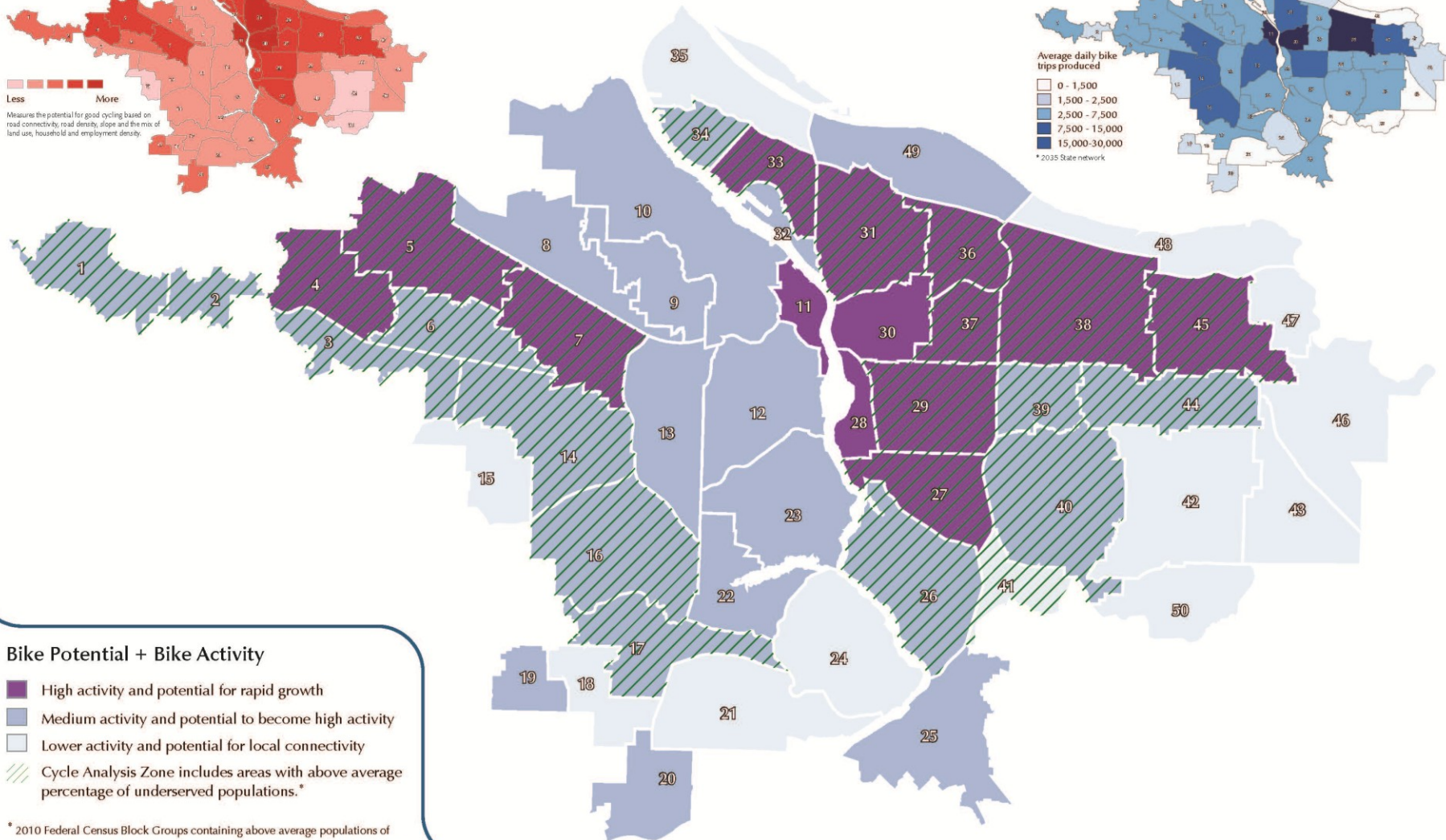
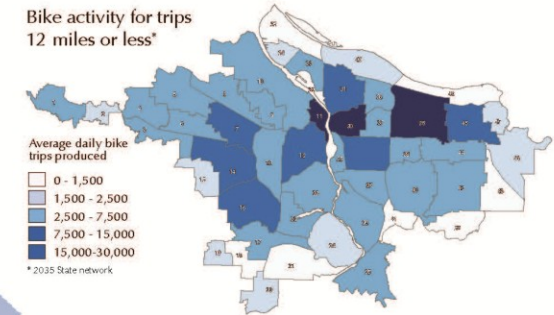
Regional Bicycle Network

Cycle Zone Potential



Bike Potential and Activity


Bike activity for trips 12 miles or less*



Bike Potential + Bike Activity

- High activity and potential for rapid growth
- Medium activity and potential to become high activity
- Lower activity and potential for local connectivity
- Cycle Analysis Zone includes areas with above average percentage of underserved populations.*

