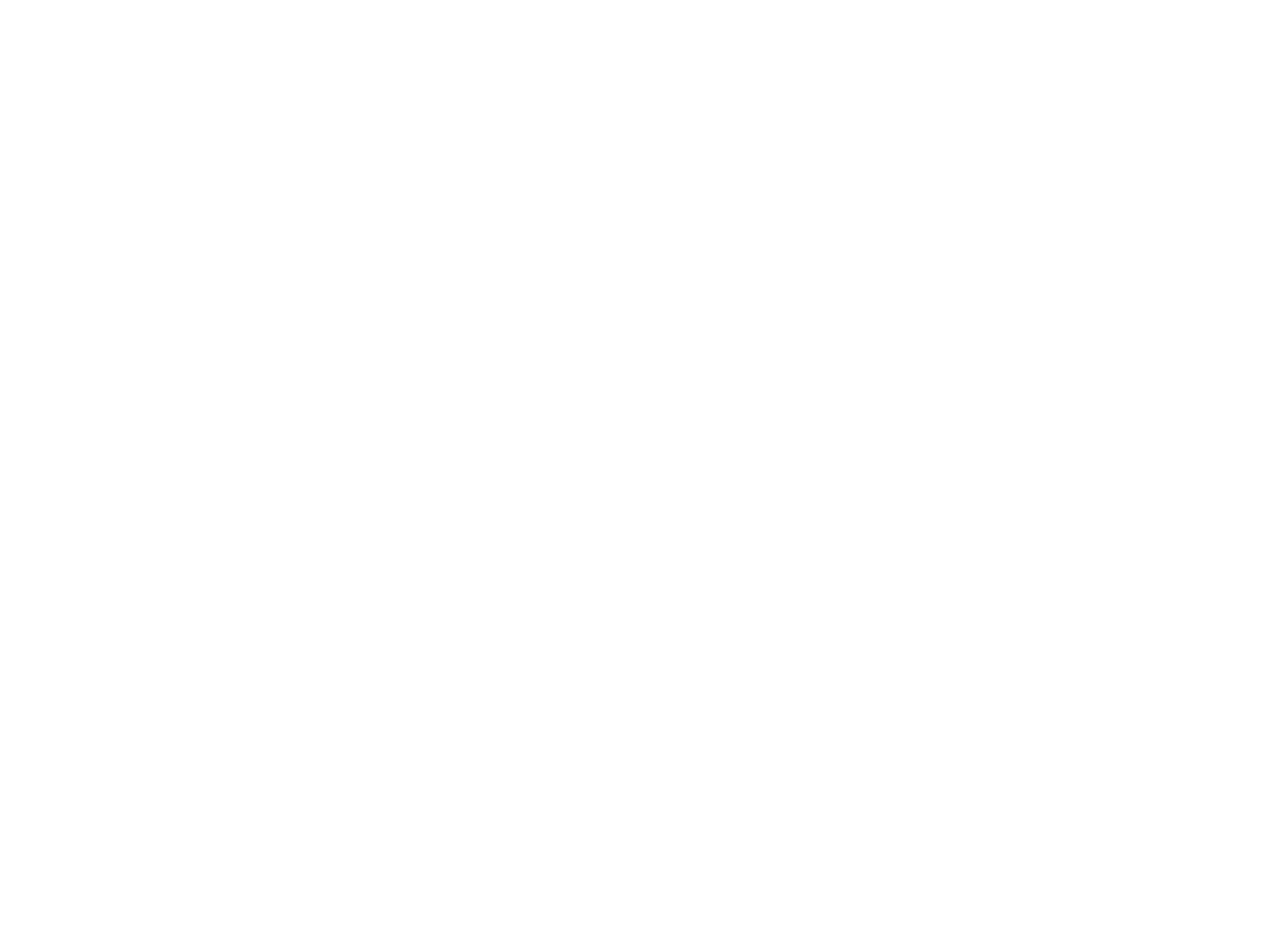




Creekside District *Master Plan and Implementation Strategy*

Adopted by Beaverton City Council
Resolution No. 4281 | November 18, 2014
Volume 1 of 2





Creekside District

Master Plan and Implementation Strategy

Adopted by Beaverton City Council
Resolution No. 4281 / November 18, 2014

Table of Contents

Introduction: Becoming Beaverton's Next Great Place	1
Chapter 1 The Planning Process	9
Chapter 2 The District Vision	13
Chapter 3 The District Today: Barriers to Redevelopment	23
Chapter 4 Goals, Objectives and Solutions	29
Chapter 5 Implementation Strategy	63

ACKNOWLEDGEMENTS

Project Managers

Laura Kelly, Planning Manager
Robert McCracken, Senior Planner

Project Leads

Stevie Freeman-Montes, Sustainability Coordinator
Megan Braunsten, Associate Planner

With Assistance From

Tyler Ryerson, Senior Planner
Leigh Crabtree, Associate Planner
Anjanette Simon, Associate Planner
Andrea Nelson, Project Coordinator

Under Direction Of

Denny Doyle, Mayor
Cheryl Twete, Community Development Director

Creekside Steering Committee

Bill Berg
Dana Biggi
Michelle Brockmann
Jenny Cadigan
Vince Chiotti
Jennifer Nye
Juanita Villarreal
Brian Wegener

Core Area Focus Group

Bill Berg, Chair
Cheryl Twete
Dana Biggi
Megan Gibb
Chris Ebersole
Jennifer Nye
Lorraine Clarno

City Council

Councilor Mark Fagin, Council President
Councilor Cate Arnold
Councilor Betty Bode
Councilor Ian King
Councilor Marc San Soucie

Planning Commission

Kim Overhage, Chair
Mimi Doukas, Vice Chair
Greg Kiene
Jennifer Nye
Ric Stephens
Linda Wilson
Scott Winter

Urban Renewal Advisory Committee

Bill Berg, Chair
Inessa Vitko, Vice Chair
Domonic Biggi
Carmela Bowns
Lorraine Clarno
Sean Colletta
Cal Hamerus
Roy Kim
Jennifer Nye
Amy Saberiyan
Cassandra Ulven
Deric Weiss
Ramsay Weit
Scott Winter

Project Partners

U.S. Department of Housing and Urban Development
Portland State University
Clean Water Services
Oregon Department of Transportation

Technical and Design Assistance

Fregonese Associates
EcoNorthwest
Walker Macy
Otak
DKS Transportation Solutions
Nelson\Nygaard
Metropolitan Group
Communitas LLC
Angelo Planning
Olmsted Legacy



The Creekside District Master Plan and Implementation Strategy was made possible by a U.S. Department of Housing and Urban Development Sustainable Communities Challenge Grant.

Fulfilling a Vision

The Creekside District Master Plan illustrates how this neighborhood's potential to become a great part of Beaverton's downtown and the greater Metro Region can be realized.



Introduction: Becoming Beaverton's Next Great Place

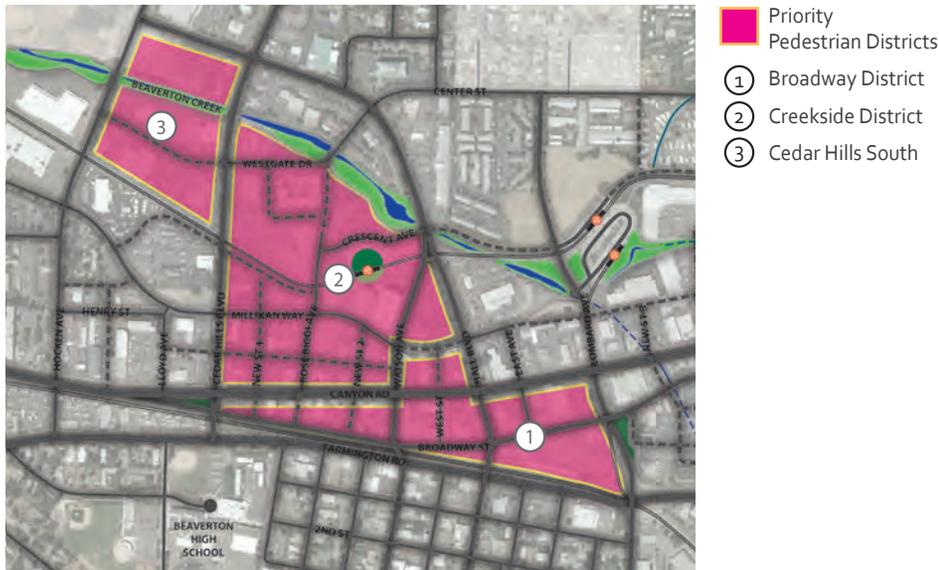
THE CREEKSIDE DISTRICT

Beaverton's Creekside District Master Plan (Master Plan) builds upon the work of the Beaverton Community Vision (2010), the Beaverton Civic Plan (2011), the Beaverton Urban Renewal Plan (2011) and the Metro 2040 Growth Concept. This Master Plan is the result of a two-year intensive analysis, planning and public outreach effort, drawing up on the ideas, expertise and vision of many. The Master Plan and its accompanying Implementation Strategy lay out the investments, projects and programs needed to transform the District into a vibrant, mixed-use, transit-oriented downtown neighborhood, where people enjoy easy access to the natural environment, safe and reliable transportation and parking systems, and opportunities for jobs, housing and entertainment.

Figure 1: Creekside District Boundary



Figure 2: Key Central City Priority Pedestrian Districts (from the Civic Plan's *Central City Strategy*)



Capitalizing on the District's Assets

The Beaverton Transit Center is the busiest transit stop in the TriMet system, accommodating over 3.3 million riders a year.¹ This translates into a huge supply of activity! And the transformation of Beaverton Creek into a desirable feature would improve the creek's ecosystem and give more people a chance to connect to nature.

1 Trimet, 2012

IMPLEMENTING THE CIVIC PLAN

Creating a Pedestrian District

The *Master Plan* builds upon the recommendations of the 2011 Beaverton Civic Plan's *Central City Strategy*, which is largely the basis for creating a *Master Plan* in this specific area. The District boundary – called out in the *Central City Strategy* as a key pedestrian district – is an appropriate and logical area to focus a transit-oriented master planning effort for a number of reasons.

- The District is centrally located and close to job centers.
- The District is inside Beaverton's urban renewal area and Enterprise Zone, which both provide incentives for investment.
- High-quality transit facilities situated within and near the District provide vital links to employment centers and the rest of the Metro region.
- The District encompasses lands zoned to support high-density growth and a diverse business community.

Federal Partnership

The City of Beaverton was fortunate to receive a Sustainable Communities Challenge Grant from the U.S. Department of Housing and Urban Development to develop the Creekside District Master Plan. The City and its partners – including Clean Water Services and Portland State University – set out to address three major elements of planning for the District: housing and redevelopment, creeks and natural resources, and transportation.

WHY IS A MASTER PLAN NEEDED?

A Necessary Tool to Guide Investment & Development

A master plan is a necessary tool to ensure that future development is well positioned to address the predicted growth of an area. It also serves to ensure that there is a better understanding of the existing community and what their needs are, in order to avoid displacement once growth inevitably occurs. Primarily, the *Creekside District Master Plan* works to ensure that desired redevelopment takes place. The *Creekside District Master Plan and Implementation Strategy* is intended to provide:

- ***Certainty for private-sector redevelopment investment.***
- ***Clarity about how the area could evolve into a more vibrant and resilient mixed-use district.***
- ***Guidance that prioritizes implementation actions for the City and its partners.***

As noted, the District has a number of environmental, regulatory, infrastructure, and other development-related issues that currently hinder any long-term momentum needed for successful private investment. Addressing many of these conditions necessitates the public's involvement to encourage and support private development. The *Master Plan* outlines the role of the City, regional agencies, local property owners and developers, in solving these problems. The *Master Plan* also lays out the types of public benefits the City should pursue through these partnerships.

Beaverton Community Vision Action Items

Between 2008 and 2010, more than 5,000 residents crafted the Beaverton Community Vision which emphasizes greater connectivity, economic opportunity, and environmental sustainability. Beaverton Community Vision action items addressed by the *Creekside District Vision and Master Plan*:

Business

- # 24: Establish Downtown Districts
- # 25: Create a "Look and Feel" for Downtown
- # 29: Address Parking Needs
- # 31: Involve the Public in Redevelopment

People

- # 18: Sidewalk and Paths System
- # 34: Public Plazas
- # 36: Connect Downtown with Neighborhoods
- # 37: Improve Downtown Walkability
- # 47: Canyon and Farmington Traffic Improvements
- # 107: Full Range of Housing Choices

Nature

- # 38: Incorporate Green and Open Spaces
- # 56: Complete Bicycle-Pedestrian Network
- # 101: Establish Beaverton Creek as an Amenity



Community Voices

People at the Beaverton Farmer's Market in 2011 as part of the Civic Plan public outreach supported more walkable, bikable places and a revitalized downtown.

A DOWNTOWN NEIGHBORHOOD

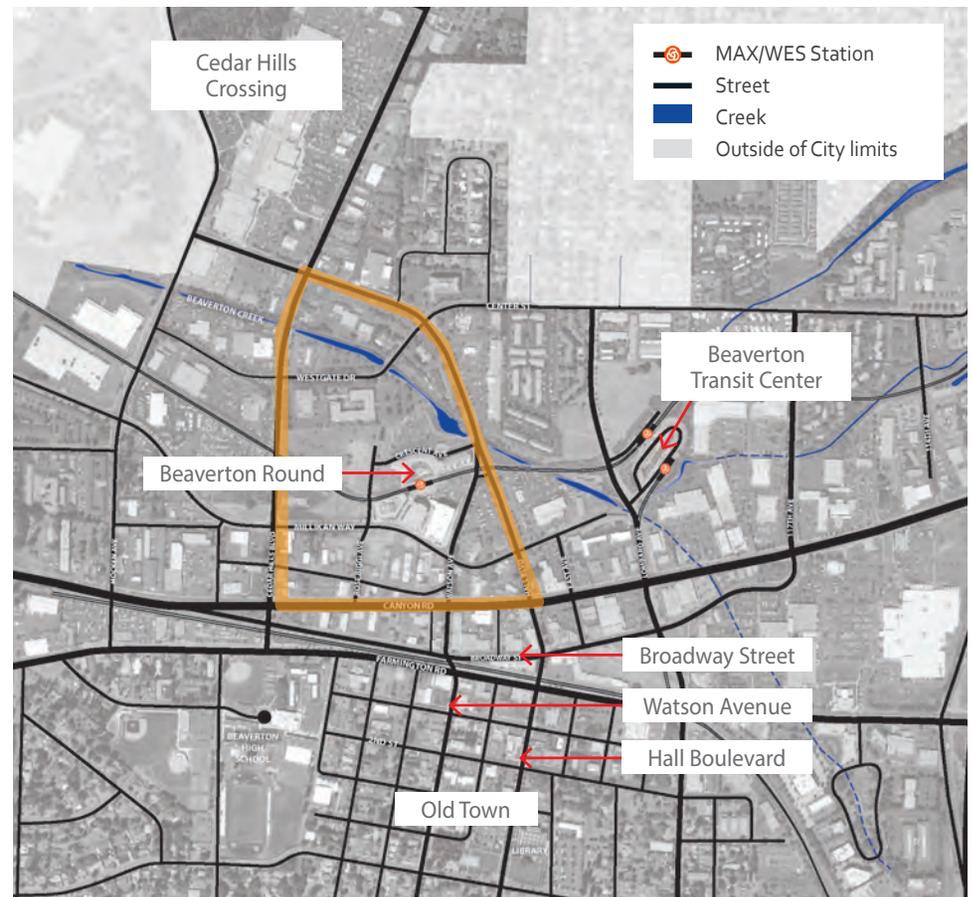
Giving the Creekside District an Identity

During the Beaverton Community Vision (2010), the Beaverton Civic Plan (2011), and Beaverton Urban Renewal Area Plan (2011) public feedback gathered from residents, business and property owners, and other stakeholders called for actions to transform Beaverton's Downtown into a vibrant mixed-use area.

The Creekside District is situated in a portion of Beaverton's Downtown that has benefitted from significant transit investments, a nascent transit-oriented development (TOD) project (The Round), and most recently the relocation of Beaverton's City Hall. However, the Creekside District also suffers from incomplete transportation networks (for all modes), challenging environmental and soil conditions, large expanses of paved land, and a lack of identity.

City and private actions to revitalize the District can build on existing assets and create a dynamic centerpiece of Beaverton's Downtown. Redevelopment of the District's vacant parcels, along with revitalization of existing buildings and uses, will help fulfill the community's long-held vision of a complete and identifiable Downtown Beaverton, with the Creekside District's role as that of a civic and cultural hub, where housing and jobs are readily accessible by regional transit.

Figure 3: Creekside District and Neighboring Districts



Significant Destinations Near the District

The Creekside District, approximately 50-acres in size, is proximate to many assets and amenities in Downtown Beaverton, including Broadway Street, Old Town, and the Cedar Hills Crossing regional mall. Defining the role of the Creekside District in Beaverton's downtown was one of the objectives of this planning effort.

THE ROLE OF THE MASTER PLAN

A Guiding Document

The *Master Plan** provides direction for policy and regulatory changes, direction on how to prioritize public investments, and criteria for developing incentive programs to support desired private development over the next 20 years.

The Role of City Council

Beaverton City Council will support the implementation of the *Master Plan* and serve as civic champions, policy makers, and will allocate funds for implementation.

The Role of BURA

The Beaverton Urban Redevelopment Agency (BURA), a partner agency, will provide funding and incentive programs for a variety of Creekside District objectives, including infrastructure improvements and crafting partnerships to create the types of new development envisioned in the *Master Plan*.

