SHARED INVESTMENT STRATEGY RECOMMENDATION

Making investments in the Southwest corridor

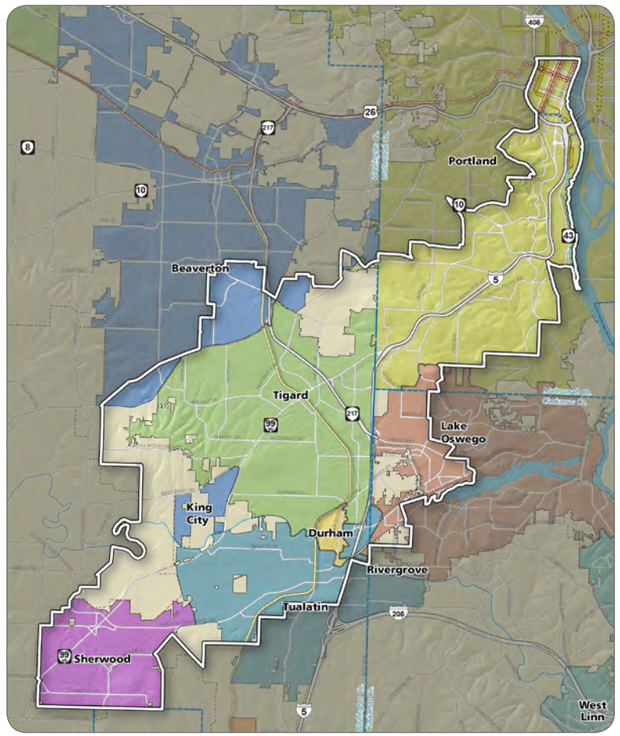
The Southwest Corridor Plan is an outcomes-oriented effort focused on supporting community-based development and placemaking that targets, coordinates and leverages public investments to make efficient use of public and private resources. The plan was developed to support achieving four balanced goals:

Accountability and partnership Partners manage resources responsibly, foster collaborative investments, implement strategies effectively and fairly, and reflect community support.

Prosperity People can live, work, play and learn in thriving and economically vibrant communities where everyday needs are easily met.

Health People live in an environment that supports the health of the community and ecosystems.

Access and mobility People have a safe, efficient and reliable transportation network that enhances economic vitality and quality of life.



Steering committee members

Metro Councilor Craig Dirksen, co-chair
Metro Councilor Bob Stacey, co-chair
Tigard Mayor John Cook
Beaverton Mayor Denny Doyle
Portland Mayor Charlie Hales
Lake Oswego Councilor Skip O'Neill
TriMet general manager Neil McFarlane
Sherwood Mayor Bill Middleton
Tualatin Mayor Lou Ogden
Washington County Commissioner Roy Rogers
Durham Mayor Gery Schirado
Multnomah County Commissioner Loretta Smith
ODOT Region 1 manager Jason Tell
King City Commissioner Suzan Turley

As people and employers seek to locate in the Southwest corridor, worsening traffic congestion will impact economic development and livability in the area. In light of this and local redevelopment and revitalization goals, the Southwest corridor was selected by regional leaders as the next priority area to study for a potential set of investments, including high capacity transit, to address accessibility and enhance the great places envisioned by communities in the corridor. In combination with other investments to support transportation choices (driving, biking, walking and transit), a new bus rapid transit or light rail line would provide better access to jobs in the corridor and encourage development in key places while protecting the character of single-family neighborhoods.

In July 2013, the Southwest Corridor Plan Steering Committee gave direction on three main questions to further narrow the options for a potential high capacity transit investment to serve the corridor land use vision. These questions include: 1) modes (bus rapid transit and/or light rail) for further study, 2) percentage of bus rapid transit in a dedicated transitway, and 3) the destination of a potential high capacity transit investment. In the year following this recommendation, a refinement phase will give more information and help the project partners define a possible project for analysis under the National Environmental Policy Act (NEPA) and explore implementation strategies for other elements of the Southwest Corridor Plan and Shared Investment Strategy.

Vision and context

The work has been guided by a steering committee that includes representatives from Southwest corridor cities, counties and agencies.

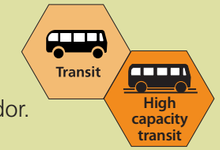
Six major planning efforts are coordinated with this effort:

- Portland Barbur Concept Plan
- Sherwood Town Center Plan
- Tigard High Capacity Transit Land Use Plan
- Linking Tualatin
- Southwest Corridor Transit Alternatives Analysis
- Southwest Corridor Transportation Plan, focused on supporting transit and land use.

The project partners have defined a set of potential investments that support land use, transportation, and community-building goals in the corridor – a shared investment strategy – to implement the shared Southwest corridor vision. The policies and projects are aimed at supporting development that is consistent with the local communities' aspirations for key places in the corridor.

Summary of the Southwest Corridor Shared Investment Strategy recommendation, July 22, 2013

Recommendation: Invest in transit (*page 6*)



Transit is a key element to help communities in the Southwest corridor achieve their development visions. This recommendation gives direction on both local bus service improvements and future high capacity transit (light rail or bus rapid transit) in the corridor.

Local service

To improve local bus service, this recommendation directs TriMet to develop and implement the Southwest Service Enhancement Plan to:

- ensure key corridor locations are connected by efficient and reliable local service – to one another, to the Westside Express Service (WES) and to a potential new high capacity transit line
- make on-the-ground improvements to the transit system
- identify how cities and counties can create better access to transit (both to local service and to a potential bus rapid transit or light rail line).

High capacity transit

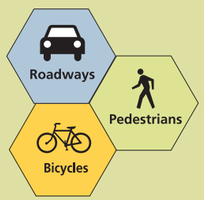
An investment in high capacity transit in the corridor would help achieve the local visions for development, revitalizing and encouraging private investment in future station areas. It would also create the ability to move people efficiently, which is especially important in a corridor where:

- it is difficult to build or expand roads due to hills, natural resources, established businesses and existing neighborhoods that would make new roads expensive and disruptive
- significant growth in jobs and population is anticipated.

To better understand the options for high capacity transit in the corridor, the Southwest Corridor Plan Steering Committee directs staff to study in more detail:

- two potential modes: light rail and bus rapid transit
- for the bus rapid transit, between 50 to 100 percent of the alignment in exclusive right of way
- a line that connects Portland to downtown Tualatin, via Tigard.

Recommendation: Invest in roadways and active transportation (*page 8*)



Potential projects were gathered from the Regional Transportation Plan and other regional plans, transportation system plans and other local plans, and suggestions from the public. This list was narrowed from more than 500 projects to a list of 81 priority projects. See ***Attachment A*** for the list of priority projects.

The 81 projects are recommended because they either:

- leverage and support the potential high capacity transit line, including:
  - walking and biking projects within one-quarter mile of potential station areas
  - trails within one mile of potential station areas
- highly support the community land use vision, including projects that:
  - leverage future development in places local communities have defined as "essential" or "priority"
  - are important to meet freight and capacity needs in employment and industrial districts
  - improve pedestrian connectivity, provide safe crossings or create high-demand bike connections.

The projects identified as highly supportive of high capacity transit will be included in further study of the high capacity transit project. Those projects that support the land use vision will move forward as the local jurisdictions develop and fund them, either individually or in collaboration with other project partners.

Recommendation: Invest in parks, trails and nature (*page 9*)

Parks, greenspaces, trails and natural areas are consistently cited as some of the Southwest corridor's most important and attractive features. To strengthen "green" elements, support community visions and leverage future transportation investments, the steering committee recommends that project partners work collaboratively and seize opportunities to implement projects included on the list contained in ***Attachment A*** as corridor development plans move forward.

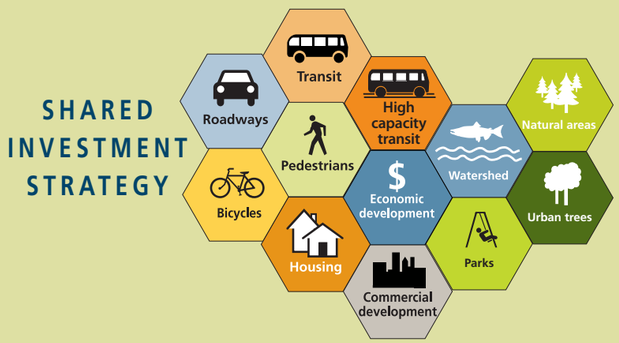
Recommendation: Consider new regulations and policies, and develop incentives to promote private investment consistent with community vision (*page 10*)

The public sector can help set the stage for development consistent with community goals through regulations, policies and development incentives that encourage private investment. ***Attachment B*** contains a variety of proposed policies and incentive programs for communities to consider as they advance Southwest Corridor Plan projects and community development goals.

In the next phase of the Southwest Corridor Plan, project partners will explore specific tools to advance the corridor land use vision and enable the region to compete nationally for scarce federal dollars to help fund a possible high capacity transit investment. Additionally, partners will collaboratively work to develop a coordinated set of multimodal performance measures reflecting state, regional and local goals.

Recommendation: Develop a collaborative funding strategy for the Southwest Corridor Plan

Project partners should work together to develop a funding strategy that includes local, regional, state and federal sources. This could include innovative financing tools and non-transportation funding for parks and natural areas.



The Southwest Corridor Land Use Vision – a community vision for places throughout the corridor

Each city in the Southwest corridor began this collaborative effort by looking at its downtown, main streets, corridors and employment areas to define a vision for these places that reflects their unique characteristics and local aspirations. The area contains a wealth of opportunities for jobs and stable neighborhoods and is expected to grow significantly in the future. The corridor includes important regional retail and employment destinations as well as many major trails and one of the nation's few urban national wildlife refuges.

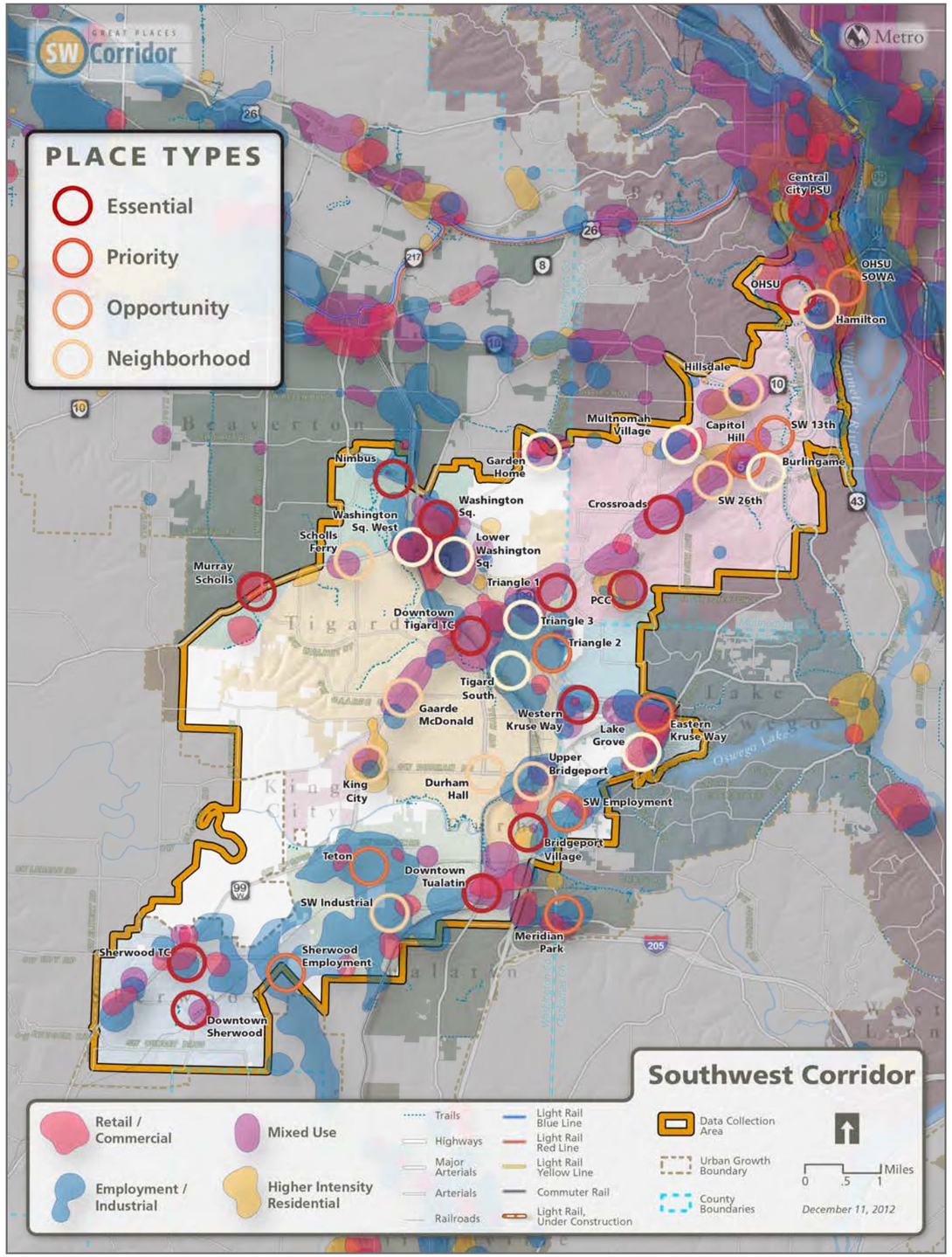
	Households	Jobs
2010	78,800	187,900
2035	111,900	259,200

The Southwest Corridor Land Use Vision compiles local land use plans and puts them into a common language, creating a foundation for the many projects (ranging from transportation to parks) to be categorized and prioritized based on how well they support the shared corridor land use vision.

The corridor vision emphasizes maintaining and enhancing the many stable single-family neighborhoods, while allowing for growth in certain places that creates more services for existing residents as well as more housing, employment and transportation choices in the future. The areas of change are described in four categories:

- **Retail/commercial** The corridor is a destination for retail with prominent shopping destinations in Washington Square and Bridgeport Village. These retail destinations will continue to generate substantial demand and will need accommodation through enhanced transit, active transportation and roadway investments.
- **Employment/industrial** The Southwest corridor includes a regional employment district with significant current employment and anticipated growth as new jobs move into the Tigard Triangle and the industrial areas of Tualatin and Sherwood.
- **Mixed use** The corridor includes opportunities for areas with a mix of housing, employment and services in a walkable environment. Good access to transit with high quality pedestrian and bike facilities are critical elements for these mixed use areas to help leverage infill and redevelopment.
- **Higher intensity residential** Infill and redevelopment is likely to be the primary generator for new development in the corridor. The majority of new residential development that does occur will be found in the mixed-use areas, and these areas will need to integrate natural features into development to ensure a high quality of life and connections to nature.

To develop the land use vision, each city identified key places and categorized them based on the importance of a high capacity transit investment to connect them (see map at right). These key places were used to draw the draft high capacity transit alternatives, thus ensuring that the transportation solution supports the community's vision for growth. The prioritized key places also help focus investments for other types of transportation as well as parks and natural resources.



Public involvement for Phase I

September 2011 to February 2012: What should be the focus of the plan?

The first public engagement stage aimed to determine the scope, evaluation framework and goals of the overall plan. In that process, project partners focused on announcing the integrated planning effort, informing the public about the background and elements of the plan, and asking residents what they value about their communities. Residents and business people were asked about challenges and opportunities in the corridor and their visions for the future of the area. The information and ideas offered informed decision-makers as they determined the scope and goals of the plan.

During the public comment period of Sept. 28 through Oct. 28, 2011, respondents posted their thoughts on boards at an open house and community events and submitted 98 public comments via the online questionnaire, mail and email.

February to August 2012: How should the wide range of potential projects be narrowed?

The second public engagement stage aimed to demonstrate and validate the screening process of narrowing the wide range of ideas to a narrowed list of potential projects.

From June 22 through July 31, 2012, project partners hosted an online, virtual open house. Participants viewed video feeds that explained the purpose and process of the overall plan. Participants were then directed to a related questionnaire that asked whether the sources of projects for the corridor were considered comprehensive and if the process for narrowing that list to move forward reflected the values of the communities in the corridor. The questionnaire received 543 responses.

An existing conditions summary, an executive summary and technical reports were produced during this time. Outlining the unique physical, economic and demographic elements of the corridor, the reports identified existing challenges and potential opportunities in economic development, housing choices, natural areas, trails and health for the corridor.

August to December 2012: How should investments be prioritized?

The third public engagement stage aimed to set the framework for shared investment strategies based on potential projects that were identified in the previous stage.

From Nov. 14, 2012 to Jan. 1, 2013, project partners hosted the online interactive Shape Southwest game and associated questionnaire. A paper version of the questionnaire was distributed in English, Spanish and Vietnamese to libraries and agencies serving environmental justice communities to engage residents without computer access. Community planning forums were convened on Oct. 9 and Dec. 3, 2012. During this time, project staff hosted booths at community events and briefed community groups, specifically to engage environmental justice communities. Additionally, community group briefings were held by project partner staff focusing on the local land use plans but also highlighting the Southwest Corridor Plan.

Public engagement at this stage of the plan focused on discussions of the benefits and tradeoffs of different types of investments, beginning with the premise that we cannot afford everything. Benefits and tradeoffs were framed by the Southwest Corridor Plan goals of health, access and mobility, and prosperity in the Southwest corridor.

During the public comment period, 2,098 people visited the project website to learn about the Southwest Corridor Plan, 695 submissions to Shape Southwest were made, 471 electronic questionnaires were submitted, and 20 paper-version questionnaires were received. Two Spanish-language questionnaires and no Vietnamese-language questionnaires were received.

January to July 2013: Are these the right things to move forward?

During this stage of public involvement, project staff provided briefings to community groups and municipal committees and sponsored public events to gather feedback to inform decision-making. Events included an open house hosted by SW Neighborhoods, Inc. on April 25, participation in the Tigard Town Hall on April 30, an economic summit on May 21 and a community planning forum on May 23 to gather feedback on potential projects and the draft high capacity transit alternatives. This opportunity for input was replicated through an online questionnaire that was open between May 23 and June 26. The public reviewed the Southwest Corridor Plan staff draft recommendation and gave feedback in an additional online questionnaire from June 11 to 26. The draft recommendation was also the focus of the final community planning forum on June 26.

Together, the questionnaires received 2,669 responses.

What are people saying about the transit alternatives and staff draft recommendation?

- There is strong support for high capacity transit in the Southwest corridor.
- Citing the need for better local transit service and more transit connections, coupled with the anticipated growth in the corridor, many people prioritize extending high capacity transit to the furthest extent possible, with Sherwood as the destination.
- While the individual responses are mixed, taken as a whole there is support for carrying forward both bus rapid transit and light rail transit for further study in the next phase of the plan.
- People overwhelmingly support studying a bus rapid transit that runs mostly or exclusively in a dedicated transitway.
- There is overall support for the other elements of the recommendation that call for:
  - enhanced local transit service
  - transit related roadway, biking and walking projects
  - roadway, biking and walking projects related to local aspirations
  - parks and natural resources projects
  - development strategy that stimulates private investment.
- The three highest priorities for Southwest Corridor Plan outcomes were:
  1. better transit (quicker trips, more local service and easier walk to a MAX or bus rapid transit station)
  2. access and mobility (more and better sidewalks and bikeways, reduced time in traffic or at lights)
  3. feasibility (cost, funding potential and support).
- Environmental justice organizations' representatives prioritized the plan outcomes differently than the majority of the public who provided input; their three highest priorities were:
  1. equity (fair distribution of benefits and burdens)
  2. healthy communities (access to parks, trails, and natural areas, more walking and biking opportunities)
  3. a tie between prosperity (more jobs, development, housing) and access and mobility (more and better sidewalks and bikeways, reduced time in traffic or at lights).

Getting to the plan

To create the Southwest Corridor Plan, representatives of cities and counties throughout corridor looked to local land use plans and policies to identify areas where the community wanted to focus new development. Four plans in particular helped identify the local vision in key areas of the corridor: Portland's Barbur Concept Plan, Tigard's High Capacity Transit Land Use Plan, the Linking Tualatin plan and Sherwood's Town Center Plan. Building on these local visions, the project partners worked together to identify a potential high capacity transit alternative that could catalyze the corridor land use vision, and developed and narrowed a list of roadway, bicycle and pedestrian improvements that would support high capacity transit and make it work better for the corridor. This work led to the recommendations in this Southwest Corridor Shared Investment Strategy. The strategy will help guide funding collaboration and coordinated implementation of opportunities throughout the Southwest corridor.

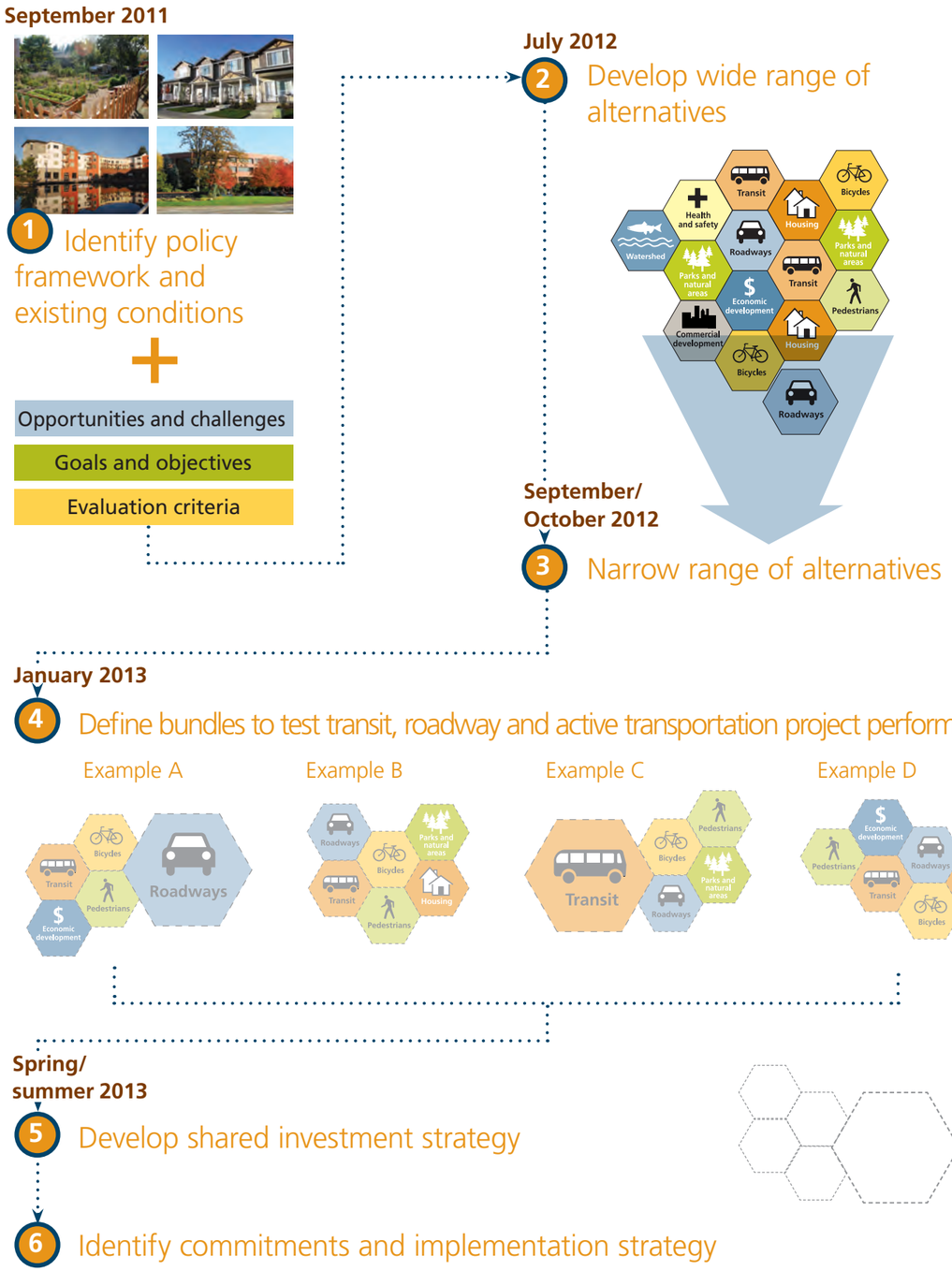
Barbur Concept Plan Creating a long-term vision for the six-mile Barbur Boulevard corridor from downtown Portland to the Tigard city limit, the Barbur Concept Plan recommends key transportation investments, stormwater solutions and changes to city policy and zoning.

Tigard High Capacity Transit Land Use Plan In this plan, Tigard developed land use concepts for vibrant station area communities and neighborhood centers that could support transit investments in a way that fits Tigard, helping to decide what growth will look like and where it should be located.

Linking Tualatin With this work, Tualatin investigated locally preferred station areas and development typologies as well as policy, investment and code changes necessary to support high capacity transit and local transit service.

Sherwood Town Center Plan Sherwood redefined the boundaries of the town center to support activity and development in both the old town area and the Six Corners commercial center.

Southwest Corridor Plan Phase I milestones



Integrating public investments to support great places

The Southwest Corridor Plan aims to use limited public resources wisely by targeting them in identified "key places" to support the local land use vision. It also sets the stage to look at how investments in transportation projects, parks and habitat improvements can be made together. This allows for efficiencies in planning and the ability to achieve multiple goals in targeted areas. The Southwest Corridor Plan goals direct partners to collaborate, target resources and search for opportunities to leverage dollars.

Collaborate

The project partners agree to work together to implement common prioritized projects that support the corridor land use vision. The private sector can bring investment in buildings, retail businesses, and jobs that help make great places. Nonprofit partners and other public agencies play an essential role in ensuring that the Southwest corridor continues to equitably and sustainably provide opportunities for a diverse range of people and maintains the connection to nature so important to current and future residents. In future phases, project partners should identify best practices and proven implementation strategies to help private, public and non-profit agencies work together to make the Southwest corridor vision a reality.

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Target resources

Focusing on the Southwest Corridor Land Use Vision has enabled project partners to limit the number of projects included in the shared investment strategy. A smaller prioritized list makes it easier to work together to fund and implement a set of common priorities.

By working together and listening to the public, the project partners narrowed a wide ranging list of roadway and active transportation projects from almost $4 billion worth of projects to about $500 million for a 15-year time frame. The list includes projects that would be highly supportive of a future high capacity transit investment, and a strategic list of roadway and active transportation projects that support the land use vision in the corridor.

The Southwest Corridor Plan also includes the region's first coordinated list of parks, trails and natural resource projects for implementation in tandem with transportation projects to support the community vision. The project partners created a list of nearly 450 projects gathered from local parks master plans, habitat improvement lists, and other sources. This was narrowed to the smaller list of parks, trails and natural resource projects included in the shared investment strategy. The list serves as a strategic resource to help project partners identify projects that leverage the benefits of – and funding for – transportation projects in the shared investment strategy.

Leverage

Great places are defined by a mix of elements that come together in one location to meet a range of community needs. Investing in a road improvement might not create a great place by itself – but combining it with a trail, a culvert replacement and bus stop improvements could help that public investment catalyze the market and attract private investment to build the community vision.

Great places are defined by a variety of elements that come together in one location to meet a range of community needs.

As a shared strategy, the narrowed lists of projects contained in this recommendation can serve as a tool for agencies when making future investment decisions. Continued communication is critical, both within agencies and with other community stakeholders.

Recommendation: Shared investment strategy

The Southwest Corridor Plan and Shared Investment Strategy includes a strategic project list for transit, roadway, active transportation and parks and natural resources as well as ideas for policy change and development strategies. The Southwest Corridor Plan evaluation, project partner priorities and public input provided the foundation for the Southwest Corridor Shared Investment Strategy.

It is understood that many Southwest corridor communities have transportation and other needs outside the boundaries of this plan, and will likely consider significant investments in other corridors during the time frame covered by the Southwest Corridor Plan. The Southwest Corridor Shared Investment Strategy is not intended to be a comprehensive listing of all priority projects in the area. Rather, it is a list of projects and policies that best meet the land use goals and objectives approved by the Southwest Corridor Plan Steering Committee in this early phase of the project. As project partners consider development and transportation needs in a variety of locations and corridors in their communities, the shared investment strategy defines actions that are critical to supporting the Southwest Corridor Land Use Vision.

Investments in the public realm

Public actions can influence development in three main ways: by regulations and policies, by investments in the public realm, and by development incentives that catalyze private investment. The Southwest Corridor Plan and Shared Investment Strategy address all three of these areas.

Moving from current conditions to community visions

Opportunities for public influence on community development

Investments in the public realm

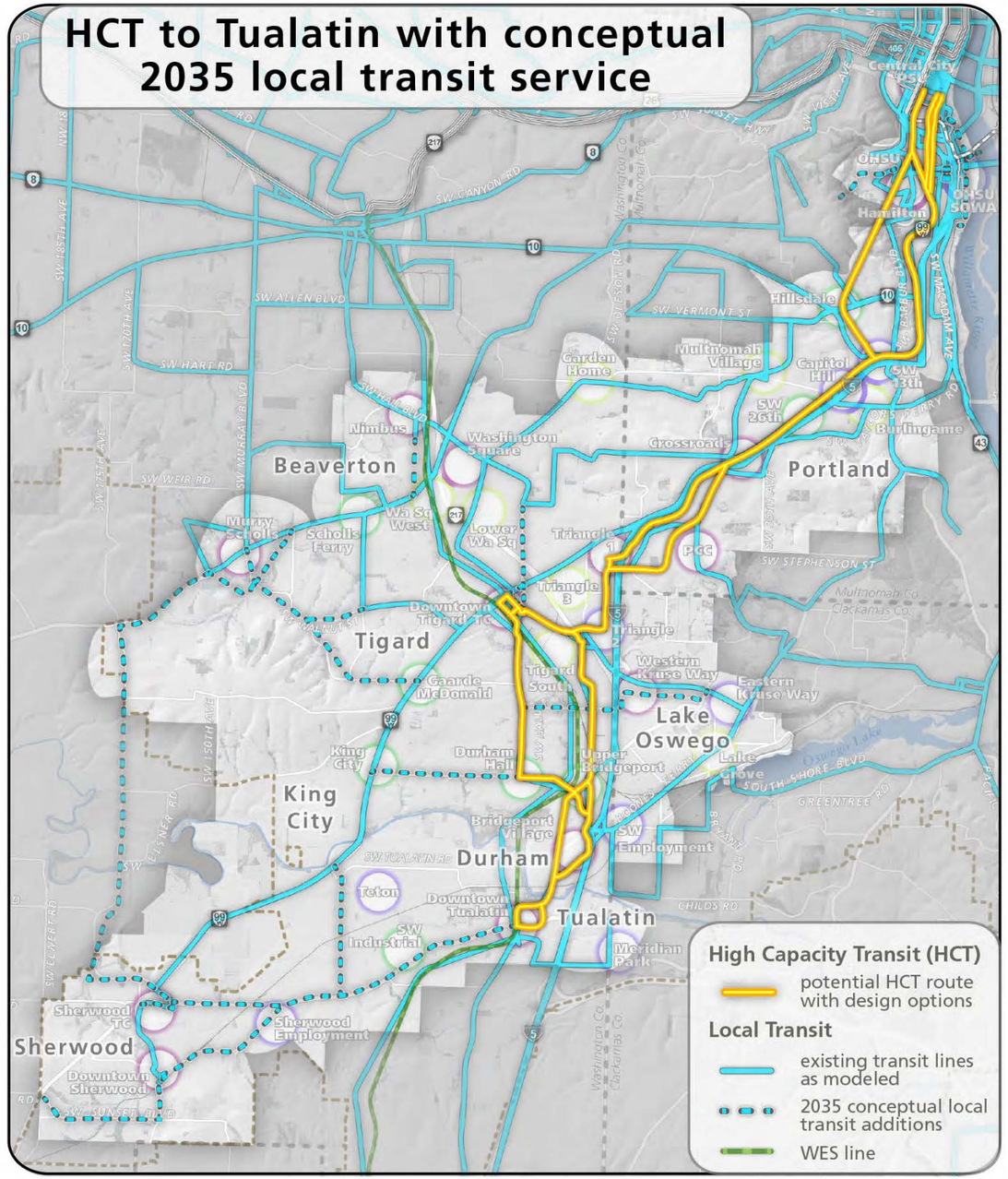
- High capacity transit
- Roadway expansions and improvements
- Bike and pedestrian facilities improvements
- Parks, trails and natural resources improvements

Regulations and policies

- Zoning changes
- Development requirements
- Policy coordination

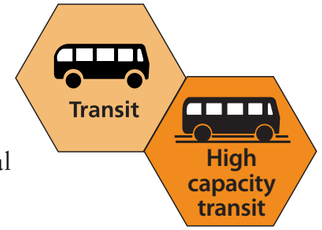
Financial incentives that catalyze private investment

- Public development grants such as through Metro's Transit-Oriented Development Program
- Local tax incentives



Note: Potential local transit service additions are conceptual only at this point. TriMet will work with local jurisdictions to determine service needs and will match service increases to available funding. Service enhancements could include both route and frequency.