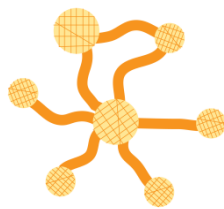
* 2010 Federal Census Block Groups containing above average populations of low income, low-English proficiency, non-white, elderly (65+), young (under 18)



Pedestrian Network Evaluation: Recommended Network and Approach to Prioritization



Add frequent transit routes and bicycle parkways that



Active Transportation Plan

Regional Pedestrian Network

Principal Pedestrian Corridors and Districts



Add arterials



Legend

- Principal arterial
- Major arterial
- Minor arterial
- Rural arterial
- Urban centers
- Employment
- Industry
- Urban Growth Boundary
- County Boundary

Figure 2.12

(dotted lines represent proposed projects and are not intended to identify specific alignments)

A proposed I-84/US 26 corridor refinement plan will define the long-term mobility strategy for this area.

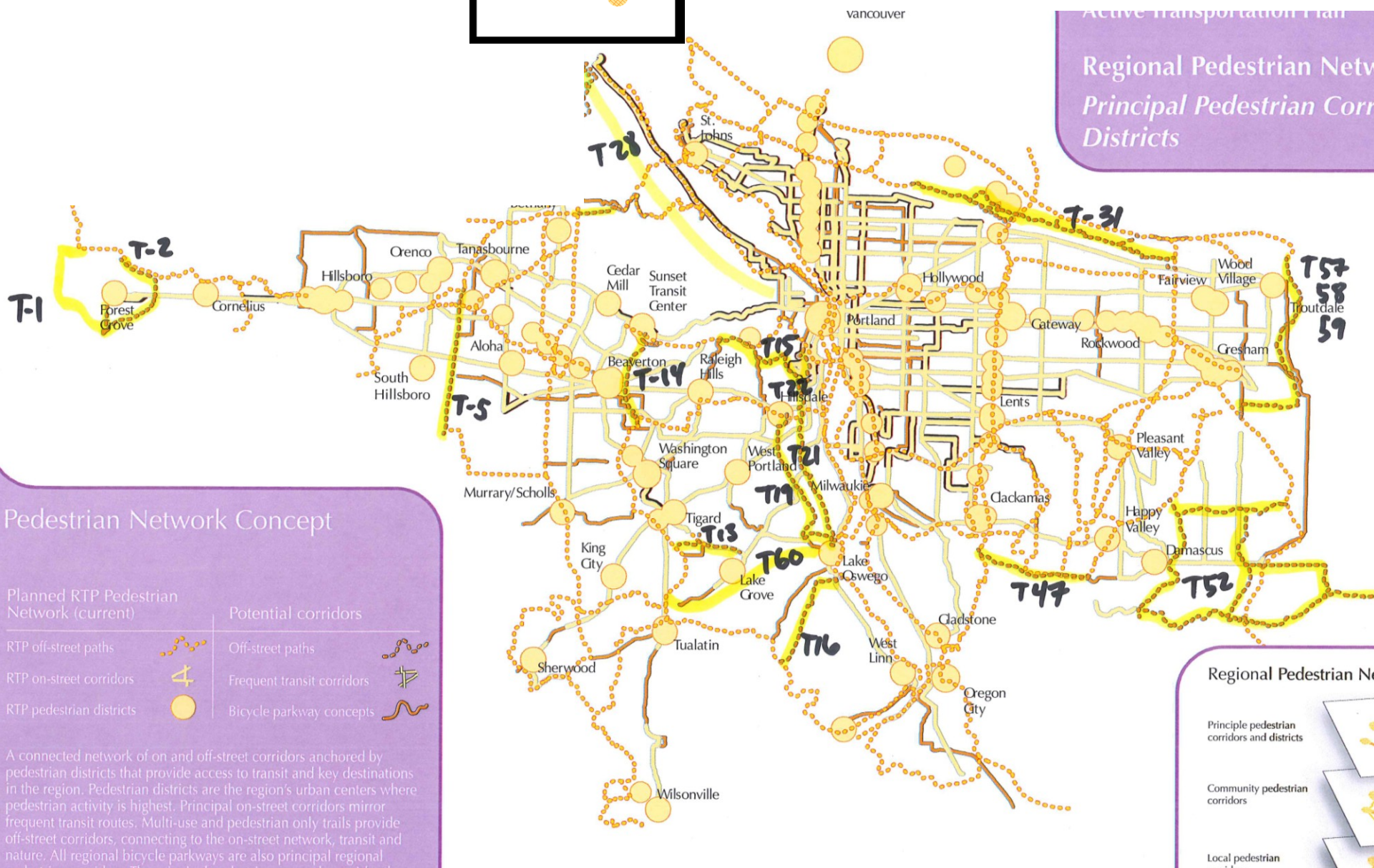
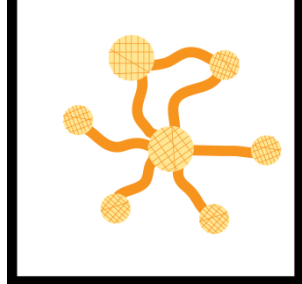
The Damascus TSP and OR 212 corridor study will provide further direction for solutions in this corridor.