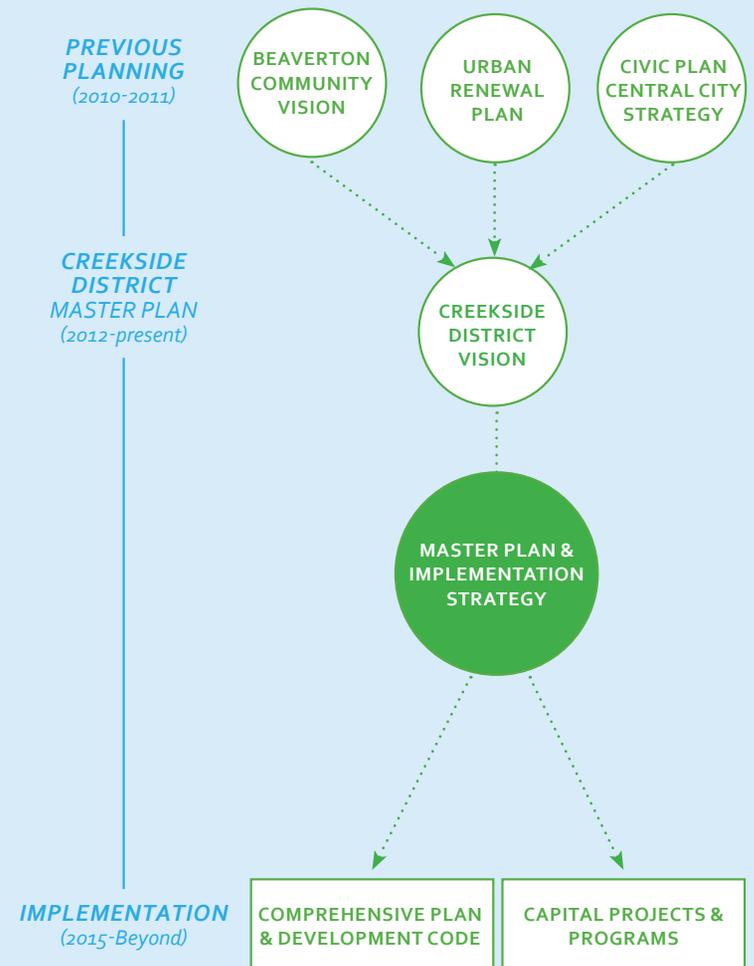
The Role of City Departments

Many City Departments will administer the projects and programs to implement the *Master Plan*. Close collaboration will be needed, particularly between the Community Development Department, Public Works, and the Mayor's Office to align work programs, the pursuit of funding opportunities and coordination with external partners.

**Public Review Draft Note: This document constitutes Volume 1 of the Creekside District Master Plan. Volume 2, the technical appendices will be forthcoming.*

The Role of the Master Plan

The Creekside District Master Plan and associated appendices are the result of previous planning efforts and an extensive public involvement process. The resulting documents will be implemented through code and policy amendments as well as capital projects and programs.



Culture and Art in the District

The Creekside District has the potential to become a civic center in Beaverton's Downtown. Careful design of public spaces that incorporate ecological features, high quality bicycle and pedestrian facilities, and development that activates the District's streets will provide a lively backdrop for civic and cultural activities.



Roles for Private and Public Partners

- **Private property owners** redevelop underused sites that will enhance property value while at the same time contribute to the District's sense of place.
- **Developers (for-profit and not-for-profit)** will work with property owners, the City and other agencies if needed, to conceive, construct and maintain a mix of high-quality new developments and appropriate rehabilitation of worthwhile existing structures.
- **Cultural and arts organizations, medical and educational institutions** may collaborate with the City in exploring the viability of locating facilities and operations into the mix of uses that will become the new fabric of the District.
- **Clean Water Services** will work with the City through the district-wide Vegetated Corridor program.
- **Metro** will work with the City to incentivize high quality mixed-use development in the Creekside District.
- **Oregon Department of Transportation** will continue to work with the City to finalize the design and engineering and begin construction of the Canyon Road safety and streetscape improvements.
- **Tualatin Valley Parks & Recreation District** will coordinate with the City on trails, plazas and open spaces.

GUIDING PRINCIPLES FOR THE CREEKSIDE DISTRICT MASTER PLAN

Approved by the Creekside District Steering Committee in March 2013, the Guiding Principles provided a framework for the planning process.

- **Provide more transportation choices.** Develop strategies to increase access to existing transit and improve roads, sidewalks, paths, and bike facilities in a manner that supports urban redevelopment in and around the Creekside District.
- **Promote equitable, affordable housing.** Support policies and programs that promote the creation of attractive, well-designed housing, accessible to people of all incomes and backgrounds, that lowers the combined cost of housing and transportation.
- **Enhance economic competitiveness.** Create an environment featuring high-quality designs that encourages the location of new businesses and assists existing businesses in the District.
- **Support existing communities.** Leverage existing infrastructure and incorporate strategies such as transit-oriented, mixed-use development, infill, and reuse for district revitalization.
- **Coordinate policies and leverage investment.** Integrate the design and investments for transportation, stormwater management, and civic space to encourage private sector investment and redevelopment.
- **Value communities and neighborhoods.** Support the community's vision for the district to make Canyon Road a great street for pedestrians, establish Beaverton Creek as an urban amenity, and invest in creating a healthy, safe and walkable neighborhood in downtown Beaverton.

Creekside District Steering Committee

The Creekside District Steering Committee is the primary review and oversight body for the Creekside District planning project. They met ten times between December 2012 and November 2014, when this plan was recommended for adoption. Members of the committee include:

- **Bill Berg**
*Urban Renewal Advisory Committee (URAC) Chair
Beaverton Committee for Community Involvement
(BCCI) Member*
- **Dana Biggi**
*Property Owner Representative
Managing Partner, Gene Biggi Properties*
- **Michelle Brockmann**
*Property Owner Representative
Assistant Vice President, ScanlanKemperBard
Companies (SKB)*
- **Jenny Cadigan**
Westside Transportation Alliance
- **Vince Chiotti**
Oregon Housing and Community Services
- **Jennifer Nye**
*Creekside District Resident
Architect, OTAK
Planning Commissioner*
- **Juanita Villarreal**
Beaverton Hispanic Center
- **Brian Wegener**
Tualatin Riverkeepers

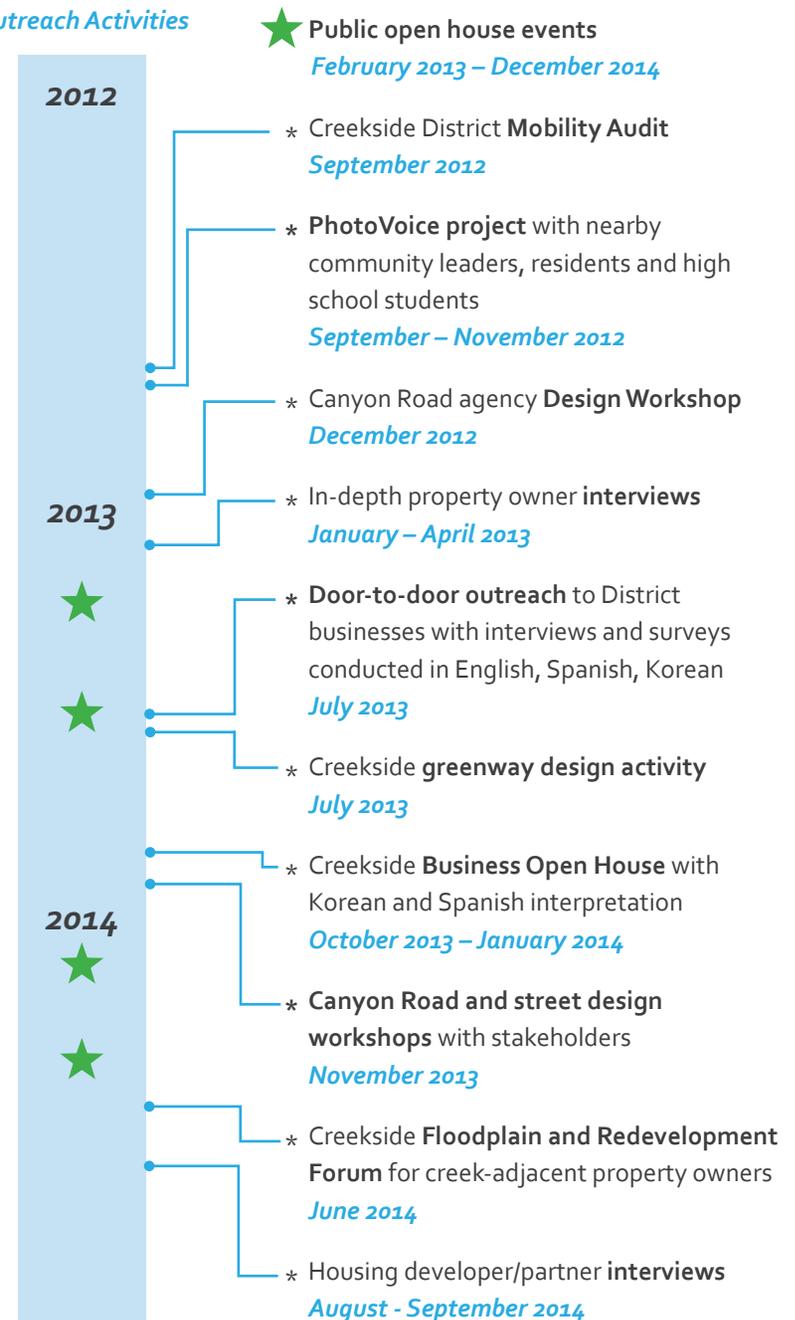
This page intentionally left blank.

Chapter 1: The Planning Process

A PLAN BUILT ON THE COMMUNITY'S INPUT

Years of community-based planning precedes the *Master Plan* – including community input from the Beaverton Community Vision, Beaverton Civic Plan, Central Beaverton Urban Renewal Plan, and formation of the Beaverton Downtown Association. While incorporating past input, new engagement and outreach activities for the *Master Plan* focused on bringing new voices to shape the future. A special effort was made to include business owners, residents and property owners from the District through personal interviews, and door-to-door outreach and open houses that utilized Korean and Spanish language interpreters. These efforts helped to ensure that typically under-represented populations were given a chance to provide input, share their concerns and stay informed as the planning process progressed.

Outreach Activities



OUTREACH ACTIVITIES

A plan that reflects the community's input, and their needs and desires for the future is an important part of building momentum and support for the *Master Plan* implementation.

To further this effort, the City worked to involve and inform key organizations and agencies as the project progressed. This included frequent collaboration with leaders and staff from partnering agencies including Clean Water Services, Tualatin Hills Parks and Recreation District, Metro and the Oregon Department of Transportation.

The project team provided briefings and feedback sessions with neighborhood association committees, such as the Beaverton Downtown Association, Beaverton's Diversity Advisory Board, Beaverton Committee for Community Involvement, Urban Redevelopment Advisory Committee, Planning Commission, and other community-based organizations, providing opportunities to stay informed and raise issues at each stage of the planning process.

Business Owner Outreach

Outreach to District business owners included in-depth interviews, a survey and a luncheon

to share the public draft of the Vision and in-process designs for public amenities. The interviews and luncheon were staffed by Spanish and Korean language translators, and the survey materials were translated into both languages.

Business owners were asked to identify characteristics of the District that are good for businesses, and which elements present barriers for continued success or expansion. Specific areas of concern among business owners included rents, parking, signage, community identity, and connectivity issues. In total, over 40 business owners from the District contributed to the development of the *Master Plan*.

Property Owner Outreach

To engage property owners in the planning process, the project team held one-on-one, in-depth interviews and hosted a forum for redevelopment and floodplain topics. Additionally, a focus group of property owners located in the core of the district, including the City and Metro, was held to develop recommendations for catalytic projects and investments. The results of this focus group were presented to a joint session of City Council and Planning Commission on September 16, 2014.

Public Open Houses

A series of four open house events were held for the general public to share project progress and gather feedback from residents, stakeholders and the wider Beaverton community. These events included project updates and illustrations of the latest designs and alternatives for consideration, with the project team available to answer questions and record comments.

Targeted Outreach

Realizing activities elsewhere in the metro region and Pacific Northwest could provide key lessons learned for future development in the District, two series of informational interviews were conducted with the development community. The first, conducted early on in the planning process, identifying potential barriers perceived in the District, as well as market opportunities. The second focused solely on housing development, identifying policies and programs the City could explore to incent the envisioned housing development for the District.

Interactive Events

There were several opportunities for stakeholders to engage in hands-on activities, grapple with trade-offs and contribute ideas to the planning process.

As part of the **Creekside District Mobility Audit** (Fall 2012), stakeholders walked throughout the District identifying areas and elements of the streetscape contributing to good or poor mobility for different modes.

Armed with digital cameras, residents, community leaders, and high school students participated in **PhotoVoice** (Fall 2012). Using photography, the group participants narrated their experiences navigating the District, including both positive and negative conditions they encountered. (See page 32 for example images and captions.)

The **Streets Design Workshop** (Fall 2013) provided an opportunity for businesses and property owners to review preliminary designs for Canyon Road safety and streetscape improvements. In addition, participants were asked to provide input on streetscape elements, like trees, street furniture, signage and other features.

The **Creekside Investment Challenge** (Summer 2014) presented an interactive game designed to let District users make funding decisions about potential improvements. The activity asked participants to make trade-offs and set priorities for improvements of public infrastructure and amenities in the District. Key findings from the Creekside Investment Challenge included:

- Providing a safe and active street environment should be the City's top priority for the District.
- For business and property owners alike, City participation in new shared parking facilities was reported to be key to redevelopment.
- Providing access to the creek through either a plaza or a trail would greatly increase the desirability of the District.

The District Mobility Audit

The Fall 2012 District Mobility Audit observed many issues around the District. Along Canyon Road, drivers face heavy traffic and unprotected, cross-traffic turns while pedestrians and cyclists face a challenging street environment that is unpredictable and inhospitable. Lack of throughways and incomplete sidewalks characterize other streets in the District, making it a difficult place to walk.

On-Going Communication

Regular project updates through District mailings, eNewsletters and YourCity newsletter articles provided the public with timely information about developments in the District planning process. A detailed project website (www.BeavertonCreekside.com) provided interested people with access to project documents and multilingual online surveys, mailers and newsletters. Briefings and feedback sessions were also held with community-based organizations and members of the media.



This page intentionally left blank.

Chapter 2:

The District Vision

Many people engaged in the process of creating a vision for the future of the District. The Vision establishes expectations for the District in 20 years – in words and images – and forms the aspiration for the *Master Plan*.

A PLACE FOR BUSINESS, PEOPLE AND NATURE

The District Vision depicts a home to many people, with urban-style apartments and condos providing a variety of housing options. A lively retail and dining atmosphere entertains visitors and residents alike. Office workers commute to the District from destinations around the city and Metro region. The once disconnected and confusing street grid has been filled in, so it's easy to get here – either by car, foot, transit or bike. Parking is plentiful for cars (and bikes), both on street and in shared parking lots and garages. Beaverton's creeks are clean and healthy waterways, and create scenic views from nearby bike and walking paths.



In twenty years, the District is a gateway to Downtown Beaverton and its successful revitalization has helped spurred revitalization for the rest of Downtown.

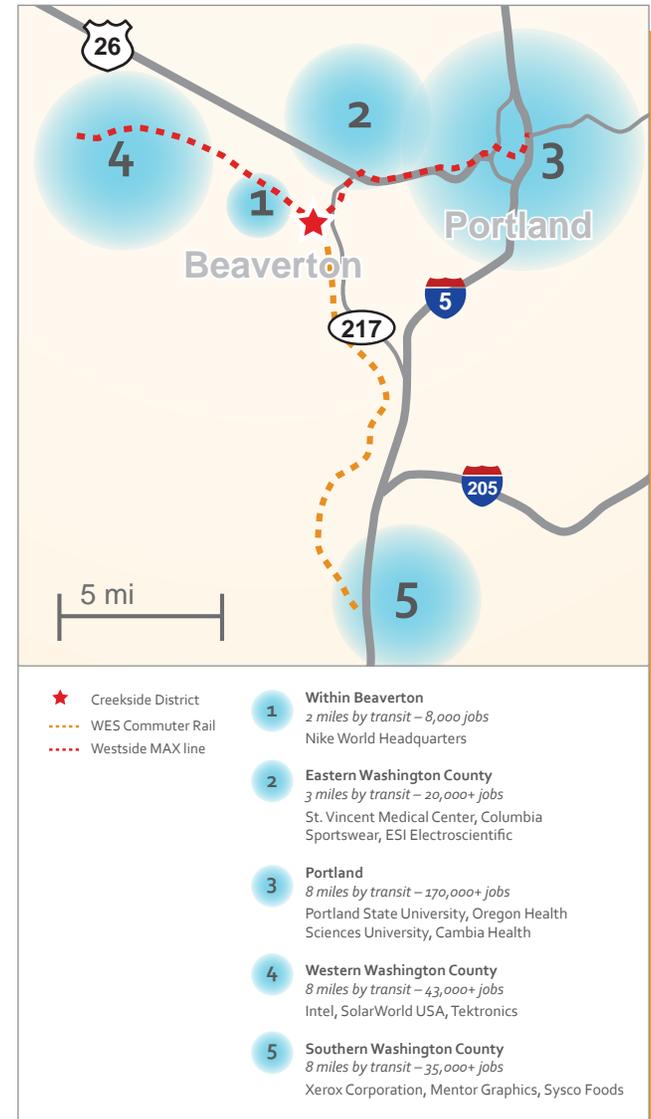
- 1** All sorts of people are attracted to the District. Many people live and work here, and visitors come for dining, shopping or to do business at City Hall.
- 2** The District is easy to navigate, with a well-connected street grid, bike and walking routes, and conveniently located parking for bikes and cars.
- 3** Beaverton's Downtown creeks are healthy and lively, and can be seen from foot and bike paths with occasional overlooks and crossings.