Transit recommendation

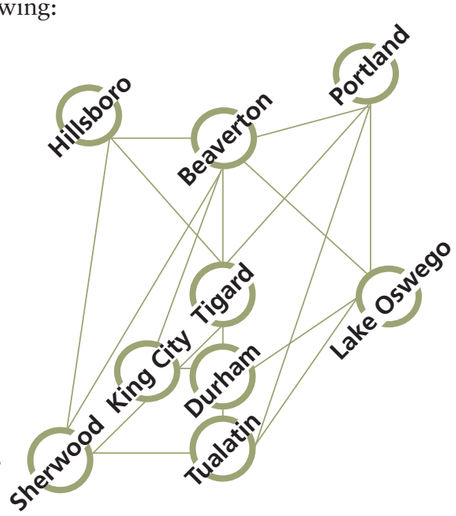


Local service/Southwest corridor service enhancement

Local transit connections will be essential to achieving the land use vision in the Southwest corridor, as well as to the success of a potential high capacity transit investment. In 2013-2014, TriMet will work with Southwest corridor jurisdictions and stakeholders to develop the Southwest Service Enhancement Plan.

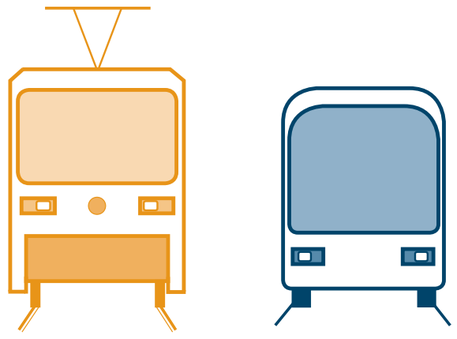
Southwest Service Enhancement Plan This recommendation directs TriMet to implement the Southwest Service Enhancement Plan to provide the following:

1. transit service that connects key Southwest corridor locations quickly and reliably to one another and to a potential high capacity transit line
   - Locations include but are not limited to: Beaverton, Washington Square, Lake Oswego, King City, Durham, Tualatin industrial areas, and downtown Sherwood.
   - Service includes improved local transit circulation from the Southwest corridor throughout Washington County, including connections to northern Washington County.
2. improved local transit connections to Westside Express Service
3. capital improvements necessary to achieve higher transit system functioning, such as queue jumps and/or re-orientation of existing transit lines to better connect key corridor areas and a future high capacity transit system
4. identification of improvements cities and counties can make for better transit access (e.g., sidewalks and safe pedestrian crossings).



High capacity transit

Mode Both light rail and bus rapid transit are recommended as modes for further study based on (1) the high ridership potential of both modes and (2) the need for additional design in order to produce more accurate capital cost estimates that clarify tradeoffs among cost, operating efficiency and ability to support the Southwest Corridor Land Use Vision.



Quality of bus rapid transit As bus rapid transit is studied as a potential high capacity transit mode, it is recommended that between 50 and 100 percent of the route runs in exclusive right of way. Federal Transit Administration (FTA) New Starts funding is only available for bus rapid transit projects with 50 percent or more of the project in dedicated transitway, and experience around the U.S. and internationally suggests that bus rapid transit with a higher level of exclusive transitway would best support the Southwest Corridor Land Use Vision. The Institute for Transportation & Development Policy has developed a bus rapid transit certification system that rates project performance. As bus rapid transit advances for further study, it is recommended that project partners aim for a project that meets Institute for Transportation & Development Policy certification standards.

Destination The recommended destination for further study for a high capacity transit investment is Tualatin, via Tigard. This recommendation is based on ridership potential, operational efficiency, and plans for increased housing and employment in Tigard and Tualatin.

Note: A high capacity transit alignment will not be on Interstate 5 or Highway 99W southwest of the I-5/99W intersection.

Funding The steering committee recommends that project partners work together to develop a funding strategy for the Southwest Corridor Plan that includes local, regional, state and

Bus rapid transit: Exclusive transitway or mixed traffic?

Bus rapid transit is a highly flexible and versatile transit mode. This means it can be difficult to define, and bus rapid transit projects are often under pressure to cut costs by reducing how much of the line runs in dedicated right of way.

A bus rapid transit project that runs in mixed traffic is less expensive to construct – it is also more expensive to operate, is slower and offers less certainty about arrival and departure times. Bus rapid transit in mixed traffic can be an improvement over local buses without transit priority treatments, but it cannot attract as many riders as bus rapid transit in exclusive lanes.

The BRT Standard by the Institute for Transportation & Development Policy is one way of rating the value of an individual bus rapid transit project. Using such a rating system creates an inherent pressure to make a high-performing project, and creates a healthy tension against the tendency to lower cost, but lower benefit, solutions. The standard is very high – there are only 12 gold standard projects in the world, none of which is in the United States.

For more information on the BRT Standard by the Institute for Transportation & Development Policy, visit www.itdp.org/microsites/the-brt-standard-2013/.

federal sources. Capital funding for construction of major transit projects comes from a variety of sources, including competitive grants and federal, state and regional funds. Transit operations (both bus and high capacity transit) are funded by passenger fares and a regional payroll tax. Any high capacity transit project would likely seek competitive federal funding through the FTA which has contributed more than half the total funding for MAX projects to date. Even with a federal grant, high capacity transit will require a corridor-wide funding strategy that secures and leverages new resources. An FTA grant would most likely require a 50 percent match which could include local, regional, state and other non-FTA federal funds.

Steering committee decisions: High capacity transit

With this recommendation, the steering committee will have narrowed the potential high capacity transit alternatives/concepts from 10 to two.

Future decisions will include determining the alignment, lane treatments, specific funding strategies, mode, station locations and local transit connections to the potential high capacity transit line.

October 2012	July 2013	mid-2014	early 2017

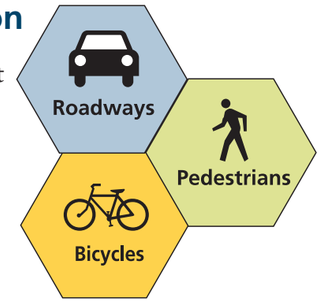
Narrow from 10 alternatives concepts to five	• Direction on Southwest (Transit) Service Enhancement Plan
	• Policy direction on "level" of bus rapid transit for further study
	• Which modes to carry forward for further study
	• Destination
		Refinement
		• Alignments
		  • Naito or Barbur?
		  • Surface or tunnel?
		  • Direct connection to PCC?
		  • Hall or 72nd?
		• Add a lane or convert a lane?
		• Potential station locations
		• Funding strategies
			Draft Environmental Impact Statement
			• Mode
			• Station locations
			• Transit system connections

Earlier decisions

The October 2012 narrowing decision removed several options from further consideration: 1) streetcar as a mode, 2) high capacity transit connection between Tigard and Sherwood on Highway 99W, and 3) the idea of adding or converting an Interstate 5 lane for high occupancy transit use. It also tabled consideration of WES improvements for another time and process.

The steering committee looked at potential impacts to auto and freight movement as well as local community land use goals to guide its narrowing decision. For instance, all high capacity transit options were routed away from Highway 99W southwest of the Interstate 5/Highway 99W intersection to avoid impacts to auto and freight movement as well as to commercial activities. Equally important is the need to provide transit connections to potential station communities in Tigard and Tualatin, specifically the Tigard Triangle, downtown Tigard and downtown Tualatin.

Roadway and active transportation recommendation



Over the past 18 months the project partners worked to narrow a large list of roadway and active transportation projects to a smaller list of projects that are most supportive of the high capacity transit recommendation and the Southwest Corridor Land Use Vision. Project partners narrowed from close to $4 billion worth of projects to around $500 million. This agreed-upon narrowed list of projects sets the stage for the project partners to cooperatively identify and leverage funding from a variety of sources. This will be critical, in light of the severe constraints on available transportation funding. Even the narrowed list of roadway and active transportation projects is more than five times greater than the projected $60 million in state and regional funds anticipated to be available in the corridor over the next 15 years.

Projects on the narrowed list fall into one of two categories:

1. Projects to be studied further in the Southwest Corridor Plan refinement phase

This includes roadway and active transportation projects that could be highly supportive for the success of a high capacity transit investment. However, even if a high capacity transit investment advances, not all of these projects can be included in a future funding package. Which projects advance along with a potential high capacity transit investment will be a future decision based on judgments by project partners during refinement in an effort to best match Federal Transit Administration funding requirements. Those projects that are not included in a high capacity transit funding package will still be available to the partners for further project development, including the pursuit of other funding opportunities.

2. Narrowed list of projects that have been identified as highly supportive of the Southwest Corridor Land Use Vision

These projects include roadway and active transportation projects that are available for further project development by project sponsors. Each project has been identified as highly supportive of a particular land use type in the corridor: commercial, freight/employment, mixed use, or higher intensity residential. Projects were selected based on geographic factors, project characteristics, stakeholder input and/or evaluation results.

These lists are not intended to identify all projects that are important to communities in the Southwest corridor. Instead, they represent a set of projects that are highly supportive of corridor land use and high capacity transit goals based on the narrowing approach intended to target and leverage limited public dollars. The lists will inform local capital improvement plans and transportation system plan development, TriMet's Transit Investment Priorities, and the next update of the Regional Transportation Plan. Projects on local and regional transportation investment plans that are not included in the shared investment strategy will remain on those local and regional plans unless the jurisdiction chooses to remove them.

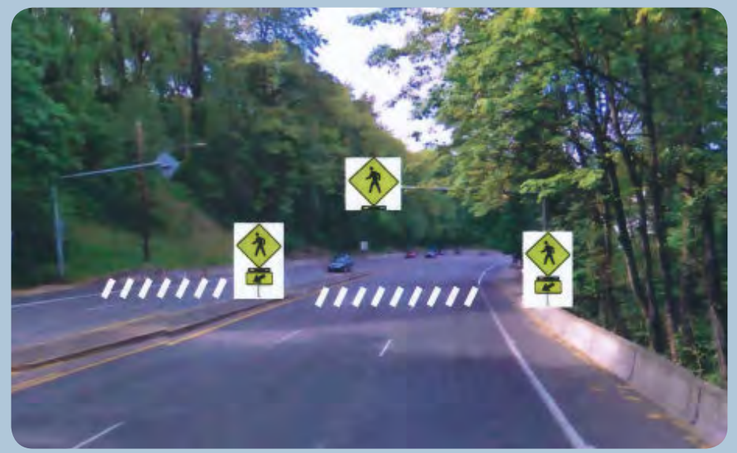
Attachment A includes maps, the project lists and narrowing criteria.

Early project implementation

In locations throughout the corridor, project partners are already making investments that support the Southwest Corridor Plan Land Use Vision, both independently and in collaboration with other corridor partners. For example, in Sherwood, the Cedar Creek trail is funded and proceeding toward construction. In Portland, Multnomah Boulevard from Barbur to Southwest 45th Avenue is being reconstructed to urban standards, including curbs and sidewalks. When complete, it will improve bicycle and pedestrian safety and connect the potential Capitol Hill/Barbur Boulevard high capacity transit station with nearby Multnomah Village. In addition, ODOT and TriMet have identified a series of low-cost improvements that can be implemented quickly and are supported by the local jurisdictions and the public. These include projects on Barbur Boulevard/Highway 99W that improve access to transit, fill pedestrian gaps or fill bicycle gaps, such as:

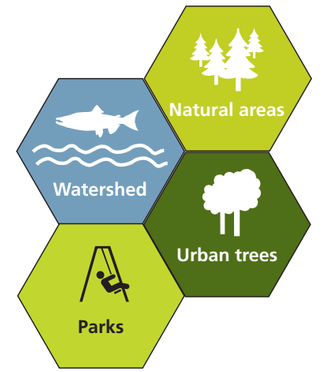
- Southwest Barbur at Southwest Bertha Boulevard bike lane markings
- Southwest Barbur at Southwest 13th Avenue crossing improvements
- Southwest Barbur at Southwest Alice Street crossing improvements
- Barbur Transit Center access improvements
- OR 99W at Bull Mountain Road sidewalk/bus stop improvements
- OR 99W at Durham Road illumination improvements
- OR 99W at Hazelbrook Road sidewalk/bus stop improvements.

These projects are expected to be completed in the next two to three years.



Example of a proposed crosswalk warning light project on Southwest Barbur Boulevard. ODOT, March 2011.

Parks, trails and nature recommendation



People consistently point to the parks, trails, natural areas and urban tree canopy as essential elements of what draws them to live, work and play in the Southwest corridor. Gathering information from local plans, project partners compiled a list of nearly 450 "green" projects in the corridor including parks, trails and natural areas as well as water quality improvements and natural resource enhancements like improved wildlife habitat corridors and replacing or retrofitting culverts for fish passage. The projects on the list were screened based on how they would support the Southwest Corridor Land Use Vision, a potential high capacity transit investment, and important water resource and regional trail connections.

1. Work together to secure funding for and implementation of the highest priority parks, trail and natural area projects for people and places

As the high capacity transit alternative is refined, partners should continue to sort and prioritize this green project list, examine likely funding sources and develop a collective strategy for grant writing and strategic use of existing or new funds. The project list and related maps can be used to coordinate across jurisdictional boundaries and select park and trail projects that support transit and new land uses. Additionally, green street designs that incorporate tree planting, vegetated storm water facilities and other low impact development approaches are recommended, softening the landscape for residents and visitors to the area and increasing people's access to nature.

2. Support habitat and water quality projects that deliver the greatest return on investment

Project partners should identify the highest value natural resource investments and work together to fund and implement those projects. This project list and approach offers an opportunity to focus on large projects that can achieve measurable ecological and financial benefits. Wherever possible, partners should work to avoid negative impacts to the highest quality areas while also enhancing those areas where water quality, wildlife habitat and recreation benefits are greatest.

Project implementation could be organized into broad strategies that include: stream and wetland enhancement, outfall and water quality facility retrofits, culvert replacements to improve fish passage and reduce risks to infrastructure, preservation of high quality fish and wildlife habitat, and enhancement of important but degraded habitats. Private land owners can also be involved through outreach and education efforts that improve stream function and water and habitat quality throughout the watersheds.

Attachment A includes maps, the narrowed list of projects and the parks and natural areas narrowing criteria.

Why the split between "trails" and "active transportation" projects?

People bike and walk on trails for recreation as well as a way to get to specific destinations, so trails are part of the overall active transportation network. For residents, there is no real division between the on-road bike lane or paved sidewalk portion of their route and the off-road trail portion of their route

Behind the scenes, there are differences that determine the best way to implement these "on-road" versus "off-road" active transportation improvements. Specific city, county or state requirements determine how bike or pedestrian facilities must be built or marked when they interact with auto traffic, while trail construction and maintenance through a park or natural area have different standards. Additionally, different potential funding sources may be pursued for trails than for on-road bike and pedestrian facilities.

This recommendation focuses on avenues for implementation, so it lists on-road bike and pedestrian improvements and selected off-road trails as active transportation and places all regional, local and community trails with parks and other nature improvements.

Achieving desired development: Regulatory environment and financial incentives

The public sector plays a key role in realizing a community's land use vision. Often, the development forms desired by communities are limited by the regulatory environment or not financially feasible. Two important tools can help the public sector set the stage for development consistent with community goals. Those tools are 1) changing the regulatory framework and 2) providing financial incentives. Together, these actions can catalyze market value and stimulate private investment.

Regulatory environment The regulatory framework is the area in which the public sector has the most control over development outcomes. This includes zoning codes and policies that relate to land development. Public sector policy changes can help local land use visions become a reality by making them the easiest thing to do. Southwest Corridor Plan partners should work together to create a regulatory framework that is predictable and efficient. This creates certainty in the private market and helps the community get high quality development in desired locations.

Financial incentives The public sector can also help catalyze development through the strategic application of financial incentives that support new development forms that may be "ahead of the market." In particular, development forms that are mixed use or multi-story are often more risky and expensive. Through creative financing strategies and tools, the public sector can help offset these risks and higher costs, helping to build value in the market and, eventually, enabling private investments to be made without public support.

Illustrative project examples

As part of the Southwest Corridor Plan, Metro staff looked at several case studies, or project examples, throughout the corridor. These examples were specifically chosen to highlight redevelopment opportunities that could be catalyzed by a combination of public sector investments and policy changes to leverage that investment.

Case study: Tigard Triangle

The Tigard Triangle is identified as an essential place for the Southwest Corridor Plan. It is envisioned as a pedestrian-friendly area with a mix of uses and an increased residential presence. The case study project is located near the potential high capacity transit line.

Analysis of development readiness in the Tigard Triangle highlighted issues with the current regulatory framework and identified the need for key public investments to spur the market to support development forms consistent with the local land use vision. This project example found that the following actions could remove barriers and improve the financial feasibility of development consistent with the Southwest Corridor Land Use Vision.

- Ease parking minimums to enable top-quality office and retail development currently constrained by parking minimums. Strategies to address this include:
  - Parking reductions that are phased in over time, including reduced minimums for retail, office and housing. This could help achieve transit-supportive densities and increase leasable square footage.
  - As development begins to take place and there is an increase in transit access, a parking management strategy (combined with phased parking reductions) could provide significant benefits. (For example, shared parking between office and retail uses.)
- Use layered landscaping to maximize leasable square-footage, reduce operating costs, and increase habitat value in an urbanizing area.
- Make investments that increase transit access (such as connections to the Tigard Transit Center, increasing higher level of connectivity within the Triangle and enhancing walkability). This will help increase the area's attractiveness and value, directly impacting achievable rents and the project's potential return on investment.
- Consider land banking developable parcels, since land values are relatively low in the Tigard Triangle today, and public partners could aggregate land for more efficient development with a higher impact.

Case study: Capitol Hill (Portland)

In Portland, one project example is located in the Capitol Hill area. Envisioned as a transit-oriented residential neighborhood with a mix of supporting uses, the case study project is located along the potential high capacity transit line.

Analysis of development readiness in this portion of the corridor in Southwest Portland highlighted issues with the current commercial zoning and identified a catalytic investment opportunity that could leverage development to match the land use vision. The following actions could help remove barriers and improve the financial feasibility of development consistent with the Southwest Corridor Land Use Vision.

- Provide public sector support for new development forms. Strategies to address this include:
  - Public ownership of the land enables the value to be written down, which could provide a multi-million dollar savings to the developer.
  - Utilizing the Transit-Oriented Tax Exemption could provide a significant financial incentive to developers while resulting in additional community benefits such as workforce affordable housing units.
  - Investments that enhance pedestrian and bike facilities and provide access to local amenities help increase the area's attractiveness and value, raising achievable rents and the project's potential return on investment.
- Focus development codes on context appropriate design and transitions with existing uses:
  - Smaller building mass and stepbacks better fit the character of the neighborhood and intensity of nearby uses, while enabling improved connectivity in the street network.
  - Surface parking at low ratios does not occupy a majority of the site, supporting this design alternative and reducing construction costs significantly.
- Focus retail uses in nodes along the corridor and provide plenty of opportunities for employment and residential uses around and between these commercial nodes.

Transit orientation and development readiness

There is growing demand for more compact urban development centered around transit, and this desire is expressed repeatedly in the land use visions of Southwest corridor communities. Research has shown that a few key measures can predict the readiness of an area to support walkable, mixed-use development. In turn, this type of development increases transit ridership and reduces vehicle miles traveled. Metro's transit-oriented development strategic plan (Metro, 2011) identifies a transit orientation measure as a composite of the following physical/demographic characteristics:

People The number of residents and workers in an area has a direct correlation with reduced auto trips.

Places Areas with commercial urban amenities such as restaurants, grocers and specialty retail not only allow residents to complete daily activities without getting in a car, but they also improve the likelihood of higher density development by increased residential land value.

Physical form Small blocks promote more compact development and walkability.

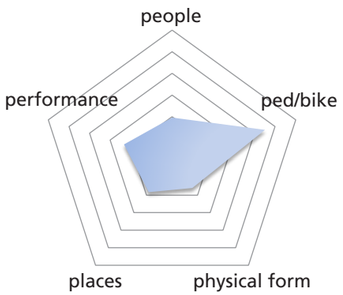
Performance High quality, frequent bus and rail service make public transportation a more reliable means of getting around and can be correlated to less driving.

Pedestrian/bicycle connectivity Access to sidewalks and safe bikeways encourages many more people to walk or cycle to transit and neighborhood destinations.

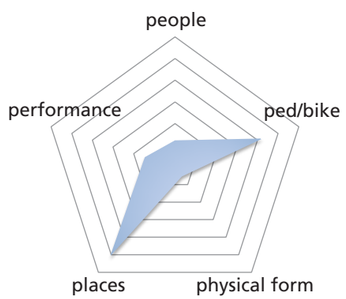
The graphs below show how selected areas of the corridor perform against this transit orientation measure. The map to the right shows the relative transit orientation of areas in the Southwest corridor in 2011. This map and others like it help determine the highest value location for a potential high capacity transit investment.

Transit orientation measure graphs, selected corridor locations

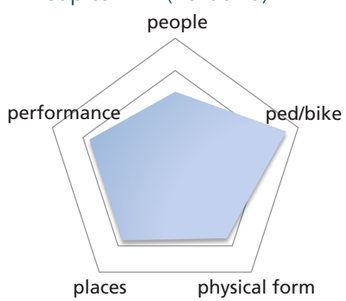
Tigard Triangle

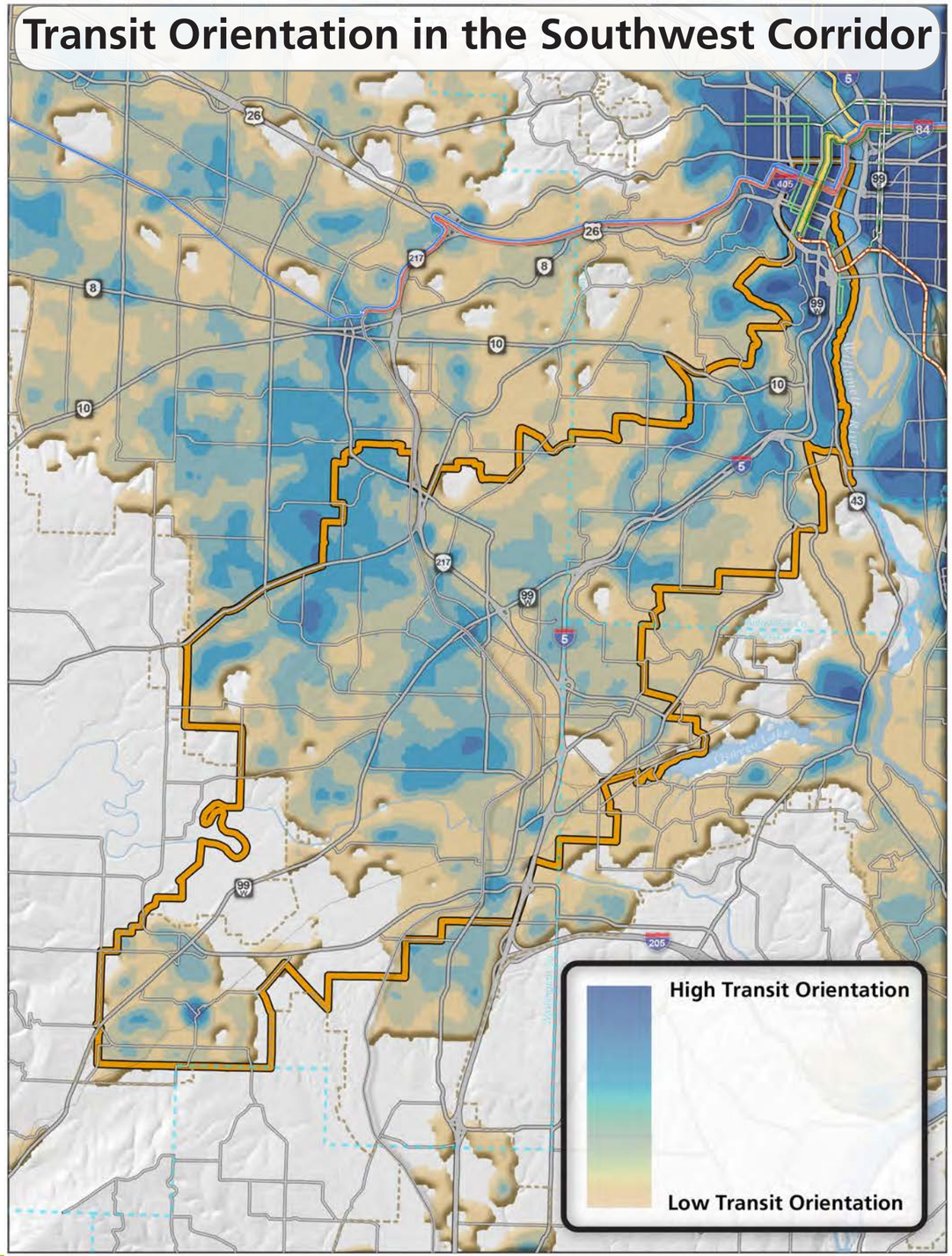


Downtown Tualatin



Capitol Hill (Portland)





New Starts funding competitive advantage

By setting the right regulatory and financial environment, the public sector can catalyze private development and, ideally, make the region more competitive for capital construction dollars from the Federal Transit Administration's New Starts grant program, likely to be a key element of a high capacity transit funding strategy. The policy guidance for the New Starts program provides measures that will be used to evaluate projects, including a series of actions local governments can take to leverage a transit investment such as plans, policies and financial incentives to support the adjacent land use and bring more transit riders to the system. The guidance prioritizes actions that support these outcomes:

- additional, transit-supportive development and redevelopment
- preservation or increase in the affordable housing supply
- increased population and employment density.

The New Starts policy guidance gives higher rating to places that have adopted plans, policies and incentives in place to support transit. Locations with built "proof of concept" transit-oriented projects rate the highest. This means the more quickly the Southwest corridor establishes transit-supportive policies and initiates financial incentives, the better positioned it will be to compete for federal funds. These actions also prepare the corridor now for transit-oriented development, rather than waiting until after transit is built.

Public benefits

By aligning the regulatory framework, offering financial incentives to catalyze development, and prioritizing transit-supportive capital investments in the public realm, the public sector has a tremendous opportunity to create successful places that reflect the Southwest Corridor Land Use Vision.

These investments help ease traffic congestion and enhance the attractiveness and market appeal of the corridor. Through public-private partnerships, catalytic projects show what is possible for future development, setting the stage for more private investment in the area. Early development projects bring more people to specifically chosen locations in the corridor, which in turn attracts more amenities and private investment to the area.

With more people and places to go in the corridor, these developments leverage additional ridership, creating greater efficiency in the transportation network and leveraging the corridor's transit investment. At the same time, the character of existing neighborhoods remains intact.

Revitalizing and re-orienting properties in station areas can also strengthen the fabric of the local community, creating places where people want to be. Public investments that create beautiful public spaces and pedestrian streetscapes draw residents and visitors to spend time there. Projects that re-energize underperforming suburban office parks and commercial strip malls into housing choices and employment opportunities attract existing and new residents. With more people and places to go in the corridor, these developments leverage additional ridership, creating greater efficiency in the transportation network and leveraging the corridor's transit investment. At the same time, the character of existing neighborhoods remains intact.

Locating more jobs and housing choices near transit – and attracting additional retail and services – not only spurs economic activity, but it also increases the overall market value in the corridor. As a result, the public sector sees a positive financial return on a high capacity transit investment – both from higher use and from the increase in tax revenue from redevelopment and its effect on the value of surrounding properties.

Parks can be key to economic development

Traditionally, parks have been developed to fill service gaps, and natural areas are purchased to protect resources. But a new perspective is emerging: Parks, trails and natural areas can be sited where development would benefit from their proximity. A growing body of evidence demonstrates how public amenities such as parks, natural areas, trails, street trees and other investments that add more nature to urban areas contribute to higher land values.

In 2012, Metro investigated the connection between access to nature and economic development within a community. The discovery: A strategy of investing in parks and open space is not contrary to a community's economic health, but rather it is an integral part of it. Integrating natural features into development helps ensure a high quality of life and a connection to nature. Additionally, when people are drawn to public spaces, they interact as neighbors, and this interaction builds stronger, healthier, more prosperous and more engaged communities.

For the full report, see: A synthesis of the relationship between parks and economic development (Metro, 2012), at www.oregonmetro.gov/naturalareas.

Toolkit: Regulatory framework that sets the stage

The Southwest Corridor Land Use Vision expresses the collective aspirations of the communities in the Southwest corridor. High capacity transit has the potential to have a catalytic effect on adjacent land uses and help achieve this vision. This will work best if transit supportive regulations and policies are in place well in advance of the high capacity transit investment. These policies will both support the land use vision now and help to achieve the community's desired goals over time. There are a number of regulatory tools and strategies that can help foster transit ready communities; however, their application differs greatly depending on the context in which they are applied.

Attachment B describes in detail these key transit supportive policies and regulatory tools. Specific project examples of how these tools can be applied are included to illustrate how the changes can raise the development potential within the corridor. Policies for consideration include:

- zoning code changes
  - density maximums and building height
  - non-compliant use provisions
  - stepbacks
  - commercial corridor assessment
- parking requirements and parking management
  - trip generation reductions
  - responsive parking ratios
  - shared parking
  - unbundling parking
- design code changes
  - layered landscapes and active open space
  - ground floor active use provisions.

Attachment B includes the full policy toolkit, which includes a representative list of possible regulations.

Toolkit: Financial incentives that set the stage

In addition to regulatory and policy changes, the public sector can help stimulate investment in strategic locations. These tools can help bridge the financial gap between what is financially feasible today and what is desired by the community. In many cases the community's vision is above and beyond what the current market can provide. Investments in the public realm (such as streetscape enhancements and transit investments) are one way to send a message to the private sector that the public is committed to making the community vision a reality. Direct financial incentives provided to key catalytic projects offer a "proof of concept" – and through strategic investment in such projects, can lead to increased value in the market. Eventually, this can allow for private investment without public support.

Current market conditions in the Southwest corridor are not supportive of many development forms that are envisioned by the local communities. In particular this is true in areas the community would like to see more walkable, attractive and business-friendly neighborhoods than exist today. The financial incentives toolkit section of Attachment B highlights key financial tools that are available to public sector partners to leverage investment and new development in specific Southwest corridor locations. The project examples illustrate how these incentives can help fill the financial gap and achieve the desired development outcomes in the corridor. Tools recommended for consideration by public sector partners in areas of change throughout the Southwest corridor include:

- Transit Oriented Tax Exemption (TOTE)
- Vertical Housing Program
- brownfield cleanup
- System Development Charges strategies
- urban renewal
- Transit Oriented Development Program
- land acquisition and banking.

Attachment B includes the full financial incentives toolkit, which includes a representative list of possible incentives.

Alternative performance measures

In some circumstances, existing state transportation level of service performance measures function as a barrier to redevelopment or new development. This could make it difficult for local communities to achieve their land use goals as set out in the Southwest corridor land use vision. To address this challenge, the steering committee recommends that the Southwest Corridor Plan refinement process include collaborative work by Metro, the Southwest corridor cities, Washington County and ODOT to develop a coordinated set of multimodal performance measures reflecting state, regional and local goals.

These multimodal performance measures may vary across the corridor based on community objectives, and should provide the objectivity necessary for fair and consistent application. The measures would be intended to support both land use review and transportation evaluation. The alternative performance measures would likely address I-5 and 99W within the Southwest corridor and Tualatin-Sherwood Road in the Tualatin and Sherwood Town Center areas, although the boundaries of application could vary. The result would be a set of multimodal performance measures and associated evaluation process that could be considered for adoption by jurisdictions throughout the region, including Metro and the Oregon Transportation Commission.