The I-5/99W corridor refinement plan has made a recommendation (Alternative 7 - with conditions) for new arterials in this area.

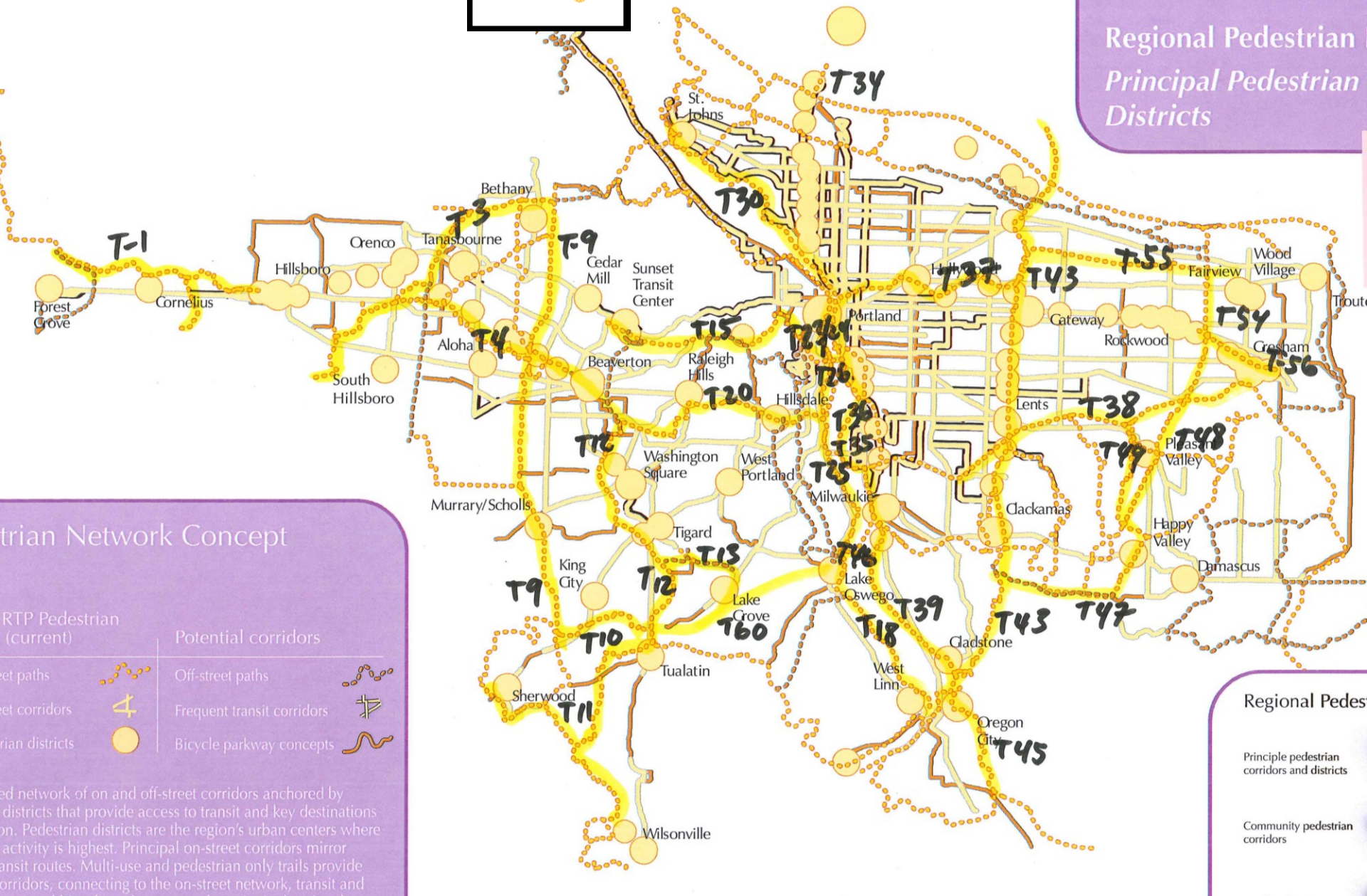
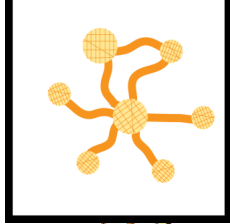
Arterial and Throughway Network

05/23/10

Add regional trails



Trails that are Pedestrian Parkways



Pedestrian project prioritization approach

| Tier | Access Score | % of Pop | Equity | Cost/person | Number |
|-------|--------------|----------|--------|-------------|-----------|
| 1 | 4 | 0.15 | 4 | 0 | 3 |
| 2 | 3 | 0.1 | 3 | 0 | 13 |
| 3 | 2 | 0.1 | 2 | 0 | 15 |
| 4 | 1 | 0.05 | 1 | 0 | <u>65</u> |
| Total | | | | | 96 |
| | | | | | 100% |

Example for discussion