Creekside Vision ...for business

Public investments in transportation, infrastructure and amenities make it easy for visitors, workers and residents to get here, and travel within the neighborhood once they're here. Small businesses find space to set up shop along streets that encourage walking and lingering. A well-managed parking system with conveniently located and easily accessible lots and garages serves workers in the daytime and residents and visitors at night.

Accessible Business District

Creekside's location on TriMet's regional rail system and proximity to Washington County and Portland job centers makes it an attractive location for employers.



1 Creekside's accessibility from around the city and Metro region makes it a business and residential hub.

2 Parking lots and garages provide convenient places for visitors and employees.

3 Creekside's streets and plazas are designed for daytime and nighttime use, making the district a lively place around the clock.

4 Beaverton City Hall and other services are located in Creekside, making it a center for civic life.



Attracting people with amenities, destinations, and a good walking environment all support the revitalization of Downtown Beaverton.

Creekside Vision ...for people

Pedestrian and bike routes to light rail and bus lines make it convenient to commute to major job centers. A new trail network along Beaverton's creeks connects to other city and regional trails offering walkers and bikers a pleasant open space experience whether traveling through the District, or as a primary destination.

- 1 A variety of plazas and gathering spaces in and around Creekside are venues for concerts, festivals and day-to-day rest and relaxation for residents and visitors.
- 2 Residents find a variety of housing options in Creekside, including apartments and condos.
- 3 Creekside joins Old Town and other downtown neighborhoods as a dining and entertainment hotspot.
- 4 Biking and walking to and through Creekside is easy on a network of paths and streets.



The Future of Canyon Road

Signal, sidewalk, access, and crossing improvements along Canyon Road have made it safer for drivers and more hospitable for walking. The trip from Old Town to Creekside is quicker and easier on foot and by bike. These investments have supported private investment in existing and new businesses that depend on foot traffic.



Creekside Vision *...for nature*

A new Creekside ecosystem incorporating trails, vistas and public plazas, creates a natural attraction to the District for visitors and residents. Collectively, these new amenities encourage high-quality development and redevelopment in the District.



Nature in the District

Creekside has both active central community gathering spaces and areas where nature thrives alongside new development. Restored streambanks and natural resource corridors are visible from safe and accessible vistas of the creek.



1 A conceptual diagram of an open space and path network serving the Creekside District and Downtown.

Creekside Vision

Design Characteristics

This vision marks the reemergence of a prominent downtown for the City and its residents. It includes high quality, catalytic development that makes a statement “this is Beaverton’s downtown”.

BUILDINGS & DEVELOPMENT

- High-caliber urban design defines Beaverton’s new Downtown.
- Mid-rise buildings are designed and oriented to reinforce the pedestrian realm with entries, facades and ample windows.
- Flexible and transparent active ground-floor spaces serve the day-to-day needs of residents, employees and visitors.
- Building materials and finishes reflect a modern, urban aesthetic.
- New development incorporates sustainable and energy-efficient elements and can be integrated into the Beaverton Central Plant.



OPEN SPACES & PLAZAS

- Open spaces and public plazas provide opportunities for civic and cultural events, as well as private enjoyment.
- The District benefits from public outdoor areas, events, and concerts that promote a lively and safe 18-hour urban district.
- Open space and plazas are geared toward the needs of urban residents, including amenities such as dog parks, and areas for outdoor relaxation and gatherings.
- Public outdoor areas showcase sustainable approaches to urban stormwater and habitat management.



STREETS & CORRIDORS

- Streets feature a unifying palette of furnishings, lighting, signage and materials.
- They are designed to maximize the ease and comfort of pedestrian travel, while providing convenient connectivity for autos and bikes and easy access to the Beaverton Central transit station.
- Corridors showcase sustainable approaches to urban stormwater and habitat management.
- They incorporate opportunities to view and interpret Beaverton Creek.

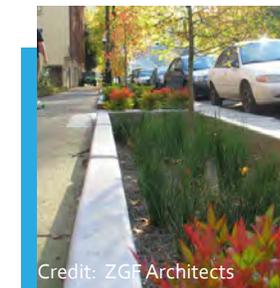
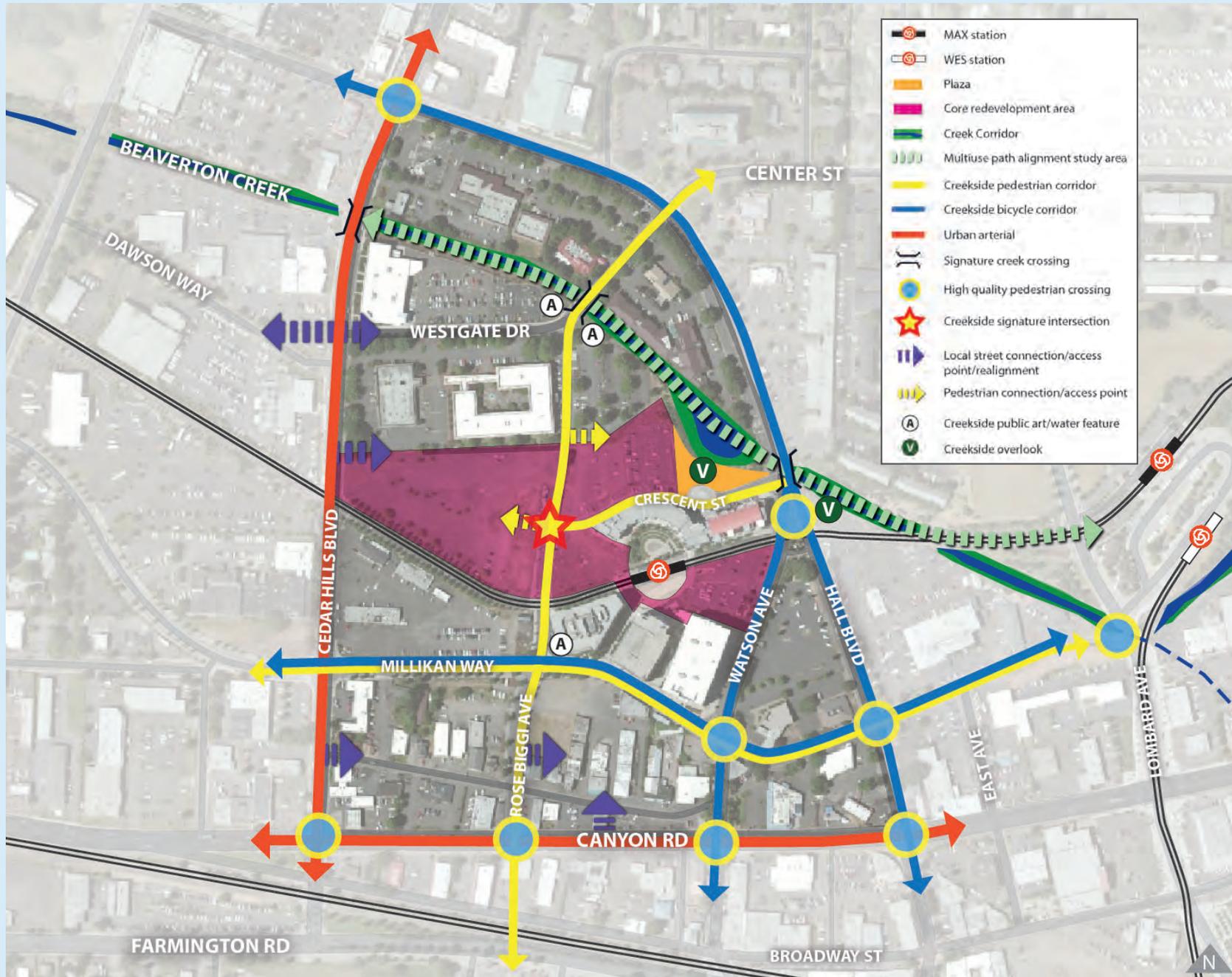


Figure 4: Urban Design Diagram



Creekside Vision

Urban Design Diagram

URBAN DESIGN DIAGRAM MAP ELEMENTS

The Urban Design Diagram depicts the urban design characteristics and objectives for the Creekside District. This map serves as a guide for the City's implementation measures in the Creekside District, such as investments in infrastructure, connectivity and amenities. The map also serves as a guide for any code or policy amendments needed to implement the Creekside District Master Plan. The following are descriptions for each element of the map.

Creekside Plaza

This is envisioned as a gathering space adjacent to the Round development, offering views of Beaverton Creek, areas for seating and a connection to a path (should it be located adjacent to Beaverton Creek). A plaza may be implemented as a City-initiated project or in partnership with a private developer on one or more adjacent properties.

Core Redevelopment Area

The Creekside District's priority catalytic investment area, due to its location proximate to the existing Round development, MAX station, City Hall (the Beaverton Building) and joint ownership of the 3.94-acre Westgate parcel between the City and Metro.

Creekside Corridor

Beaverton Creek is the focus of restoration, habitat improvement and storm water management. Adjacent development "turns a

friendly face to the creek" through landscaping, location of pedestrian amenities, views to the creek, and other design features.

Multiuse Path Alignment Study Area

The Crescent Connection, currently in the design phase, will connect the Beaverton Transit Center and Cedar Hills Blvd with a combination of off- and on-street multi-use path. The path's alignment has yet to be determined, but if constructed along Beaverton Creek, should provide opportunities for creek views and complement adjacent redevelopment parcels.

Creekside Pedestrian Corridor

These streets serve as the primary route of pedestrian travel within the District. Sidewalks along these streets should be a minimum of 12' and include street trees and furniture, a wide pedestrian travel zone, and outdoor seating or merchant space. Development on these streets should provide active ground floor spaces with buildings oriented to a high percentage of the frontages. Driveways and curb cuts should be located on other streets.

Creekside Bicycle Corridor

These streets serve as primary bike routes to and through the Creekside District. Such streets should be prioritized for the design and implementation of bicycle facilities to provide critical east-west and north-south bicycle connections.

Urban Arterial 

These streets serve as high capacity thoroughfares with the highest volume of auto traffic. The pedestrian realm should provide adequately wide sidewalks, and where feasible a vegetated buffer to further separate pedestrians from traffic. For some arterials, redevelopment projects will result in the reservation of right-of-way to provide wider sidewalks and bike lanes.

Signature Creek Crossing 

The reconstruction of bridges over Beaverton Creek represent an opportunity to provide overlooks and design features highlighting the waterway. The City should include with any bridge reconstruction or replacement project a civic design component, which may include viewing platforms, public art or similar decorative feature.

High Quality Pedestrian Crossing 

These intersections or crossings should include safety, visibility and convenience elements to better serve pedestrians in the district. These measures may include bulb outs, beacons, lighting, striping or pedestrian refuges.

Creekside Signature Intersection 

Proposed at the intersection of Rose Biggi Avenue and Crescent Street, the Signature Intersection represents the primary crossroads of pedestrian travel within the Creekside District. This intersection, and eventual development on each of its corners, should be carefully designed to provide a high quality pedestrian environment and serve as a showcase and focal point of the Creekside District area.

Roadway Realignment 

To improve connectivity and access in the Creekside District, the intersections of Dawson Way and Westgate Drive should be reconfigured to a four-way signalized intersection.

Local Street Connection or Access Point 

These are approximate locations for local street access in the district. In some cases, such as in the vicinity of Beaverdam Road, realignment of the existing street may be needed, should private redevelopment of the area occur.

Pedestrian Connection or Access Point 

These are approximate locations for the addition of pedestrian access and connectivity in the District. This pedestrian access may come in the form of a walkway, plaza, woonerf or similarly configured facility. For redevelopment parcels, these publicly-accessible pedestrian facilities may be integrated into a project.

Creekside Public Art / Water Feature 

These areas represent possible locations for public art or civic design features, signifying a gateway or transition point into the District, or the crossing of Beaverton Creek. Locations identified on the Urban Design Diagram are not exhaustive or exclusive; the City should determine, with the help of artists, how public art can be included with infrastructure and redevelopment projects in these areas.

Creekside Overlook 

These areas represent possible locations for overlooks, viewing platforms and interpretive features along Beaverton Creek. They should be designed to connect with any multi-use paths in the District.

Creekside Vision ...Core Area Development

The District's core, which includes the Westgate property and the Round, represents a catalytic opportunity area to jumpstart the revitalization and redevelopment of other areas of the Round.

Figure 5: Core Area Redevelopment Illustration



This page intentionally left blank.

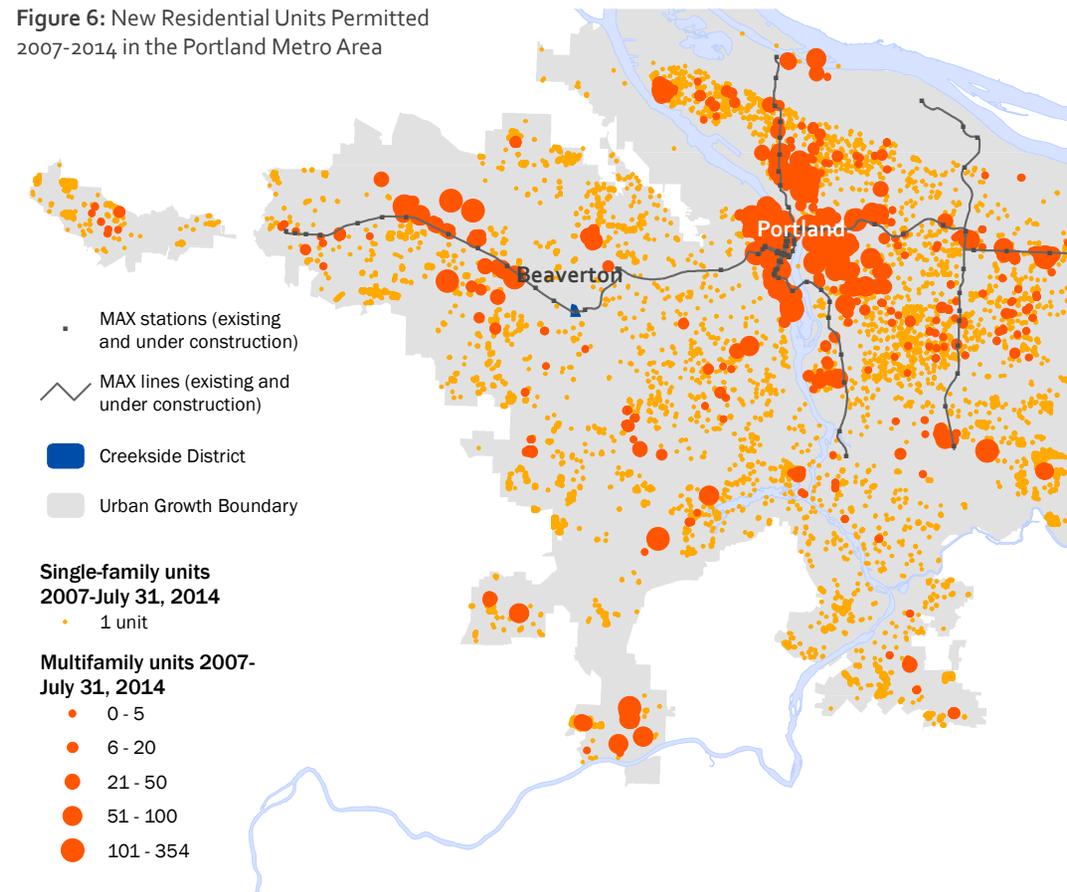
Chapter 3: The District Today

Barriers to Redevelopment & Investment

SLOW HOUSING GROWTH IN THE DISTRICT

In order to determine how to realize the District Vision, it is important to first understand current conditions in the District, and compare it to other areas in the region that share similar characteristics. Such areas are found along Tri-Met's Yellow MAX Line in North Portland and along the Red and Blue lines – both in Hillsboro and in Portland's east side. These transit-rich areas have seen new residential permit activity as the economy has recovered from the recent economic recession. Comparatively, the Creekside District lags in housing and transit-oriented development. This lack of reinvestment translates into underutilized transit facilities and the inability to fulfill the community vision for an attractive downtown that draws people and businesses into Beaverton.

Figure 6: New Residential Units Permitted 2007-2014 in the Portland Metro Area



Source: Construction Monitor, data provided by Metro, RLIS, May 2014.
Prepared here by ECONorthwest.

Images from PhotoVoice Tell a Story

Participants in the Creekside District Master Plan PhotoVoice Project were asked to use pictures to tell the story of Downtown Beaverton from their perspective. Many of the images highlight the District's most challenging issues: lack of attractions and insufficient connections for pedestrians and cyclists.



"Es una foto que me llamo la atencion porke nos protege de lo peligroso que pueden ser los carros especialmente en la noche y tomados o con mala vision."

"It is a picture that attracted my attention because it protects us of how dangerous cars can be. Especially at night and drunk or with bad vision."

"This photo shows the poor use of land. You could use this for a number of things, shops, local business, a park. This is a lot of empty space and makes people think Beaverton isn't well put together (which is partially true)."



"There are many retail stores that are not attractive to walk around the Creek side area. I hope there will be more pleasant stores that attract more people who have family with kids, such as ice cream store, book store, coffee shop, bicycle store, clothing shop, diner and etc."

EXISTING DEVELOPMENT BUSINESSES & HOUSING

Much of the building stock in the District is over 30 years old. There are also a high number of vacant or underdeveloped properties, primarily in the central area of the District. Parcel sizes are small, typically just over half an acre, which can make larger redevelopment projects difficult because of the need to acquire and consolidate multiple parcels.

Despite a paucity of recent development the District does have a diverse mix of office, service and retail businesses today. Of the more than 260 businesses in Creekside, women-owned enterprises comprise over 30%, and 1 in 8 are minority-owned. Nearly two thirds of businesses in the District are very small, with five or fewer employees, and another 30% of businesses have under 20 employees.