Southwest Corridor Plan recommendation attachments

Attachment A: Roadway, active transportation, parks, trails and natural resources projects map book and project lists

Attachment B: Regulatory framework and financial incentives toolkit

Documents that support this action and provide key information for further phases

www.swcorridorplan.org/projectlibrary

Charter *Dec. 12, 2011*

Health assessment *January 2012*

Opportunity and housing report *January 2012*

Vision, goals and objectives *May 14, 2012*

Existing conditions summary report *April 18, 2012*

Southwest corridor economic development conditions, stakeholder perspectives and investment alternatives *Jan. 24, 2013*

Project bundles *Feb. 5, 2013*

Evaluation report, *July 1, 2013*

Public involvement report, *July 1, 2013*

Forward: What's next for the Southwest Corridor Plan?

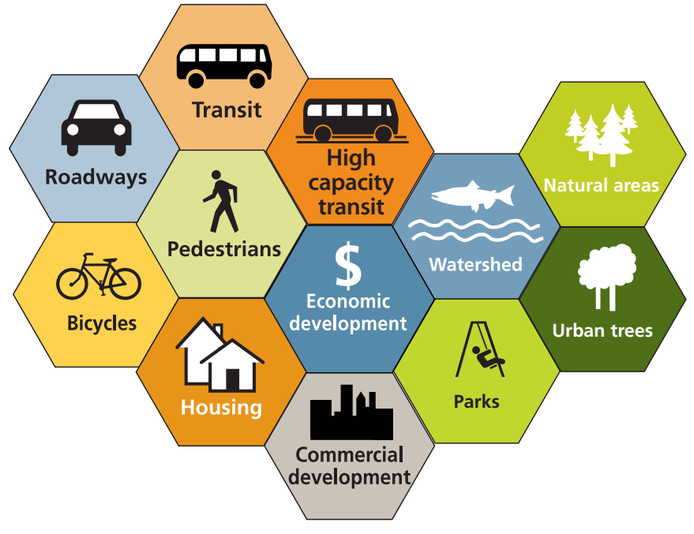
During the months following the steering committee recommendation, the boards and councils of plan partners (cities, counties and agencies) will take action on the Southwest Corridor Plan.

Project partners will continue to meet during the 2013-14 refinement period to consider high capacity transit options, guide transit Service Enhancement Plan decisions and move forward with strategic project development for priorities identified in the Southwest Corridor Shared Investment Strategy.

Project partners will collaborate to develop an implementation structure that maximizes the potential for project success. This structure will consider:

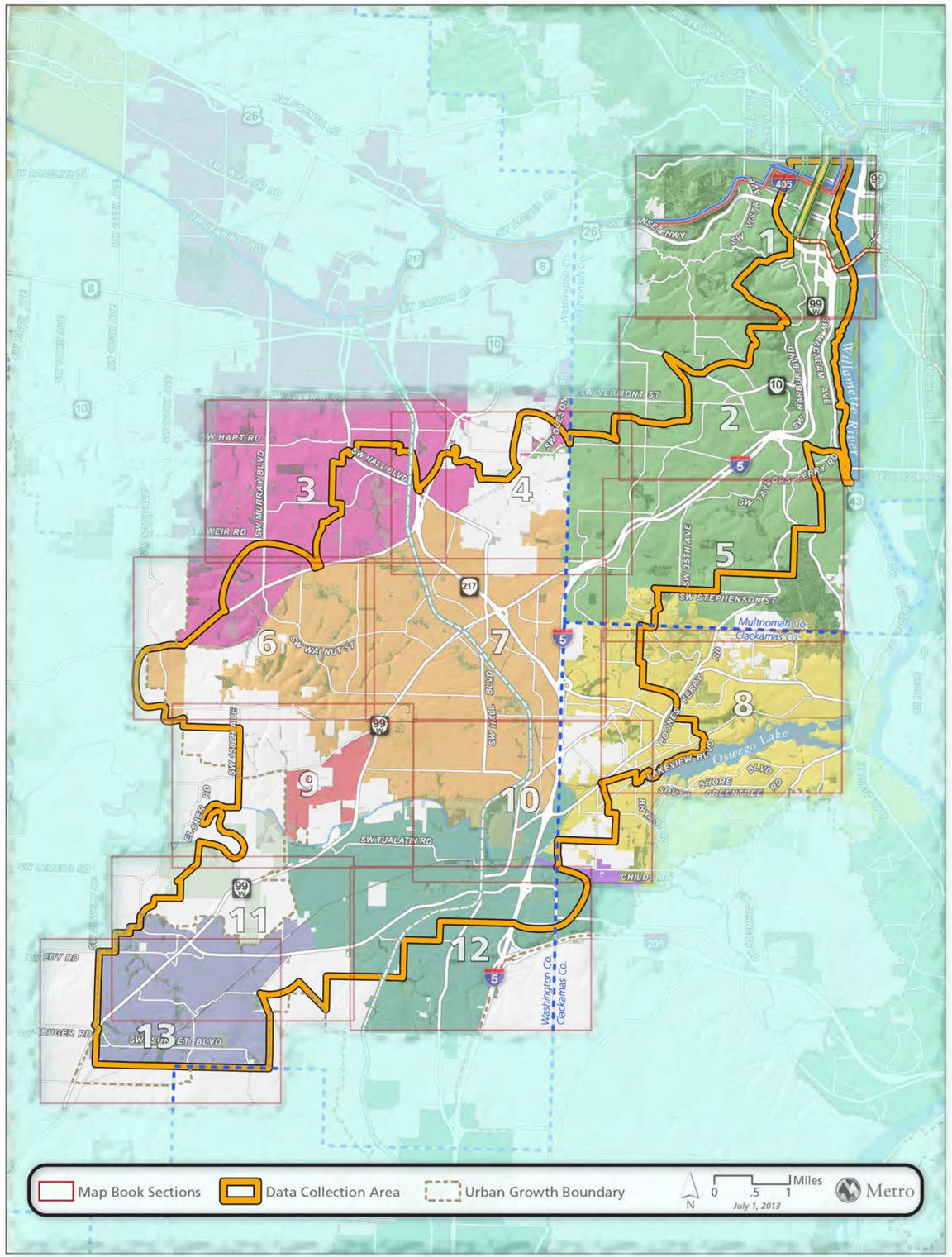
- community partners
- public/private/non-profit partnerships
- citizen engagement
- innovative and collaborative funding mechanisms.

As the partners work to advance projects in the Southwest Corridor Shared Investment Strategy, they should consider other regional plans such as the Regional Trails Plan and the Active Transportation Plan to identify the safest and most interconnected bicycling and walking network possible. At the end of the refinement period (in mid-2014), the Southwest Corridor Plan Steering Committee will decide whether to advance a high capacity transit project for further consideration in a Draft Environmental Impact Statement (DEIS) under the National Environmental Policy Act (NEPA).



Southwest Corridor Strategic Investment Strategy action chart

July steering committee recommendation	Responsibility for implementation					
	Who implements		When	Funding for work	Notes	Target date for next steps (if applicable)
	Lead	Partners				
Decision to refine high capacity transit alternatives for further study	**Metro**/TriMet	Cities, counties, ODOT	8/2013 – 6/2014	MTIP – Metro	Early 2014 SC agreement: 1. Refined high capacity transit project 2. Collaborative funding plan for DEIS 3. Preliminary funding strategy for high capacity transit project	**Mid 2014**: Begin Draft Environmental Impact Statement (DEIS) on high capacity transit alternative as refined by project partners **Early 2017**: Target end date for DEIS and Locally Preferred Alternative decision
Southwest Service Enhancement Plan	**TriMet/**Metro	Cities	8/2013 – 12/2014	TriMet with some Metro staff support	Vision for future transit service throughout the area, including connections to high capacity transit. Long-term enhancements will be guided by TriMet's financial capacity and by local jurisdiction access improvements	**2015 and forward**: Implement service enhancements and revisit over time based on local improvements
Southwest corridor Alternative Performance Measures	ODOT	Cities, Washington County, Metro	8/2013 – 6/2014	ODOT	Coordinate work during refinement of high capacity transit alternative	
Policies and incentives to address regulatory framework and financial incentives	Cities	Metro	Timing depends on jurisdiction needs and desires and direct connection to high capacity transit	Cities	Milestones for specific cities will be tied to progress on high capacity transit project with an aim to address FTA guidelines and help the region compete for federal transit funds	**Spring 2014**: Define specific policy considerations for project partners to pursue in coordination with DEIS and development of a Locally Preferred Alternative
Roadway and active transportation projects highly supportive of high capacity transit	Metro/TriMet	ODOT, cities, counties	8/2013 – 6/2014	Metro	During refinement, partners will determine which projects are integral to a high capacity transit investment	**Mid 2014**: Partners will define which projects are packaged with the high capacity transit alternative for NEPA
Roadway and active transportation projects highly supportive of corridor land use vision	Cities, counties, ODOT		As funding becomes available	Project sponsor	Project sponsors will take responsibility to implement their projects with some collaborative efforts to seek funding, particularly for projects identified for early implementation; project sponsors actions may include project design and engineering, public outreach and working with regional partners to include the project in the Regional Transportation Plan	
Parks and natural resource projects	Cities, counties, Metro	Parks, environmental agencies and non-profits	8/2013 – 6/2014 for projects related to high capacity transit	Project sponsor and Metro will look at projects that could be part of high capacity transit alternative	Project partners will take responsibility to implement their projects and work collaboratively to seek grant opportunities and other funding	**Mid 2014**: Identify projects that may be part of high capacity transit alternative for NEPA



GREAT PLACES

SW Corridor Plan

Portland • Sherwood • Tigard • Tualatin
Beaverton • Durham • King City • Lake Oswego
Multnomah County • Washington County
ODOT • TriMet • Metro

Steering committee recommendation | Attachment A

Roadway, active transportation, parks, trails and natural resources projects map book and project lists

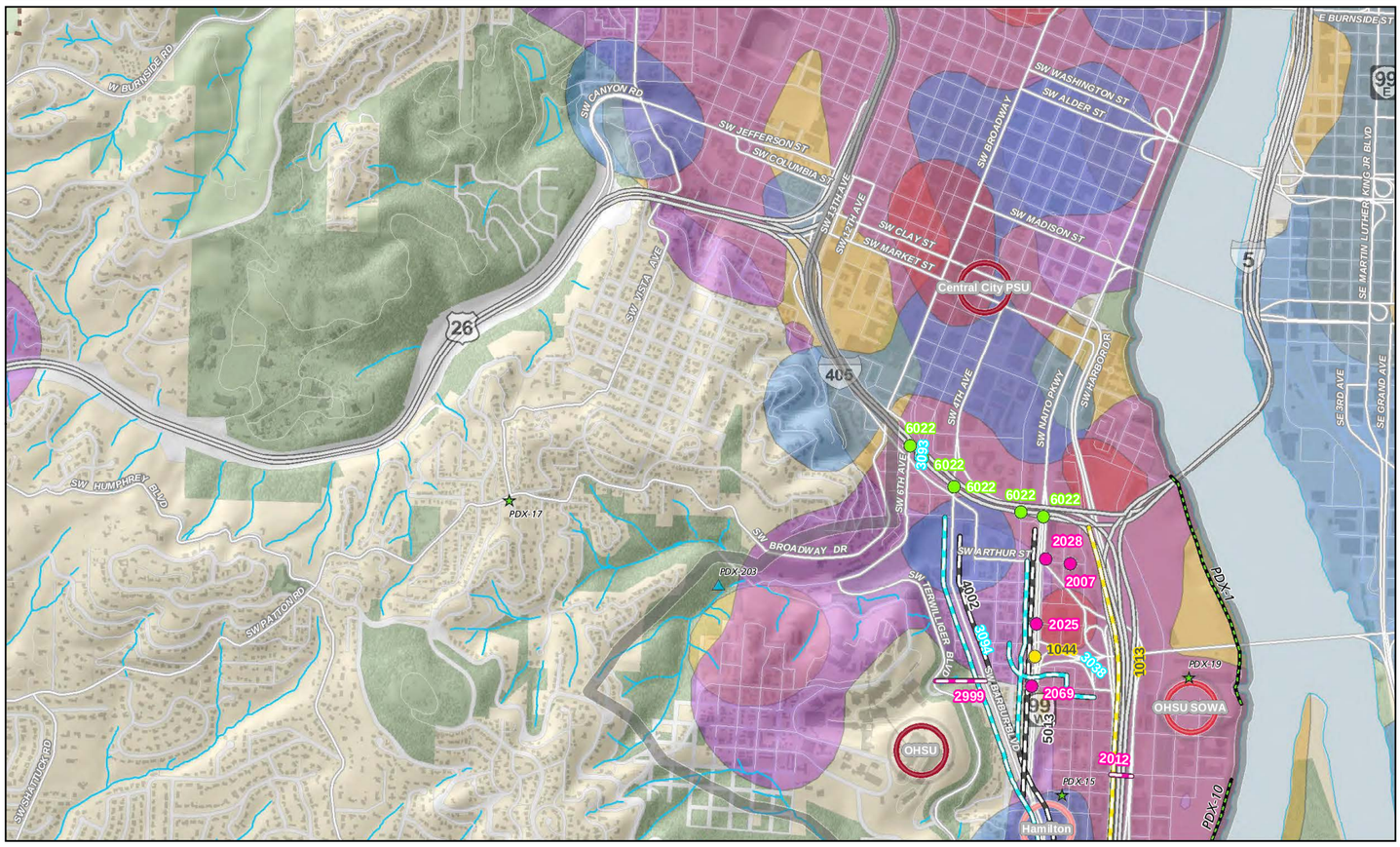
July 22, 2013

Map tiles	2
Roadway and active transportation list	9
Parks, trails and natural resources list	12

Maps are included for location purposes only.

SW Corridor

Roadway, Active Transportation, and Green Projects – Section 1



Projects by Type
- Bicycle
- Bike/Ped
- AT Trail
- Pedestrian
- Auto/ Freight
- Multimodal
- Fish Projects
- Natural Resource
- Park/ Natural Resource
- Stormwater
- Trails

Development Categories
- Commercial/ Industrial
- Employment
- Mixed Use
- Higher Intensity Residential

Key Places
- Essential
- Priority
- Opportunity
- Neighborhood

- Urban Growth Boundary
- Parks
- SW Corridor

1,000 500 0 1,000 Feet

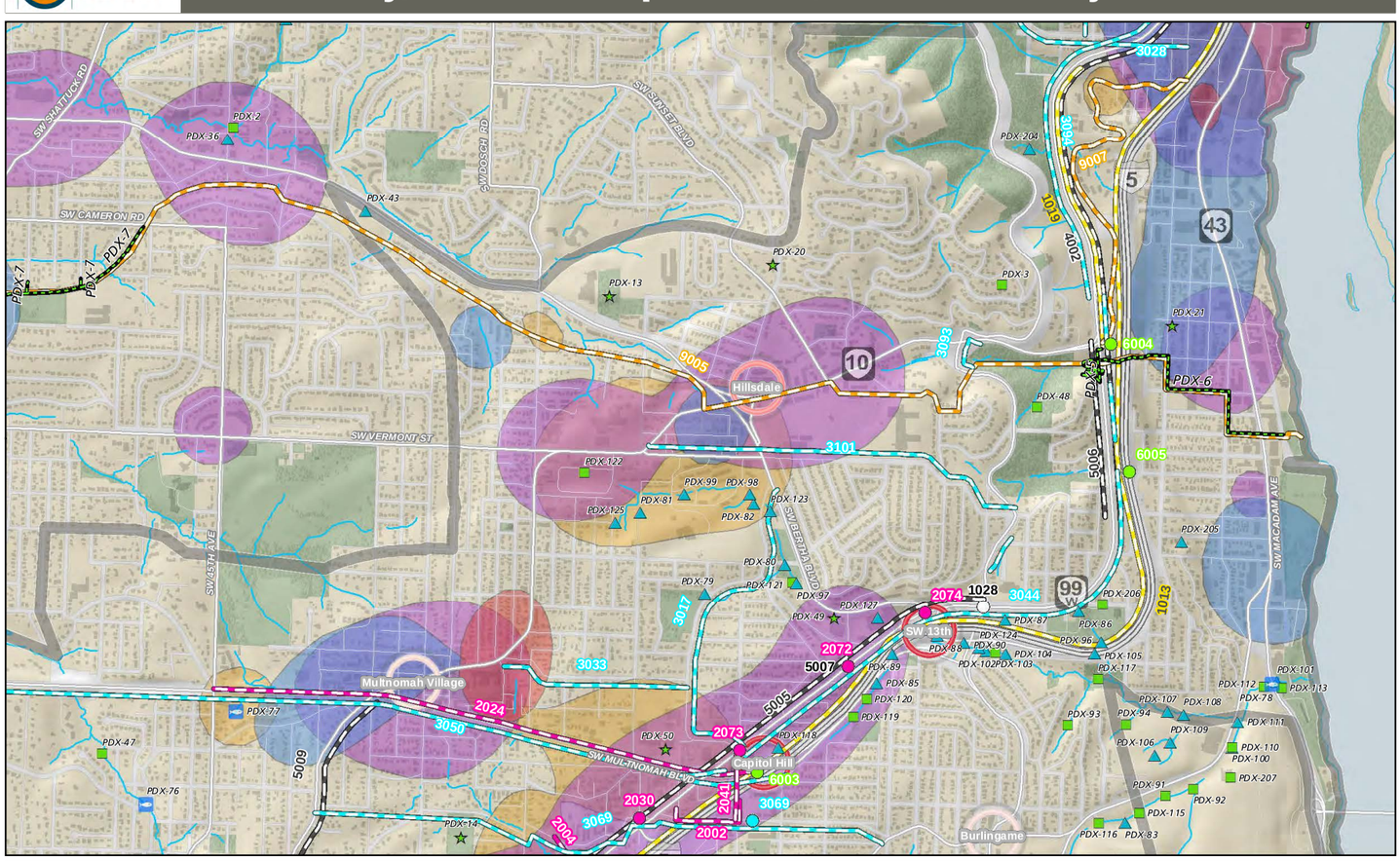
N

Metro

July 15, 2013

SW Corridor

Roadway, Active Transportation, and Green Projects – Section 2



Projects by Type
- Bicycle
- Bike/Ped
- AT Trail
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- Auto/ Freight
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- Fish Projects
- Natural Resource
- Park/ Natural Resource
- Stormwater
- Trails

Development Categories
- Commercial/ Industrial
- Employment
- Mixed Use
- Higher Intensity Residential

Key Places
- Essential
- Priority
- Opportunity
- Neighborhood

- Urban Growth Boundary
- Parks
- SW Corridor

1,000 500 0 1,000 Feet

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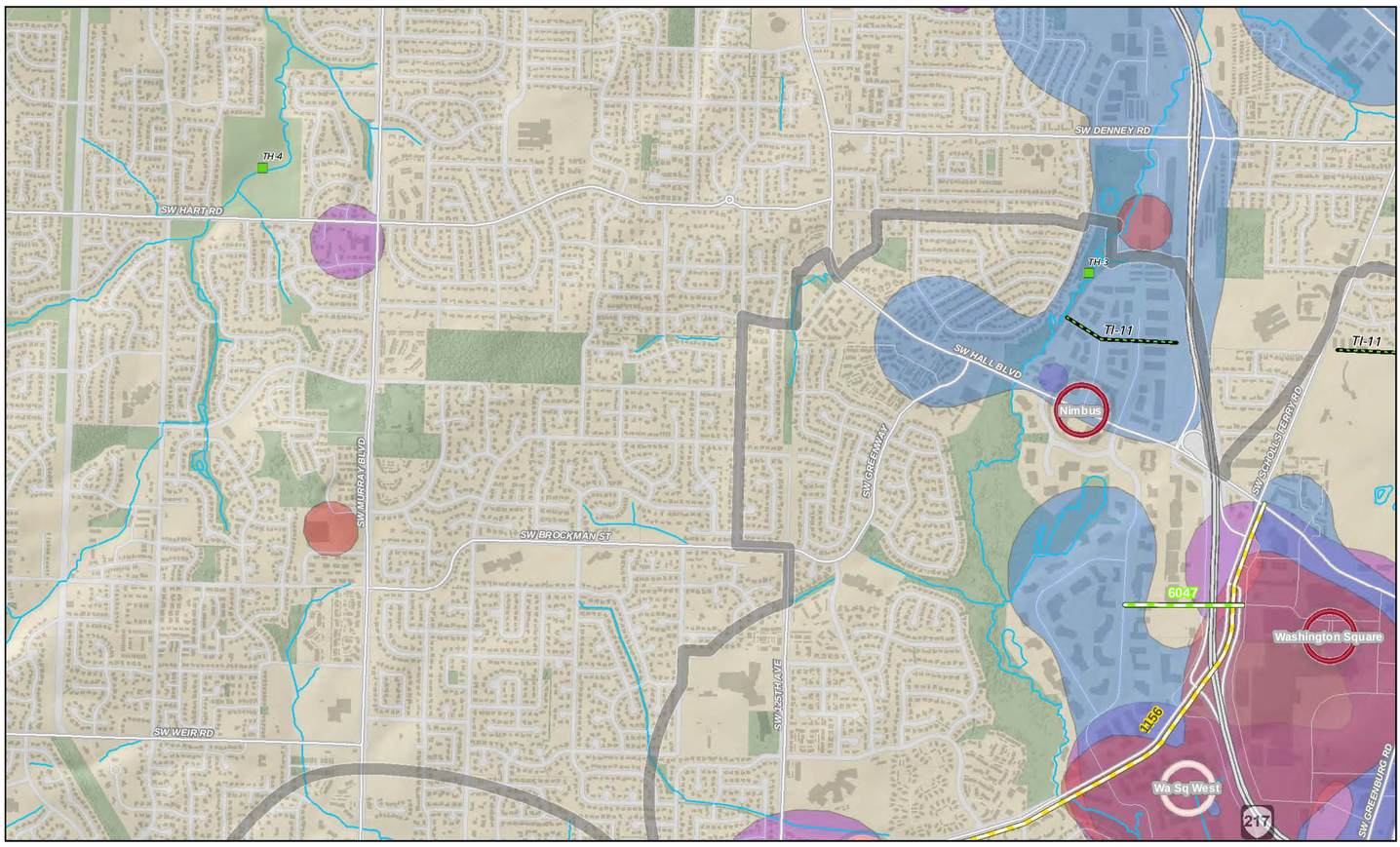
Metro

July 15, 2013

Roadway, Active Transportation, and Green Projects – Section 3



Projects by Type: Bicycle; Bike/Ped; AT Trail; Pedestrian; Auto/ Freight; Multimodal; Fish Projects; Natural Resource; Park/ Natural Resource; Stormwater; Trails

Development Categories: Commercial/ Industrial; Employment; Mixed Use; Higher Intensity Residential

Key Places: Essential; Priority; Opportunity; Neighborhood

Urban Growth Boundary; Parks; SW Corridor

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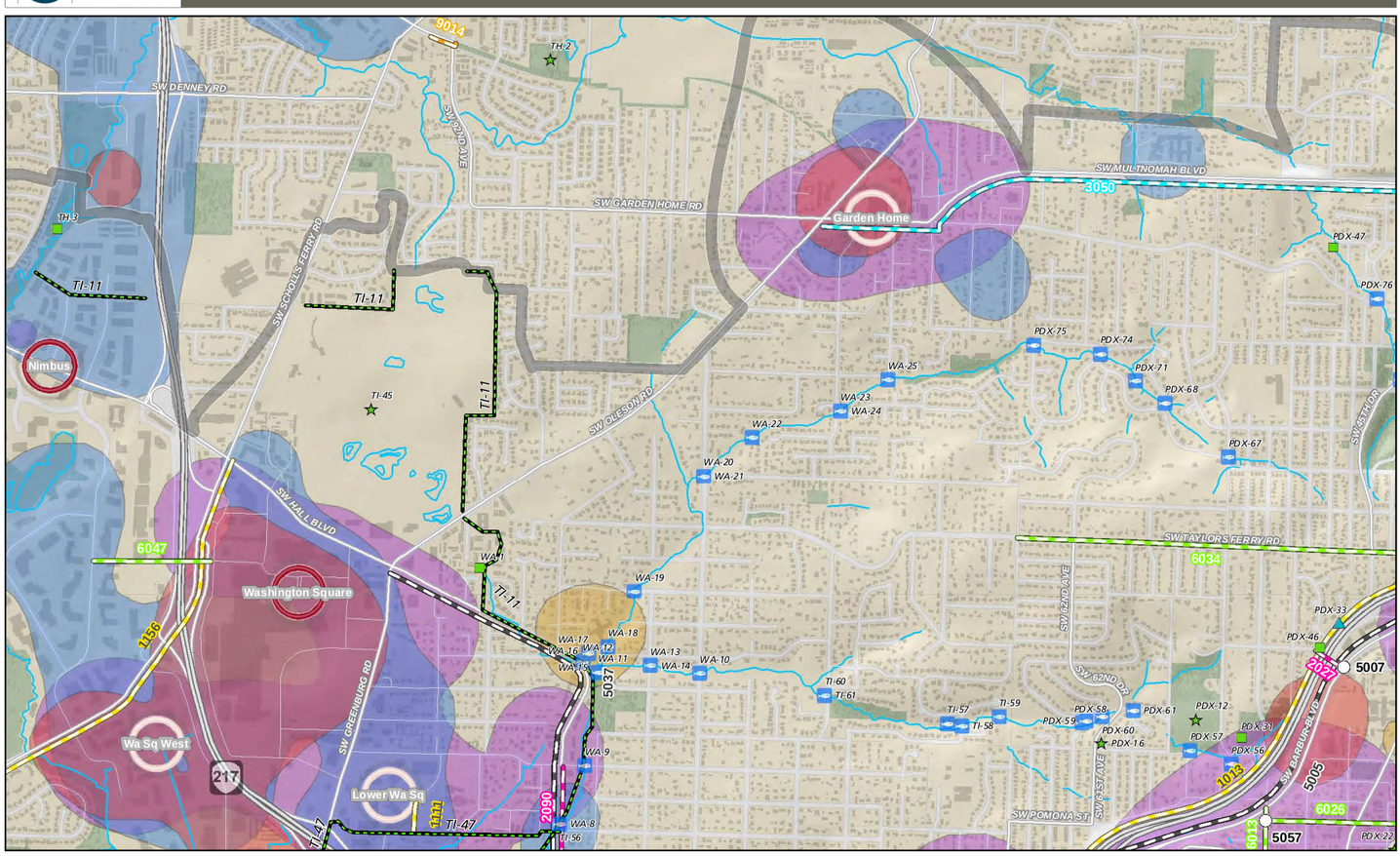
Metro

July 15, 2013

Roadway, Active Transportation, and Green Projects – Section 4



Projects by Type: Bicycle; Bike/Ped; AT Trail; Pedestrian; Auto/ Freight; Multimodal; Fish Projects; Natural Resource; Park/ Natural Resource; Stormwater; Trails

Development Categories: Commercial/ Industrial; Employment; Mixed Use; Higher Intensity Residential

Key Places: Essential; Priority; Opportunity; Neighborhood

Urban Growth Boundary; Parks; SW Corridor

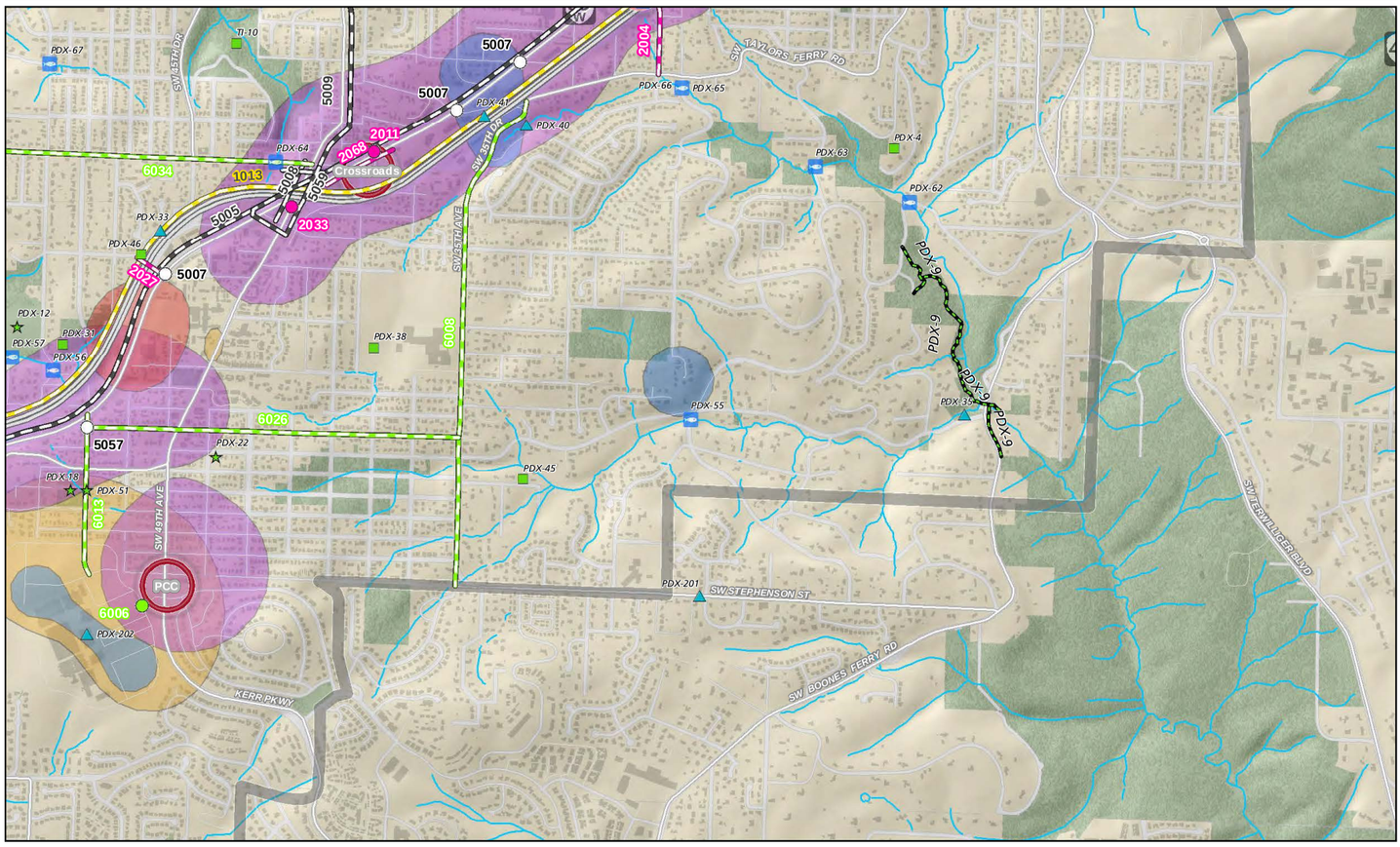
1,000 500 0 1,000 Feet

N

Metro

July 15, 2013

SW Corridor — Roadway, Active Transportation, and Green Projects – Section 5



Projects by Type: Bicycle; Bike/Ped; AT Trail; Pedestrian; Auto/ Freight; Multimodal; Fish Projects; Natural Resource; Park/ Natural Resource; Stormwater; Trails

Development Categories: Commercial/ Industrial; Employment; Mixed Use; Higher Intensity Residential