Currently, there are about 65 housing units in the District, and the surrounding area includes a supply of moderately priced rental housing. Office users gravitate toward the relatively lower rents for Class B and C space that is predominant within the District. Retail uses are concentrated at the Round and along Canyon Road. (See Business Continuity Strategy in Volume 2.)

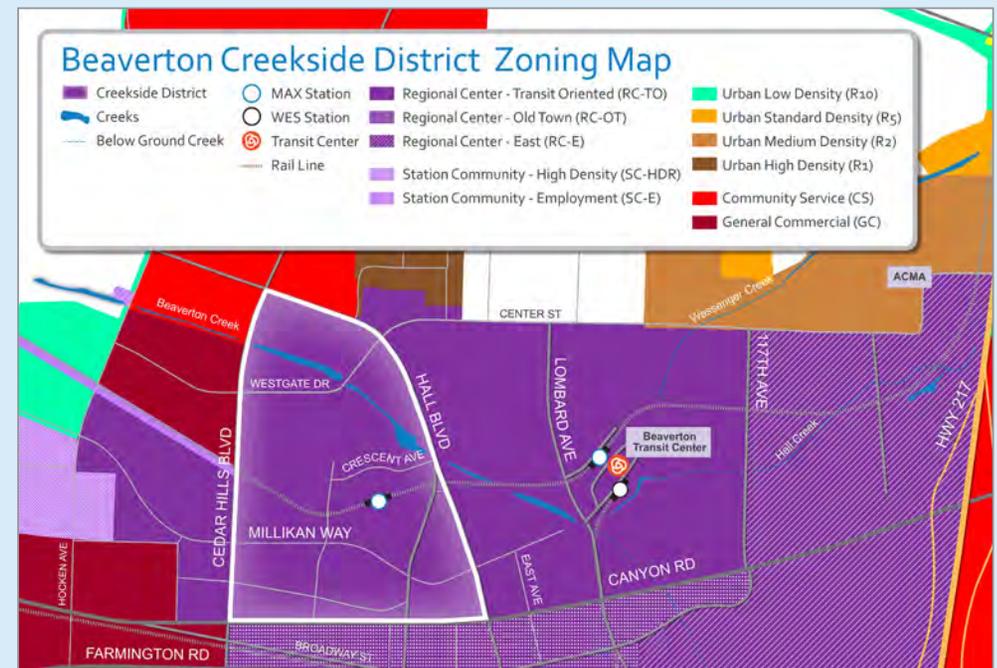
MAJOR FACTORS INFLUENCING DEVELOPMENT POTENTIAL

Slow paced development can sometimes be attributed to outdated zoning and land use designations that no longer match community preferences or market viability. However, in this case, the policy framework to support a dense and lively district is already in place. The District is located in Beaverton's "Regional Center" land use designation as part of Metro's 2040 Growth Concept. And under current City code, it is part of the "Regional Center Transit-Oriented" (RC-TO) zone, the City's most dense, mixed use zoning designed to encourage transit-oriented development.

The reasons behind the District's lagging potential then, are not substantially related to the regulatory environment. Instead, the District faces significant barriers related to infrastructure, transportation system completeness, stormwater management and a lack of amenities that hinder private investment in new development – especially the kind of dense, transit-oriented development envisioned for the District. These factors influence desirability, perception and most importantly rents, which are generally too low to support the cost of new construction. While there are many methods of measuring development feasibility, at the highest level, redevelopment is "feasible" and likely to attract private sector investment when rents or sales prices are high enough to support the cost of new construction.

The Issues and Opportunities Map (Figure 8) illustrates some of the District's existing conditions.

Figure 7: Creekside District Zoning



Permissive Zoning Designations in Place

The Regional Center—Transit Oriented (RC-TO) zoning designation is designed to encourage transit-oriented development and includes the following characteristics:¹

Parcel Area: No minimum or maximum

Residential Density: No maximum for mixed-use projects

Floor Area Ratio: 0.6 minimum, no maximum

Lot Dimensions: No minimum width or depth

Yard Setbacks: No front, side, or rear minimum

Maximum Height Allowed: 120 feet

¹ Beaverton Development Code, Chapter 20

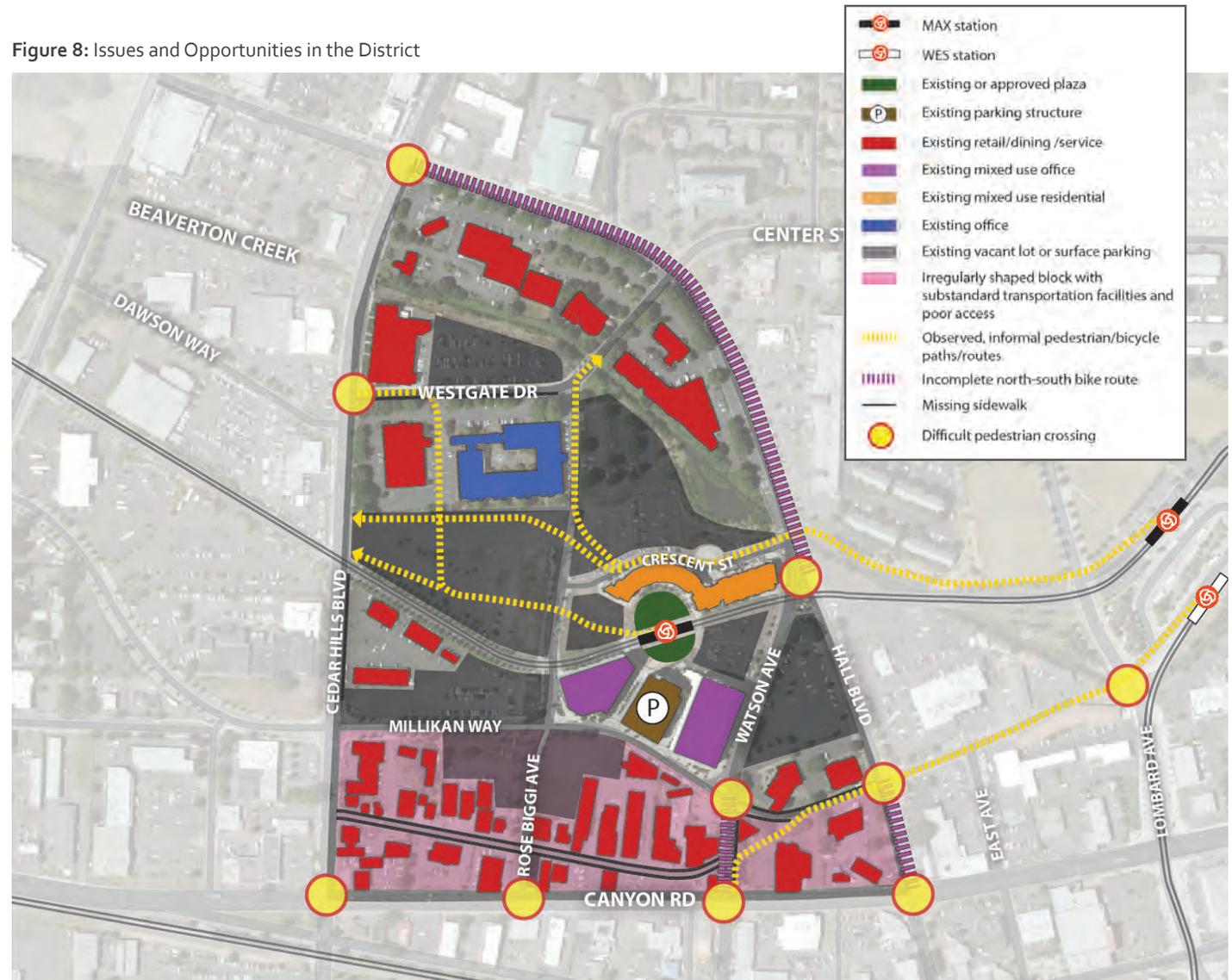
Issue and Opportunities Map

This map depicts the existing conditions of the District, with a particular focus on pedestrian movements, gaps in the bicycle network, built and undeveloped properties and the character of existing uses.

It is clear that the central area of the District is undeveloped and pedestrian traffic to and through the District takes many routes. This represents an opportunity to shape the pedestrian realm with redevelopment, and channel pedestrian traffic in a way that supports urban buildings and uses. Basic improvements to pedestrian crossings and routes will also better serve present and future residents and employees.

These issues and opportunities helped shape the Urban Design Diagram, which can be found in the Creekside District Vision, page 22.

Figure 8: Issues and Opportunities in the District



Lack of connectivity, accessibility and poor transportation infrastructure.

Traveling to and through the District is difficult today. Large, irregularly shaped blocks and a sparse street network limit route choices for people traveling by car, bike and on foot. Pedestrians must often travel along high-speed and high-volume arterials – or across private properties – to find the most direct route. And despite having some of the highest volume of pedestrians in the City¹, the District pedestrian realm suffers from inconsistent and sometimes poor sidewalk conditions, long distances between crossings and limited buffering between people walking and the cars on the street.

The conditions are similar for cyclists. Limited route choices for north and south, as well as east and west bicycle movements make the Creekside District a difficult area to navigate.

At the southern border of the District, Canyon Road (Oregon Hwy 8) lacks many safety and pedestrian amenities, as well as predictable access for businesses along the road. The proposed improvements along Canyon Road between 117th Avenue and Hocken Avenue will improve safety for all users.

¹ Beaverton Transportation System Plan, 2010.

Stormwater and flooding issues make Downtown's creeks an unappealing feature.

Transformed from a wide, forested floodplain by development, the Beaverton Creek watershed in Downtown Beaverton suffers many of the ills common in urban streams. Nearly a third of the Downtown creek system is now covered by pavement, which has been altered to make way for buildings, streets and parking lots. Stormwater travels through the District, flowing across rooftops and paved areas and carrying pollutants and debris into the creek system. The existing stormwater system is at or near capacity in much of the District and consequently, Beaverton Creek is subject to frequent flooding. Reducing the amount of impervious surfaces through redevelopment will gradually reduce the volume of stormwater runoff to Beaverton Creek.

Many properties within the District are within the regulatory 100-year floodplain, necessitating flood insurance for current and future development. The 100-year floodplain in this area, and its regulatory and insurance requirements, have long been a source of confusion and frustration on the part of the City and property owners.

Insufficient amenities to attract visitors, businesses and residents.

Perhaps most central to the District's issues is the general lack of activity and destinations. This is especially true outside the immediate vicinity of the Beaverton Transit Center station, and on the Westgate property, to the west of the Round. The District is mostly paved, and includes many vacant properties and surface parking lots.

If the District can create an identity that draws people for work, to live or just to visit, it will have a positive influence on private-sector development decisions. It will also mean that public investments to improve the District's infrastructure and connection to the larger downtown area and the surrounding community will be better utilized, since more people will be attracted to the District and have more reasons to travel in and out of the District.

This page intentionally left blank.

Chapter 4:

Goals, Objectives & Solutions:

Recommendations for the Creekside District

The *Master Plan* Goals, Objectives and Solutions are intended to address identified challenges, make the most of opportunities and support the revitalization and redevelopment of the District. They are organized under the following hierarchy:

- **Goal** statements provide a definition of the three overarching topics: Transportation, Housing and Redevelopment, and the Creeks.
- **Objectives** provide specific goals within each topic area.
- **Solutions** provide overarching approaches to achieving the objectives and reference specific implementation actions in the Implementation Strategy (Chapter 5).

Goal One:

The District is a vibrant, attractive Downtown residential and employment center and a catalyst for continued growth downtown.

Goal Two:

The District is a thriving, well-connected hub of transit-oriented development and pedestrian-friendly urban form.

Goal Three:

The Downtown creek system is a beautiful destination and focal point for people who live, work and visit the District.

Goals, Objectives and Solutions at a Glance

Goal	Objective	Solutions
<p>Goal 1: The District is a vibrant, attractive and walkable downtown residential and employment center and a catalyst for continued growth downtown.</p>	<p>Objective 1.1: Well-designed, transit-oriented developments are financially feasible and are built throughout the District.</p>	<p>1.1.1: Make policy and regulatory changes to support redevelopment and <i>Master Plan</i> implementation. (p. 32) 1.1.2: Create a development strategy for the former Westgate site. (p. 33) 1.1.3: Implement public and public-private improvements. (p. 34) 1.1.4: Expand existing development tools and technical assistance. (p. 34) 1.1.5: Use urban renewal funds strategically to incent development. (p. 35) 1.1.6: Develop policies and tools to support the creation of housing at a variety of income levels. (P. 36) 1.1.7: Leverage the Beaverton Central Plant as a development incentive for The Round through rate calibration. (p. 37) 1.1.8: Provide financial assistance to offset development or redevelopment costs related to poor soil conditions in the District. (p. 37) 1.1.9: Manage the Vegetated Corridor at the district level. (p. 38)</p>
	<p>Objective 1.2: Flooding impacts to private and public property are reduced and mitigated.</p>	<p>1.2.1: Implement conveyance improvements along Beaverton Creek to alleviate minor flooding impacts to Creekside and upstream properties. (p. 40) 1.2.2: Develop a formal incentive program for the use of engineered fill to elevate redevelopment properties. (p. 41) 1.2.3: Develop a strategy to address Federal Endangered Species Act implications for the National Flood Insurance Program. (p. 42)</p>
	<p>Objective 1.3: The District’s unique sense of place and unified identity capitalize on the nearby creeks and attract residents and visitors from nearby neighborhoods as well as other parts of the region.</p>	<p>1.3.1: Create a Creekside Plaza north of The Round. (p. 43) 1.3.2: Create a continuous greenway along the District’s creek. (p. 44) 1.3.3: Create and build the Creekside District’s identity through placemaking projects and programs. (p. 45) 1.3.4: Prioritize the completion of a new performing arts center in the District. (p. 47)</p>
	<p>Objective 1.4: Existing businesses in the District are well supported.</p>	<p>1.4.1: Implement the Business Continuity Strategy. (p. 48)</p>

Goal	Objective	Solutions
Goal 2: The District is a thriving, well-connected hub of transit-oriented development and pedestrian-friendly urban form.	Objective 2.1: People walking, biking or driving enjoy safe, convenient and pleasant connections to transit and other destinations within or near the District.	2.1.1: Invest in sidewalk and streetscape improvements for pedestrians. (p. 50) 2.1.2: Expand bike facilities and wayfinding throughout the District. (p. 50) 2.1.3: Expand the street network with new streets, connections and access points for all users. (p. 52) 2.1.4: Implement the Canyon Road Safety and Complete Corridor project. (p. 52)
	Objective 2.2: Beaverton's Creeks are made a part of the District's urban and transportation fabric.	2.2.1: Design and build the Crescent Connection multi-use path to serve community connectivity and access needs. (p. 54) 2.2.2: Provide visual access to creeks from existing paths and trails, and those created with new development using overlooks and markers. (p. 55)
	Objective 2.3: A District-wide parking strategy supports compact development and ensures adequate parking availability for a mix of uses.	2.3.1: Revise Development Code parking regulations for the District to support desired urban form and development feasibility. (p. 55) 2.3.2: Provide consolidated district parking facilities to support desired urban form and development feasibility. (p. 56)
Goal 3: The downtown creeks are a beautiful destination and focal point for people who live, work and visit.	Objective 3.1: The District is a steward of sustainable development and stormwater management.	3.1.1: Require new development to incorporate on-site stormwater treatment facilities located to maximize benefits to the downtown creek system. (p. 58) 3.1.2: Build regional stormwater treatment facilities. (p. 59)
	Objective 3.2: Ecosystem improvements increase health and beauty of the Downtown creek system.	3.2.1: Develop public and private programs designed to clean and restore the downtown creeks and stream bank areas. (p. 60) 3.2.2: Provide incentives to daylight Beaverton Creek. (p. 60)

Prioritizing District Investments

Realizing the District Vision will take a coordinated effort on behalf of the City, private investors, public agencies, and others, and with limited public funds available for capital projects and programs, it is necessary to prioritize these investments. The Creekside District Master Plan recommends three distinct categories of projects as a way to organize use of public money.

"Do Now" Catalytic Projects and Policies:

These include Core Area Investments: projects on or adjacent to the Westgate and Round properties that help to improve development feasibility, and District-wide Policies: new programs and policies that lay the groundwork for future public-private partnerships in the entire District, including new incentive toolkits, Development Code amendments, creek restoration programs, parking code changes.

"Do When" Community Infrastructure Projects:

Located in or near the Creekside District, these improvements benefit residents and employees who move through the District and should be completed regardless of Creekside redevelopment.

Please see the Implementation Strategy, beginning on page 63, for more information.

"Do If" Co-investment Projects:

Infrastructure projects directly tied to redevelopment on private properties. These projects are contingent upon partnerships with willing property owners and developers to move forward, usually through negotiated development agreements or the use of tax increment financing.

Goal One:

The District is a vibrant, attractive and walkable downtown residential and employment center and a catalyst for continued growth Downtown.

Objective 1.1: Well-designed, transit-oriented developments are financially feasible and are built throughout the District.

Solution 1.1.1: Make policy and regulatory changes to support redevelopment and Master Plan implementation.

There are several areas of the Beaverton Development Code that should be amended in order to shape future development in the District to implement the District's Urban Design Diagram. The Urban Design Diagram (page 18) graphically represents the development framework for the District. It identifies important connections, development sites, and natural assets.

Building Design and Orientation Standards:

The City's highest level of required building frontage (50%) is a good city-wide standard, but for the focal points of the District, the recommended building frontage is 75%.

As design and orientation are regulated by the designation of Major Pedestrian Routes (MPR), a new class of MPR may be needed for these signature areas.

Streetscape Design Standards:

The City should adopt Creekside District Streetscape Design Guidelines that provide a unified design for street furniture, paving materials, pedestrian-oriented lighting, signs and trees. Public projects in the Creekside District should, where possible, include budget for the siting and installation of these wayfinding signs identified in the 2014 Downtown Beaverton Wayfinding

System Plan. For streets where special design treatments are warranted, such as Canyon Road and Crescent Avenue, Code amendments may be necessary to ensure consistent application of these designs.

Building Materials and Design:

The City has standards and guidelines regarding building materials and design features, including requirements for ground floor visibility, architectural elements, and awning placement. To realize the vision of the Creekside District as the City's centerpiece for sustainable and high quality design, it may be necessary to specify preferred materials, finishes and treatments.

Floor Area Ratios:

As discussed on page 25 of this plan, the Regional Center- Transit Oriented (RC-TO) zoning allows for some of the City's highest density developments. However, the minimum density allowed by the zone is not consistent with the intensity of development envisioned by the community through the District vision. An increase in the minimum Floor Area Ratio standard is one way to address this.

See Project Sheet A.1 for actions related to this solution. For detailed information, see "Analysis of Opportunities and Barriers to Development", "Core Area Focus Group Memo", and "Streetscape Guidelines" documents in Volume 2.

Solution 1.1.2: Create a development strategy for the former Westgate site.

Currently owned by the City and Metro, the 3.94-acre Westgate property is a catalytic development site, adjacent to The Round TOD development. The Westgate property

Sketches of Westgate's Potential Future

The Westgate focus group discussed development themes, site design and design parameters. Then, participants reviewed analysis on design, parking and development feasibility. A series of sketches were created to illustrate key considerations for the evaluation of development proposals on the property.

will play a pivotal role in the District's future, and represents the City's biggest strategic asset in the early phases of redevelopment.

The next step is to create a strategy that the City and Metro can use to attract appropriate new development to the Westgate property. The strategy should reflect objectives for the District, such as those defined by the Creekside property owners focus group (see sidebar). Evaluation parameters may include a set of guidelines, including provisions for a certain amount of density (or FAR) and retail amenities, lot coverage, active retail frontage, and tax increment generation.

See Project Sheet A.1 for actions related to this solution. For detailed information, see "Core Area Focus Group Memo" document in Volume 2.

**Westgate Focus Group**

In August 2014, the City of Beaverton convened a group of property owners and stakeholders to discuss urban design considerations for the Westgate and Round properties in the core the Creekside District.

**Focus Group Recommended Mix of Uses**

- The District should be a civic destination, and might include a performing arts center and a District serving parking garage in the early phases of redevelopment.
- Apart from civic and cultural uses, the area should include a range of urban uses (residential, office, retail) appropriate for a transit-oriented neighborhood.

Recommended Considerations for Public Investment

Does the potential development project:

- Move the District closer to the Vision for the area defined in this Master Plan?
- Have a pedestrian orientation and high quality development?
- Contribute to a mix of uses that is attractive to a broad cross-section of the community and add to the District as a civic destination?
- Have a mix of funding sources available and fiscally responsible public contributions?
- Catalyze additional development?

Solution 1.1.3: Implement public and public-private improvements.

Development analysis helped to define and test the physical improvements that are necessary to create an identifiable and navigable district, to create developable parcels, and create amenities that spur development. In essence, these improvements are necessary to help the area to compete with other transit-oriented development areas that have more robust built-environment amenities.

The detailed list of capital projects and investments in Chapter 5: Implementation Strategy has been organized into three categories to better understand the role that the projects will play in implementation, and to develop a cohesive approach implementation and funding projects in each category. (See "Prioritizing District Investments" on page 31 for an explanation.)

See Project Sheets A.1, A.4 & A.5 for actions related to this solution. For detailed information, see "Analysis of Opportunities and Barriers to Development", "Parking Strategy Recommendations" documents in Volume 2.

Solution 1.1.4: Expand existing development tools and technical assistance.

The City should expand existing offerings for development support, and ensure interested property owners and developers in the region know about existing programs and assistance available.

Incentives for development could include robust technical assistance programs to identify gap-financing sources (such as SBA loans, tax credits, EB5, New Market Tax Credits, etc.) and to connect developers and



Core Area of the Creekside District Today



Credit: Fregonese Associates

An artists rendition of what the core of the Creekside District could look once redeveloped.

property owners to financing and lending sources. Technical assistance programs could be targeted to support minority or smaller local developers, or to particular projects critical to the District’s redevelopment vision.

This solution should be considered in the 5-year plan for BURA. For detailed information, see “Analysis of Opportunities and Barriers to Development” document in Volume 2.

Solution 1.1.5: Use urban renewal funds strategically to incent development.

The City should take a proactive approach to redevelopment by deploying its resources in partnership with the Beaverton Urban Redevelopment Agency (BURA). This approach will bring certainty and increase private-sector confidence for investing in the District.

BURA, an agency separate from the City of Beaverton, will be able to provide financial and other incentives to support redevelopment in the Creekside District (in addition to other areas of the urban renewal area). The following are project characteristics that BURA should consider supporting:

- Meets or exceeds minimum floor area ratios (FAR) requirements for the District.
- Provides additional ground-floor active use

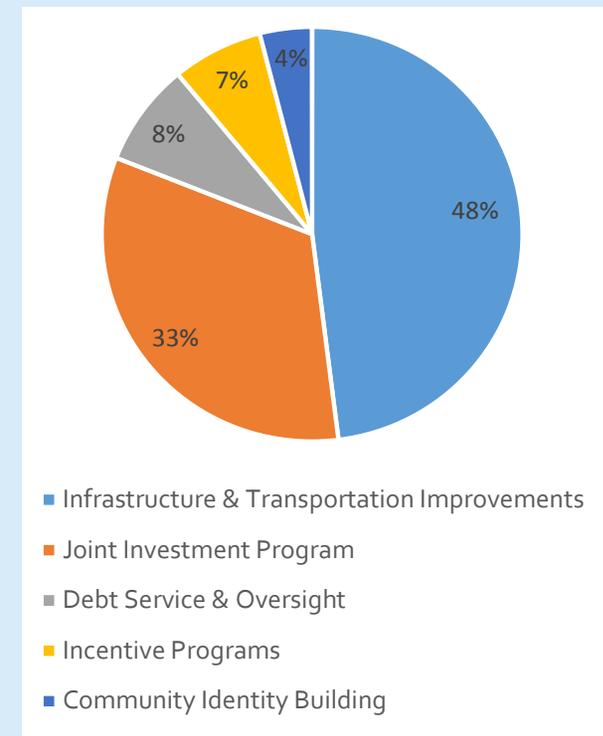
space (i.e. storefronts).

- Provides wider pedestrian setbacks or amenities like publicly accessible plazas or open space.
- Provides amenities for urban residents, such as on-site storage, high quality common spaces (like rooftop decks or community rooms), sportcourts and playgrounds.
- Provides stormwater management in the form of amenities, such as rain gardens or green walls and roofs, or contributes to regional a regional stormwater facility, plaza, trail or park.
- Provides access to parking in cooperation with a District shared parking system.



Credit: ZGF

Figure 9: Share of BURA Tax Increment by Project Type



Approved by voters in 2011, BURA has allocated tax increment finance expenditures to five categories of projects.

In exchange for these types of higher quality development, the City and/or BURA could provide the following incentives:

- Assistance with design solutions, structural foundations and pre-development activities;
- Financial assistance for engineered fill and foundation work on unstable soils;
- Financial support – such as low-interest loans, gap financing, grants, or land write-downs – for development projects that meet public goals.
- Funding for roadways and streetscape improvements in conjunction with, or to support, redevelopment.
- Tenant improvement loans or grants for uses that provide key services to an urban neighborhood.

This solution should be considered in the 5-year plan for BURA. For detailed information, see "Analysis of Opportunities and Barriers to Development" document in Volume 2.

Solution 1.1.6: Develop policies and tools to support the creation of housing at a variety of income levels.

While the fifty-acre area of Creekside is too small of a geography for establishing its own specific housing policy, it is likely the District will attract particular type of residents,

including younger households (ages 25-34), those without children, and older households looking to downsize. Tools and programs that work to support mixed income, transit-oriented housing in Creekside could work elsewhere – especially in other mixed-use parts of the City. As part of the Creekside planning effort, a series of interviews were conducted with housing developers and partners, who provided their perspective on how to make an urban neighborhood such as Creekside an attractive and financially feasible place to build. The results were general findings for all housing developers, as well as key priority differences between for-profit and non-profit developers.

Any housing developer will want a good partner in the City, including:

- Construction (or plans for construction) of transportation systems that provide better access in and out of the District for vehicles and pedestrians
- Shared parking program for the District, with the City as an active partner
- Financial incentives (low cost or donated land, permit fee waivers, SDC financing/offsets/subsidies, etc.)
- Expedited permitting processes

- An internal liaison to assist through the development process

For-profit developers, in particular, generally want amenities already in place, such as a park or open space, district events, or safe and attractive streets.

In contrast, non-profit developers, who have more incentive due to funding requirements to include greater on-site amenities, are more interested in the City helping to provide tools to decrease their costs both up front and long term. These can include additional incentives, grants and low-interest loans up front, and/or tax abatement/credit programs to assist with lower operating costs down the road.



In order to create a neighborhood within the District, incorporating urban-type amenities, that people of all ages, races and income levels can call home, the City will need to add to its current development toolbox.

A general housing policy discussion should occur at the BURA and City-wide geographies. The City and BURA should review the findings of the Creekside District developer interviews and incorporate them into the Comprehensive Plan and BURA policies and programs for use in other areas.

See the Comprehensive Plan and BURA 5-year plan.

Solution 1.1.7: Leverage the Beaverton Central Plant as a development incentive for The Round through rate calibration.

The Beaverton Central Plant (BCP) provides heating and cooling services for tenants of The Beaverton Round. The BCP was designed as a high-efficiency facility to serve the entire Round development, and is also capable of serving the Westgate and adjacent properties.



Beaverton Central Plant

Since development within The Round is incomplete, the BCP currently only operates around one-third its capacity.

The City should consider adjusting the BCP rates to incentivize development, thus maximizing utilization of the BCP.

See Project Sheet A.1 for actions related to this solution. For detailed information, see "Core Area Focus Group Memo" document in Volume 2.

Solution 1.1.8: Provide financial assistance to offset development or redevelopment costs related to poor soil conditions in the District.

The City or BURA should provide financial assistance, or assistance with site preparation (such as predevelopment site surveys), as a way to help alleviate uncertainty and catalyze growth and redevelopment within the District.

Development of multi-story structures within the District can be more costly than similar developments in other parts of the city and region due to the District's unique geography. Situated at the lower portion of a basin, land in the District is composed of deposited sediment, providing less stability than

bedrock or other conglomerations. As a result, new building foundations will likely require geotechnical structural supports.

Costs premiums for addressing foundation support will vary from project to project, as the specific soil conditions and engineering solution will vary by site. Within the Portland Metro area, experts have observed these costs ranging from an additional \$5-25 per square foot of building.

See BURA 5-year plan for actions related to this solution. For detailed information, see "Analysis of Opportunities and Barriers to Development" document in Volume 2.



New building foundations will likely require geotechnical structural supports, such as Geopiers, a proprietary system that has been used for previously built structures at the Round.

Current Vegetated Corridor Process

When development occurs near a creek, wetland, or other significant natural resource, property owners must comply with Clean Water Services (CWS) requirements to protect and enhance the resource. Under current CWS permitting requirements, this involves:

1. Mapping the edge of sensitive areas
2. Working with CWS to determine the boundary of the Vegetated Corridor
3. Obtaining a CWS permit for development
4. Enhancing the Vegetated Corridor by removing pavement and invasive species and replanting with natives.

New Approach for the Creekside District

The new approach to Vegetated Corridor permitting in the Creekside District means that with redevelopment, property owners must still protect and enhance the resource, but are not required to map the Edge of Sensitive Area and Vegetated Corridor. The Creekside District Vegetated Corridor mapping, undertaken by the City of Beaverton and CWS, is estimated to save an average of \$6,000 to \$10,000 per project in mapping and consulting costs and an estimated 4-6 weeks in permitting time.

Solution 1.1.9: Manage the vegetated corridor at the District level.

In coordination with Clean Water Services (CWS), the City has developed a process to manage the Vegetated Corridor at the District level, which eliminates several steps for District property owners seeking a Service Provider Letter (SPL) for development. This process will need to be finalized and implemented as a program available to District property owners and developers.

For properties within 200 feet of a “water quality sensitive area” (defined by CWS) such as a creek or wetland, CWS requires a SPL for development or redevelopment activities. Obtaining the SPL typically involves mapping the sensitive area and working with CWS to determine the precise location and extent of the Vegetated Corridor. By utilizing the District-wide Vegetated Corridor approach, property owners would not be required to undertake their own mapping and coordination with CWS as these steps will have already been completed.

For property owners who would rather pursue the standard procedure for development along the creek, that option would remain available through CWS. (More information on the CWS standard procedure is available in the Clean Water Service Design and Construction Manual, Chapter 3.)

See Project Sheet B.1 for actions related to this solution.



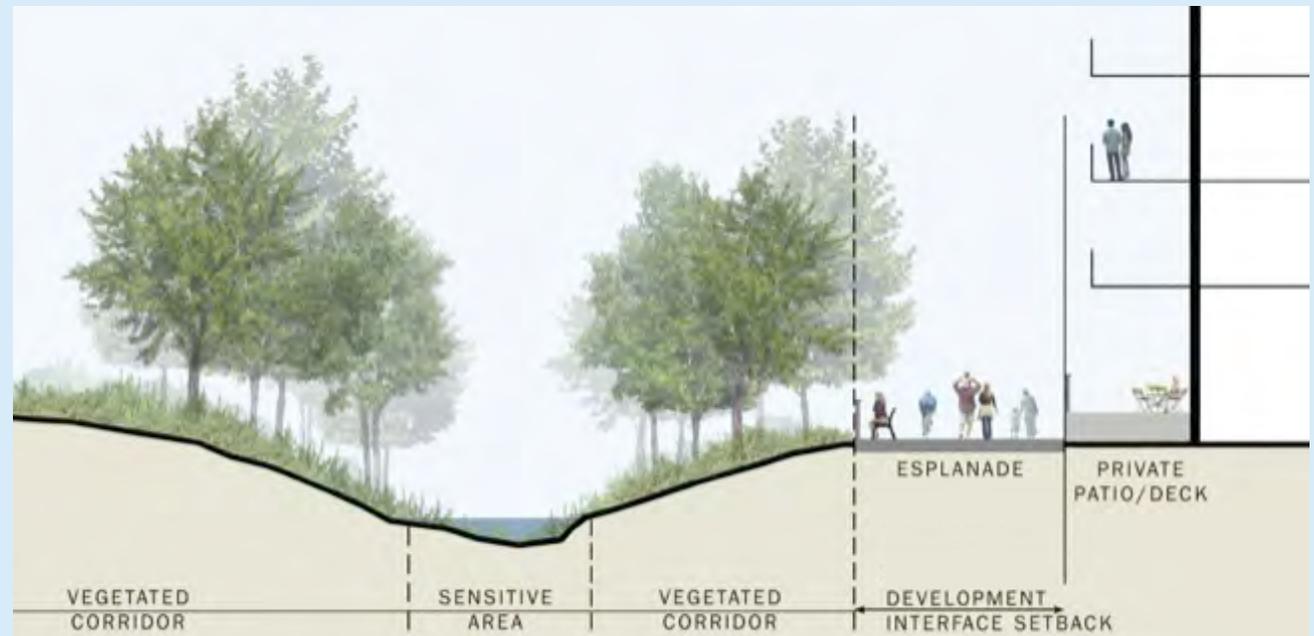
Credit: Walker Macy

Figure 10: District Vegetated Corridor Boundary, Before and After Redevelopment



What is a Vegetated Corridor?

A vegetated corridor is the transitional zone where land and creek come together. The land and riparian vegetation along a waterway form a corridor and create a vegetative buffer strip along the creek. The vegetated corridor helps to protect the creeks – and contributes to a healthy watershed – by absorbing runoff, reducing erosion, filtering out pollutants, shading the stream and providing food and habitat for the creeks’ terrestrial and aquatic plants and animals. CWS requires the preservation and maintenance of the vegetated corridor to protect its water quality functions.

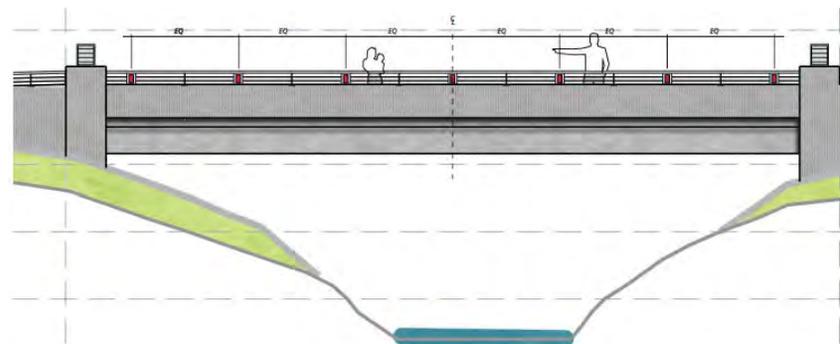


Objective 1.2: Flooding impacts to private and public property are reduced and mitigated.

Solution 1.2.1: Implement conveyance improvements along Beaverton Creek to alleviate minor flooding impacts to Creekside and upstream properties.

A number of bridges and culverts along Beaverton Creek currently constrict the flow of water out of the District. Removing these constrictions by replacing and raising the bridges or culverts will reduce minor flooding impacts on District properties and public facilities. Figure 11 shows the location of five recommended bridge and culvert replacement locations. Three facilities, the Rose Biggi Avenue Bridge (under construction, as of the writing of this plan), Hocken Avenue Bridge and Cedar Hills Bridge are under the jurisdiction of the City. Due to the flood relief benefits associated with replacing these bridges, such projects are likely to rank competitively when seeking construction funding from external sources. Some facilities will require the coordination of outside agencies, such as TriMet and Washington County.