Key Places: Essential; Priority; Opportunity; Neighborhood

Urban Growth Boundary; Parks; SW Corridor

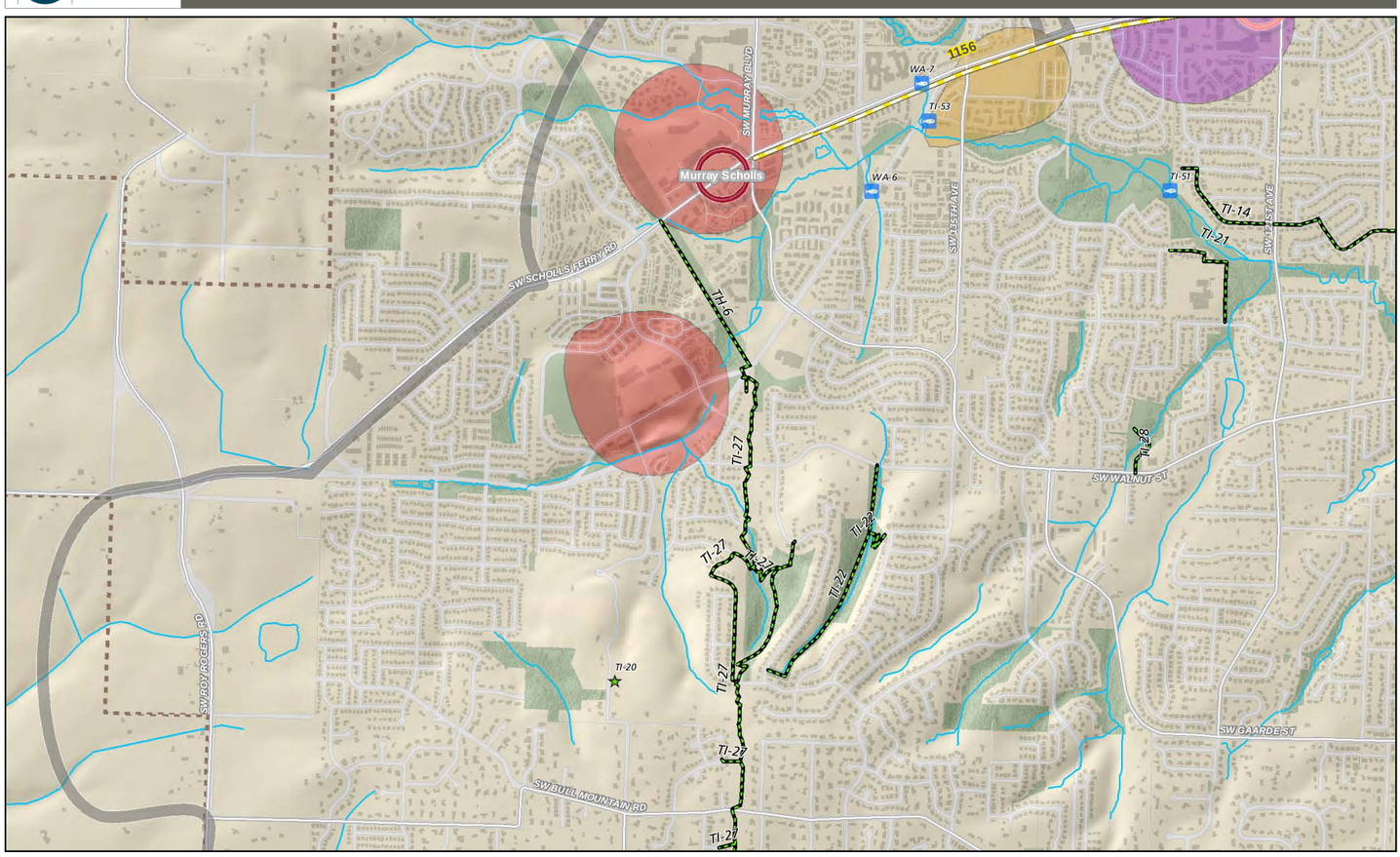
1,000 500 0 1,000 Feet

N

Metro

July 15, 2013

SW Corridor — Roadway, Active Transportation, and Green Projects – Section 6



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Development Categories: Commercial/ Industrial; Employment; Mixed Use; Higher Intensity Residential

Key Places: Essential; Priority; Opportunity; Neighborhood

Urban Growth Boundary; Parks; SW Corridor

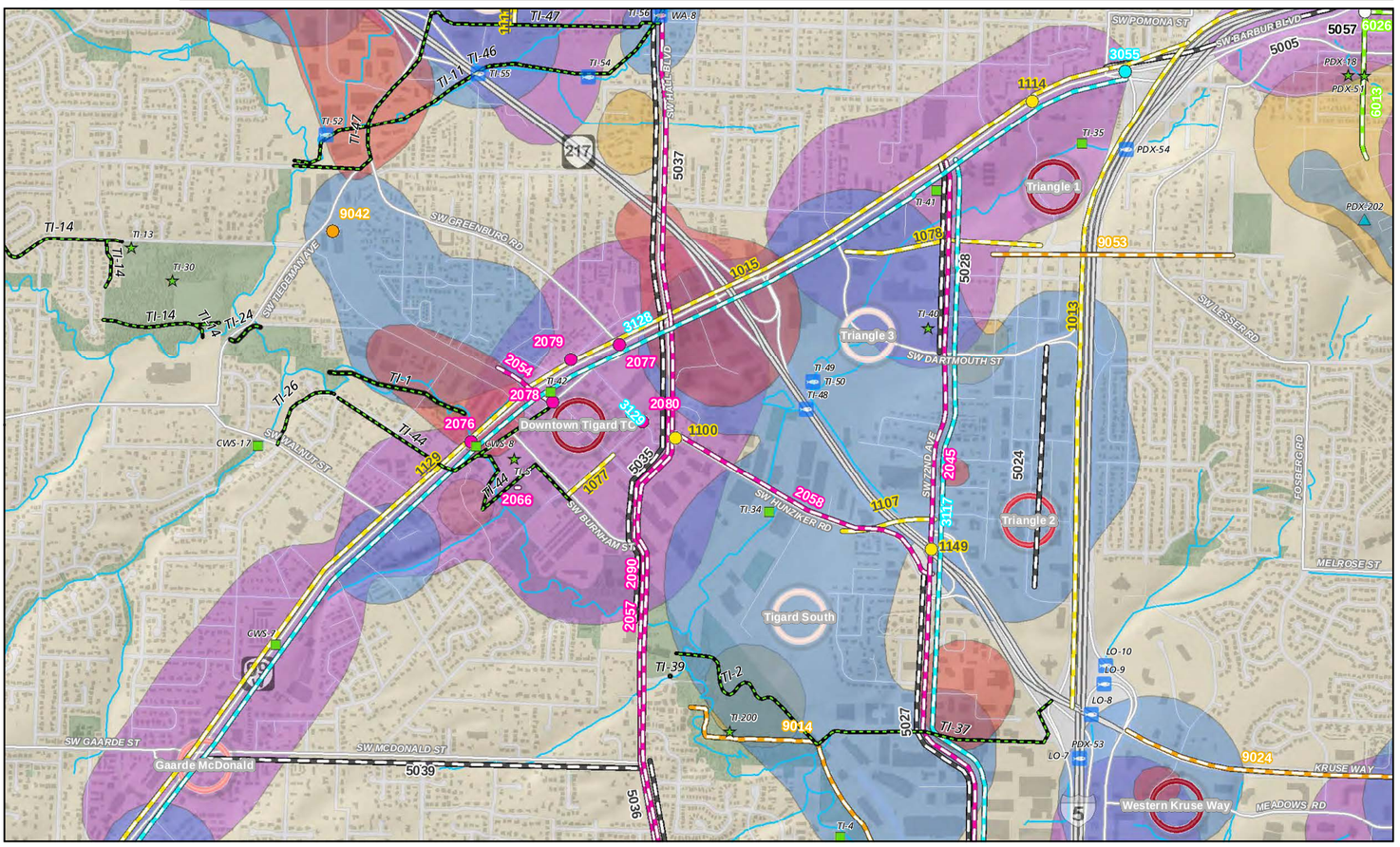
1,000 500 0 1,000 Feet

N

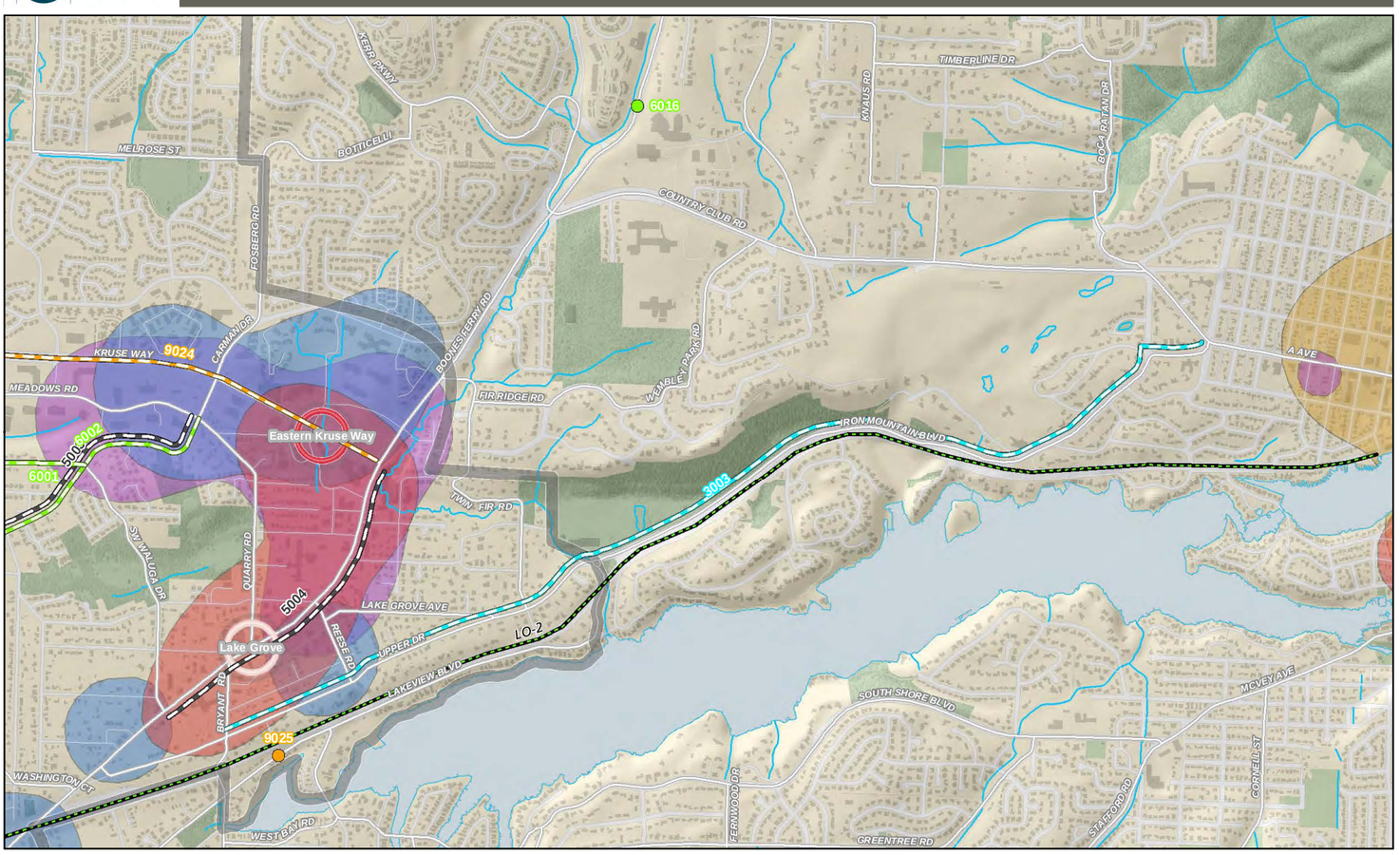
Metro

July 15, 2013

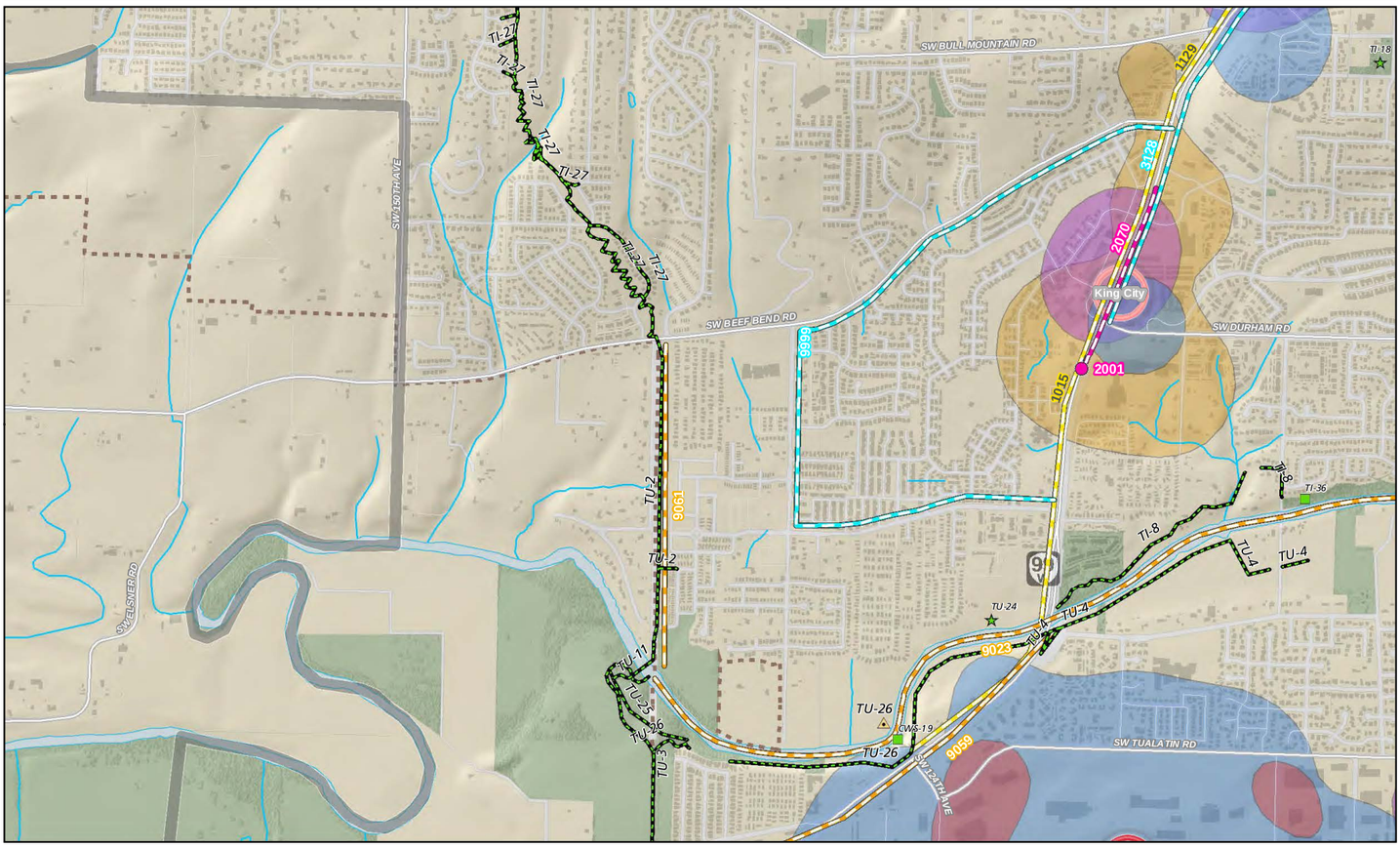
Roadway, Active Transportation, and Green Projects – Section 7



Roadway, Active Transportation, and Green Projects – Section 8



SW Corridor — Roadway, Active Transportation, and Green Projects – Section 9



Projects by Type: Bicycle; Bike/Ped; Alt Trail; Pedestrian; Auto/ Freight; Multimodal; Fish Projects; Natural Resource; Park/ Natural Resource; Stormwater; Trails

Development Categories: Commercial/ Industrial; Employment; Mixed Use; Higher Intensity Residential

Key Places: Essential; Priority; Opportunity; Neighborhood

Urban Growth Boundary; Parks; SW Corridor

1,000 500 0 1,000 Feet

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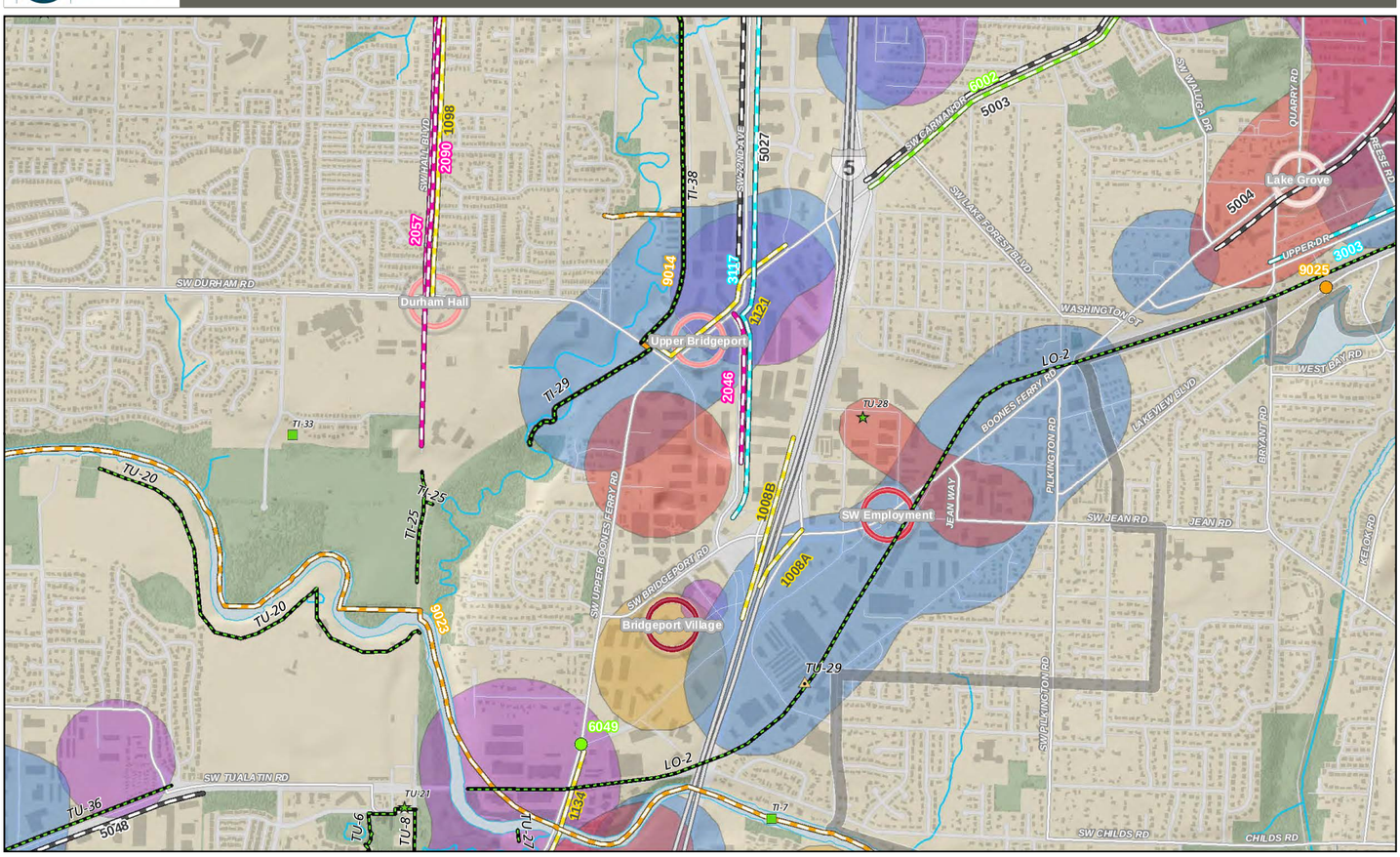
Metro

July 15, 2013

SW Corridor — Roadway, Active Transportation, and Green Projects – Section 10



Projects by Type: Bicycle; Bike/Ped; Alt Trail; Pedestrian; Auto/ Freight; Multimodal; Fish Projects; Natural Resource; Park/ Natural Resource; Stormwater; Trails

Development Categories: Commercial/ Industrial; Employment; Mixed Use; Higher Intensity Residential

Key Places: Essential; Priority; Opportunity; Neighborhood

Urban Growth Boundary; Parks; SW Corridor

1,000 500 0 1,000 Feet

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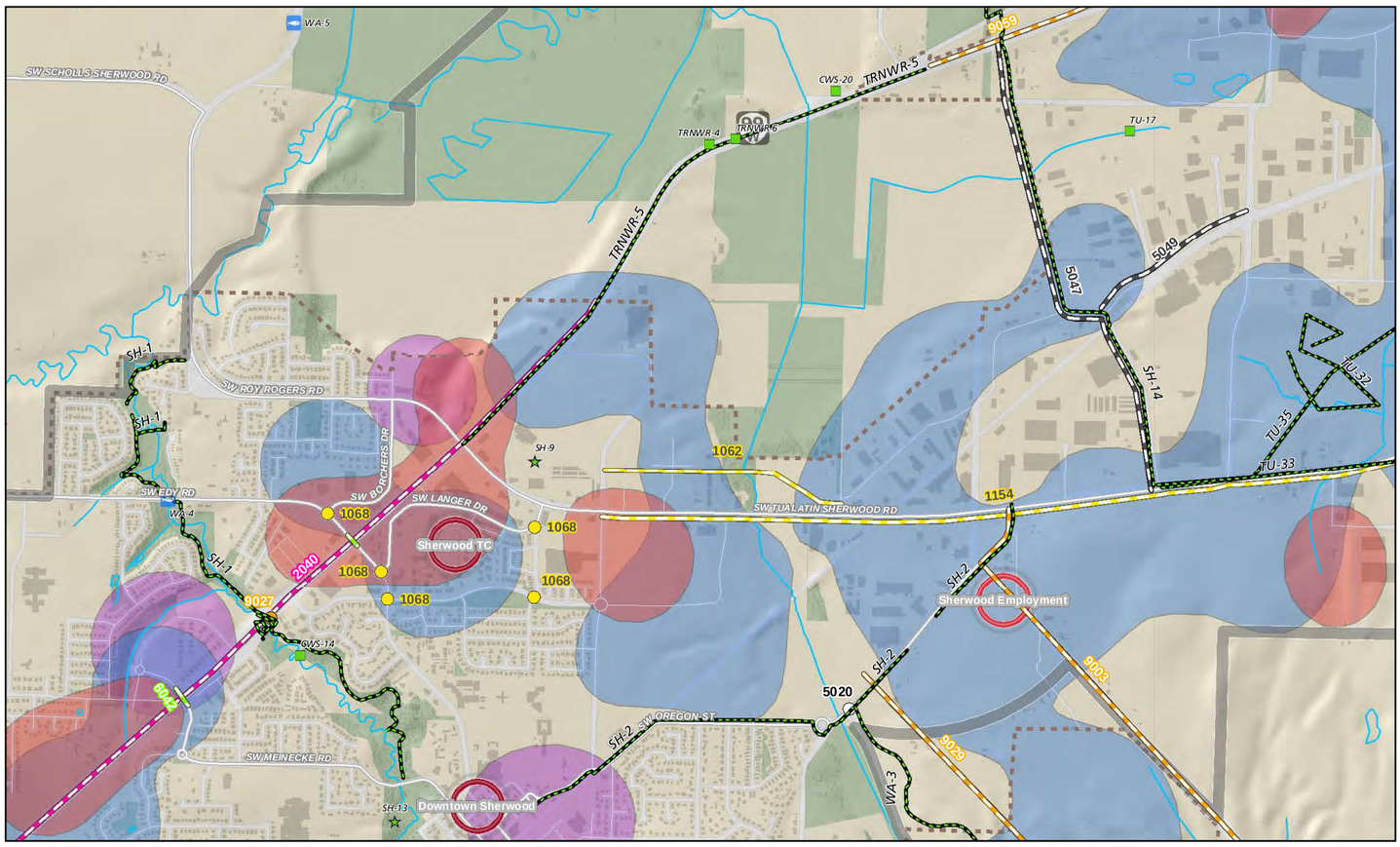
Metro

July 15, 2013

Roadway, Active Transportation, and Green Projects – Section 11



Projects by Type: Bicycle; Bike/Ped; AT Trail; Pedestrian; Auto/ Freight; Multimodal; Fish Projects; Natural Resource; Park/ Natural Resource; Stormwater; Trails

Development Categories: Commercial/ Industrial; Employment; Mixed Use; Higher Intensity Residential

Key Places: Essential; Priority; Opportunity; Neighborhood

Urban Growth Boundary; Parks; SW Corridor

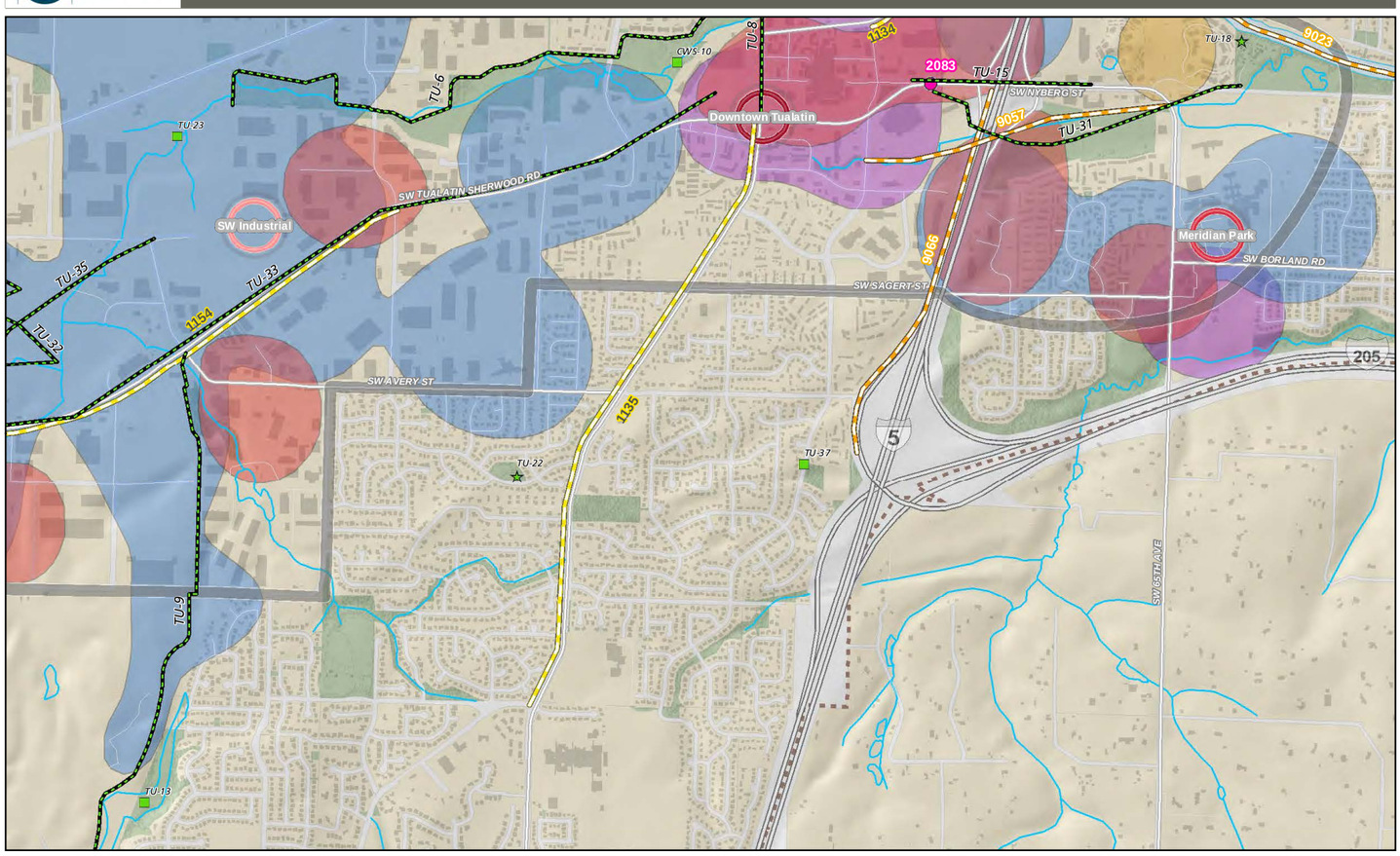
1,000 500 0 1,000 Feet

N

Metro

July 15, 2013

Roadway, Active Transportation, and Green Projects – Section 12



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Development Categories: Commercial/ Industrial; Employment; Mixed Use; Higher Intensity Residential

Key Places: Essential; Priority; Opportunity; Neighborhood

Urban Growth Boundary; Parks; SW Corridor

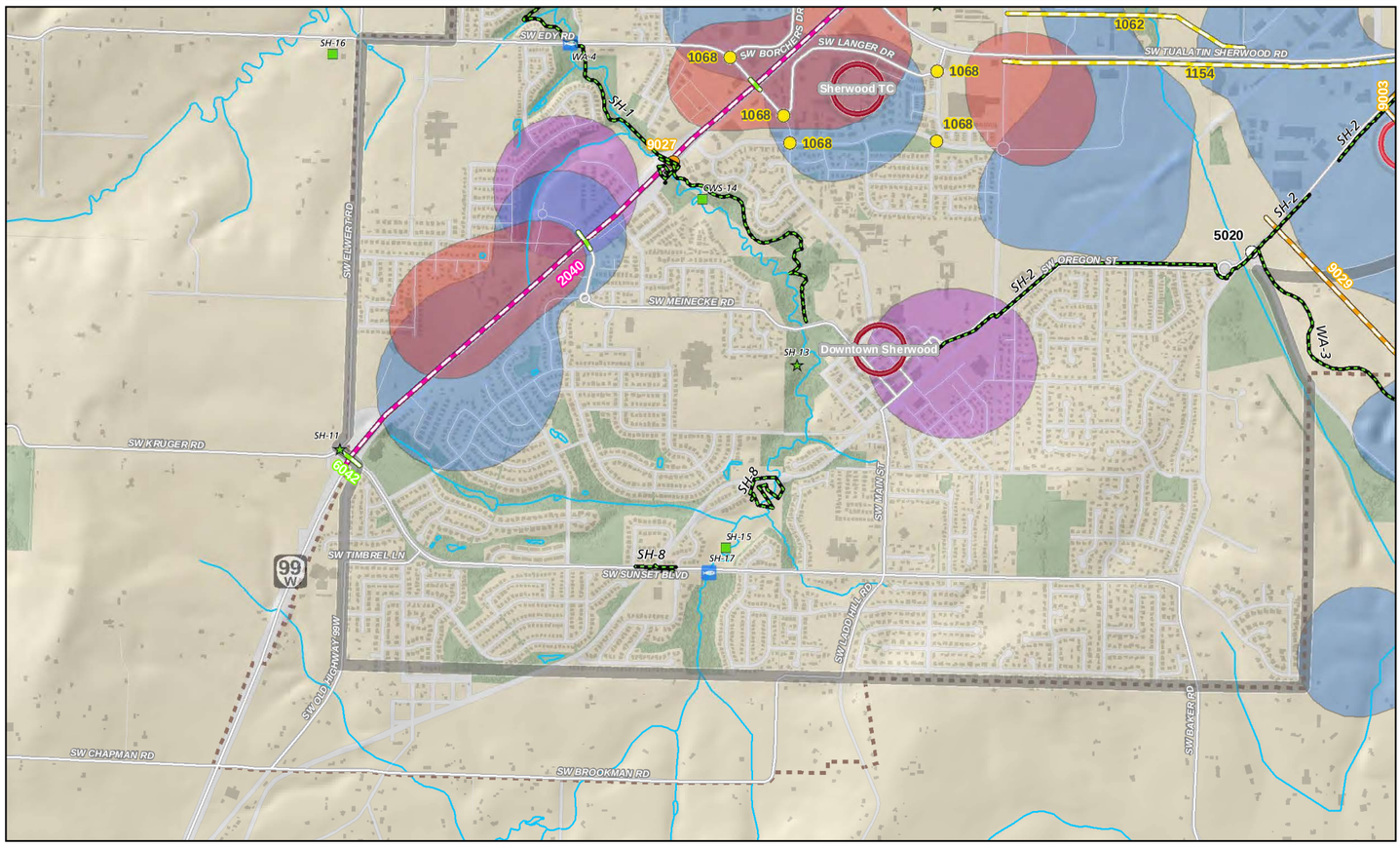
1,000 500 0 1,000 Feet

N

Metro

July 15, 2013

Roadway, Active Transportation, and Green Projects – Section 13



CRITERIA FOR PROJECT SELECTION

Highly supportive of high capacity transit

Critical

- Does it create or improve ped access on a connection HCT will use?
- Does it help people safely access a station by walking or bicycling within 1/4 mile or a trail within 1 mile?

High

- Does it help people safely access a station by walking or bicycling within 1/4 - 1/2 mile or a trail within 2 miles?

Medium

- Does it help people safely access a station by walking or bicycling within 1/2 - 1 mile or a trail within 3 miles?
- Does it improve local transit service accessing the HCT?
- Does it improve road connections to an end-of-line park and ride?

Low

- None of the above, or covered by another project

Highly supportive of the land use vision in essential or priority places

- Is the project in an essential/priority place?
- Is the project supportive of the local land use vision for the place?
- Does the project support land use by providing safe crossings or pedestrian/bicycle connections (active transportation)?