Figure 11: Locations of Recommended Conveyance Improvements



As of the writing of this plan, the bridge over Beaverton Creek at Rose Biggi is being improved, including being raised 4' above current levels, providing additional space for water to travel through in the event of a flood.

Credit: Walker Macy

A second form of conveyance improvement includes “benching”, whereby the creek’s banks are re-graded to provide additional lateral storage capacity. This approach may be best applied to reaches of the Creek where the regulated vegetated corridor is in poor condition. This allows for the removal of invasive plants, grading and replanting to take place in one step. Benching may be undertaken on City-owned property as a demonstration project, or in coordination with a property owner. The City should consider incentives for benching and vegetated corridor enhancement during the redevelopment of private properties along the creek.

See Project Sheets C.4-C.7 for actions related to this solution. For detailed information, see “Stormwater Master Plan” document in Volume 2.

Solution 1.2.2: Develop a formal incentive program for the use of engineered fill to elevate redevelopment properties.

The City should assist private property owners wishing to elevate using engineered fill with required permits from state and federal agencies that may have jurisdiction over the floodplain.

Elevating properties, which can be pursued as an alternative to flood-proofing, is the most cost-effective, predictable and easy-to-implement option to raise redeveloped land out of the 100-

Figure 12: 100 Year Flood Plain



Credit: Walker Macy

Benching within the floodway is one way to add flood storage capacity, and can be done in coordination with invasive species removal and replanting. Benching can be instituted on a property-by-property basis.

year floodplain and is currently available to much of the District (generally, Canyon Road to Murray Boulevard along Beaverton Creek). Many properties in the District are not required to compensate floodplain alterations by removing material elsewhere (i.e. cut-and-fill balance). However, the City currently does not have a formal incentive program to support redevelopment projects that need engineered fill assistance.

Engineered fill would represent a relatively small portion of the total cost of a redevelopment project, considering the necessity for more costly engineered foundation support due to the soil conditions.

See the BURA 5-year plan for actions related to this solution. For detailed information, see "Stormwater Master Plan" document in Volume 2.

Solution 1.2.3: Develop a strategy to address Federal Endangered Species Act implications for the National Flood Insurance Program.

The Creekside District, like many communities with rivers and stream systems, has properties in the 100-year floodplain. Many properties are currently paved, which contributes to stormwater quality and quantity problems in Beaverton Creek. In

these cases, the only realistic way a property owner can be expected to make substantial water quality improvements on a largely paved parcel is through redevelopment. Current design practices can combine stormwater facilities with new development and current CWS regulations protect the creek itself plus an additional 25-50 feet from the creek from development and paving. Such redevelopment can result in both the economic enhancement of established downtown areas like the Creekside District, and the restoration of portions of the creek system.

However, as of this writing, the National Marine Fisheries Service (NMFS) and the Federal Emergency Management Agency (FEMA) are engaged in a consultation regarding the impact of development activities in the regulated 100-year floodplain on species listed under the Endangered Species Act. As drafted, the Biological Opinion for Oregon proposes changes to the National Flood Insurance Program (NFIP), many of which will require local agencies to restrict most development activity in or near the 100-year floodplain.

Under the requirements proposed in the draft Biological Opinion, most economically

productive uses on these properties will be prohibited, thus reducing the likelihood of any further private investment. As a result, paved properties near Beaverton Creek will likely remain paved in perpetuity, and continue to negatively impact natural habitats.

The City and its regional and state partners should work with Federal partners, including the Federal Congressional delegation, to ensure that the final Biological Opinion takes into account the realities of already urbanized floodplains, and the important relationship between redevelopment and restoration.

See Project Sheet B.6 for actions related to this solution.

Objective 1.3: The District's unique sense of place and unified identity capitalize on the nearby creeks and attract residents and visitors from nearby neighborhoods as well as other parts of the region.

Solution 1.3.1: Create a Creekside Plaza north of The Round.

The City should work to finalize designs for a public plaza and open space north of The Round and build it in conjunction with redevelopment in the District.

First envisioned as part of the Civic Plan, public plaza design concepts were furthered as part of the *Master Plan* process and public feedback was incorporated to determine the plaza's desired feel and function, the availability of land for siting the plaza, and how to phase the project. The final plaza design should create a centerpiece and gathering place for the District, where nature thrives alongside development and the public can enjoy newly restored stream banks via shared pathways and view points for passive and active recreation. Other elements should include a central open space, integrated stormwater facilities, public art, and creek-adjacent housing, shopping and restaurants.

In the short term, the City should refine the design of the Creekside plaza in collaboration with area property owners and City partners, in particular, Tualatin Hills Parks and Recreation District (THPRD).

Once designs are completed, construction could begin on City-owned property, complementing the proposed Crescent Connection multi-use path. Currently in the design phase, the Crescent Connection is part of a proposed regional multi-use facility connecting users to other regional centers and transit (see Solution 2.2.1, page 54 for more information).

The long-term phase of the plaza assumes the relocation of surface parking and the integration of the plaza with redeveloped properties.

See Project Sheets A.2 for actions related to this solution. For detailed information, see "Core Area Focus Group Memo" document in Volume 2.

Design Characteristics

Attendees at Creekside Open Houses and events weighed in on the look and feel of paths, gathering spaces and plazas. The preferred character of such spaces is urban in feel, with a moderate amount of landscaping, seating areas, and a visual connection to natural features.



Creeks as an Urban Amenity

The Beaverton Community Vision envisions the Downtown creek system becoming an urban amenity. Through open houses and other events, community members confirmed that they preferred elements such as outdoor café seating, paved plazas and esplanades to lawns and play areas. Natural areas and habitat were also reported as important elements.



Solution 1.3.2: Create a continuous greenway along the District's creek.

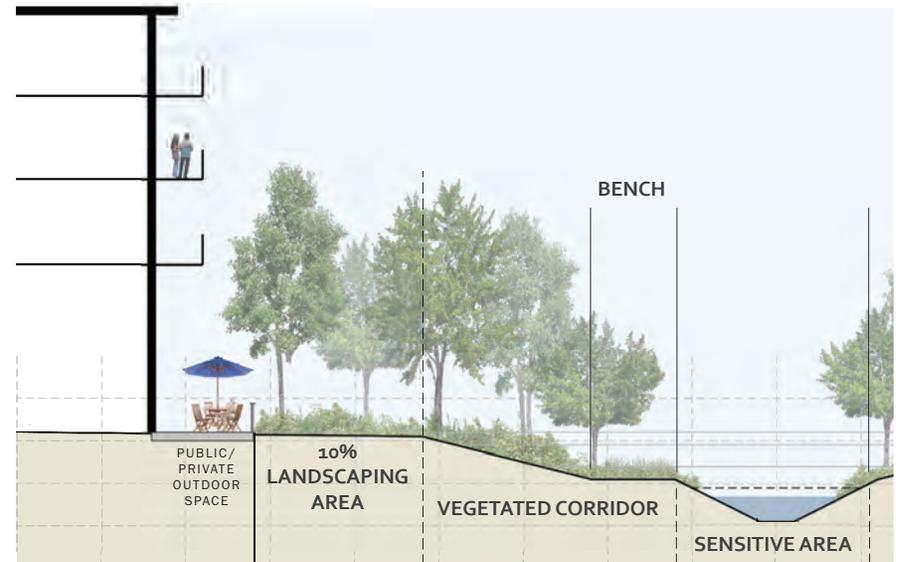
To create a creek adjacent greenway that extends from the proposed public plaza and open space (see Solution 1.3.1) through both public and private property along the District's creek system, the City should encourage creek-adjacent property owners to locate their required landscaping and open space alongside the vegetated corridor.

A continuous creekside greenway would effectively widen the swath of natural area running through the heart of the District. This would enhance the environmental and aesthetic value of the Vegetated Corridor, as well as provide a visual and natural amenity for pedestrians and bicyclists using the Crescent Connection Path and other District paths potentially sited along the creeks. While not all of the proposed greenway would be public space, most of it will be visible to passersby.

Greenway projects that include the participation of willing property owners, non-profits and/or the public maybe eligible for grant funds, such as Metro's Nature in Neighborhoods program.

See Project Sheets B.4 for actions related to this solution.

Figure 13: Example of 10% landscaping setback next to the Vegetative Corridor



Credit: Walker Macy

The City should work with property owners to make enhancements to Beaverton Creek, including Vegetated Corridor restoration. Funding for these improvements may be sought from outside sources, such as Metro's Nature in Neighborhoods grant program.

Solution 1.3.3: Create and build the Creekside District's identity through placemaking projects and programs.

The Creekside District should be recognizable to residents and visitors as one of the unique neighborhoods of Downtown Beaverton. The Creekside District is characterized by its role as a civic and cultural center, home to high density housing and employment uses, its connection to the greater Portland region via MAX, and its relationship to Beaverton Creek. The City should encourage the development of this identity through public art, unique district branding elements like gateways and signage, and highlight creek bridges through design.



Credit: City of Beaverton

Three Creeks One Will, a sculpture by artist Devin Laurence Field, was installed as part of refurbishing The Round's South Plaza in 2013.

Public Art: Public investments in the Creekside District, including infrastructure, utilities and transportation projects, are excellent opportunities for the inclusion of public art. Infrastructure projects themselves can also be public art projects. For example, the BP Pedestrian Bridge in Chicago (shown below) is a both a multi-use transportation facility and a stunning statement of civic identity. Public art can also be interactive; a human-scale chessboard at Director Park in Portland provides a “stage” for urban



Credit: Wally Gobetz

BP Pedestrian Bridge, designed by Frank Gehry, connects Chicago's Millennium Park and Daley Bicentennial Plaza

interaction.

Public art is most importantly a process of artistic conception and the early involvement of artists is crucial for successful integration of art into a public project. The Creekside District Urban Design Diagram (page 18) identifies several locations where public art may be integrated with future projects.

Gateways: Gateway elements provide visual cues for travelers to distinguish the District from neighboring areas. Gateway elements can consist of monumental public art, signage, as well as traditional gateway arches. The City should coordinate with the Beaverton Arts Commission to explore other potential locations, or criteria for the location of public art and gateway elements in and around the District.



Credit: SERA Architects

Garden Chess at Director park in Downtown Portland lends liveliness to the urban plaza.

Creek Crossings: A common refrain about creeks in Downtown Beaverton is that people often do not know where they are located. Bridges provide an opportunity to demarcate creek crossings, and can serve as gateway elements in the District. The Rose Biggi Avenue Bridge (under construction, as of the writing of this plan), was designed to include wide sidewalks and special ornamentation. The Creekside District Urban Design Diagram (page 18) identifies bridges that are slated for replacement over the next 10-20 years. The City should include similar creek crossing features or art when designing these bridges.

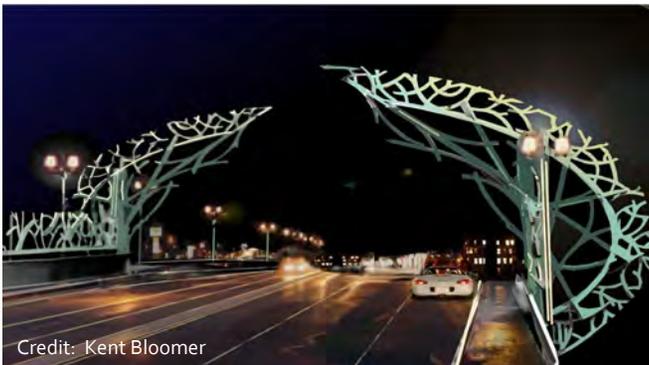
Wayfinding Signage: Wayfinding signage orients and directs travelers of all modes to and from destinations. Wayfinding systems include informational, directional, and identification signs and maps that are simple, intuitive and work together to help people of all ages and abilities find their way. The City completed a Wayfinding System Plan in 2014, and should implement the system in and around the District.

See Project Sheets B.3, B.4 & C.3 for actions related to this solution. For detailed information, see "Streetscape Guidelines" document in Volume 2.



Credit: RACC

Danb Corson's Nepenthes sculptures serve as public art and gateway elements along NW Davis Street in Portland's Pearl District.



Credit: Kent Bloomer

Artistic bridge design elements for the New York Avenue Bridge in Washington, DC.



Example of wayfinding signage from the recently completed Beaverton Wayfinding System Plan. Projects undertaken in the District should, where feasible, include installation of these wayfinding elements.

Solution 1.3.4: Prioritize the completion of a new performing arts center in the District.

Working with the Beaverton Arts Commission (BAC), the City should work to finalize the location and financing plan for a new performing arts center. This could include a public-private partnership with a suitable developer or property owner.

A new performing arts center would strengthen the role of arts and cultural programs and institutions in the District, providing the area's diverse community with space for multi-cultural events and celebrations. A high-quality performance venue with convenient proximity to light rail transit and major roadways would also draw visitors from around the region.

In 2010, a Blue Ribbon Task Force, appointed by Mayor Doyle and chaired by business



Credit: Beaverton Arts Commission

leader and philanthropist Mrs. Pat Reser, further investigated the need for a performing arts center and made recommendations for moving forward. In 2013, a studio class of University of Oregon architecture students created architectural concepts based on two possible sites using a building program supplied through Blue Ribbon Task Force research. The recommended building program includes the following elements: a 400 seat main stage, 150 seat second stage, café, catering kitchen, multipurpose, classroom, meeting, event, and conference space.

There is continued community interest in locating a performing arts center in Beaverton and the Beaverton Arts Commission is leading the effort.

See Project Sheet C.3 for actions related to this solution. For detailed information, see "Core Area Focus Group Memo" document in Volume 2.



Credit: Adam Lawler

A University of Oregon student's conceptual rendering of a performing arts and cultural facility.



Credit: Opsi Architecture

Exploring Facility and Urban Design Elements of a Performing Arts center

In 2013, architecture students from University of Oregon in Portland and Opsi Architecture collaborated on conceptual designs for the first public performance and visual arts venue in Beaverton. Students were asked to propose concepts that would help transform the area into a pedestrian-friendly District.

Objective 1.4: Existing businesses in the District are well supported.

Solution 1.4.1: Implement a Business Continuity Strategy.

Business owners who participated in the District planning effort were excited about the possibilities for improvements and supported a vision of revitalization for the area, but many were concerned that new development and improved amenities could also bring rising rents. The City and BURA should implement programs and incentives to both help existing businesses adapt as the District redevelops and encourage the creation of new enterprises and jobs within the District.

Perceived threats to the continuity of existing District businesses include:

- Direct displacement or change of visibility for those businesses that are currently located in buildings that might redevelop.
- Demographic changes of the residents may require businesses to alter their goods, services or marketing strategy.
- Some businesses, especially small and minority-owned businesses, may be more vulnerable to rent price increases, because they already operate on thin

margins with limited available capital to adjust their business model in response to rapid transitions.

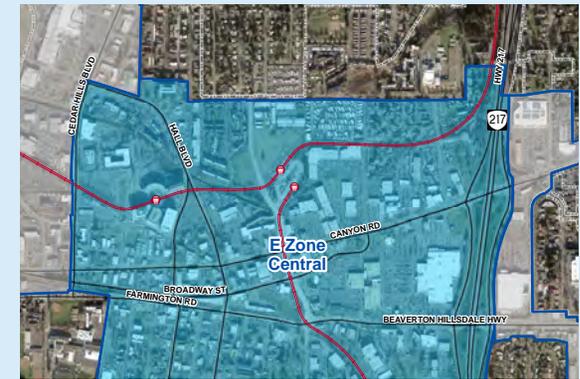
As part of the Creekside District planning process, a Business Continuity Strategy (to be found in *Master Plan* Volume 2) was developed using input from business owners and in collaboration with City staff. It is organized into two categories:

- **New programs and services.** These are a mix of technical and business support services, partnerships and ongoing programs that the City can provide to increase business vitality in the District and during *Master Plan* implementation. Examples include the creation of a Creekside Business Association, technical assistance for property owners interested in Crime Prevention Through Environmental Design, and graffiti abatement programs.
- **Business improvement and expansion incentives.** These include incentives for businesses to improve their physical space, including storefront and tenant improvement programs and/or support for co-location opportunities.

This solution should be considered in the 5-year plan for BURA. For detailed information, see "Business Continuity Strategy" document in Volume 2.

Beaverton Enterprise Zone Program

The Creekside District is within the Central Beaverton Enterprise Zone, an incentive program created and administered by the City's Economic Development Division. The program allows a property tax abatement for eligible businesses on any new development (land and existing improvements do not qualify) for three years (and up to five).



Enterprise Zones are designed to encourage business investment through property tax relief, in specific areas of the state. In exchange for locating or expanding into an Enterprise Zone, eligible (generally non-retail) businesses receive total exemption from the property taxes normally assessed on new plant and equipment, for a specified amount of time, which varies between the different zone programs.

This page intentionally left blank.

Goal Two:

The District is a thriving, well-connected hub of transit-oriented development and pedestrian-friendly urban form.

Objective 2.1: People walking, biking or driving enjoy safe, convenient and pleasant connections to transit and other destinations within or near the District.

Solution 2.1.1: Invest in sidewalk and streetscape improvements for pedestrians.

The City should make District-wide investments to construct and upgrade sidewalks, crossings and designated elements of the pedestrian environment for all streets in the District, with priority given to streets designated as Pedestrian Corridors.

Other sidewalks should be constructed by the City when new roads are built, or existing ones rebuilt. These investments should be timed to correspond to private sector investments whenever possible. BURA

should establish a phasing approach whereby sidewalks can be upgraded block by block in sync with development interests.