DRAFT STEERING COMMITTEE RECOMMENDATION

Southwest Corridor: Roadway and Active Transportation Projects - 6/21/13

critical
high
medium
low/none

Location/ Ownership	#	Project Title	Project Description	Cost	Highly supportive of HCT	Highly supportive of land use goals, esntl/prty places
Portland ODOT	1044	South Portland Circulation and Connectivity (Ross Island Bridge ramp connections)	Adds a new ramp connection between I-405 and the Ross Island Bridge from Kelly Avenue. Restore at-grade intersections along Naito Parkway, with new signalized intersections at Ross Island Bridge access and at Hooker Street. Removes several existing roadways and ramp connections.	$$$$	5 all other	
Tigard	1077	Ash Avenue railroad crossing (new roadway)	Extend Ash Avenue across the railroad tracks from Burnham to Commercial Street.	$		
Tigard	1078	Atlanta Street Extension (new roadway)	Extend Atlanta Street west to Dartmouth Street	$		
Tigard WashCo.	1098	Hall Boulevard Widening, Bonita Road to Durham	Widen to 3 lanes; build sidewalks and bike lanes; safety improvements (construct 3 lanes with development, preserve ROW for 5 lanes)	$	4 all other	
Tigard WashCo.	1100	Hall/Hunziker/Scoffins Intersection Realignment	Realign offset intersection to cross intersection to alleviate congestion and safety issues	$		
Tigard WashCo.	1107	Hwy. 217 Over-crossing - Hunziker Hampton Connection	Build new connection of Hunziker Road to 72nd Avenue at Hampton St., requires over-crossing over Hwy 217, removes or revises existing 72nd Avenue/Hunziker intersection/ connection.	$$$$		Not E/P place
Tualatin WashCo.	1134	Boones Ferry Road (reconstruct/widen from Martinazzi to Lower Boones Ferry)	Reconstruction/widen to 5 lanes from Martinazzi to Lower Boones Ferry Road, including bridge.	$$$	1	
Portland	2004	26th Ave, SW (Spring Garden - Taylors Ferry): Pedestrian Improvements	Construct a walkway for pedestrian travel and access to transit and install street lighting	¢		
Portland ODOT	2011	Connections to Transit/Transit Improvements: Barbur & Taylors Ferry	New steps/ramp connecting SW Taylors Ferry frontage road to Barbur across from transit center at existing signalized crossing.	¢		
Portland	2018	Huber Street Sidewalk Project 37th Ave. - 43rd Ave./I-5 On-Ramp	Construct new concrete sidewalks , curbs, and curb ramps on south side of SW Huber Street from 37th Ave. to 43rd Ave.	¢		
Portland ODOT	2027	Pedestrian Overpass near Markham School	Construct pedestrian path and bridge over Barbur Blvd. and I-5 to connect SW Alfred and SW 52nd to the rear of Markham School.	$$		
Portland	2041	SW 19th Ave sidewalks: Barbur - Spring Garden	Construct new sidewalks where none exist (DA)	¢		
Tigard	2045	72nd Avenue sidewalks: 99W to Bonita	Complete gaps in sidewalk on both sides of street from Highway 99W to Bonita Road	$	3 all other	
Tigard	2046	72nd Avenue sidewalks: Upper Boones Ferry to Durham	Install sidewalk on both sides of street from Upper Boones Ferry Road to Durham Road	$	1	
Tigard	2054	Commercial Street sidewalks: Main to Lincoln	Install sidewalks on both sides of the street from Main Street to Lincoln Street	¢		
Tigard	2057	Hall Boulevard sidewalks: Hunziker to city limits	Complete gaps in sidewalk on alternating sides of street from Hunziker Street to the South City Limits.	$	4 all other	
Tigard	2058	Hunziker Street Sidewalks: 72nd to Hall	Install sidewalk on both sides of the street from 72nd Avenue to Hall Boulevard	$		
Tigard ODOT	2066	Tigard Town Center (Downtown) Pedestrian Improvements	Improve sidewalks, lighting, crossings, bus shelters and benches throughout the downtown including: Highway 99W, Hall Blvd, Main Street, Hunziker, Walnut and neighborhood streets.	$		
Tigard ODOT	2076	Tigard Transit Center 99W sidewalk infill.	Build sidewalks that are at least 10 ft. wide along SW Pacific Hwy (99W), where there are none, and widen existing sidewalk corridors all along 99W, so there is landscaped buffer between pedestrians and the motor vehicles.	¢		
Tigard ODOT	2077	Tigard Transit Center crossing improvements.	Shorten crossing distances, make crosswalks more visible, and provide more time for pedestrians to cross at the intersections of 99W and SW Greenburg Rd., 99W & SW Hall Blvd., and 99W & SW Dartmouth St.	$		
Tigard	2078	Tigard Transit Center Park & Ride pedestrian path.	Provide a designated pedestrian path through the transit center park and ride lot, connecting to SW Main St.	¢		

Footnotes:

1 - HCT to Tualatin only; 2 - HCT to Sherwood only; 3 - 72nd HCT alignment only; 4 - Hall HCT alignment only; 5 - Naito HCT alignment only; 6 - Barbur/53rd station only

Estimated Cost Magnitudes: ¢ - up to $500,000; $ - up to $5 Million; $$ - up to $10 Million; $$$ - up to $20 Million; $$$$ - More than $20 Million

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Roadway and Active Transportation Projects - 7/15/13

critical
high
medium
low/none

Location/ Ownership	#	Project Title	Project Description	Cost	Highly supportive of HCT	Highly supportive of land use goals, esntl/prty places
Tigard	2079	Tigard Transit Center pedestrian path	Formalize the informal path running from Center Street Connection from SW Commercial St. to SW Hall Blvd., by paving it, making it ADA accessible, providing lighting, and wayfinding signage.	¢		
Tigard	2080	Tigard Transit Center sidewalk infill.	Build sidewalks, where there are none, along SW Scoffins St. & SW Ash St. These streets are near the Tigard Transit Center and provide access to it. Ensure there is a landscaped buffer between pedestrians and motor vehicles.	¢		
Tigard	2090	Hall Blvd sidewalks: Locust to Hunziker	Locust St to Durham Rd- pedestrian infill (Note: to be consistent with SW project list this should be Locust to Hunziker)	$	4 all other	
Portland	2999	Pedestrian connection from Barbur to Terwilliger at Gibbs	Construct a new pedestrian walkway under the tram within the Gibbs right-of-way through the Terwilliger Parkway. The steep grade and forested area will require lighting and stairs.	$		
Portland	3017	Capitol Hill Rd bikeway -from SW Barbur Blvd to SW Bertha Blvd.	Multiple bicycle facility types: bicycle boulevard or enhanced shared roadway (Barbur - Troy; 21st - Custer); bicycle boulevard or advisory bike lane (Troy - 21st); enhanced shared roadway (Custer - Bertha)	¢		
Portland	3028	Inner Hamilton bikeway -from SW Terwilliger Blvd to SW Corbett Ave.	Enhanced shared roadway. Includes connection to Terwilliger on SW Hamilton Terrace	¢		
Portland	3033	Inner Troy bikeway -from SW Capitol Hwy to SW Capitol Hill Rd.	Bike boulevard from SW Capitol Hwy to SW Capitol Hill Rd	¢		
Portland	3038	Lower SW 1st bikeway -from SW Barbur Blvd to SW Arthur St.	Multiple bicycle facility types: separated in-roadway (Corbett: Gibbs - Grover); bicycle boulevard (all other segments). Includes connection to SW Kelly Ave on SW Grover St and SW Corbett Ave	¢		
Portland ODOT	3044	Middle Barbur bikeway -from SW 23rd Ave to SW Capitol Hwy-Barbur Blvd Ramp.	Separated bicycle route in-roadway. Listed as a Regional Bicycle Parkway in the Regional Active Transportation Plan (5/9/13).	$		
Portland	3069	Spring Garden, SW (Taylors Ferry - Capitol Hwy): Bikeway	Provide bike lanes on existing street	$		
Portland	3093	Terwilliger bikeway gaps	Separated bicycle route in-roadway. Eliminate key gaps in the Terwilliger Blvd bikeway	¢		
Portland	3101	Vermont-Chestnut bikeway -from SW Capitol Hwy to SW Terwilliger Blvd.	Bicycle boulevard	¢		
Tigard Tualatin	3117	72nd Avenue bikeway: 99W to city limits	Install bike facilities on both sides of the street from Highway 99W to South City Limits	$	3 all other	
Tigard Lake Oswego	3121	Bonita Road bike lanes: 72nd to I-5	Install bike lanes in eastbound direction from 72nd Avenue to I-5 Bridge	¢	1	
Tigard ODOT	3128	Pacific Hwy-99W Bike Lanes in Tigard	Fill in gaps in bike lanes along Pacific Hwy-99W within the Tigard city limits. Listed as a Regional Bicycle Parkway in the Regional Active Transportation Plan (5/9/13).	¢		
Tigard	3129	Tigard Transit Center Bicycle Hub	Provide bicycle hub at Tigard Transit Center	¢		
Portland ODOT	4002	Barbur Blvd, SW (3rd - Terwilliger): Multi-modal Improvements	Construct Improvements for transit, bikes and pedestrians. Transit improvements include preferential signals, pullouts, shelters, left turn lanes, sidewalks, and crossing improvements.	$$		
Portland ODOT	5005	Barbur Blvd, SW (Terwilliger - City Limits): Multi-modal Improvements	Complete boulevard design improvements including sidewalks and street trees, safe pedestrian crossings, enhance transit access and stop locations, and bike lanes (Terwilliger - SW 64th or Portland City Limits).	$$$$		
Portland	5009	Capitol Hwy Improvements (replace roadway and add sidewalks)	Improve SW Capitol Highway from SW Multnomah Boulevard to SW Taylors Ferry Road per the Capitol Highway Plan. Replace Existing Roadway and add sidewalks, bike lanes and green stormwater features.	$$$		
Portland ODOT	5013	Naito/South Portland Improvements (left turn pockets with bike/ped and remove tunnel, ramps and viaduct)	Reconstruct Naito Pkwy as two-lane road w/bike lanes, sidewalks, left turn pockets, & on-street parking. Remove grade separation along Naito at Barbur Blvd. (tunnel), the Ross Island Bridge, Arthur/Kelly (viaduct), and the Grover pedestrian bridge.	$$$$	5 all other	
Tigard	5024	68th Avenue (widen to 3 lanes)	Widen to 3 lanes or for transitway including sidewalks and bike lanes between Dartmouth/I-5 Ramps and south end	$$$		
Tigard WashCo. ODOT	5035	Hall Boulevard Widening, Highway 99W to Fanno Creek	Widen to 3 lanes plus on-street parking (or potential 5 lanes); build sidewalks and bike lanes; safety improvements	$	4 all other	
Tigard WashCo.	5036	Hall Boulevard Widening, McDonald Street to Fanno Creek including creek bridge	Widen to 3 lanes; preserve ROW for 5 lanes; build sidewalks and bike lanes; safety improvements	$$$	4 all other	
Portland	5057	SW 53rd and Pomona (improves safety of ped/bike users)	Reconfigure and improve intersection to manage traffic turning speeds, and improve safety of ped/bike users between Barbur and Pomona.	¢	6 all other	
Portland ODOT	5059	SW Portland/ Crossroads Multimodal Project (roadway realignments and modifications to Barbur Blvd., Capitol Hwy., and the I-5 southbound on-ramp)	Implement Barbur Concept Plan walk audit recommendations in the SW Portland TC, including modifications to Barbur Blvd., Capitol Hwy., and the I-5 southbound on-ramp to support safer and more efficient operation for all modes. Project specifics include intersection types and roadway realignments to be refined.	$$$$		
Lake Oswego	6001	Bonita Rd. sidewalks and bike lanes - Carman Dr. to Bangy Rd.	Sidewalks and bike lanes; supplement to Tigard project #3121 which continues to 72nd.	¢	1	
Portland	6003	Multmonah viaduct bicycle and pedestrian facilities	Construct new bicycle and pedestrian facilities at/parallel to Multnomah St. viaduct	$		
Portland	6013	Barbur/PCC ped/bike Connection	Neighborhood greenway connection between Barbur and PCC via SW 53rd.	¢	6 all other	
Portland	6021	Hood Avenue Pedestrian Improvements (Lane to Macadam)	Install sidewalk with barrier along east side and pedestrian crossing at Lane Street.	$		
Portland ODOT	6022	I-405 Bike/Ped Crossing Improvements	Improve opportunities for bicycles and pedestrians to cross over/under I-405 on Harbor Drive, Naito Parkway, 1st, 4th, 5th, 6th and Broadway.	$		
Portland	6026	Pomona St: Bicycle and Ped improvements (35th to Barbur)	provide bike lanes and sidewalks	$		

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DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Roadway and Active Transportation Projects - 7/15/13

critical
high
medium
low/none

Location/ Ownership	#	Project Title	Project Description	Cost	Highly supportive of HCT	Highly supportive of land use goals, esntl/prty places
Portland	6034	Taylors Ferry, SW (Capitol Hwy - City Limits): Bicycle & Pedestrian Improvements	SW Taylors Ferry Rd: Provide bicycle lanes, including shoulder widening and drainage, and construct sidewalks for access to transit.	$		
Durham	6049	Boones Ferry Sidewalks	Improve sidewalks and bicycle lane at Boones Ferry to Lower Boones Ferry	¢	1	
Portland	9005	Red Electric Trail: Fanno Creek Trail to Willamette Park	Provide east-west route for pedestrians and cyclists in SW Portland that connects and extends the existing Fanno Creek Greenway Trail to Willamette Park. Listed as a Regional Bicycle Parkway and Regional Pedestrian Parkway in the Regional Active Transportation Plan (5/9/13).	$$$		
Portland	9007	Slavin Road to Red Electric Trail: Barbur to Corbett	Build Multi use trail on Slavin Road from Barbur to Corbett. The Red Electric Trail is listed as a Regional Bicycle Parkway and Regional Pedestrian Parkway in the Regional Active Transportation Plan (5/9/13).	$		
Tigard	9014	Fanno Creek Trail - Tualatin River to Tigard St.	Complete gaps along the Fanno Creek multiuse path from the Tualatin River to Tigard Library and from Pacific Hwy-99W to Tigard Street. Listed as a Regional Bicycle Parkway and Regional Pedestrian Parkway in the Regional Active Transportation Plan (5/9/13).	$		
Tigard Tualatin	9023	Tualatin River Pathway	Develop a continuous multi-use pathway along the Tualatin River from Boones Ferry Road under I-5 to the Tualatin River Greenway and Browns Ferry Park. Listed as a Regional Bicycle Parkway and Regional Pedestrian Parkway in the Regional Active Transportation Plan (5/9/13).	$$	1	
Portland Tigard	9053	Ped/Bike Connection between Tigard Triangle and PCC-Sylvania	Provide pedestrian/bicycle connection between the Tigard Triangle area and PCC-Sylvania	$		
Tualatin	9057	Nyberg Creek Greenway	Connecting east and west of I5 then north and south to Hwy 99 to I5 bikeway (south) and Tualatin River Greenway (north)	$	1	
Tualatin ODOT	9066	North/South I-5 Parallel Path in Tualatin	Ped/bike pathway	$$	1	
Portland ODOT	1019	Barbur Lane Diet - Capitol to Hamilton (reduce northbound lanes from three to two with multi-modal improvements)	Reduce number of northbound lanes from three to two from Capitol Hwy (north) to 1/4 mile south of Hamilton to reduce speeds and improve safety, improve ped/bike crossing safety and add protected bike lanes	¢		
Sherwood	1062	Arrow Street (Herman Road) - Build 3 lanes with sidewalks and bike lanes	Construct new road to collector standards. Build new 3 lane roadway with stream crossing and with bike lanes and sidewalks from Langer Farms Parkway Phase 2 to Gerda Lane/Galbreath Drive.	$$		
Sherwood	1068	Town Center Signal & Intersection Improvements (Downtown Sherwood)	Improve 3-leg intersection at Edy & Borchers; remove traffic signal at Baler; on Sherwood Blvd. remove traffic signal at Langer and disallow left turns from Langer to Sherwood, and add traffic signal at Century Dr.	$	2 all other	
Tigard ODOT	1129	Highway 99W access management in Tigard	Implement access management strategies and median projects, including additional pedestrian crossing locations, in Hwy 99W Plan.	$$		
Tualatin Sherwood WashCo.	1154	Tualatin-Sherwood Rd. (Langer Parkway to Teton Ave.) - Widening to 5 lanes with ped./bike	Widen from 3 to 5 lanes with bike lanes and sidewalks from Langer Parkway to Teton Ave.	$$$	all other 2	
King City ODOT	2001	King City Town Center Pedestrian Improvements	Improve sidewalks, lighting, bus shelters and benches, and pedestrian crossings for Highway 99W.	$		
Tigard King City ODOT	2070	99W pedestrian improvements to serve King City transit stops	Provide pedestrian access and crossing opportunities at transit stops on 99W in the vicinity of Royalty Parkway and Durham Rd in King City.	¢		
Lake Oswego	5004	Boones Ferry Road Boulevard improvements (turn lanes with bike/ped. - Madrona to Kruse Way)	Widen to include bike lanes, sidewalks, and turn lanes. This project is Phase 2, Oakridge/Reese to Kruse Way. Phase 1 ($23 Million) is in Low Build.	$$		
Portland ODOT	5006	Barbur Lane Diet: Terwilliger to Capitol	Reduce number of northbound travel lanes on Barbur from Terwilliger to Capitol Highway (north) from two to one to reduce speed and improve safety. Adds bike lanes over Newberry and Vermont bridges.	¢		
Sherwood	5020	Oregon-Tonquin Intersection & Street Improvements	Intersection improvements (consider roundabout) on Oregon at Tonquin Road; sidewalks and bike access through the intersection.	$		
Tigard WashCo. ODOT	5037	Hall Boulevard Widening, Oleson to 99W	Widen to 3 lanes; build sidewalks and bike lanes; safety improvements	$		
Tualatin WashCo.	5047	Cipole Rd. (widen to 3 lanes with ped./bike)	Reconstruct/widen to 3 lanes from 99W to Tualatin-Sherwood Road with sidewalks and bike lanes.	$$$	2 all other	
Tualatin	5048	Herman (multi-modal improvements, Teton to Tualatin Rd.)	Improve to urban standard from Teton to Tualatin.	$		
Tualatin	5049	Herman (multi-modal improvements, Cipole to 124th)	Reconstruction from Cipole to 124th with sidewalks and bike lanes	$		
Lake Oswego	6002	Carman Dr. sidewalks and bike lanes	Add bike lanes and pedestrian pathway	$		
Portland ODOT	6004	Newbury viaduct bicycle and pedestrian facilities	Construct new bicycle and pedestrian facilities at/parallel to Newbury St. viaduct	$		
Portland ODOT	6005	Vermont viaduct bicycle and pedestrian facilities	Construct new bicycle and pedestrian facilities at/parallel to Vermont St. viaduct	$$		
Sherwood ODOT	6042	99W - Sherwood TC Bicycle/Ped. Bridges	Ped/bike under/overcrossings of 99W at Sunset, Meinecke, Edy. Listed as a Regional Bicycle Parkway in the Regional Active Transportation Plan (5/9/13).	$$$	2 all other	
Sherwood	9003	Tonquin Trail	Construct mult-use trail with some on-street segments connecting multiple communities in Washington and Clackamas County. Listed as a Regional Bicycle Parkway and Regional Pedestrian Parkway in the Regional Active Transportation Plan (5/9/13).	$	2 all other	
Sherwood	9029	Westside Trail segments	Trail opportunities within easements of BPA and PGE for connectivity. Listed as a Regional Bicycle Parkway and Regional Pedestrian Parkway in the Regional Active Transportation Plan (5/9/13).	$	2 all other	
Tualatin	9061	Westside Trail - Tualatin River Bridge	New bike/ped bridge over the Tualatin River. Could be a joint effort with the Willamette River Water consortium. Listed as a Regional Bicycle Parkway in the Regional Active Transportation Plan (5/9/13).	$$		

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DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

This is a list of parks, trails and natural resources projects described by staff in each jurisdiction as well as projects located within jurisdictions collected from regional or other plans. The purpose of the list is to serve as a reference document for project coordination and development.

Projects highlighted in green meet the criteria for proximity to potential transit or key places identified in the Land Use Vision. For some jurisdictions, priority projects have been identified and are indicated with an "X". Within Washington County, there is a more current methodology for identifying and prioritizing culvert replacement needs for fish passage which should be used.

Funding Amount (scale of funding for associated projects): HIGH: $5 million and up, MEDIUM: $0.5 million to $5 million, LOW - Under $.05 million

Funding Timing: SHORT TERM: 0-5 years, MID TERM: 5-15 years or LONG TERM: Beyond 15 years

Criteria/Identified Needs:

SERVICE NEED: 10-minute walk of a park, trail, or natural area
DEVELOPMENT COMPLEMENT: Parks, trails, and natural resource investments can support higher density housing and provide links to transit and neighborhood services.
LAND ACQUISITION: Assemble and Acquire large parcels - Parks greater than 5 acres are desirable.
CONNECTIVITY: access to nature both along the trails and by connecting parks and natural areas
WATER QUALITY AND QUANTITY
STREAMS AND RIPARIAN HEALTH
WILDLIFE HABITAT
WILDLIFE CROSSING
LOW IMPACT DEVELOPMENT: LID(A)s
URBAN FOREST Canopy – Trees

Project Size: S: SMALL is under one acre, M: MEDIUM is 1 acre to 5 acres, L: LARGE is more than 5 acres

Note 1: Though not mapped as specific projects, items highlighted in turquoise are representative of policy recommendations for use in the Southwest corridor.

		for the SW Corridor.					
PDX - 4	**Acquire 84 Acres: Tryon Creek Watershed**	Land in the Tryon Creek watershed is one of the acquisition targets for Natural Areas in the *Park System Development Charge Acquisition & Development Plan* for the SW Corridor.	Limit Metro Bond Funds	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX - 5	**Red Electric Trail**	Implement the 2007 Red Electric Trail Planning Study (Fanno Greek Trail through PDX) by developing a bike/ped crossing at Barbur Blvd to the old SW Slavin Rd. R.O.W.	No	MID TERM: 5-15 years	HIGH - 5 million and up	MID TERM: 5-15 years	
PDX- 6	**Red Electric Trail**	Implement the 2007 Red Electric Trail Planning Study (Fanno Greek Trail through PDX) by developing a bike friendly connection from Park Hill Dr. to the Willamette Greenway.	No	MID TERM: 5-15 years	HIGH - 5 million and up	MID TERM: 5-15 years	
PDX -7	**Red Electric Trail**	Implement the 2007 Red Electric Trail Planning Study (Fanno Greek Trail through PDX) by developing SW Shattuck to SW Cameron section of RE Trail (project is funded for SW 30th to SW Vermont).	Yes	SHORT TERM: 0-5 years; 2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
PDX - 8	**Red Electric Trail**	Implementation of the 2007 Red Electric Trail Planning Study (Fanno Greek Trail through PDX) • Acquire & Develop: Washington County Line to SW Shattuck section of RE Trail	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-9	**Hillsdale to Lake Oswego Trail**	Develop a sustainable trail (soft surface) between Tryon Creek State Natural Area and Marshall Park, and contribute to funded BES culvert replacement project at Boones Ferry Road, Arnold and Tryon Creeks. Make -up short fall to provide for pedestrian passage.	Yes; Partially funded	SHORT TERM: 0-5 years; 2014	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
PDX-10	**South Waterfront Greenway Phase I**	Create a new high-density urban community while supporting the habitats along the Willamette River. Phase 1 is partially funded for Riverward improvements - additional funding needed to finish project.	Yes; Partially funded	SHORT TERM: 0-5 years; 2012-2013	HIGH - 5 million and up	SHORT TERM: 0-5 years	
PDX-11	**City Greenways**	Develop city connections, greenways and corridors. A system of habitat connections, neighborhood greenways and civic corridors will weave nature into the city and sustain healthy, resilient neighborhoods, watersheds and Portlanders.	No	MID TERM: 5-15 years	HIGH - 5 million and up	MID TERM: 5-15 years	
PDX-12	**Dickinson Park**	Implement master plan vision for this underdeveloped PP&R property.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-13	**Hillsdale Park**	Implement master plan vision for this underdeveloped PP&R property.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-14	**Spring Garden Park**	Implement master plan vision for this underdeveloped PP&R property.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-15	**Heritage Tree Park**	Focus on undeveloped PP&R properties in need of Master Plans and development.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-16	**SW Dickinson & 62nd**	Focus on undeveloped PP&R properties in need of Master Plans and development.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-17	**SW Talbot Property**	Focus on undeveloped PP&R properties in need of Master Plans and development.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-18	**Sylvania Park**	Focus on undeveloped PP&R properties in need of Master Plans and development.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
PDX-19	**Acquire & Develop 4 acres: So. Waterfront**	Imlement parks targets for acquisition and development in the Park System Development Charge Acquisition & Development Plan (park deficient areas) for the SW Corridor.	No	MID TERM: 5-15 years	HIGH - 5 million and up	MID TERM: 5-15 years	
PDX-20	**Acquire & Develop 4 acres: Hillsdale**	Imlement parks targets for acquisition and development in the Park System Development Charge Acquisition & Development Plan (park deficient areas) for the SW Corridor.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-21	**Acquire & Develop 2 acres: John's Landing:**	Imlement parks targets for acquisition and development in the Park System Development Charge Acquisition & Development Plan (park deficient areas) for the SW Corridor.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-22	**Acquire & Develop 10 acres: Southwest– largest gap in service**	Imlement parks targets for acquisition and development in the Park System Development Charge Acquisition & Development Plan (park deficient areas) for the SW Corridor.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-23	**Watershed Health**	Implement Watershed Health Strategy to Reduce impervious surfaces and retrofit impervious surfaces to reduce impacts.	Partial	Ongoing	MEDIUM - 1/2 million to 5 million	Policy	
PDX-24	**Watershed Health**	Implement Watershed Health Strategy to manage all stormwater runoff from new development and redevelopment in accordance with the requirements of the Stormwater Management	Partial	Ongoing	MEDIUM - 1/2 million to 5 million	Ongoing	
PDX-25	**Watershed Health**	Watershed Health Strategy - Assess, repair and/or replace existing stormwater outfalls along Barbur Boulevard as needed. In particular, outfall repairs and/or replacements should be designed so as not to cause erosion and degradation of receiving streams.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	Ongoing	
PDX-26	**Watershed Health**	Watershed Health Strategy - Restore stream functions and stability in planning areas when possible.	Partial	Ongoing	MEDIUM - 1/2 million to 5 million	Ongoing	
PDX-27	**Watershed Health**	Watershed Health Strategy - Restore habitat connectivity through revegetation, land acquisition, stream daylighting, culvert replacement, and other methods when possible.	Partial	Ongoing	MEDIUM - 1/2 million to 5 million	Ongoing	
PDX-28	**Watershed Health**	Watershed Health Strategy - Increase canopy and other vegetative cover and improve the quality and composition of vegetation including street trees.	Partial	Ongoing	MEDIUM - 1/2 million to 5 million	Ongoing	
PDX-29	**Watershed Health**	Watershed Health Strategy - Protect sites and features with high watershed value. This could include acquisition, easements, or other methods	Partial	Ongoing	MEDIUM - 1/2 million to 5 million	Ongoing	
PDX-31	**S. Ash Creek Stream Enhancement**	Design is underway for this stream and sewer protection project in the Fanno Creek natural area in the Tryon Creek watershed. The project will stabilize the channel, protect the sewer pipe where it crosses the stream, and improve water quality. Construction is planned in summer 2014	Yes	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	X
PDX-33	**Tryon Creek Trunk Sewer Repair Projects**	The Tryon Creek Trunk Sewer is a 30-inch, above-ground pipe that carries sewer from parts of southwest Portland and Lake Oswego to the City of Portland's Tryon Creek Wastewater Treatment Plant in Lake Oswego. BES is planning repairs, including seismic upgrade, to a portion of the 50-year old pipe between Tryon Creek State Natural Area to the Lake Oswego treatment plant. Project design began in early 2013 and will take about one year. Construction and Tryon Creek improvements will begin in 2014.	Yes	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	X
PDX-35	**Boones Ferry Culvert Replacement**	The culvert in Tryon Creek under Boones Ferry Road is a fish passage barrier. BES is planning to replace the culvert to enable fish passage, increase hydraulic capacity, and improve in-stream habitat. Project design will begin in spring 2013 and will take about two years. Construction is planned in 2015 or 2016.	Yes	SHORT TERM: 0-5 years; 2012-2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
PDX-36	**Fanno SW 45th Avenue Culvert Replacement CIP #86**	The culvert in Fanno Creek under SW 45th Avenue is undersized and is a passage barrier for native resident fish. BES is planning to replace the culvert to improve conveyance capacity, enable fish passage, and improve localized aquatic habitat. Project design will begin in summer 2013 and is expected to take about two years. Construction is planned in 2015 or 2016.	Yes	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
PDX-37	**Tryon I-5 at SW 26th WQ Facility CIP #8679**	In partnership with the Oregon Department of Transportation (ODOT), BES is now designing three stormwater management facilities that will be located on ODOT right-of-way between I-5 and SW Barbur Boulevard at SW 26th. The facilities will detain and treat stormwater runoff from I-5, Barbur Blvd., and nearby residential and commercial areas. Design will be completed in 2013. Construction is planned in 2014.	Yes	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
PDX-38	**Jackson MS Stream Daylighting & Stormwater Retro CIP #8680**	Falling Creek is currently piped under Jackson Middle School. This project will replace the pipe with an open stream channel. It will also construct stormwater facilities to detain and treat stormwater runoff from school parking lots. Design is scheduled to start in 2014 and construction in 2015 and/or 2016.	Yes	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
PDX-40	**Stormwater Outfall Maintenance CIP #8677**	BES is now designing improvements to one stormwater outfall to Falling Creek (a tributary to Tryon Creek) and two outfalls to Fanno Creek main stem near Beaverton Hillsdale Highway. These projects will upgrade stormwater infrastructure. Design is scheduled to be completed in 2013 and construction is planned in 2014.	Yes	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
PDX-41	**Fanno/Tryon Water Quality Facilities CIP #8687**	These are four sites for stormwater management facilities. One facility in Fanno Creek was constructed in 2010 and the other Fanno Creek site has been incorporated into another project. Two potential sites in upper Tryon Creek remain.	NO	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
PDX-43	**Beaverton Hillsdale Highway Drainage Improvement**	BES is now designing stormwater retrofits for Beaverton Hillsdale Highway. These projects will detain and treat stormwater runoff from the roadway. Design is scheduled to be completed in summer 2014 and construction is planned in 2014/2015.	Yes	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
PDX-45	**Western end of the Arnold/Tryon Creek corridor**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	Yes	SHORT TERM: 0-5 years; 2012-2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
PDX-46	**The narrow treed area between Ash Creek Natural Area and Woods Memorial Natural Area**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	Yes	SHORT TERM: 0-5 years; 2012-2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
PDX-47	**Corridors between Woods Memorial Natural Area to Gabriel and April Hill Parks**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	Yes	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-48	**Corridor from Riverview Cemetery through any of three potential routes to (a) George Himes Park, (b) Terwilliger natural areas, (c) Marquam Nature Park, Council Crest and eventually Forest Park**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	Yes	SHORT TERM: 0-5 years; 2012-2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
PDX-49	**Park Site behind Fred Meyer**	Preliminary concept idea for implementing neighborhood park for proposed increased density at focus areas on Barbur Boulevard	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-50	**Park Site behind Safeway**	Preliminary concept idea for implementing neighborhood park for proposed increased density at focus areas on Barbur Boulevard	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-51	**SW 53rd Neighborhood Greenway**	Provide safe pedestrian/bike facilities for connectivity	No	SHORT TERM: 0-5 years; 2012-2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
PDX-52	**Sidewalks, Street Trees, and Green Streets in SW Corridor**	Improving active transportation links, new sidewalks, greenways for better access and connectivity	No	Ongoing	LOW - Under 1/2 million	Ongoing	
PDX-53	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #7 on Ball Creek. Unknown passage status. Barrier subtype is 'full box.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-54	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #15. Unknown passage status. Barrier subtype is 'round.' Culvert assessment by ODFW staff (1996-1999) using guidelines and criteria to determine fish passage. Culvert is not on straight-line chart. Lower 25' backflows, possible velocity barrier.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-55	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #24 on Arnold Creek. Passage status is blocked. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert, located at SW Lancaster Rd. It is 1.3M concrete.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-56	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #26 on South Fork Ash Creek. Barrier subtype is unknown. Passable passage status. Professional judgment was used to evaluate this culvert, located as SW 55th.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-57	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #27 on South Fork Ash Creek. Barrier subtype is unknown. Professional judgment was used to evaluate this culvert.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-58	**Remove Fish Barrier**	Remove unnamed structure ODFW ID #29 on South Fork Ash Creek. Barrier type is an exposed sewer pipe. Partially blocked passage status. Professional judgment was used to evaluate this structure.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-59	**Remove Fish Barrier**	Remove unnamed structure ODFW ID #31 on South Fork Ash Creek. Passable passage status. Professional judgment was used to evaluate the structure. Comment says, "house on top of creek SW Lauradel."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-60	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #33 on South Fork Ash Creek. Partially blocked passage status. Professional judgment was used to evaluate this culvert at SW 62nd, at a housing development.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-61	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #34 on South Fork Ash Creek. Passable passage status. Professional judgment was used to evaluate the culvert, near a walking path.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-62	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #46 on Tryon Creek. Partially blocked passage status. Barrier subtype is 'round.' Professional judgment was used to evaluate the culvert at SW Maple Crest Dr. It is 1.7m metal.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-63	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #48 on Tryon Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert at SW 18th Pl. It is 1.7m metal.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-64	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #49 on Woods Creek. Blocked passage status. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert at SW Taylors Ferry Rd. It is 0.8m metal.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-65	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #50 on Tryon Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
PDX-66	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #51 on Tryon Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-67	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #54 on Ash Creek. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert at SW 55th. It is 0.8m concrete.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-68	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #58 on Ash Creek. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert at SW Lancaster. It is 0.7m concrete.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-69	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #59 on Falling Creek. Barrier subtype is 'round.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-70	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #60 on Falling Creek. Barrier subtype is 'round.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-71	**Remove Fish Barrier**	Remove unnamed structure ODFW ID #62 on Ash Creek. Partially blocked passage status. Barrier type is an exposed sewer pipe. Professional judgment was used to evaluate this structure. Comment says, "step ht=0.45m exposed sewer pipe crossing."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-72	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #63 on Woods Creek. Blocked passage status. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert at SW 45th. It is 0.9m metal.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-73	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #64. Unknown passage status. Barrier subtype is 'round.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-74	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #65 on Ash Creek. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert at SW Orchid Dr. It is 1.2m concrete.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-75	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #66 on Ash Creek. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert at SW Dolph. It is 1.0m concrete.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-76	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #67 on Wood Creek. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert SW Garden Home Rd. It is 1.0m metal.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-77	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #68 on Vermont Creek. Barrier subtype is 'round.' Professional judgment was used to evaluate this culvert. Comments include, "end of survey; cr. Never surface 0.65m concrete no drop."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-78	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #69. Barrier subtype is 'round.' Owner is ODOT. Culvert assessment by ODFW staff (1996-1999) using guidelines and criteria to determine fish passage. Comments include, "not on straight-line chart. 0.4 miles north of Sellwood Br. 4' falls above culvert. City culvert below appears to be velocity barrier."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
PDX-79	**Custer Park Pollution Reduction Facility**	Custer Park pollution reduction facility upgrade; expansion of capacity and function of existing swale and pond located along Custer Creek in Custer Park to improve stormwater services and recreation use. BES: Project 5.2/2014 CIP - $230,000	No	SHORT TERM: 0-5 years	LOW - Under 1/2 million		X
PDX-80	**Stephens Creek Nature Park Detentions and Wetland facilities**	Stephens Nature Park in-line detention and wetland enhancement; construct detention facility in Stephens Creek upstream of the Burlingame culvert and enhance existing wetland, consistent with 2005 A Functional Plan for Stephens Creek Nature Park and planned 2013 trail improvements. BES: Project 31.1a/b /2014 CIP - $750,000	No	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million		X
PDX-81	**Raz Wetlands**	Raz property wetland detention facility; detention and stream channel construction in undeveloped property at the headwaters of Stephens Creek. BES has a signed contract in place to purchase this property. BES: Project 24.6/2014 CIP - $1,030,000	No	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million		X
PDX-82	**Greater Portland Bible Church neighborhood facility**	Greater Portland Bible Church neighborhood facility; an opportunity exists to construct a vegetated stormwater treatment facility on a tax lot adjacent to the Greater Portland Bible Church. BES: Project 6.1/6.3/ CIP 2014	No	SHORT TERM: 0-5 years	LOW - Under 1/2 million		
PDX-83	**Stephens Creek Tributaries Outfall Repair**	Repair and enhancement of 17 public and private stormwater outfalls on the River View, River View South, and Ruby Creek tributaries of Stephens Creek. BES: Project /CIP 2014 - $960,000	No	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million		X
PDX-84	**Right-of-way Retrofit Shell**	Provides a flexible means to construct stormwater retrofits to the existing system on streets identified as high-priority for detention and/or and pollution reduction. I-5. BES: Project / CIP 2014 - $1,000,000	No	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million		X
PDX-85	**SW Terwilliger Shared Detention Facility**	ODOT Shared Detention and Pollution Reduction Facilities - SW Terwilliger shared detention facility. BES: Project 23.1a/ CIP 2015 - $220,000	No	SHORT TERM: 0-5 years	LOW - Under 1/2 million		X
PDX-86	**Fulton Park Neighborhood Wetland Facility**	ODOT Shared Detention and Pollution Reduction Facilities - Fulton Park neighborhood wetland facility adjacent to the community garden. BES: Project 21.2b/ CIP 2015 - $470,000	No	SHORT TERM: 0-5 years	LOW - Under 1/2 million		X
PDX-87	**A-Boy Plumbing neighborhood detention facility**	ODOT Shared Detention and Pollution Reduction Facilities - A-Boy Plumbing neighborhood detention facility adjacent to I-5 in existing low point. BES: Project 21.1a/ CIP 2015 - $1,280,000	No	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million		
PDX-88	**Stormwater filter vault at ODOT right-of-way**	ODOT Shared Detention and Pollution Reduction Facilities - Stormwater filter vault at ODOT right-of-way, which can treat both I-5 runoff, city streets, and private property. BES: Project 23.2/ CIP 2015 - $500,000	No	SHORT TERM: 0-5 years	LOW - Under 1/2 million		X
PDX-89	**Local stormwater treatment facilities on I-5 overpasses**	ODOT Shared Detention and Pollution Reduction Facilities - Local stormwater treatment facilities on I-5 overpasses. BES: Project 23.3/ CIP 2015 - $110,000	No	SHORT TERM: 0-5 years	LOW - Under 1/2 million		X
PDX-90	**Rain gardens for bioremediation of I-5 outfalls**	ODOT Shared Detention and Pollution Reduction Facilities - Rain gardens for bioremediation of I-5 outfalls adjacent to Stephens Creek. BES: Project 25.5/ CIP 2015 - $140,000	No	SHORT TERM: 0-5 years	LOW - Under 1/2 million		X

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
PDX-91	**River View Tributary Improvements**	Stephens Creek Tributaries Habitat Restoration - River View Tributary—improve near-stream habitat; this project will improve habitat conditions in the stream by restoring in-stream habitats and wetlands, and improving habitat connectivity through bank layback, and installation of large wood. It will improve the diversity of native plants in the riparian area. BES: Project 9.3a/ CIP 2015 - $260,000	No	SHORT TERM: 0-5 years	LOW - Under 1/2 million		
PDX-92	**River View neighborhood scale wetland facility**	Stephens Creek Tributaries Habitat Restoration - River View neighborhood scale wetland facility; this project will enhance wetlands associated with River View and Taylors Ferry tributaries to improve habitat, peak flows, and water quality. BES: Project 9.5/ CIP 2015 - $67,000	No	SHORT TERM; 0-5 years	LOW - Under 1/2 million		X
PDX-93	**Crestline Creek Stream Improvements**	Stephens Creek Tributaries Habitat Restoration - Crestline Creek—improve near-stream habitat; this project will include removal of invasive plants and revegetation with native plants, improvement of near - stream habitat, and educate and encourage property owners to remove invasive plants and re -populate with riparian vegetation along the Crestline Creek riparian corridor, including the area along the surface channel near the headwaters. BES: Project 12.4/CIP 2015 - $40,000	No	SHORT TERM; 0-5 years	LOW - Under 1/2 million		X
PDX-94	**Ruby Creek Stream Improvements**	Stephens Creek Tributaries Habitat Restoration - Ruby Creek—improve near-stream habitat; this project will focus on education and outreach to encourage property owners to remove invasive plants and re - populate revegetation with native plants and riparian vegetation along the Ruby Creek riparian corridor to where it flows into the mainstem Stephens Creek. BES: Project 19.3/ CIP 2015 - $22,000	No	SHORT TERM: 0-5 years	LOW - Under 1/2 million		
PDX-95	**Private Property Partnership Shell**	Stephens Creek Tributaries Habitat Restoration - This shell will fund projects that mitigate stormwater runoff from existing impervious surface on private property or create stormwater assets not owned and operated by BES. The Private Property Partnership Shell is intended as a flexible means to incentivize stormwater projects on private properties that help cost-effectively meet BES's stormwater system improvements needs. This could include funding larger facilities than would otherwise be required by the SWMM or construction of habitat and restoration projects in natural systems that are impaired by runoff from the BES stormwater system. BES: Project BWRF.2/ Select projects for CIP 2015 - $2,007,000 + 850,000 for commercial property retrofits with ecoroof and pervious pavement.	No	SHORT-TERM; 0-5 years	MEDIUM - 1/2 million to 5 million		
PDX-96	**Fulton Park stream daylighting**	Headwaters Stream Enhancement and Daylighting - Fulton Park stream daylighting; there is an opportunity to daylight the piped stormwater runoff in Fulton Park to the adjacent historic channel (Miles Creek), which would ultimately lead to improved habitat and biological communities. The runoff would be attenuated and treated before returning to the pipe and being conveyed under I-5. BES: Project 32.1/CIP 2017 - $860,000	No	SHORT TERM; 0-5 years	MEDIUM - 1/2 million to 5 million		
PDX-97	**In-stream habitat improvements at Cloverleaf Apartment**	Headwaters Stream Enhancement and Daylighting - Improve in-stream habitat at Cloverleaf Apartments; this project consists of restoration work at the Clover Leaf reach of the Stephens Creek mainstem. This project should consider the presence of hydric soils and work to improve connectivity of the stream to springs and remnant floodplain elevations. Riparian and in -stream restoration will include bank layback where downcutting has occurred, installation of large wood complexes to create small in-stream pools, addition of coarse sediment materials to improve in -stream habitat. Riparian enhancement will include replanting with riparian and emergent vegetation. Reconstruct discharge outfalls from building and parking stormwater runoff to enhance floodplain function. BES: Project 31.4/CIP 2017 - $471,000	No	SHORT TERM; 0-5 years	lOW - Under 1/2 million		
PDX-98	**Capitol Hills Condos stream daylighting**	Headwaters Stream Enhancement and Daylighting - Capitol Hills Condos stream daylighting; work with private property owners to remove piped section of Stephens Creek through the Condo complex. Replace with restored stream channel and adjacent riparian area. BES: Project 24.8/ CIP 2017 - $1,470,000	No	SHORT TERM; 0-5 years	MEDIUM - 1/2 million to 5 million		
PDX-99	**Shadow Hills Apartments stream enhancement**	Headwaters Stream Enhancement and Daylighting - Shadow Hills Apartments stream enhancement; restoration work at the Shadow Hills reach of Stephens Creek should consider the presence of hydric soils and work to improve connectivity of the stream to springs and remnant floodplain elevations (present or created). Riparian and in-stream restoration of the Shadow Hills reach of Stephens Creek will include bank layback where downcutting has occurred, installation of large wood complexes to create small in-stream pools, addition of coarse sediment materials to improve in -stream habitat. Riparian enhancement will include replanting with riparian and emergent vegetation. Reconstruct discharge outfalls from building and parking stormwater runoff to enhance floodplain function. BES: Project 24.9/ CIP 2017 - $470,000	No	SHORT TERM; 0-5 years	LOW - Under 1/2 million		
PDX-100	**Taylors Ferry improve in-stream habitat**	Headwaters Stream Enhancement and Daylighting - Taylors Ferry improve in-stream habitat; add in-stream cover for aquatic organisms and to stabilize banks. This project is intended to meet the alternative themes to emphasize biological communities and habitat restoration. BES: Project 28.3d/ CIP 2017 - $1,080,000	No	SHORT TERM; 0-5 years	MEDIUM - 1/2 million to 5 million		

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
PDX-101	**Replace Macadam Culvert**	Remove existing culverts under Highway 43 and replace with a larger culvert/span and restore natural substrate to Stephens Creek. Remove invasive species (English ivy and Himalayan blackberry) and plant native riparian vegetation in the currently degraded buffer zones between Macadam and Stephens Creek. Increase in-stream habitat to support benthic invertebrates and native fish. BES: Project 29.1/ CIP 2017 - $440,000	No	SHORT TERM; 0-5 years	LOW - Under 1/2 million		
PDX-102	**Lay back banks Burlingame reach**	Lay back banks Burlingame reach. BES:25.1a/ No CIP identified $334,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		
PDX-103	**Improve in-stream habitat Burlingame reach**	Improve in-stream habitat Burlingame reach.BES:25.1c/ No CIP identified - $1,862,000	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		
PDX-104	**Wetland enhancement Burlingame reach**	Wetland enhancement Burlingame reach. BES: Project 25.2/No CIP identified- $67,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		X
PDX-105	**Stephens Canyon I-5 Runoff to Willamette or Combined System**	Stephens Canyon I-5 Runoff to Willamette or Combined System. BES: Project 26.1, 26.1f/ No CIP identified at this time - $4,069,000	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		X
PDX-106	**Mausoleum Tributary property acquisition**	Mausoleum Tributary property acquisition. BES: Project 27.4b/No CIP identified at this time - $2,268,000	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		
PDX-107	**Mausoleum North property acquisition**	Mausoleum North property acquisition. BES: Project 27.6/ No CIP identified at this time - $851,000	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		
PDX-108	**Wetland enhancement Burlingame reach**	Wetland enhancement Burlingame reach, separate location- this is not a repeat of PDX-104. BES: Project 27.3/ No CIP identified at this time - $67,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		
PDX-109	**Mausoleum property revegetation**	Mausoleum property revegetation. BES: Project 27.4a/No CIP identified at this time - $161,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		
PDX-110	**Taylors Ferry stream daylighting**	Taylors Ferry stream daylighting. BES: Project 28.3b/No CIP identified at this time - $1,386,000	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		
PDX-111	**Taylors Ferry culvert replacement**	Taylors Ferry culvert replacement. BES: Project 28.3a /No CIP identified at this time - $326,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		X
PDX-112	**Natural fish ladder above Hwy 43 culvert**	Natural fish ladder above Hwy 43 culvert. BES: Project 28.3c /No CIP identified at this time - $1,318,000	No	Medium term: 5-15 years	High - 5 million+		
PDX-113	**Macadam improve near-stream habitat**	Macadam improve near-stream habitat. BES: Project 29.5/No CIP identified at this time - $188,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		
PDX-114	**Boones Ferry neighborhood detention pond**	2.1b Boones Ferry neighborhood detention pond. BES: Project 2.1b/No CIP identified at this time - $405,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		
PDX-115	**River View Cemetery improve in-stream habitat**	River View Cemetery improve in-stream habitat. BES: Project 9.3b/No CIP identified at this time - $8,972,000	No	Medium term: 5-15 years	High - 5 million+		
PDX-116	**Restore in-stream connectivity for fish passage**	Restore in-stream connectivity for fish passage - Taylors Ferry tributary. BES: Project 9.4/No CIP identified at this time - No cost estimate at this time.	No	Medium term: 5-15 years	High - 5 million+		
PDX-117	**Large wood installations, invasives control and revegetation in Stephens Canyon**	Large wood installations, invasives control and revegetation in Stephens Canyon. BES: Project 26.2/No CIP identified at this time - $890,000	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		
PDX-118	**SW Evans neighborhood facilities**	SW Evans neighborhood facilities. BES: Project 17.3/No CIP identified at this time - $626,000	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		
PDX-119	**SW Terwilliger improve near-stream habitat in ODOT right-of-way**	23.4a SW Terwilliger improve near-stream habitat in ODOT right-of-way. BES: Project 23.4a/No CIP identified at this time - $55,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		
PDX-120	**SW Terwilliger improve in-stream habitat**	SW Terwilliger improve in-stream habitat. BES: Project 23.4b/No CIP identified at this time - $419,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		
PDX-121	**Improve near-stream habitat Clover Leaf Apt.**	Improve near-stream habitat Clover Leaf Apt. BES: Project 31.3/No CIP identified at this time - $2,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		X
PDX-122	**Spring Creek riparian restoration**	Spring Creek riparian restoration. BES: Project 24.10/No CIP identified at this time - $3,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		X
PDX-123	**Raz Transportation acquisition, stream daylighting, LUST Cleanup**	Raz Transportation acquisition, stream daylighting, LUST Cleanup. BES: Project 31.2a, b, c/No CIP identified at this time - $1,341,000	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		
PDX-124	**Culvert removal and daylighting in Burlingame reach**	Culvert removal and daylighting in Burlingame reach. BES: Project 25.1b /No CIP identified at this time - $145,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		
PDX-125	**Expand and enhance Texas Wetland**	Expand and enhance Texas Wetland. BES: Project 3.1 /Op CIP 2014 - $21,000	Partial	SHORT TERM: 0-5 years	LOW - Under 1/2 million		X
PDX-126	**Restore historic channel at Miles Creek**	Restore historic channel at Miles Creek. BES: Project 26.7 /on hold in WIF - $437,000	No	SHORT TERM; 0-5 years	LOW - Under 1/2 million		X
PDX-127	**Real time controls stormwater retrofit at Burlingame Fred Meyer and nearby apartments**	Real time controls stormwater retrofit at Burlingame Fred Meyer and nearby apartments. BES: Project 32.3 /No CIP identified at this time - $76,000	No	Medium term: 5-15 years	LOW - Under 1/2 million		
PDX-128	**Curb extension retrofits on PBOT high-priority streets**	BWRF.1 Curb extension retrofits on PBOT high-priority streets BES: Project BWRF.1 /No CIP identified at this time -$4,565,000 Select projects identified for CIP 2014	No	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million		X
PDX-129	**Curb extension retrofits on all right-of-way**	BWRF.2 Curb extension retrofits on all right-of-way. BES: Project BWRF.2 /No CIP identified at this time $23,386,000	No	Medium term: 5-15 years	High- 5 million +		
PDX-130	**Basin wide tree planting**	Basin wide tree planting. BES: Project BWRF.4/ No CIP identified at this time - $1,660,000	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		
PDX-131	**Apt Retrofit (Spring Creek, Shadow Hills and Capitol Hill)**	Apt Retrofit (Spring Creek, Shadow Hills and Capitol Hill). BES project 24.5. $1,602,000 NO CIP identified at this time.	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		
PDX-132	**Capitol Hill School and St Claire Church Retrofits**	Capitol Hill School and St Claire Church Retrofits. BES project 22.1. $2,653,000 NO CIP identified at this time.	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
PDX-133	**Stormwater retrofit at Hillsdale Community Church**	Stormwater retrofit at Hillsdale Community Church. BES project 3.4. $668,000 NO CIP identified at this time.	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		
PDX - 200	**Roadside Drainage and Shoulder Improvements, SW Hamilton**	BES is planning to construct drainage (improving existing roadside ditches) and road shoulder improvements on selected uncurbed streets in the Fanno and Tryon watersheds in the next five years. Currently design of improvements to SW Hamilton (between SW Shattuck and SW Dosch) will be completed this summer and construction is planned in spring 2014. Funding for additional identified streets is planned to start in 2015/16.	Yes	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million		X
PDX - 201	**Roadside Drainage and Shoulder Improvements, SW Stephenson**	BES is planning to construct drainage (improving existing roadside ditches) and road shoulder improvements on selected uncurbed streets in the Fanno and Tryon watersheds in the next five years. Currently design of improvements to SW Stephenson (between SW 35th and SW Boones Ferry) will be completed this summer and construction is planned in spring 2014. Funding for additional identified streets is planned to start in 2015/16.	Yes	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million		X
PDX - 202	Portland Community College Sylvania Campus Stormwater Retrofits	Forty-seven potential stormwater retrofit projects have been identified on the PCC campus. One project was constructed in 2009.	No	Medium term: 5-15 years	MEDIUM - 1/2 million to 5 million		X
PDX - 203	Marquam Woods Subwatershed Improvement Strategies Opportunities	BES's Willamette Watershed Team has produced an Improvement Strategies report that identifies opportunities to improve watershed health in the Marquam-Woods subwatershed. Recommended actions include stormwater retrofits, planting trees, removing invasive plants and restoring native vegetation. http://www.portlandoregon.gov/bes/article/251889	Partial	varied	MEDIUM - 1/2 million to 5 million		X
PDX - 204	Carolina-Terwilliger Subwatershed Improvement Strategies Opportunities	BES's Willamette Watershed Team has produced an Improvement Strategies report that identifies opportunities to improve watershed health in the Carolina-Terwilliger subwatershed. Recommended actions include stormwater retrofits, planting trees, removing invasive plants and restoring native vegetation. http://www.portlandoregon.gov/bes/article/251888	Partial	varied	MEDIUM - 1/2 million to 5 million		X
PDX - 205	California Subwatershed Improvement Strategies Opportunities	BES's Willamette Watershed Team has produced an Improvement Strategies report that identifies opportunities to improve watershed health in the California subwatershed. Recommended actions include stormwater retrofits, planting trees, removing invasive plants and restoring native vegetation. http://www.portlandoregon.gov/bes/article/251885	Partial	varied	MEDIUM - 1/2 million to 5 million		X
PDX-206	**Fulton Park revegetation FORMERLY PDX - 125 DUPLICATE NUMBER**	Fulton Park revegetation. BES: Project 32.3 /Op CIP 2014 - $36,000	No	SHORT TERM: 0-5 years	LOW-Under 1/2 million		X
PDX-207	**Mausoleum Retrofits Formerly PDX-127 DUPLICATE NUMBER**	Mausoleum Retrofits. BES: Project 27.1, 27.2/No CIP identified at this time - $55,000	No	Medium term: 5-15 years	LOW-Under 1/2 million		
		CITY OF TIGARD					
TI-1	**Fanno Creek Corridor Trail (T7)**	Woodward Park to Grant (partially funded), Grant to Main (partially funded), Planning and Acquisition, MORE important	Yes; Partially funded	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
TI-2	**Fanno Creek Corridor Trail (T11)**	Trail link from Tigard Public Library to Milton Court/Bonita Road	No	SHORT TO MID TERM: 0-15 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
TI-3	**Fanno Creek Corridor Trail (T6)**	Trail link from Fanno Creek/Tigard Street to Tigard Transit Center	Yes; Partially funded	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
TI-4	**Fanno Creek stormwater**	Stormwater and protection of trail	Yes; Partially funded	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
TI-5	**Fanno Creek Park: Urban Plaza**	Acquisition and development of urban plaza for downtown Tigard, The Downtown Plaza was designed to meet the need for a community gathering space for events and everyday use, and the goal of initiating redevelopment under a new Urban Renewal District approved in May of 2006.	Yes; Partially funded	SHORT TO MID TERM: 0-15 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
TI-7	**Tualatin River Corridor**	Limit pollution and restore native vegetation in riparian zone	No	MID TERM: 5-15 years	HIGH - 5 million and up	MID TERM: 5-15 years	
TI-8	**Tualatin River Trail**	108th Avenue Grading and Existing Trail Improvements, 108th Avenue to Pacific Highway Extension	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-9	**Tualatin River Water Trail**	CWS, Bruce Roll	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
TI-10	**Ash Creek Corridor**	Limit pollution and restore native vegetation in riparian zone	Yes	SHORT TERM: 0-5 years; 2012-2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
TI-11	**Washington Square Connection/Washington Square Loop**	Trail Loop complete in THPRD. Fanno Creek to Highway 217 Sidewalk and Bikeway improvements, less important	No	LONG TERM: Beyond 15 years	HIGH - 5 million and up	LONG TERM: Beyond 15 years	
TI-13	**Dirksen Nature Park Education Center**	Dirksen Nature Park Education Center. Update and improve the education facility and parking area.	Yes; Partially funded	SHORT TERM: 0-5 years	LOW - Under 1/2 million	SHORT TERM: 0-5 years	X
TI-14	**Summer Creek Trail and Corridor**	Summer Crest Drive and Tigard Street sidewalk and bikeway improvements, Fowler Nature Education Trail	Yes; Partially funded	SHORT TERM: 0-5 years	LOW - Under 1/2 million	SHORT TERM: 0-5 years	
TI-15	**Red Rock Creek, Tigard Triangle**	Limit pollution and restore native vegetation in riparian zone	No	MID TO LONG TERM: 5-15 years or beyond	LOW - Under 1/2 million	MID TERM: 5-15 years	
TI-18	**East Butte Heritage Park**	Upland restoration, enhancement, and invasive species removal	Yes; Partially funded	SHORT TERM: 0-5 years	LOW - Under 1/2 million	SHORT TERM: 0-5 years	X
TI-20	**Sunrise and Cach Community Park**	Design for additional facilities and programming of park	Yes	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
TI-21	**Krueger Creek and Summer Creek Trail Connections**	Summer Creek Trail to Mary Woodard School	No	MID TERM: 5-15 years	LOW - Under 1/2 million	MID TERM: 5-15 years	
TI-22	**Ascension Trail**	Ascension Trail Improvements	No	MID TERM: 5-15 years	LOW - Under 1/2 million	MID TERM: 5-15 years	
TI-23	**Tigard Street trail connection**	Fanno Creek/north Dakota Street to Tiedeman Street	No	MID TERM: 5-15 years	LOW - Under 1/2 million	MID TERM: 5-15 years	
TI-24	**Fanno Creek (crossing realignment)**	Tiedeman Avenue Crossing Re-alignment	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-25	**Fanno Creek - 85th Avenue to Durham**	85th Avenue Trail to Durham City/Ki-A-Kuts, Complete an important gap in the trail from Bonita Road to Durham Road. Trail will be built in the street right-of-way of SW 74th Avenue. Tonquin Trail at Ki-A-Kuts bridge over the Tualatin River.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-26	**Pathfinder-Genesis Trail (T8)**	Fanno Creek to Pathfinder Court Trail	Yes; Partially funded	SHORT TERM: 0-5 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
TI-27	**Westside Trail (T10)**	Planned Portland to Tualatin expansion	No	MID TO LONG TERM: 5-15 years or beyond	HIGH - 5 million and up	MID TERM: 5-15 years	
TI-28	**Krueger Creek Trail**	Walnut Street to Jack Park	Yes; Partially funded	SHORT TERM: 0-5 years	LOW - Under 1/2 million	SHORT TERM: 0-5 years	
TI-29	**Fanno Creek Trail - Durham Rd to Tualatin River Trail Connection**	Durham Road to Tualatin River Trail	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-30	**Dirksen Nature Park Property**	Dirksen Nature Park restoration, enhancement, and invasive species removal. Site improvements including loop trail, parking, natural play area, and sidewalk/street improvements. Acquisition is complete.	Yes; Partially funded	SHORT TERM to MID TERM: 0-15 years	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
TI-31	**Tree Grove protection**	Focus on preserving large groves of native trees.	No	Ongoing	MEDIUM - 1/2 million to 5 million	Ongoing	X
TI-32	**River Terrace Annexation**	Property acquisition for new parks in River terrace UGB expansion area	No	Ongoing	HIGH - 5 million and up	Ongoing	X
TI-33	**Looping north of the Tualatin River**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
TI-34	**Fanno Creek forks to the northeast at Fanno Creek Park**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
TI-35	**Fanno Creek**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
TI-36	**South of SW Riverwood Lane, between SW Greenland Brire & SW Wood Crest Avenue**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
TI-37	**Kruse Way Trail**	There is an existing bike/ped bridge crossing I-5 at the Hwy 217 interchange. The bridge is part of Lake Oswego's Kruse Way Trail. The trail needs to be extended to the west only a short distance to connect to the Fanno Creek Trail.	No	LONG TERM: Beyond 15 years	HIGH - 5 million and up	LONG TERM: Beyond 15 years	
TI-38	**Fanno Creek Trail - Bonita Road to Durham Road Connection**	Complete an important gap in the trail from Bonita Road to Durham Road. Trail will be built in the street right-of-way of SW 74th Avenue.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-39	**Red Rock Creek Bike/Ped Creek Crossing**	Provide bike/ped connectivity with bridge crossing of Red Rock Creek	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-40	**Tigard Triangle Park**	Create neighborhood park in underserviced area of Tigard triangle	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	X

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
TI-41	**Acquire TDRs on Red Rock Creek**	Purchase TDRS on Red Rock Creek for preservation of riparian corridor	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	X
TI-42	**Tigard Main Street Green Street**	Provide new green street facilities on Main Street	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	X
TI-43	**Connection between Tigard Triangle and PCC-Sylvania**	Provide pedestrian/bicylcle connection between the Tigard Triangle area and PCC-Sylvania	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-44	**Complete Green Spines in Downtown**	Provide "green" boulevards for downtown Tigard as planned in Fannon Creek Master Plan	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-45	**Open Space/Park development in Washington Square**	Provide additional open space or neighborhood park in Washington Square	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	X
TI-46	**Pedestrian Crossing /Sky Bridge over I-5 at Ash Creek**	Provide sky bridge pedestrian/bicyle crossing over Interstate 5 at Ash Creek	No	MID TERM: 5-15 years	HIGH - 5 million and up	MID TERM: 5-15 years	
TI-47	**Washington Square Greenbelt**	The Washington Square Regional Center Plan - September 1999 established a plan for an interconnected open space system and a green belt around the center that would potentially add property value and attract quality developments that ultimately will create a great place to live and work for the region.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-48	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #11. Unknown passage status. Barrier subtype is 'full box.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-49	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #12. Unknown passage status. Barrier subtype is 'round.' Owner is ODOT. Culvert assessment by ODFW staff (1996-1999) using guidelines and criteria to determine fish passage. Comments include, "1 mile from I-5. Double culvert (24" x 2) Steps fall 2' over 5' long cascade. Initial steps are 16" and 12". Subterranean above. Below runs alongside of large pond. Listed as irrigation ditch in straight-line chart."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-50	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #13. Unknown passage status. Barrier subtype is 'round.' Owner is ODOT. Culvert assessment by ODFW staff (1996-1999) using guidelines and criteria to determine fish passage. Comments include, "1 mile from I-5. Double culvert (24" x 2) Steps fall 2' over 5' long cascade. Initial steps are 16" and 12". Subterranean above. Below runs alongside of large pond. Listed as irrigation ditch in straight-line chart."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-51	**Remove Fish Barrier**	Remove Stark Reservoir ODFW ID #14 over unnamed stream. Barrier subtype is 'permanent dam.' Owner is Herbert & Roth Stark.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-52	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #17 on Ash Creek. Barrier subtype is 'round.' Unknown passage status. Comments include, "historic St. presence above culvert on Ash Creek."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-53	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #18. Passable passage status. Owner is ODOT. Culvert assessment by ODFW staff (1996-1999) using guidelines and criteria to determine fish passage. Not in straight-line chart.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-54	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #20 on Ash Creek. Partially blocked passage status. Professional judgment used to evaluate culvert. Comments include, "step ht+0.4m; old irr dam."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-55	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #21 on Ash Creek. Barrier subtype is 'round.' Owner is ODOT. Passable passage status. Culvert assessment by ODFW staff (1996-1999) using guidelines and criteria to determine fish passage. Labeled as "Hedges Cr" on road.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-56	**Remove Fish Barrier**	Remove unnamed culvert on ODFW ID #22 on Ash Creek. Barrier subtype is 'full box.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-57	**Remove Fish Barrier**	Remove unnamed dam on ODFW ID #28 on South Fork Ash Creek. Partially blocked passage status. Professional judgment used to evaluate dam. Comments include, "step ht=0.8m; backyard dam."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-58	**Remove Fish Barrier**	Remove unnamed culvert on ODFW ID #30 on South Fork Ash Creek. Blocked passage status. Professional judgment used to evaluate culvert on SW Ventura Dr.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-59	**Remove Fish Barrier**	Remove unnamed culvert on ODFW ID #32 on South Fork Ash Creek. Passable passage status. Professional judgment used to evaluate culvert. Comments include, "T=12.0C path; county boundary."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-60	**Remove Fish Barrier**	Remove unnamed culvert on ODFW ID #35 on South Fork Ash Creek. Barrier subtype is 'round.' Professional judgment used to evaluate culvert. Comments include, "1.0m concrete no drop."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-61	**Remove Fish Barrier**	Remove unnamed culvert on ODFW ID #36 on South Fork Ash Creek. Barrier subtype is 'round.' Professional judgment used to evaluate culvert. Comments include, "1.0m concrete no drop."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TI-200	**Fanno Creek Corridor Fields Property**	Master plan, design and construction of a natural areas park at the Fields Property.	No			SHORT TERM: 0-5 years	
		CITY OF TUALATIN					
TU-1	**Ice Age Tonquin Trail**	Land use, acquisition, and trail development, also Tigard, King City, Durham and Washington County	No	LONG TERM: Beyond 15 years	HIGH - 5 million and up	LONG TERM: Beyond 15 years	X
TU-2	**Westside Trail**	New bike/ped bridge over the Tualatin River. Could be a joint effort with the Willamette River Water consortium.	No	MID TERM: 5-15 years	HIGH - 5 million and up	MID TERM: 5-15 years	
TU-3	**Tualatin National Wildlife Refuge Trail Connection**	Complete linkage to create connection to Tualatin National Wildlife Refuge	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
TU-4	**Tualatin River Greenway**	Land acquisition and path development, West and east of I5, extending past 99W to the Westside Trail, desire	No	LONG TERM: Beyond 15 years	HIGH - 5 million and up	LONG TERM: Beyond 15 years	X