Specific improvements should include:

- Improve crosswalk and intersection safety.
- Widen sidewalks to at least 12 feet.
- Ensure that encroachments such as outdoor seating or street trees, contribute to the streets overall function and attractiveness while also leaving ample space for walking.
- Use of a standard set of street furnishings, trees and lighting fixtures.
- Improve transit access and connections.
- Connect transit stops to pedestrian routes and bicycle paths.

See Project Sheets C.1, C.3 & C.9 for actions related to this solution. For detailed information, see "Mobility Audit" document in Volume 2.



Rose Biggi Avenue and Crescent Street today - Creekside's "signature intersection", as illustrated in the Urban Design Diagram on page 18.



Credit: Fregonese Associates
Creekside's "signature intersection" illustrated future, representing the primary crossroads of pedestrian travel within the District.

Figure 14: Proposed Creekside Pedestrian Projects

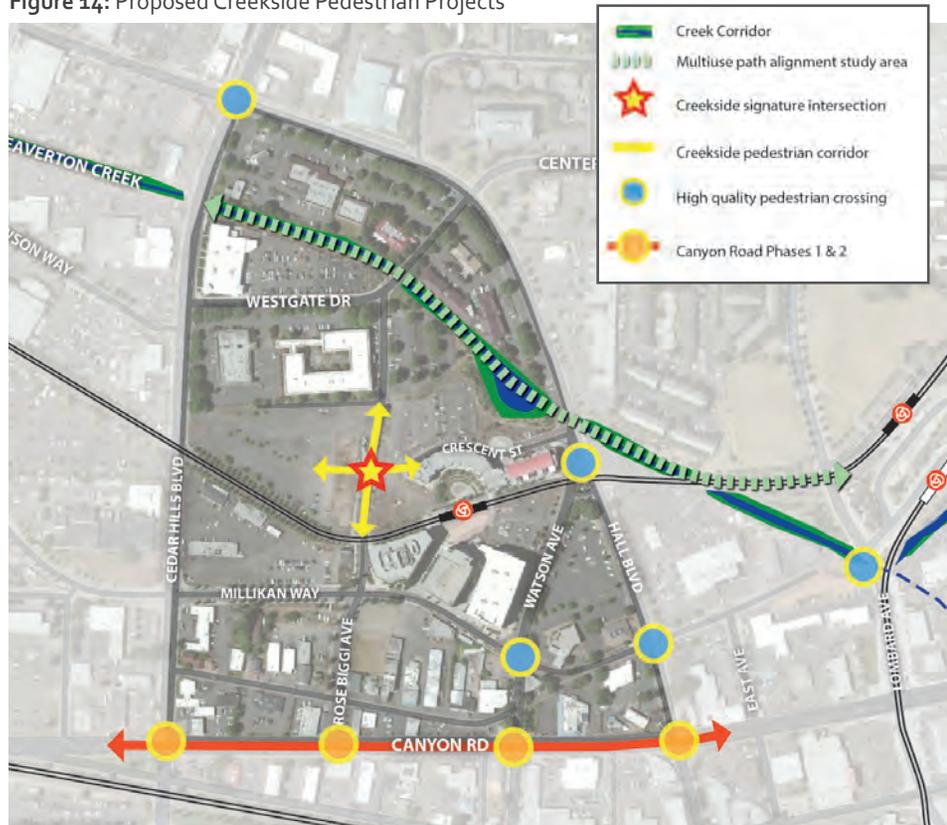
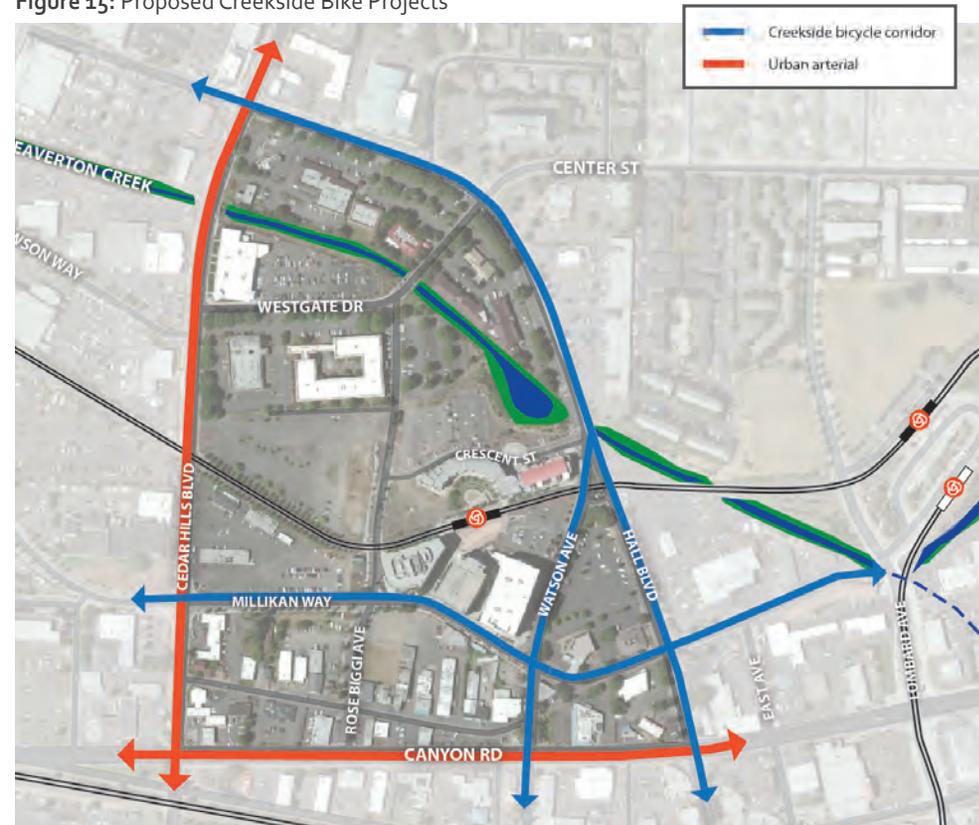


Figure 15: Proposed Creekside Bike Projects



Solution 2.1.2: Expand bike facilities and wayfinding throughout the District.

The City should invest in the recommended bike facility improvements specified on Figure 15, including studying the addition of bike lanes on Hall, Watson and Cedar Hills, constructing the Millikan/Broadway Bikeways (see page 53 for map), and creating shared-

lane facilities for the remaining District streets. District-wide, the City should build upon its wayfinding program to help cyclists identify the safest routes and determine their location. During sidewalk construction or upgrades the City should supply bicycle parking in visible locations to support businesses. The City should establish a formal process by which business or property owners can request that

bike corrals be made available for on-street bike parking adjacent to their businesses.

See Project Sheets B.8 & C.1 for actions related to this solution. For detailed information, see "Mobility Audit" document in Volume 2 and the "Beaverton Wayfinding System Plan".

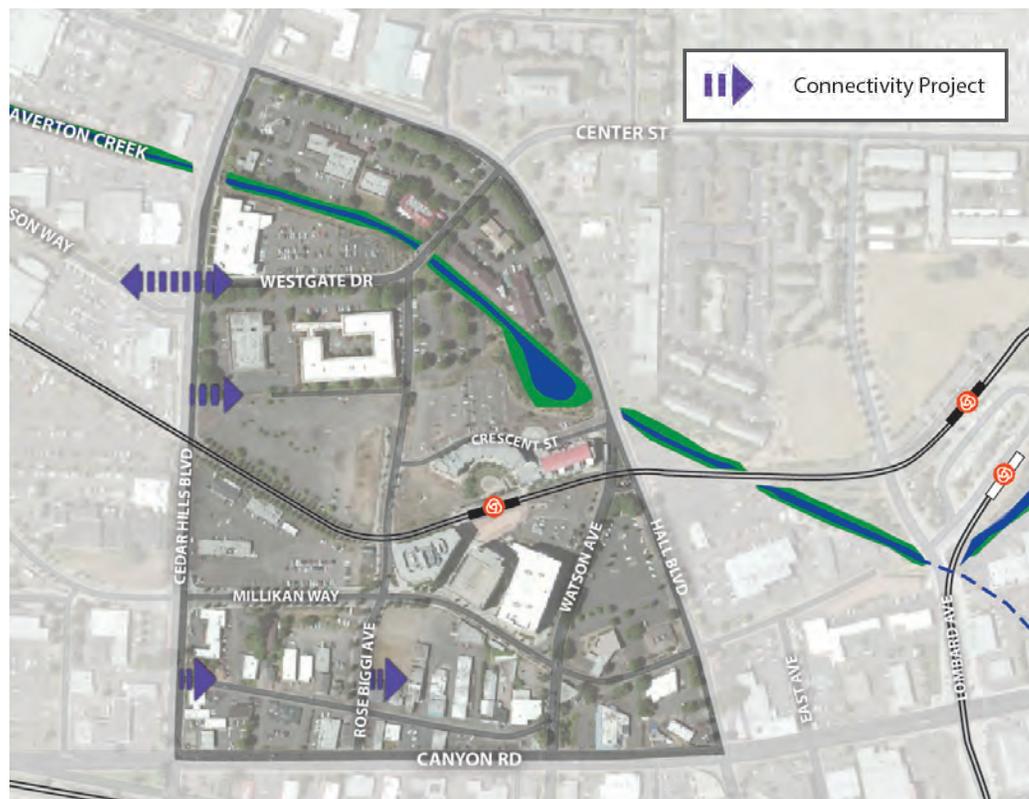
Solution 2.1.3: Expand the street network with new streets, connections and access points for all users.

The City should expand the street network in the District using recommendations included in Figure 16. These projects that will create a more complete and quality street network with short blocks. Expanding the street grid with new streets will fundamentally improve

access to and within the District, improving mobility no matter how a person chooses to travel. Although some of these projects can be initiated in the near term, the realignment of Beaverdam Road would only occur with private redevelopment of Beaverdam parcels.

See Project Sheets A.4 & A.5 for actions related to this solution. For detailed information, see "District Transportation Plan", and "Mobility Audit" documents in Volume 2.

Figure 16: Proposed New Creekside Connections



Solution 2.1.4: Implement the Canyon Road Safety and Complete Corridor project.

The Canyon Road project seeks to and addresses issues such as safety, access and streetscape appearance, as well as to facilitate downtown economic revitalization and redevelopment. The City has secured funding for Phase 1 of the project, which will upgrade intersections and pedestrian crossings, and replace a narrow pedestrian bridge over Beaverdam Creek. Regional Flexible Funds in the amount of \$3.535 million have been obtained for this project and are expected to become available in fiscal year 2015-16.

The second phase of the project, for which funding has not yet been secured, will add safety improvements, such as a vegetated median, a vegetated buffer between the (reconstructed) sidewalk and road, underground utilities, street trees, lighting and stormwater treatment facilities.

As of the writing of this plan, the City has completed 30% engineering drawings for the entirety of the Canyon Road project. Next

steps include securing design exceptions in coordination with ODOT and the continued pursuit of construction funding for the second phase.

Phase 3 of the Canyon Road project, which would occur only in conjunction with private redevelopment of adjacent parcels, includes the widening of sidewalk space and eventual addition of a separated bicycle facility (i.e. cycle track) behind the curb. This additional pedestrian (and eventual bicycle facility) space will be dedicated with the redevelopment of properties along Canyon Road. The City will need to amend policy and Development Code to require this dedication.

The improvement of safety and traffic operations on Canyon Road also depends on implementation of an access management strategy. Elements of that strategy include reducing the number turning conflicts through consolidation of driveways and the use of side streets. The City should develop the access management strategy, in coordination with ODOT and property owners, and amend City codes and policies to implement it.

See Project Sheets A.7, C.1 & C.2 for actions related to this solution. For detailed information, see "District Transportation Plan", and "Mobility Audit" documents in Volume 2.

Figure 17: Parallel Bikeways: Millikan and Broadway

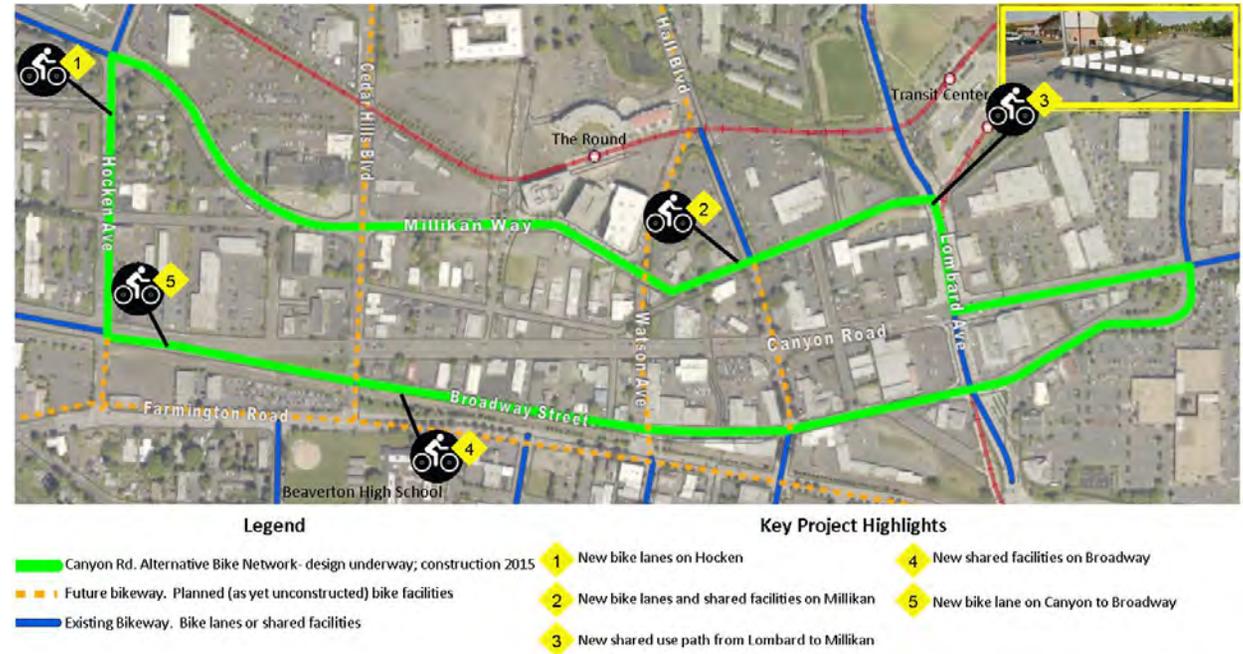
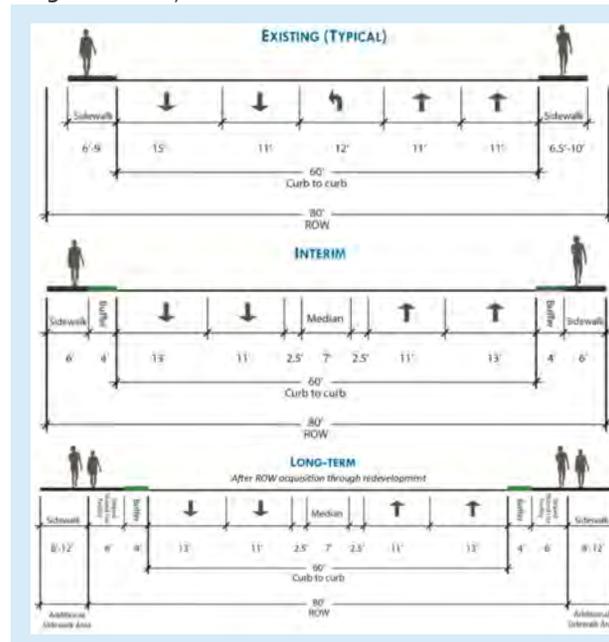


Figure 18: Canyon Road Cross Sections



Canyon Road Improvement Phases

Today, Canyon Road consists of an 80-foot right-of-way, with curb-tight sidewalks, no bicycle facilities and a continuous center turn lane.

The interim improvements, which could be accomplished with small amounts of right-of-way acquisition, include a planted sidewalk buffer and center-lane medians to reduce vehicle turning conflicts. Parallel bikeways are currently under design for Millikan Way and Broadway Street.

The long-term improvements include acquisition of additional right-of-way, in conjunction with redevelopment, to provide widened sidewalks, and eventually, a separated bicycle facility behind the curb.

Objective 2.2: Beaverton's Creeks are made a part of the District's urban and transportation fabric.

Solution 2.2.1: Design and build the Crescent Connection multi-use path to serve community connectivity and access needs.

Though at the time of this writing the exact alignment of the Crescent Connection has yet to be determined, it would generally run parallel to Beaverton Creek from the

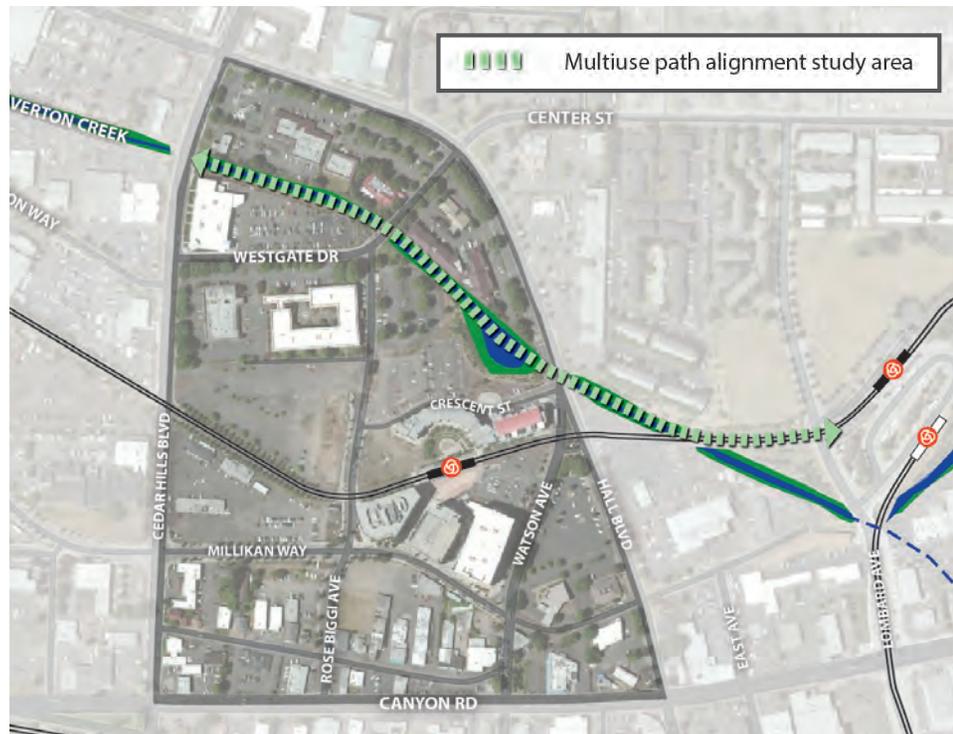
Beaverton Transit Center to the western side of Cedar Hills Boulevard. The City, working with the THPRD, should make it a priority to align the Crescent Connection with the District's need for an east-west path for pedestrians and cyclists.