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
TU-5	**Tualatin River Water Trail**	DevelopmentTualatin River Water Trail within Tualatin	No	MID TERM: 5-15 years	HIGH - 5 million and up	MID TERM: 5-15 years	
TU-6	**Hedges Creek Wetland Area**	Trail easement needed along private properties east of Myslony St. to Pazcuzzi Pond. East of Pazcuzzi pond there are approx. 30 acres in Tualatin ownership and rest in Wetlands Conservancy ownership. Trail route to follow CWS Cipole Trunk Sewer easement. Easements needed east of 90th Avenue to where built section of trail exists.	No	LONG TERM: Beyond 15 years	HIGH - 5 million and up	LONG TERM: Beyond 15 years	
TU-7	**Fanno Creek Trail**	Improve riparian corridor and complete spur connections	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
TU-8	**Tonquin Trail Connection to WES**	Connect Tonquin Trail, Tualatin River Greenway and Hedges Creek Wetlands to WES Station	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
TU-9	**Koller Wetlands and Ponds**	Purchase trail easement from landowners to west of railroad tracks so that future trail users will have views of Koller Wetlands and ponds. Purchase perched wetland (Kolk pond) on top of bedrock. Tonquin Trail likely built after this area annexed by Tualatin.	Yes	SHORT TERM: 0-5 years; 2012	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
TU-10	**Nyberg Creek Greenway**	Land acquisition and path development. Connecting east and west of I5 then north and south to Hwy 99 to I5 bikeway (south) and Tualatin River Greenway (north)	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	X
TU-11	**Moran Property**	Tonquin Trail trailhead, river access and bike/pedestrian bridge over Tualatin River on Metro owned land. Ongoing DEQ monitored clean-up of oil-contaminated soil. Tonquin Trail will connect to built section of Tualatin River Greenway to east of Moran. Metro and TRNWR have IGA for natural resource restoration work that the Refuge conducts on Metro land.	Yes	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
TU-12	**99W Parallel Path**	Off Street route parallel to 99W	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	X
TU-13	**Kolk Property - Kohler Wetland**	Perched wetland on top of bedrock desirable for acquisition and protection	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
TU-14	**Ice Age Discovery Trail**	Overlap NPS Ice Age Discovery Trail with Tualatin portion of the Tonquin Trail. Incorporate NPS Ice Age Marketing Plan, Ice Age Visitor Plan, Historical Society and Chamber support.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	X
TU-15	**Nyberg Undercrossing at I-5**	Provide pedestrian/bicylcle connection under the intersection of Nyberg and Interstate 5	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	X
TU-16	**Parallel Facility to I-5**	Land use, acquistion and path development. Provide a safe parallel pedestrian/bicycle facility parallel to Interstate 5	No	LONG TERM: Beyond 15 years	HIGH - 5 million and up	LONG TERM: Beyond 15 years	X
TU-17	**Wildlife Corridor south of the Tualatin River**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	X
TU-18	**Brown's Ferry Park Barn: Master Plan**	A Master Plan for the renovation of the barn at Brown's Ferry Park will identify improvements to be made to the historic structure so that it is safe for public use, to gain new utility from it as a three season picnic shelter and to preserve a historic feature of Tualatin's agrarian past.	Yes	SHORT TERM: 0-5 years; 2014-2015	LOW - Under 1/2 million	SHORT TERM: 0-5 years	
TU-19	**Brown's Ferry Park Com Ctr: Feasibility Study**	The BFCC Feasibility Study will determine what improvements should be made to modernize the facility, maximize functionality, and prolong its useful life. The Feasibility Study will study ways to update technological systems, improve access, enhance health and safety conditions, reduce energy use, enlarge recreation program spaces, and improve inter-facility connectivity.	Yes	SHORT TERM: 0-5 years; 2014-2015	LOW - Under 1/2 million	SHORT TERM: 0-5 years	
TU-20	**Tualatin River Greenway: Land Acquisition**	Land is a basic ingredient of a park and recreation system, and as such the Parks and Recreation Master Plan emphasizes land acquisition as a major goal and, in particular land for riverfront parks. Additional riverfront park land will strengthen the Greenway as a recreational corridor by providing land for facilities (bikeways, docks, viewing areas) and improving public access to the river and serving as a focus for river related activities. Financial readiness for acquisition is of critical importance because once the land has been developed, it may never again be available for public ownership.	Yes	SHORT TERM: 0-5 years; 2012-2013, 2013-2014, 2014-2015, 2015-2016,2016-2017	HIGH - 5 million and up	SHORT TERM: 0-5 years	
TU-21	**Van Raden Com Ctr: Feasibility Study**	Feasibility Study for Van Raden Community Center to define	Yes	SHORT TERM: 0-5 years; 2014-2015	LOW - Under 1/2 million	SHORT TERM: 0-5 years	
TU-22	**Lafky Park: Playground/Swing set Replacement**	Lafky Park is located at 9655 SW Siletz Drive, serving the residential neighborhoods in the south central areas of town. The existing playground structure is a wooden timber framed structure built in 1984. At the age of 27 years this structure is at the end of its life cycle, the swing set was removed from service (August 2011) as a result of a failure of the timber supports, the remaining structure is in similar decline. A complete removal and replacement with updated playground system is due.	Yes	SHORT TERM: 0-5 years; 2014-2015	LOW - Under 1/2 million	SHORT TERM: 0-5 years	
TU-23	**Placeholder for additional project - Intentionally blank**						

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
TU-24	**Park targeted for acquisition /Tualatin River and 99W**	Neighborhood park acquisition and development	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-25	**Connection of Tualatin River Greenway to Moran Property**	Bike/ped facilities for connectivity	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-26	**Tualatin River Greenway Connection linking Greenway from west side to 99W**	Bike/ped facilities for connectivity	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-27	**Riverfront property acquisition for pedestrian bridge at Boones Ferry Road**	Bike/ped facilities for connectivity	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-28	**Wetland Park acquisition and Development**	Open space acquisition and development	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-29	**Surf to Turf Trail - Tualatin**	Bike/ped facilities for connectivity	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
Add: TU-30	**North/South I-5 Parallel Path**	Land use, acquisition and path development	No	MID TERM: 5-15 years			X
TU-31	**Nyberg Creek Trail Acquisition and Undercrossing**	Bike/ped facilities for connectivity	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-32	**Myslony Wetlands**	Open space protection	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-33	**Parkway Treatment on Tualatin Sherwood Road**	Bike/ped facilities for connectivity	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-34	**New Park Adjacent to Tualatin Elementary School**	Neighborhood park acquisition and development	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-35	**Trail System to connect to Myslony Greenway**	Bike/ped facilities for connectivity	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-36	**Leveton-Herman Road Improvements**	Bike/ped facilities improvements between Teton and Tualatin Road.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-37	**Martinazzi Street Improvements - Green Street**	Watershed protection and improving ped/bike connectivity	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TU-38	**Construct Tonquin Trail along Cipole Rd.**	Project will be in unincorporated Washington County since it is recommended for west side of Cipole. Construct Tonquin Trail in ROW on west side of Cipole Road when that road gets improved.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
CLEAN WATER SERVICES							
CWS-1	**Stormwater treatment and Floodplain reconnection of the Tualatin River watershed**	LONG TERM PROGRAMMTIC Acquire developed flood plain properties and restore to riparian corrridor for flood storage	No	LONG TERM: Beyond 15 years	HIGH - 5 million and up	LONG TERM: Beyond 15 years	
CWS-2	**Fanno Creek Restoration**	Hall Street to Durham Road, including Bonita Natural Areas	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
CWS-3	**Ash Creek Wetland**	Large existing wetland (approximately 30 ac) north of Hwy 217; used for grazing; opportunity for enhancement and floodplain storage, no current development plans; no funding identified for acquisition.	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
CWS-4	**Restore riparian health**	LONG TERM PROGRAMMTIC Property acquisition and restoring the flood plain. Change geomorphology conditions of streams as a long term strategy to address hydrology and hydraulics	No	LONG TERM: Beyond 15 years	HIGH - 5 million and up	LONG TERM: Beyond 15 years	
CWS-5	**Restore riparian health**	All open streams provide for riparian canopy to improve health and function	No	LONG TERM: Beyond 15 years	HIGH - 5 million and up	LONG TERM: Beyond 15 years	
CWS-6	**Preserve existing forest**	For ecosystem services including stormwater management	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
CWS-7	**Hwy 99W Median Retrofit**	Provide stormwater treatment using open space available in the Hwy 99W in Tigard/King City, Project partnered with ODOT and city of Tigard, Pre-design funded for FY2011-12, Design planned for FY2012-13 – future funding dependent on report	Yes	SHORT TERM: 0-5 years; 2011-2012, 2012, 2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
CWS-8	**Fanno Creek Stormwater Basin Master Plan**	Sub-basin watershed master plan to identify conveyance improvement, culvert replacement, facility/outfall retrofits, and water quality treatment challenges and opportunities for enhancement projects, Project funded for FY2013-14 no funding identified for potential solutions	Yes	SHORT TERM: 0-5 years; 2011-2012, 2012-2013	LOW - Under 1/2 million	SHORT TERM: 0-5 years	X
CWS-9	**Stormwater Outfall and Facility Retrofits**	Located throughout the SW Corridor; retrofit opportunities exist to address stormwater treatment and will be identified when alignment is selected.	Yes; Limited District Funding Available	SHORT TERM; 0-5 years	HIGH - 5 million and up	MID TERM: 5-15 years	
CWS-10	**Hedges Creek and Wetland Enhancement**	Should be coordinated with the City of Tualatin. When Tonquin Trail is constructed over CWS' Cipole Sanitary Trunk Sewer easement between Pazcuzzi Pond east to built sections of trail near Tualatin Police Station, opportunities will exist for habitat improvement, invasive species removal and native plantings. Also, opportunity to improve wildlife passage at culvert where trail will cross Teton Ave. Most of the wetlands are owned by Wetland Conservancy and City of Tualatin.	District will partner with Metro and City funding from partners	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
CWS-11	**Fanno Creek Improvement - Downtown**	Near City Hall – streambank stabilization and enhancement project, Most of the wetlands is owned by City of Tigard; no funding identified	Yes	SHORT TERM; 0-5 years	lOW - Under 1 million	LONG TERM: Beyond 15 years	X
CWS-13	**Culvert Replacement**	Located throughout the SW Corridor; opportunities exist to address fish passage and capacity and will be identified when the alignment is selected.	Yes; Limited District Funding Available	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
CWS-14	**Cedar Creek Corridor**	Local and regional trails being constructed (Tonquin Trail); potential impact on existing natural resources; opportunity for enhancing degraded corridor, including improving wildlife passage when new trail crossing built beneath highway 99. Wildlife passage improvements also recommended where Cedar Creek crosses beneath Eddy Road and Roy Rodgers Road when trail is built over road in these locations. Metro funded trail master plan; enhancement is not funded.	District will partner with Metro and City for trail; District does not have funding for this project	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
CWS -15	**Deek Creek and Edgewater Subdivisions**	Located in King City; presently being developed; opportunity for constructing a regional stormwater treatment facility exists	No	SHORT TERM: 0-5 years; 2012-2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
CWS-17	**Derry Dell at Walnut**	This Project, in partnership with the City of Tigard, removes five exposed sewer crossings, adds 1,200 feet of sanitary sewer, and removes several manholes in the Woodard city park. Benefits include fish passage and streambank stabilization on 400-feet of Derry Dell Creek. Proposed schedule: Construction in summer of 2014.	Yes	SHORT TERM: 0-5 years; 2012-2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
CWS-18	**Fanno Interceptor Upgrade**	Sanitary trunk upgrade that is located in the Fanno Creek Corridor, phased construction in FY2014-2018.	Yes	SHORT TERM: 0-5 years; 2012-2013	High: 5 million+	SHORT TERM: 0-5 years	X
CWS-19	**Upper Tualatin Interceptor Upgrade**	Sanitary trunk upgrade pending sanitary sewer model verification; located near Hwy 99W corridor	Yes	SHORT TERM: 0-5 years; 2012-2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
CWS-20	**Onion Flat Trunk Sewer Upgrade**	Sanitary trunk upgrade to support future industrial growth in Sherwood and Tualatin UGB; located south of Hwy 99W corridor. Opportunity to coordinate with acquisition and protection targeted by City of Sherwood in Project SH-12.	Yes	SHORT TERM: 0-5 years; 2012-2013	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	X
WASHINGTON COUNTY							
WA-1	**Wildlife corridor between Ash Creek and Red Tail Golf Course**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
WA-3	**Interim Tonquin Trail**	Interim Tonquin Trail to serve connectivity needs while overall trail is acquired and developed.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-4	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #5 on Cedar Creek. Owner is Washington County. Passable passage status. Culvert assessment by ODFW staff (1996-1999) using guidelines and criteria to determine fish passage. Comments include, "0.5 miles east of Elwert Rd."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-5	**Remove Fish Barrier**	Remove Tualatin Refuge Dam ODFW ID #6. Owner is USFWS. Barrier subtype is a permanent dam.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-6	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #16 on Sumner Creek. Passable passage status. Owner is ODOT. Culvert assessment by ODFW staff (1996-1999) using guidelines and criteria to determine fish passage.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	Tualatin River Wildlife Refuge priority
WA-7	**Remove Fish Barrier**	Remove unnamed barrier ODFW ID #19. Passage status unknown. Barrier type not indicated on map.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-8	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #23 on Ash Creek. Barrier subtype 'full box.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-9	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #25 on Ash Creek. Passable passage status. Barrier subtype 'full box.' Professional judgment used to evaluate culvert on SW Locust. It is 1.5m box culvert.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-10	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #37 on Ash Creek. Barrier subtype 'round.' Passable passage status. Professional judgment used to evaluate culvert on SW 80th. It is 1.9m concrete, with no drop.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-11	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #38 on South Fork Ash Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert at SW 80th. It is 1.5m metal, with no drop.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-12	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #39 on South Fork Ash Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert. It is at a private driveway and is 0.9m concrete.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-13	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #40 on South Fork Ash Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert at SW 82nd. It is 1.5m metal with no drop.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-14	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #41 on South Fork Ash Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert at SW 82nd. It is 1.5m metal with no drop.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-15	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #42 on Ash Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert. It is 1.7m metal, at a private driveway.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
WA-16	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #43 on Ash Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert. It is 1.7m metal, at a private driveway.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-17	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #44 on Ash Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert. It is 1.7m metal, at a private driveway.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-18	**Remove Fish Barrier**	Remove unnamed dam ODFW ID #45 on Ash Creek. Comments include, "concrete structure 'slide' to damn pond."	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-19	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #47 on Ash Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert at SW Cedarcrest. It is 1.5m metal.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-20	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #52 on Ash Creek. Partially blocked passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert at SW 80th. It is 0.9m concrete.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-21	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #53 on Ash Creek. Partially blocked passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert at SW 80th. It is 0.9m concrete.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-22	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #55 on Ash Creek. Passable passage status. Barrier subtype is 'unknown.' Professional judgment used to evaluate culvert. It is at a private driveway.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-23	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #56 on Ash Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert at SW 74th. It is 1.0m concrete.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-24	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #57 on Ash Creek. Passable passage status. Barrier subtype is 'round.' Professional judgment used to evaluate culvert at SW 74th. It is 1.0m concrete.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
WA-25	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #61 on Ash Creek. Passable passage status. Barrier subtype is 'unknown.' Professional judgment used to evaluate culvert at an old driveway - not used anymore.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
CITY OF SHERWOOD							
SH-1	**Cedar Creek Trail**	Provide pedestrian/bike connection	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	
SH-2	**Tonquin Trail**	Oregon Street/Tonquin Road intersection to Roy Rodgers Road.	Yes	SHORT TERM: 0-5 years; 2013-2014	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
SH-3	**99W culvert underpass**	Provide pedestrian/bike connection	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
SH-4	**Adams Park north**	Acquire and develop neighborhood park	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
SH-5	**Complete the Trail System**	Complete the Trail System and Connect the Community	No	Ongoing	HIGH - 5 million and up	Ongoing	
SH-7	**Design and Construct a Skatepark**	Acquire and develop skate park	No	LONG TERM: Beyond 15 years	LOW - Under 1/2 million	LONG TERM: Beyond 15 years	
SH-8	**Bike Ped Bridge Crossing of Railroad tracks**	Provide safe pedestrian/bike crossing of train tracks	No	LONG TERM: Beyond 15 years	HIGH - 5 million and up	LONG TERM: Beyond 15 years	
SH-9	**Town Center Plan - Open Space**	Acquire and develop open space	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
SH-10	**Tannery Site**	Acquire and develop	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
SH-11	**Roundabout Development**	Set aside remnant land from transportation project for construction of a roundabout and a park or open space.	No	MID TERM: 5-15 years	LOW - Under 1/2 million	MID TERM: 5-15 years	
Sh: 12	**Chicken Creek Watershed**	Acquisition opportunities for watershed protection	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
SH-13	**Stella Olsen Park**	Improve Amphitheater in Stella Olsen Park, wetland improvements - Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices.	No	MID TERM: 5-15 years	LOW - Under 1/2 million	MID TERM: 5-15 years	X
SH-14	**BPA and PGE Line Easements**	Trail opportunities within easements of BPA and PGE for connectivity	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
SH-15	**Floodplain Improvements north of Sunset Boulevard**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices. Excavate to connect isolated floodplains and to create additional floodplain areas terraces adjacent to streams. Plant the terraces with a diverse mix of site appropriate herbs, trees and shrubs. Grade the terraces to prevent fish entrapment when flood water levels decrease.	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	X

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
SH-16	**Chicken Creek (Elwort and Edy Intersection)**	Address fragmented wildlife corridors by installing a diverse mix of site-appropriate herbs, trees and shrubs to the extent that there are not significant gaps in tree cover. Maximize the width of the vegetated corridor. Create occasional meadows but not at the expense of leaving a gap in tree cover connection along the corridor. Stabilize soil erosion using bioengineering practices. Excavate to connect isolated floodplains and to create additional floodplain areas terraces adjacent to streams. Plant the terraces with a diverse mix of site appropriate herbs, trees and shrubs. Grade the terraces to prevent fish entrapment when flood water levels decrease.	No	LONG TERM: Beyond 15 years	MEDIUM - 1/2 million to 5 million	LONG TERM: Beyond 15 years	X
SH-17	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #1 on Cedar Creek. Passable passage status. Owner is Washington County. Culvert assessment by ODFW staff (1996-1999) using guidelines and criteria to determine fish passage. Culvert is 0.4 miles west of Parrot Mt. Rd.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TUALATIN HILLS PARKS AND RECREATION DISTRICT							
TH-1	**SW Community Park**	This project will be the development of a brand new Community Park in THPRD's southwest quadrant. Project amenities have yet to be determined, but may include athletic fields, picnic areas, play equipment, pathways, or community gardens. More details will become available as project start-up approaches.	Yes	SHORT TERM: 0-5 years; 2012-2016	HIGH - 5 million and up: 7.5 million	SHORT TERM: 0-5 years	
TH-2	**Vista Brook Park**	Master planning for Vista Brook Park began in fall 2010. Renovations will include pathways, play equipment, picnic areas, basketball court upgrades, parking improvements, landscape plantings and natural area restoration.	Yes	SHORT TERM: 0-5 years; 2013	LOW - Under 1/2 million: 500000.00	SHORT TERM: 0-5 years	
TH-3	**Fanno Creek Park**	The Natural Resources Department will conduct extensive weed treatment and intensive tree/shrub plantings to provide shade and habitat diversity at the 20-acre Fanno Creek Park. A study site for creek and water flow improvements will also be incorporated	Yes	SHORT TERM: 0-5 years; 2013-2014	LOW- Under 1/2 million: 158000.00	SHORT TERM: 0-5 years	
TH-4	**Lowami Hart Woods**	The Natural Resources Department will be completing a large-scale removal of non-native weeds then replanting with native plants and/or shrubs. During this process, the Natural Resources Department will be re-routing and/or closing illegal trails. The 27.75-acre park is predominantly forested with a sloping terrain. A section of South Johnson Creek flows through the park from south to north. Tributary streams and wetlands also exist on-site. The 2001 master plan calls for trails through the natural area, with a main trail segment planned to be part of the future South Johnson Creek Community Trail. Other master plan amenities include a small parking lot with adjacent picnic areas and informational kiosk, an informal central gathering area for environmental education of small groups, and new pedestrian bridges.	Yes	SHORT TERM: 0-5 years; 2010-2015	MEDIUM - 1/2 million to 5 million	SHORT TERM: 0-5 years	
TH-5	**Vista Brook Park**	The Natural Resources Department will be enhancing the natural area by removing non-native plants. They will then replant with native trees and shrubs after the park development occurs. In order to further preserve habitats, this project will likely enhance pond edges and potentially add basking logs for wildlife.	Yes	SHORT TERM: 0-5 years; 2011-2012	LOW - Under 1/2 million: 20,600.00	SHORT TERM: 0-5 years	
~~TH-6~~	~~**Jordan Woods Natural Area**~~	~~The Park District has approved a master plan for Jordan-Husen Park. The master plan is made up of two distinct parks. The Jackie Husen Park is a neighborhood park with typical amenities such as play equipment, pathways and open space areas. The Jackie Husen project is not a part of the bond program. Jordan Woods Natural Area will be funded with bond money and is a linear community trail development project. Additional paved and soft surface trails, an overlook, two bridges and boardwalk will be installed to provide for complete site access.~~	~~Yes~~	~~SHORT TERM: 0-5 years; 2009-2013~~	~~MEDIUM - 1/2 million to 5 million: 1,600,000.00~~	~~SHORT TERM: 0-5 years~~	
TH-6	**Westside Trail - Segment no. 1 (Barrows Rd to Scholls Ferry Road)**	(Barrows Rd to Scholls Ferry Road) of the Westside Trail is a 0.39-mile-long trail that will begin at the Tigard city limits at Barrows Road, connecting the east/west Summercreek Community Trail then continuing north toward Scholls Ferry Road. Along with the initial benefit of connecting multiple regional and community trails, this trail will also allow easy access for local patrons to the Murray-Scholls Town Center area.	Yes	SHORT TERM: 0-5 years; 2009-2013	MEDIUM - 1/2 million to 5 million: 4,150,000	SHORT TERM: 0-5 years	
TH-7	**Westside Trail - Segment no. 4 (Galena Way to Rigert Road)**	(Galena Way to Rigert Road) of the Westside Trail will connect Galena Way to Rigert Road. After completion, this segment will connect 3.32 miles of the Westside Trail.	Yes	SHORT TERM: 0-5 years; 2009-2013	HIGH - 5 million and up	SHORT TERM: 0-5 years	
TH-8	**Westside Trail - Segment no. 7 (Mt. Williams-Burntwood Way to Davis Road)**	(Mt. Williams-Burntwood Way to Davis Road) of the Westside Trail will connect Burntwood Way to Davis Road over the Mount Williams parcel. This is a partnership project with the city of Beaverton and is a very challenging segment due to steep topography and existing natural resources (trees). Westside Trail -	Yes	SHORT TERM: 0-5 years; 2009-2013	HIGH - 5 million and up	SHORT TERM: 0-5 years	
CITY OF LAKE OSWEGO							
LO-2	**Surf to Turf Trail**	Develop Surf to Turf Trail that is planned to connect Fanno Creek Trail and the Tonquin Trail by following the Pacific and Western Railroad alignment.	No	MID TERM: 5-15 years	HIGH - 5 million and up	MID TERM: 5-15 years	
LO-3	**Create children's nature play areas**	Develop areas for children's play/nature play	No	SHORT TERM: 0-5 years; 2012-2017	LOW - Under 1/2 million	SHORT TERM: 0-5 years	
LO-4	**Opportunities to be close to nature**	Create opportunities to be close to nature	No	SHORT TERM: 0-5 years; 2012-2017	LOW - Under 1/2 million	SHORT TERM: 0-5 years	

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

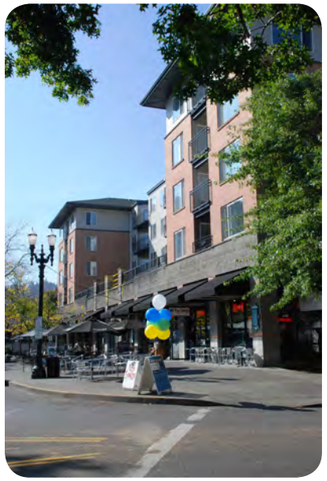
Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

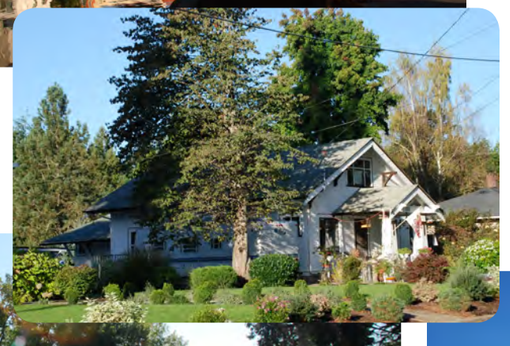
Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
LO-5	**Opportunities for connectivity**	Promote opportunities for connectivity	No	Ongoing	MEDIUM - 1/2 million to 5 million	Ongoing	
LO-6	**Acquire park/natural resource lands**	Acquire park/natural resource lands (over 30 acres)	No	Ongoing	HIGH - 5 million and up	Ongoing	
LO-7	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #7 on Ball Creek. Unknown passage status. Barrier subtype is 'full box.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
LO-8	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #8 on Ball Creek. Unknown passage status. Barrier subtype is 'round.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
LO-9	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #9 on Ball Creek. Unknown passage status. Barrier subtype is 'round.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
LO-10	**Remove Fish Barrier**	Remove unnamed culvert ODFW ID #10. Unknown passage status. Barrier subtype is 'round.'	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
OREGON DEPARTMENT OF FISH AND WILDLIFE							
ODFW -1	**Protect native turtle populations**	Implement OCS strategies to protect the Western Painted and Western Pond turtle that remain in planning area. Focus on breeding populations by creating Turtle Conservation Areas to provide strongholds for source populations to sustain populations into the future as development continues. Take actions that support TCA's (connectivity, acquisition, adjacent upland acquisition, safe road crossings, protections, etc.).	No	Ongoing	HIGH - 5 million and up	Ongoing	
ODFW -2	**Guidelines for trails outside of habitat areas**	Delineate areas where trails may not be appropriate in order to protect wildlife populations into the future while still providing trails/transportation connectivity and green space experiences.	No	Ongoing	LOW - Under 1/2 million	Ongoing	
ODFW -3	**Identify valuable uplands**	Identify uplands prior to development in expanding UGB that would be appropriate for a trail in order to avoid unnecessary impact to sensitive resources/wildlife. Preserving greenspace in uplands that trails can run through will get away from relying too heavily on riparian areas for trail connectivity and nature trails.	No	Ongoing	LOW - Under 1/2 million	Ongoing	
ODFW -4	**Create cap for linear feet of trail**	Create cap for linear feet of trail (any trail- city, parks, or Metro) per acre, per square mile, or percent of total Creek length.	No	Ongoing	LOW - Under 1/2 million	Ongoing	
ODFW -5	**Support Heritage Tree Program**	Create greater participation/incentive for heritage tree program at Metro level and/or City level.	No	Ongoing	MEDIUM - 1/2 million to 5 million	Ongoing	
ODFW -6	**Guidelines for commuter trails**	Create guidelines that help identify where federally funded commuter trails (16-20 foot wide asphalt trails) are and are not appropriate for ecosystem health and function.	No	Ongoing	LOW - Under 1/2 million	Ongoing	
ODFW -7	**Incentivize maintaining riparian buffer**	Encroachment of buffers across city entities is a large and unenforced issue. Incentivize maintaining riparian buffer on private property.	No	Ongoing	LOW - Under 1/2 million	Ongoing	
ODFW -8	**Protect properties along the Tualatin River**	Prioritize acquisition/protection of properties along the Tualatin to Willamette via Rock Creek/Coffee Lake Creek Wildlife Corridor.	No	Ongoing	HIGH - 5 million and up	Ongoing	
ODFW -9	**Create Oak Conservation Areas**	Identify and create Oak Conservation Areas (OCS strategy habitat). Prioritize parcels 10 acres+ for protection acquisition. Incentivize oak (singe tree or group) preservation on private property.	No	Ongoing	HIGH - 5 million and up	Ongoing	
TUALATIN RIVER NATIONAL WILDLIFE REFUGE							
TRNWR - 1	**Additional turn-out lanes on 99W**	Acceleration/deceleration lanes on HWY 99 at Refuge entry are needed, very dangerous coming to visitor's center, especially from the south.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TRNWR - 2	**Restoration of Rock Creek**	Restore Rock Creek to its meandering channel and improve hydrology.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TRNWR - 4	**Improve Bus Access to TNWR**	#12 Bus Service to Refuge is needed to maintain and expand service. There are current bus stop issues at this location. A safe crossing or dedicated stopping lane is needed with a bus shelter.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TRNWR - 5	**Develop Tonquin Trail and 99W to TNWR**	Develop biking and walking access to TNWR along 99W from Tualatin.	No	MID TERM: 5-15 years	LOW - Under 1/2 million	MID TERM: 5-15 years	
TRNWR - 6	**Improve wildlife passage across 99W**	Improve wildlife passage from properties across 99W including Onion Flats to TNWR.	No	MID TERM: 5-15 years	MEDIUM - 1/2 million to 5 million	MID TERM: 5-15 years	
TUALATIN RIVERKEEPERS							
TRV - 1	**Implement Washington Square Regional Center Plan**	Ensure livability and environmental goals of Washington Square Regional Center Plan	No		HIGH - 5 million and up	Policy	
TRV - 2	**Separation of bikes and cars**	Separation of bikes and cars is needed and consider shallow drainages that separate vehicle types	No		HIGH - 5 million and up	Policy	

DRAFT STEERING COMMITTEE RECOMMENDATION (continued)

Southwest Corridor: Parks, Trails, Natural Resources Projects -7/15/13

Jurisdiction and project number	Project Title /Location	Project Description	Funding	Funding Timing	Estimated Cost	Recommendation	Jurisdictional Priorities
TRV - 3	**Natural Resource acquisition in Corridor**	Have the City of Tigard consider buying natural resources and then selling the developable portions	No		HIGH - 5 million and up	Policy	
TRV - 4	**SW 80th Additional bike path and sidewalks**	SW 80th extending from Oelson Road on to the north needs to be connected to HWY 99 by bike path as well as sidewalk system	No		MEDIUM - 1/2 million to 5 million	Policy	
TRV - 5	**Restoration of South Fork Ash Creek**	Full drainage length of South Fork Ash Creek extending underneath I-5 and Barbur Boulevard down to Mt. Sylvania needs to be considered and protected	No		MEDIUM - 1/2 million to 5 million	Policy	
TRV - 6	**Restoration of Red Rock Creek**	Full drainage length of Red Rock Creek which enters Fanno Creek opposite the Tigard Library needs to be considered and protected	No		MEDIUM - 1/2 million to 5 million	Policy	
TRV - 7	**99W Center swale conversion**	Wide center median on 99W needs to be used for stormwater quality and quantity. 99W center swale conversion for stormwater quality and quantity.	No		MEDIUM - 1/2 million to 5 million	Policy	
~~TRV - 8~~	~~**Junk Yard acquisition and restoration**~~	~~on 99W adjacent to the Tualatin River National Wildlife Refuge is a junkyard that floods frequently and pollutes Rock Creek and the Tualatin River.~~	~~No~~			~~Policy~~	
TRV - 9	**Improve Fanno Creek bridge crossings**	Bridge crossings need to be expanded to allow for creek meander, provide safe wildlife passages and adequate room for pedestrian and bike trails.	No		HIGH - 5 million and up	Policy	
TRV - 10	**Removal of watershed barriers**	Removal of small dams in the SW Corridor would improve water quality and fish habitat and be supportive of the goals of the Tualatin Basin Healthy Streams plan. Examples of these dams are at Summerlake Park and Murray Hill Shopping Center on Murray Blvd.	No		HIGH - 5 million and up	Policy	
TRV - 11	**Improve Stormwater Quality**	There are a lot of huge parking lots in the SW Corridor including Washington Square, the Tigard Triangle and big box retailers in Sherwood. We should use this planning opportunity to eliminate runoff from these parking lots (and the large roofs they serve) with pervious pavement, parking lot trees, bioswales, ecoroofs.	No		HIGH - 5 million and up	Policy	
TRV - 12	**Pedestrian Crossing /Sky Bridge over 99W**	Bus access to the Tualatin River National Wildlife Refuge is good outbound but not inbound. A sky bridge or tunnel across 99W would provide Tri-Met riders a safe way to get back to Portland from the refuge. The crossing of 99W at Durham Road is unsafe. Several pedestrians have been killed here. We need a pedestrian bridge or a tunnel. Tonquin Trail crossings of 99W and Tualatin-Sherwood Road should be made with safety in mind (skybridges).	No		HIGH - 5 million and up	Policy	
TUALATIN RIVER WATERSHED COUNCIL							
TUWC- 1	**Remove stream barriers to endemic species**	Remove barriers such as dams and culverts and/or mitigate their impacts to endemic species. Prioritize Tualatin River, Scoggins Creek Basin, Dairy-McKay Basins, Gales Creek Basin, upper Rock Creek Basin, Chiscken and Cedar Creek sub-basins, Jaquith and McFee sub-basins. Beginning with those areas positioned downstream.	No		HIGH - 5 million and up	Policy	
TUWC- 2	**Remove stream barriers to Cutthroat Trout**	Remove barriers such as dams and culverts and/or mitigate their impacts to cut throat trout species. Prioritize Bronson, Willow, Cedar Mill, Wapato, Ayers, Hill Christensen, Burris, Fanno, and Davis sub-basins, beginning with those areas positioned downstream in relation to the 14 sub-watershed.	No		HIGH - 5 million and up	Policy	
TUWC- 3	**Improve hydrologic conditions**	Geographic priorities: Tualatin River main stem and all sub-basins. Improve hydrologic conditions: Ensure adequate water flow to meet endemic fish needs	No		HIGH - 5 million and up	Policy	
TUWC- 4	**Improve hydrologic conditions**	Geographic priorities: Tualatin River main stem and all sub-basins. Improve hydrologic conditions: Manage peak flows and storm water in urbanized areas.	No		HIGH - 5 million and up	Policy	
TUWC- 5	**Improve riparian conditions**	Improve geomorphic conditions: increase bank stability, increase sinuosity (remove channel straightening), decrease channel entrenchment/increase flood plain connectivity. Prioritize in low to mid gradient areas.	No		HIGH - 5 million and up	Policy	
TUWC- 6	**Restore riparian conditions**	Manage invasive species to gain increase in native plant community diversity, expand stream cover, and increase woody debris. Prioritize project sites that affect longer stretches and on both sides of the stream, and achieve larger riparian zones in proportion to stream size.	No		HIGH - 5 million and up	Policy	
TUWC- 7	**Improve Water Quality**	Implement strategies to improve water quality in the Tualatin River. The DEQ lists the Tualatin River as 'water quality limited' due to its higher temperature (low flows and lack of riparian shade), dissolved oxygen (oxygen consuming substances that end up in the sediment), and presence of bacteria.	No		HIGH - 5 million and up	Policy	
TUWC- 8	**Restore wetlands and floodplains**	Preserve, restore, and enhance wetlands and floodplains, including emergent wetlands in all areas of Tualatin River watershed.	No		HIGH - 5 million and up	Policy	
TUWC- 9	**Preserve intact upland areas**	Preserve intact upland areas such as oak woodlands, prairie and oak savannas in all areas of Tualatin River watershed.	No		HIGH - 5 million and up	Policy	
TUWC- 10	**Remove invasive species**	Priority removal of invasive species in all areas of Tualatin River watershed.	No		HIGH - 5 million and up	Policy	
TUWC- 11	**Prioritize connectivity of uplands**	Prioritize connectivity of uplands to support wildlife corridors in all areas of the Tualatin River watershed.	No		HIGH - 5 million and up	Policy	





GREAT PLACES
SW Corridor Plan

Portland • Sherwood • Tigard • Tualatin
Beaverton • Durham • King City • Lake Oswego
Multnomah County • Washington County
ODOT • TriMet • Metro

Steering committee recommendation | Attachment B

Regulatory framework and financial incentives toolkit

July 22, 2013

Toolkit: Regulatory framework that sets the stage

The Southwest Corridor Land Use Vision expresses the collective aspirations of the communities in the Southwest corridor. High capacity transit has the potential to catalyze adjacent land uses and help achieve this vision. This will work best if transit-supportive regulations and policies are in place well in advance of the high capacity transit investment. These policies will support the land use vision now and help the community to achieve desired goals over time.

There are a number of regulatory tools and strategies that can help foster transit ready communities. There is not a one size fits all approach to the regulatory framework for the entire corridor. Rather, regulatory tools are specific to their context and the land use that is envisioned and tools must be tailored to address the needs of a given area and put in place tools that reflect local development goals. In an effort to better understand these nuances, a *pro forma*-based project example approach was taken in three different places (Capitol Hill Portland, Tigard Triangle and Downtown Tualatin) throughout the corridor that had similar goals. In these *pro forma* project examples, a prototype building was developed that reflects community goals based on local land use plans and then tested against the existing regulatory framework. Using this approach, regulatory issues specific to an area can be identified and an understanding of the market feasibility is provided to determine if financial incentive tools (described in the next section) could be used to help support new development forms in the corridor.

This toolkit describes key transit supportive policies and regulatory tools and offers some possible examples of their application in the Southwest corridor. Information is included to illustrate how the changes can raise the development potential within the corridor. Described in more detail below, the policies that are recommended for further action by local partners include the following:

- zoning code changes
  - examining density maximums and building height
  - non-compliant use provision
  - stepbacks
  - commercial corridor assessment
- parking requirements and parking management
  - trip generation reductions
  - responsive parking ratios
  - shared parking
  - unbundling parking
- design code changes
  - layered landscapes and active open space
  - ground floor active use provisions.

ZONING CODE

▶ Density maximums and building height

WHAT

Local jurisdictions often focus on height limits and density maximums when trying to identify the appropriate level of development for a mixed-use district. Often, more suburban development styles dictate a limit on the height of buildings to ensure compatibility with existing residential neighborhoods. As a result, local building codes often limit both building height and ceiling height of multistory, mixed-use buildings without a clear understanding of the design needs of these buildings.

WHY

Building height and ceiling height must be linked to work properly. If one of the two is not calculated for a mixed-use development type, a developer will be unable to accommodate both storefront and living area designs. This problem can stifle development or cause developers to underutilize properties in downtowns, main streets and mixed-use corridors.

HOW

To ensure that density and height restrictions truly support mixed-use development, a local jurisdiction would assess the zoning code and ensure it does not contain ceiling height and building height restrictions that preclude a mixed-use design type. Additionally, the jurisdiction would determine whether density maximums are possible at the required building height maximum for the zone. If conflicts occur, the jurisdiction would then take steps to correct one or both of the requirements to support the desired development type in the zone.

ZONING CODE

▶ Non-conforming use provision

WHAT

In downtowns, main streets and mixed-use corridors, a non-conforming use provision can attract redevelopment on a smaller, site-specific scale. These code provisions allow a property with an existing auto-oriented use that would no longer be permitted in a zone to be continued if the property is redeveloped in exchange for increased density, a greater mix of uses, and higher design standards. This increased flexibility in a code can affect a developer's decision to approach a specific site. In many cases, the redevelopment and design of the site may turn out to be even more important than the allowed uses.

WHY

Auto-oriented land use areas along the corridor may find this code change helpful to incent local redevelopment projects that would otherwise be limited in scope.

HOW

A local jurisdiction would examine their development code and determine the best locations to apply a non-conforming use provision. The policy could be targeted in areas where the city wishes to see redevelopment occur. This approach can be implemented in base zones, plan districts or overlay zones.

▶ Stepbacks

WHAT

A specific design feature of zoning codes can allow buildings to step back upper stories from the street, thus lowering the scale of the development on the street front while allowing for higher densities on the project. In these cases, additional height and density may be allowed even as the stepbacks create a slenderizing effect. Stepbacks may be used in combination with height limits to ease the transition between adjacent higher- and lower-density developments. Often, stepbacks are used to bridge different development types in abutting districts.

WHY

Numerous developments along the corridor could benefit from this particular application, especially where they are adjacent to single-family neighborhoods. To alleviate the possible negative effect of high density development on a nearby neighborhood, stepback provisions allow for a smoother transition on the street frontage and development that is more attractive to nearby neighbors.

HOW

A local jurisdiction would examine their land use plans and determine the best locations for the application of stepback requirements. The focus should be on areas where new development is directly adjacent to single-family neighborhoods or other sensitive land uses. Stepbacks can be implemented though existing design standards in particular plan districts or overlay zones.

ZONING CODE

▶ Commercial corridor assessment

WHAT

To better position the Barbur/99W corridor for future redevelopment, the corridor must be re-evaluated to determine the form that is most likely to attract investment. For properties within the corridor, revitalization will likely require a restructuring of land use and development patterns around nodes of commercial activity. A change from auto-oriented to multimodal transportation through and near the corridor can help guide and focus redevelopment within these nodes, which in turn will enhance mobility through the corridor. This land use pattern and the street design should be planned together, reinforce each other and promote multimodal access. A change in commercial/retail corridor alignment will not be easy, but is likely necessary to attract activity and development into designated commercial nodes.

WHY

Dissatisfaction with the Barbur/99W commercial strip has become increasingly common. Issues often arise around its poor design and continued traffic congestion, which hurts businesses along the corridor. Pedestrians and bicyclists want the corridor to be safer and more appealing. The corridor's extensive parking lots and paved surfaces, long distances between stores, poor connectivity among businesses and neighborhoods, and low-efficiency land uses all discourage walking, bicycling and transit use. They generate multiple single-purpose vehicle trips, increase use of and dependence on fossil fuels and contribute to air pollution, increased stormwater runoff and depletion of water resources and wildlife habitat. In its current form, the Barbur/99W corridor has no strong development focus, creating more competition between jurisdictions instead of rewarding cooperation.

HOW

The four jurisdictions that comprise the bulk of the commercial corridor along Barbur/99W should collaborate on a multi-jurisdictional effort to re-examine commercial/retail uses and identify the optimal location for a focus on nodal, retail development. The study would attempt to determine the best locations for different intensities of commercial uses and, consequently, identify locations best suited for land use changes that would focus on new housing and employment opportunities between identified commercial/retail nodes.

PARKING

▶ Trip generation reductions

WHAT

Local governments typically use the Institute of Transportation Engineers (ITE) Trip Generation Handbook to evaluate the transportation impacts of development projects and to calculate Transportation System Development Charges (TSDCs). However, since the rates in the ITE Trip Generation Handbook are focused on single-use, vehicle-oriented suburban sites, local rates should be established for sites with pedestrian access, transit service and limited or paid parking. To develop the transit-supportive land uses envisioned for the Southwest corridor, local jurisdictions will likely need lower trip generation assumptions. Trip generation reductions support people-oriented design attracting more activity and amenities to the area. As a result, development projects can increase lot coverage, accessibility and active uses and become financially feasible due to lower parking and TSDC costs.

WHY

In this region, actual trip generation along corridors and in centers outside of the central city is 50 to 70 percent below ITE trip generation rates. Suburban corridors in the region experience a non-auto mode share ranging from 15 to 45 percent. With additional transit-oriented development, these locations will likely see this range shift to 30 to 70 percent non-auto based trips in these places. Such a shift would be consistent with similar corridors in the metro region. These levels of non-auto mode reflect the Southwest Corridor Land Use Vision and should be what the corridor plans for. Trip generation rates consistent with ITE can require that as much as 50 to 75 percent of a site to be dedicated to parking. In addition to being a non-income generating use, higher parking levels can trigger additional auto capacity without addressing the needs of pedestrians, bicyclists and businesses. Reducing trip generation rates can reduce parking costs from 10 percent to less than 1 percent of total project costs, and TSDC fees can be scaled back based on project form and land use, reducing them to only 1 to 2 percent of total project costs.

HOW

To adjust ITE trip generation rates consistent with the envisioned built environment, local jurisdictions can use the model created in the Oregon Transportation Research and Education Consortium's contextual influences on trip generation study. The rate adjustment utilizes Metro's Context Tool, which considers the number of transit corridors, people density, the number of high-frequency transit routes, lot coverage, bike facilities and intersection density. By using built measures or the Context Tool, trip generation rates can be matched to the local context and the vision for growth in that location. Cities and counties would adopt this adjustment factor for calculating trip generation and amend capital improvement plans to reflect these adjustments in the project list as well as the TSDC rates.

PARKING

▶ Responsive parking ratios

WHAT

Existing parking ratios do not necessarily support the transportation and land uses envisioned in the Southwest Corridor Land Use Vision. In order to support a high capacity transit investment, parking ratios along the corridor and in key places should be adjusted. The best approach to catalyze development is to adopt parking ratios that respond, or change, based on existing performance in the area. Performance typically is measured by the existing inventory of parking spaces, peak hour occupancies and other elements of the current and planned for built environment. A good benchmark is 85 percent occupancy during peak hour occupancies. As the market, form and utilization change, so do the parking ratios.

WHY

Given the high cost of parking to developers and end users and the negative impact to pedestrian-oriented design, existing parking ratios do not support the transit-oriented vision for the Southwest corridor. A number of recent parking studies in the region's centers have also shown an excess supply of parking with utilization rates well below 85 percent. By providing parking at levels appropriate for multimodal areas, local jurisdictions can reduce the cost of development and support transit-oriented design, an attractive streetscape, and increased amenities in the corridor. In the project examples, existing parking ratios called for 50 to 60 percent of a parcel to be dedicated to parking. With ratios more reflective of transit-oriented form and travel behavior, this was reduced to 30 percent or less, providing additional space for local amenities such as storefronts and pocket parks.

HOW

First, it is important to understand the current supply of parking in these areas by taking an inventory of parking spaces in the district and the utilization rate of those spaces. The local jurisdiction should then adopt a parking district with appropriate parking management strategies (shared parking, unbundling, pricing, etc.) to use the parking supply most efficiently. Simultaneously, the municipality would adopt a set of parking ratios that respond to specific supply, occupancy and built environment performance measures. As performance in the district fluctuates, a new ratio is triggered. Since parking is managed at the district level, it is best to provide one ratio set for residential uses and another for non-residential uses.

▶ Unbundled parking

WHAT

In transit served communities, parking can be "unbundled," or sold/leased separately, from residential and retail units. Developers provide what the market will support. Typically, early projects do not provide much parking, because there is already an abundance of unused parking supply that can be leased nearby and the cost of providing parking is too high to result in a feasible project. As a market develops, parking supply gets tighter and projects become more profitable, developers can capture a premium from pricing parking separately from the residential units and storefronts. In turn, residents and retailers determine how much parking they need and what they are willing to pay. As a result, unbundling parking is more responsive to local demand. Extra supply unused by residents can be leased to surrounding businesses, reducing the overall number of parking spaces a project must provide.

WHY

This is a beneficial parking strategy for areas transitioning to a more transit-oriented form, as it is linked to parking supply and demand as well as what the market can build. It is a policy that enables more housing choices, especially at lower price points for young families and those on a fixed income. This type of project has attracted significant interest from buyers who do not need parking spots and people wanting to live in a transit-oriented development. In one of the project examples, unbundling parking would result in a $6 to $12 thousand decrease in cost – and therefore price – per unit. For units without parking, TSDC discounts for lower transportation system impacts would further reduce unit costs by a total of $13 to $19 thousand.

HOW

In transit station areas and key places along the Southwest corridor, local jurisdictions should enable unbundled parking. The option of unbundling parking would be adopted into the city's parking standards in the zoning code for these specific areas. Unbundling could be allowed by right in areas adjacent to the corridor and station areas. In areas with a tight supply of parking, it can also be allowed as a condition of approval or for a percentage of the units or square footage (greater than half), providing flexibility and market relevance while ensuring that at least some parking is provided on site.

PARKING

▶ Shared parking

WHAT

Shared parking is a parking strategy whereby parking spaces are shared by more than one user, which allows parking facilities to be utilized more efficiently. Shared parking takes advantage of the fact that most parking spaces are only used part time by a particular automobile, with many parking facilities having a significant number of unused spaces that follow predictable daily, weekly and annual cycles.

WHY

Shared parking can reduce parking facility costs (including aesthetic and environmental impacts), allow greater flexibility in facility location and site design, and encourage more efficient land use.

HOW

The option of shared parking should be provided in city code, by right in designated areas or as a condition of approval on specific development projects. Typically, this would require that arrangements be made between individual facility developers and managers participating in the shared parking effort.

DESIGN CODE

▶ Ground floor active-use provisions

WHAT

Requiring retail ground floor uses in mixed-use buildings can discourage near-term development in areas where the market does not yet support such uses. One way address this market gap is to allow interim storefront uses, while also requiring that ground floor spaces be designed to support retail or commercial uses once the market is ready for them. Codes that recognize the realities of a specific market and identify provisions to support a long-term vision for an area or district are important when a community is trying to activate land uses.

WHY

Ground floor active-use provisions allow a developer to create good "bones" in a development that can later be utilized for the uses ultimately envisioned by the local jurisdiction. They allow for some type of use (often of a lower intensity) to exist in the space in the interim, helping to provide street-level activity. Over time, as rents increase in an area, non-retail uses are replaced, either moving a floor or moving to the periphery of the district.

HOW

A local jurisdiction should address this particular provision in mixed-use districts that require ground floor commercial/retail uses. The provisions in the code should continue to require the specific ceiling heights, footprint requirements and depth needs that standard commercial/retail uses require, but allow for non-retail uses to temporarily occupy the space.

▶ Layered landscapes and active open spaces

WHAT

Layered landscapes attempt to replicate the natural environment, integrating multiple levels or layers of native species of plants. The resulting landscape can differ from project to project but will consist of some combination of the following: ground surfaces, such as dirt paths, bioswales and pervious pavers; habitat at the human level, including shrubs, flowers, wetlands or green walls; and a habitat canopy, using multiple layers of trees as well as green roofs. Layered landscapes help produce aesthetically pleasing open spaces that also serve to filter and absorb on-site stormwater runoff.

WHY

Each layer counts toward habitat and open space requirements, allowing businesses and communities to maximize the use of a property and mitigate development impacts within smaller spaces. Layered landscapes often require less maintenance and operating costs. More traditional forms of landscaping requirements ask for a percentage of the property to be set aside, which raises costs and does not necessarily result in more sustainable, low-impact development.

HOW

Jurisdictions would amend their code to move away from mandated percentages of open space on a development site and focus instead on performance of the natural landscape features. This can be done by implementing a flexible menu of design standards that allow different features to be assigned a point value and mixed together for ecological effectiveness rather than total square feet of coverage.

Toolkit: Financial incentives that set the stage

In addition to regulatory and policy changes, the public sector can use a variety of financial incentives to help stimulate investment in strategic locations. These tools can help bridge the financial gap between what is financially feasible today and what is desired by the community. In many cases, the community's vision is above and beyond what the current market can provide. Investments in the public realm (such as streetscape enhancements and transit investments) are one way to send a message to the private sector that the public is committed to making the community vision a reality. Direct financial incentives for key catalytic projects offer a "proof of concept" – and through strategic investment in such projects, can lead to increased value in the market. Eventually, this can allow for private investment without public support.

Current market conditions in the Southwest corridor do not necessarily support the development forms envisioned by the local communities. This is especially true in areas that would like to see more walkable, attractive and business-friendly neighborhoods than exist today. This section highlights key financial tools available to public sector partners to leverage investment and new development in Southwest corridor locations. The project examples illustrate how these incentives can help fill the financial gap and achieve the desired development outcomes in the corridor. Described in more detail below, these tools are recommended for consideration by public sector partners in areas of change throughout the Southwest corridor:

- Transit Oriented Tax Exemption (TOTE)
- Vertical Housing Program
- brownfield cleanup
- System Development Charges strategies
- urban renewal
- Transit Oriented Development Program
- land acquisition and banking.

▶ Transit-Oriented Tax Exemption

WHAT

The Transit-Oriented Tax Exemption (TOTE) encourages the construction of transit-supportive, multiple-unit housing in corridors and centers in order to shift the balance between the residential and commercial nature of those areas. It seeks to encourage creation of places where people can both live and work. The TOTE reduces operating costs through a 10-year, 100 percent property tax exemption on the value of an improvement. Immediate relief from a significant tax increase makes it more feasible for developers to provide the amenities, form and high-quality design of the development envisioned in these areas.

WHY

Using the TOTE in the Southwest corridor could have significant impacts on the feasibility of high-quality, transit-oriented projects. Catalytic projects, by their nature, generally occur in areas where the market is marginal. Public sector assistance is needed to overcome significant gaps in financial feasibility. The public's portion can often be as high as 20 to 25 percent of total development costs. The TOTE can cover half or more of that share without requiring any upfront cash from the public sector. In the Southwest corridor, project examples suggest that the TOTE could reduce costs to the developer by 10 to 15 percent of the total development cost, and as a result, bring more housing, jobs and transit-oriented design to the corridor. In one example, the TOTE was combined with impact fee reductions and a land value write-down, and together this package made the project feasible without requiring a cash investment from the city.

HOW

A local jurisdiction designs their own TOTE program, local application and approval criteria consistent with criteria set forth by the state, which emphasizes development of multi-unit housing accessible to a broad range of residents on underutilized sites in light rail station areas, transit-oriented and core areas. The city or county adopts, by resolution or ordinance, through a public process, the provisions of ORS 307.600-637 and a designated TOTE area. The City of Portland has an established TOTE program, so development in that portion of the corridor only requires an application demonstrating how the project meets the city's program criteria.

▶ Vertical Housing Program

WHAT

In transit-oriented areas, light rail station areas and urban centers, the Vertical Housing Program can reduce costs at the front end of a developer's investment through a temporary (10-year) abtement relief for on-site improvements. With immediate relief from a significant tax increase, developers can invest additional funds in projects that often have higher initial costs. This tax abatement opportunity is available for multistory, mixed-use development projects (construction or rehabilitation) that include residential units. The rate of the 10-year abatement ranges from 20 to 80 percent of improvement value depending on the number of floors of housing in the project. By providing affordable housing units, the developer may also qualify to receive a partial property tax exemption on the land value.

WHY

As a partial tax abatement, the VHP provides a smaller reduction of costs to a project than the Transit-Oriented Tax Exemption (TOTE). However, it is easier to implement and requires fewer resources to manage than the TOTE, and it can still have a significant impact on the feasibility of mixed-use housing projects along a transit corridor. Project examples from the Southwest corridor showed that the vertical housing tax abatement covered 6 to 8 percent of total development costs, which for one project covered 70 percent of the gap in financial feasibility. By foregoing initial years of tax revenue, local jurisdictions can solidify additional housing opportunities in transit rich areas without needing to spend upfront cash on the project. In doing so, they will also attract additional development projects and tax revenue to the area, generating return even during the years of the abatement.

HOW

A local jurisdiction or combination of jurisdictions applies to the state for designation of a Vertical Housing Development Zone. Once the zone is in place, mixed-use residential development projects located within the approved zone are eligible for the tax abatement. Developers follow all local development standards and codes, and file an additional application with the state for the tax abatement. Once the development market is strong and incentives are no longer needed, the local jurisdiction files a request with the state to discontinue the zone.

▶ Brownfield cleanup

WHAT

Environmental contamination from historic uses impacts multiple Southwest corridor locations, leaving these places underutilized and undervalued. Used strategically by a local government, state and federal brownfield cleanup funds can stimulate the market and return these sites to productive use. Public grants and financing options can help cover expenses before project financing is available to developers. Interim public ownership and cleanup, particularly when negotiated through a Prospective Purchaser Agreement with Oregon DEQ, limits liability risks for future owners and prepares shovel-ready sites. Local development incentives prioritize investment and make development easier on these sites. Cities can apply all of these tools to remove brownfield-related obstacles and enable the private sector to develop these sites and return them to productive use.

WHY

Cleanup costs range from $50 to $500 thousand per acre, which can preclude redevelopment in areas with weak or average market conditions. With land being one of the most valuable assets to a local government, the opportunities lost (housing, jobs, tax revenue) on brownfields are far greater than the investment needed by the public sector to revitalize these sites. The project examples in the Southwest corridor included a brownfield with $300 thousand in assessment and cleanup costs. While possibly prohibitive to a developer, this represents only 1.8 percent of the total development costs for a project designed consistent with the vision. A relatively small public investment here would lead to significant potential return. Without the investment, the city would lose the people, jobs and amenities it would have brought to the area. By making the project happen, the city also experiences a radiating effect on property values, improving market conditions throughout the district and attracting additional development.

HOW

Local jurisdictions can waive fees and expedite the permitting and review process for projects on brownfield sites. Local jurisdictions can also qualify for federal and state environmental assessment and cleanup funds for contaminated, underutilized sites. The first step is to explore the different funding options with the Oregon Brownfields Program and an EPA Brownfields Program officer as well as potential ownership and liability protections with Oregon DEQ.

▶ System Development Charges

WHAT

System Development Charges (SDCs) are collected to pay for infrastructure needs associated with growth. These fees can be reduced in dense, mixed-use neighborhoods to reflect the reduced impacts of sustainable development patterns. Similarly, if a developer constructs public improvements, such as street improvements or a new park to serve the surrounding community, then local jurisdictions can provide credits reducing the developer's overall SDC liability. By reducing or eliminating SDCs, which can be particularly high for projects with multiple-unit housing, funds are freed up at the front end of development to provide affordable units and the type of development envisioned along the corridor.

WHY

In the Southwest corridor project examples, SDCs accounted for 3 to 5 percent of total development costs. Reducing these fees does not require a cash investment, and research has shown that these development types can reduce impact to the transportation and water systems – so lower fees are appropriate.

HOW

Local jurisdictions can ensure that transit-supportive infrastructure projects, including station connections and parking garages, are incorporated into infrastructure project lists so that new growth pays for all kinds of infrastructure needed to serve the area's new residents. At the same time, cities and counties can reduce SDC fees in dense mixed-use areas and for projects providing lower parking ratios. Local data confirms national findings that vehicle trip rates decrease as neighborhood types become more urban. In the metro region, businesses located along corridors and in neighborhood centers find as much as 50 to 70 percent of their customers arriving by transit, walking or biking. Local jurisdictions can use the model in the Oregon Transportation Research and Education Consortium's contextual influences on trip generation study to adjust trip generation rates accordingly.

▶ Urban renewal

WHAT

Urban renewal serves as a strong financial incentive to stimulate investment in targeted areas by borrowing against the projected increase in property values in those areas. Using this Tax Increment Financing (TIF) gives areas with weak markets access to a substantial source of equity for capital improvements. This can make development projects financially viable while kick-starting private investments. An area lacking adequate infrastructure or needing capacity improvements can establish an Urban Renewal Area to make public realm improvements and invest in underutilized properties.

WHY

Urban renewal can be critical to revitalizing main streets, downtowns and mixed-use corridors such as Old Town Sherwood and Tualatin Commons. Long-term public financing can leverage private investment for downtown redevelopment, affordable housing and economic development projects. Local jurisdictions can use low-interest loans or sell land at "fair reuse value" to lower redevelopment costs and stimulate activity in these areas. Public realm improvements (infrastructure, streetscape, open spaces, civic buildings, façade enhancements) made through the use of TIF also help by increasing the desirability and value of the area, raising market rents and attracting new construction. In Old Town Sherwood, for example, over $35 million was generated and spent on a number of improvement projects, including the cleanup of a large and difficult brownfield site.

HOW

Municipalities establish an urban renewal area and adopt an urban renewal plan through a public process. An urban renewal agency, consisting of the governing body or an independent organization, then manages the projects, provisions and expenditures outlined in the urban renewal plan. It is important to work with local taxing districts from the beginning of the process to help prevent or reduce opposition to the plan. Communities should also consider affordable housing policies to address possible gentrification and displacement issues, since the purpose of urban renewal areas is to increase investment and value in these places.

▶ Transit-oriented development program

WHAT

The Metro Transit-Oriented Development Program contributes directly to the construction of projects that are not currently feasible under current market conditions. This is achieved through some combination of direct capital investment, development easements or land value write-downs. Through active engagement in the design and construction of real projects, the program can help identify and remove obstacles to the creation of transit villages, main streets and mixed-used urban centers.

WHY

Focusing housing and employment near transit is one of the most effective ways to reduce regional road congestion, improve air quality and increase transit ridership. Car trips are less frequent in centers with a balance of jobs, housing and urban amenities. Focusing development in existing urban areas uses land more efficiently, reduces the need for costly new public facilities and prevents unnecessary conversion of farmland and natural areas to urban use.

HOW

A developer with site control may contact Metro directly to determine funding eligibility for compact and mixed-use transit-oriented development projects that would not be feasible without public participation. Local jurisdictions are encouraged to engage with developers and point them in the direction of the Metro Transit-Oriented Development Program if their projects meet program standards.

▶ Land acquisition and banking

WHAT

Communities will often acquire properties in an effort to influence the land development process. Additionally, some cities operate a land banking program, which is the holding and management of properties for strategic investment over a period of time. Cities may leverage their ownership to influence a development project or use other properties as bargaining chips in property exchanges with interested developers. Land banking can be used to influence all development types, from employment and retail to new housing and mixed-use projects.

WHY

The acquisition of properties allows cities to be active participants in the development process, giving them the leverage to guide the process toward a desired outcome. Often, properties are scattered and owned by multiple parties. Since working with multiple ownership parties and a large geographic area lead to a lack of redevelopment focus, this can make large-scale redevelopment difficult. By acquiring and banking property, a city can aggregate disparate parcels and streamline the development process with a private developer.

HOW

A local jurisdiction would formalize a land acquisition and/or banking program for the purpose of influencing development. Most programs establish an independent entity with clear control over the land banking process. Direct government control is possible, but an independent agency often has more flexibility and leverage in any future redevelopment opportunities. Traditionally, land banking programs focus on tax foreclosure properties, but they may also explore voluntary donation or purchase on the open market.

More information about these development strategies

Metro's Community Investment Toolkit
www.oregonmetro.gov/communityinvestment

Vertical Housing Program
Oregon Housing and Community Services
www.oregon.gov/OHCS/Pages/HFS_Vertical_Housing_Program.aspx

Brownfield cleanup
Oregon Brownfields Program
www.oregon4biz.com/Business-financing-resources/Oregon-Finance-Programs/Brownfields-Redevelopment-Fund/

Oregon DEQ Prospective Purchaser Agreement
www.deq.state.or.us/lq/cu/ppa.htm

EPA Oregon Office
www2.epa.gov/aboutepa/epa-oregon

Metro's Brownfield Recycling Program
www.oregonmetro.gov/brownfields

Transit Oriented Tax Exemption
ORS Chapter 307.600-637
www.leg.state.or.us/ors/307.html

Trip generation reductions and System Development Charges
Contextual Influences on Trip Generation
www.otrec.us/project/407

Urban renewal
The Association of Oregon Redevelopment Authorities
www.orurbanrenewal.org/

ORS Chapter 457
www.leg.state.or.us/ors/457.html

Metro's Transit-Oriented Development Program
www.oregonmetro.gov/tod

Land banking
www.thelandbank.org