A multi-use path through the District will contribute significantly to the overall accessibility and connectivity of the District, providing access to destinations and venues within the District and links to City and

regional trails. In addition, a multi-use path would contribute to other quality of life factors that walking and biking offer such as relaxation and exercise. A new multi-use path will improve accessibility and connectivity by:

- Increasing opportunities for active transportation.
- Providing access to destinations and venues within the District.
- Provide signage that helps people reach their destination.

Figure 18: Crescent Connection Path Study Area



General principles the City should use to select a path alignment through the District:

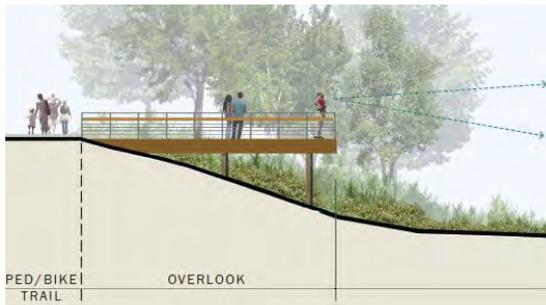
- Ensure the most direct route as possible;
- Minimize motorized traffic conflicts, including unsignalized intersections and driveway accesses;
- Crossings should provide safe sightlines for motorists and people using the path;
- Limit using sidewalk space on existing sidewalks with limited pedestrian capacity;
- Limit use of streets wherever possible; and
- Minimize damage to existing and enhanced riparian areas.

See Project Sheet C.8 for actions related to this solution.

Solution 2.2.2: Provide visual access to creeks from existing paths and trails, and those created with new development using overlooks and markers.

A series of overlooks and markers should be located at current creek crossings to offer residents and visitors the ability to view and connect with the creeks.

As ecologically sensitive areas, the creeks and vegetated corridor should be protected from physical access (which can damage plants and cause erosion), but the public should still be able to see and appreciate the creeks.



Overlooks should be designed to provide views, but not necessarily access to the creeks.

Additional overlooks could be placed at creek crossings and along new paths. Overlooks should be located within the greenway near the creek banks to provide places to enjoy the creek and wildlife habitat, reinforcing visual

access and community connection to the creeks.

See Project Sheet C.8 for actions related to this solution. For detailed information, see "Streetscape Guidelines" document in Volume 2.

Objective 2.3: A District-wide parking strategy supports compact development and ensures adequate parking availability for a mix of uses.

Solution 2.3.1: Revise Development Code parking regulations for the District to support desired urban form and development feasibility.

The City should revise the Development Code to reduce on-site parking requirements from a peak demand standard to an average daily demand standard in the off-peak hour.

On-street parking should be prioritized for short-term visitor and customer use through timed limits and parking enforcement.

Off-street parking exerts a major influence on urban form – therefore parking supply and demand management, as well as parking location, are major challenges in a transit-oriented center. Providing sufficient

surface parking for peak demand takes up a considerable amount of space, reducing potential return on investment and disrupting compact, walkable urban form.

To mitigate these impacts, a more balanced approach is used by most downtown and main street districts across the country providing a limited number of convenient, short-term parking spaces on-site and offering a larger pool of shared parking spaces a short distance away. In this way, peak demand for one use ideally coincides with a low demand time for another use. Thus, fewer overall spaces are needed to meet district-wide demand.

See Project Sheet B.5 for actions related to this solution. For detailed information, see "Parking Strategy Recommendations" document in Volume 2.

Solution 2.3.2: Provide consolidated district parking facilities to support desired urban form and development feasibility.

The City should provide consolidated parking access for new development in a set of strategically located District parking facilities owned or controlled by the City. This will not preclude the development or use of private parking facilities; the City's role should be to lead the establishment of a shared parking system in the District.

District parking facilities can reduce the amount of land devoted to parking which supports goals for a walkable and pedestrian-friendly environment. The location of the facilities should be coordinated in a hub-and-spoke format that purposefully sites the facility to serve multiple uses and/or buildings within a reasonable distance.

City leadership and oversight will be required to transition parking in the District from low-density surface parking to a more dense urban form of parking (i.e. parking structures). However, parking management in the District will require funding that exceeds current resources. The City needs to consider new funding mechanisms to cover costs associated with the provision of shared parking.

Funding sources will be needed for both the capital cost of developing parking facilities, and the ongoing maintenance and operations. It is unlikely that any single source of funding will be adequate for these costs and ongoing expenses, but the City has several options for “seeding” a parking capital fund, which may then be leveraged with funds from a private developer.

Funding options include:

- Dedicating a small share of the City’s

total Capital Improvement budget to a parking facility fund.

- Establishing a parking fee-in-lieu program, whereby developers can purchase access rights to an existing or future parking facility at rates substantially less than the cost of constructing their own parking.
- Exploring, with local property owners, the creation of a Local Improvement District for parking.
- The strategic acquisition and contribution of land for parking facilities.

Operation funds for District parking facilities may include revenues from parking citations, monthly or annual parking access permits from District users and, eventually, paid on-street parking.

See Project Sheet A.3 for actions related to this solution. For detailed information, see “Parking Strategy Recommendations” document in Volume 2.



Credit: Jacqueline Poggi



Credit: Jacqueline Poggi

Parking Structures as Urban Design

Parking can be a great amenity to increase development feasibility, especially when parking requirements can be partially or wholly met via a public garage. There are a number of factors to consider when locating shared parking facilities, including:

- Impacts to the pedestrian environment
- Relationship to primary uses (buildings)
- Visibility from high volume streets
- Influence on District design character

In Miami Beach, the parking structure at 1111 Lincoln Road (shown above) redefines the traditional garage by doubling as an event space that can be rented for weddings, art galleries, and other functions.



Credit: Chris Goldberg

This page intentionally left blank.

Goal Three:

The Downtown creeks are a beautiful destination and focal point for people who live, work and visit the District.

Objective 3.1: The District is a steward of sustainable development and stormwater management.

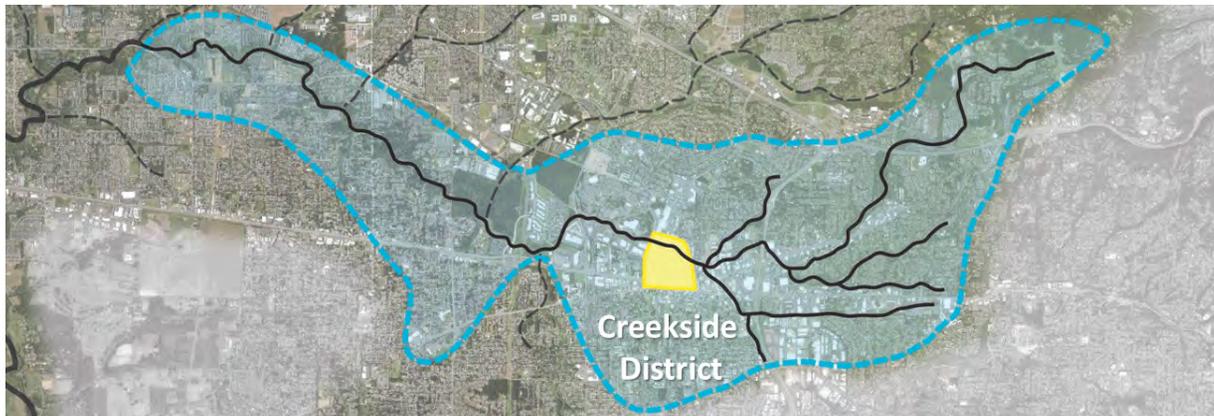
Solution 3.1.1: Require new development to incorporate on-site stormwater treatment facilities located to maximize benefits to the Downtown creek system.

As new development occurs in the District and roads are improved, the City should require both public and private projects to use the latest sustainable low-impact development approaches (LIDA) building techniques when feasible.

The easiest way to manage urban stormwater runoff is to capture and disperse it onsite throughout the urban landscape before it

is discharged into the City's storm sewer system. LIDA provide these kinds of onsite solutions and are a key component of the stormwater management solutions for the District. LIDA facilities also serve as multi-purpose amenities. Techniques such as sidewalk planters and swales can be integrated with the landscape to beautify and green the environment, as well as assist with water quality improvements.

Figure 19: The Creekside District Watershed



The District is part of the large regional Tualatin River watershed.



Credit: Phillip Jeffrey

Onsite stormwater cleaning measures are most important for properties with their own outfalls, where stormwater directly enters the creek system. These properties should be encouraged to configure the site so the LIDA facilities are located parallel and adjacent to the vegetated corridor.

LIDA examples include:

- Porous pavement
- Green roof
- Rain garden
- Flow-through planter
- Vegetated swale
- Vegetated filter strip
- Extended dry basin
- Constructed wetland
- Conveyance and stormwater art

- Planting design and habitat

See Project Sheet B.4 for actions related to this solution.

Solution 3.1.2: Build regional stormwater treatment facilities.

A number of locations for large-scale stormwater facilities were studied for this plan. The purpose of these facilities is to treat currently untreated water that flows from nearby and distant neighborhoods into the District and the Downtown creeks system.

There are two major design options for stormwater treatment facilities: above-ground naturalistic (i.e. planted swales) and below ground engineered facilities (i.e. filter

vaults). Naturalistic facilities can provide attractive landscape features in urban areas as well as habitat for wildlife, but they can take up large expanses of land. Filter vaults are designed to blend in with other utilities and infrastructure, and take up significantly less space.

A large regional stormwater swale facility will compete for land needed for housing, employment and other uses in the 50-acre Creekside District. If the City chooses to construct such a facility, it should incorporate landscape and/or plaza design elements, so it may also serve as an urban amenity.

See pages 74-75 for actions related to this solution. For detailed information, see "Stormwater Master Plan" document in Volume 2.



Credit: Graham Ballantyne

Tanner Springs Park in Portland is a good example of a large urban regional stormwater facility also serving as an urban amenity.

Objective 3.2: Ecosystem improvements increase health and beauty of the Downtown creek system.

Solution 3.2.1: Develop public and private programs designed to clean and restore the Downtown creeks and stream bank areas.

As creek-adjacent properties begin to redevelop in the District, vegetated corridors will be enhanced, making the physical creek environment healthier for aquatic life and more attractive. However, instead of relying on property by property redevelopment to trigger creek improvements, the City could play an active role in cleanup and enhancement. By working with CWS, property owners and other stakeholders, the City can help restore degraded portions of the creek and its banks in the near term.

The program should be structured to provide education and assistance to property owners in direct coordination with partner

agencies including CWS and the Tualatin River Watershed Council. Both of these agencies have strong, well-established volunteer resources for riparian rehabilitation and invasive plan removal.

See Project Sheet B.6 for actions related to this solution. For detailed information, see "Stormwater Master Plan" document in Volume 2.

Solution 3.2.2: Provide incentives to daylight Beaverton Creek.

The City should amend its Comprehensive Plan and regulatory code to prevent any further piping of Downtown creeks, and work with property owners to return sections of the creeks that are currently paved or piped to a more natural, above-ground condition.

Conditions under which the City should consider the daylighting of piped creeks include:

- The proposed redevelopment of property with piped creeks.
- The anticipated or actual failure of a creek

pipe facility.

- Opportunity sites where daylighting can be incorporated into flood control and stormwater management projects.
- The creation of a public park, plaza or open space in the vicinity of a piped section of creek.

For private property owners who wish to daylight the creek and restore its natural function, the City, CWS or BURA should provide assistance to make the process more feasible including financial incentives and technical assistance to meet regulatory requirements.

See Project Sheet B.4 for actions related to this solution. For detailed information, see "Stormwater Master Plan" document in Volume 2.

What is daylighting?

Daylighting segments of the creek means reintroducing a more natural, above ground channel and is accompanied by restoration of the stream bank and vegetated corridor. Daylighting also provides opportunities for community building, a renewed connection to nature in the city, more visual access to the creeks, and raises awareness of this natural amenity and encourages environmental stewardship.

Measured by length, nearly a third of the creeks in Downtown Beaverton are piped and paved over, which has major negative impacts on the health of the creek environment.



Seattle's Thornton Creek headwaters reestablishment project was located in the most developed corner of the watershed. Although initially contentious, it led to a successful community process and facilitated a major private redevelopment with 530 housing units and 50,000 sq. ft. of commercial space, as well as plantings, walkways and public art.

This page intentionally left blank.

Chapter 5:

Implementation Strategy *for the Creekside District*

PURPOSE

This chapter describes the steps that the City and its partners will take to achieve the vision for the Creekside District. Based on the objectives outlined in Chapter 4, this section establishes a framework for investments in public improvements that can be coordinated with private investments to catalyze development and enhance the quality of the Creekside District. It also describes the near-term priority projects that will be undertaken. The goal of these public investments and updated policies is to spur new private development that aligns with the community's vision for the area.

PHASING STRATEGY

The City will not implement all of the improvements in the District at once; limited resources and private market barriers require prioritization and phasing over time. Phasing infill redevelopment is more complicated than phasing greenfield development because existing development patterns and the infrastructure already in place must be retrofitted for more urban development forms. While the City and Metro control one well-located and large parcel at the heart of the District (the Westgate site), other private investments are dependent upon actions of other private property owners. The *Master Plan* recognizes these contingencies, and prioritizes and categorizes actions in the District accordingly.

Figure 20 and Figure 21 provide an overview of the approach to phasing, organizing project implementation to focus activity in the near-term on: (1) revitalization of the core of the District (the publicly-owned Westgate site and properties at The Round); and (2) setting the stage for revitalization of the remainder of the District with policy and code updates as well as studies to determine future infrastructure needs. The investments were identified and prioritized in a process that involved research, analysis and stakeholder input. The projects are organized into three categories:

Catalytic Projects/Policies ("Do Now"):

A. Core Area Investments: Projects on Westgate and Round properties that (1) create developable parcels (road access or parking structures to allow development of surface parking) or (2) create amenities (plazas and creek restoration) and value for all residents and help to improve development feasibility. The City/BURA needs to take a leadership role and should move projects forward in early phases with public dollars.

B. District-wide Policies: New programs and policies that lay the groundwork for future public-private partnerships in the entire District, including new incentive toolkits,

Development Code amendments and creek restoration programs.

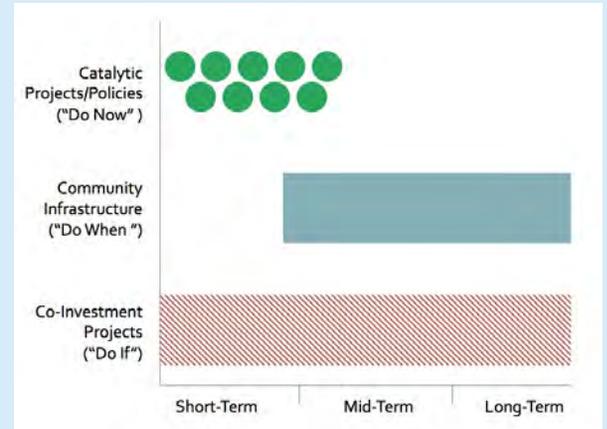
Community Infrastructure Projects ("Do When"):

Located in or near the Creekside District, these improvements benefit all residents and employees in the City who move through the District. These projects should be funded regardless of Creekside District redevelopment, and primarily with public money (including regional, state, and federal dollars). Examples include the Broadway/ Millikan bikeway improvements and creek conveyance improvements.

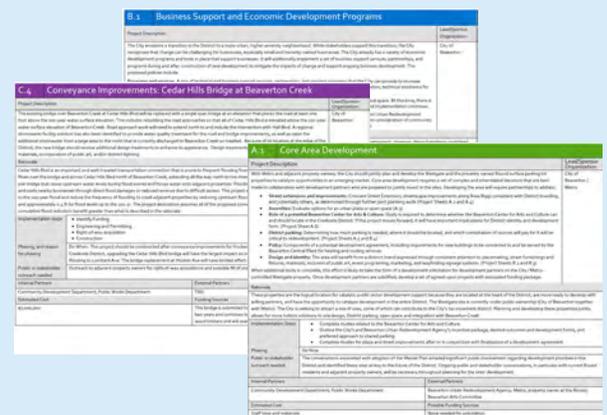
Co-investment Projects ("Do If"):

Infrastructure projects that are directly tied to redevelopment on private properties. These projects are contingent upon partnerships with willing property owners and developers to move forward, usually through negotiated development agreements or the use of tax increment finance dollars. The City/BURA needs a set of goals, project types and criteria to guide negotiations with developers. Examples include: assistance with structural engineering to address soils constraints in new District Vision-aligned buildings; and assistance with fill to address flooding.

Figure 20: Project Categories Timeline

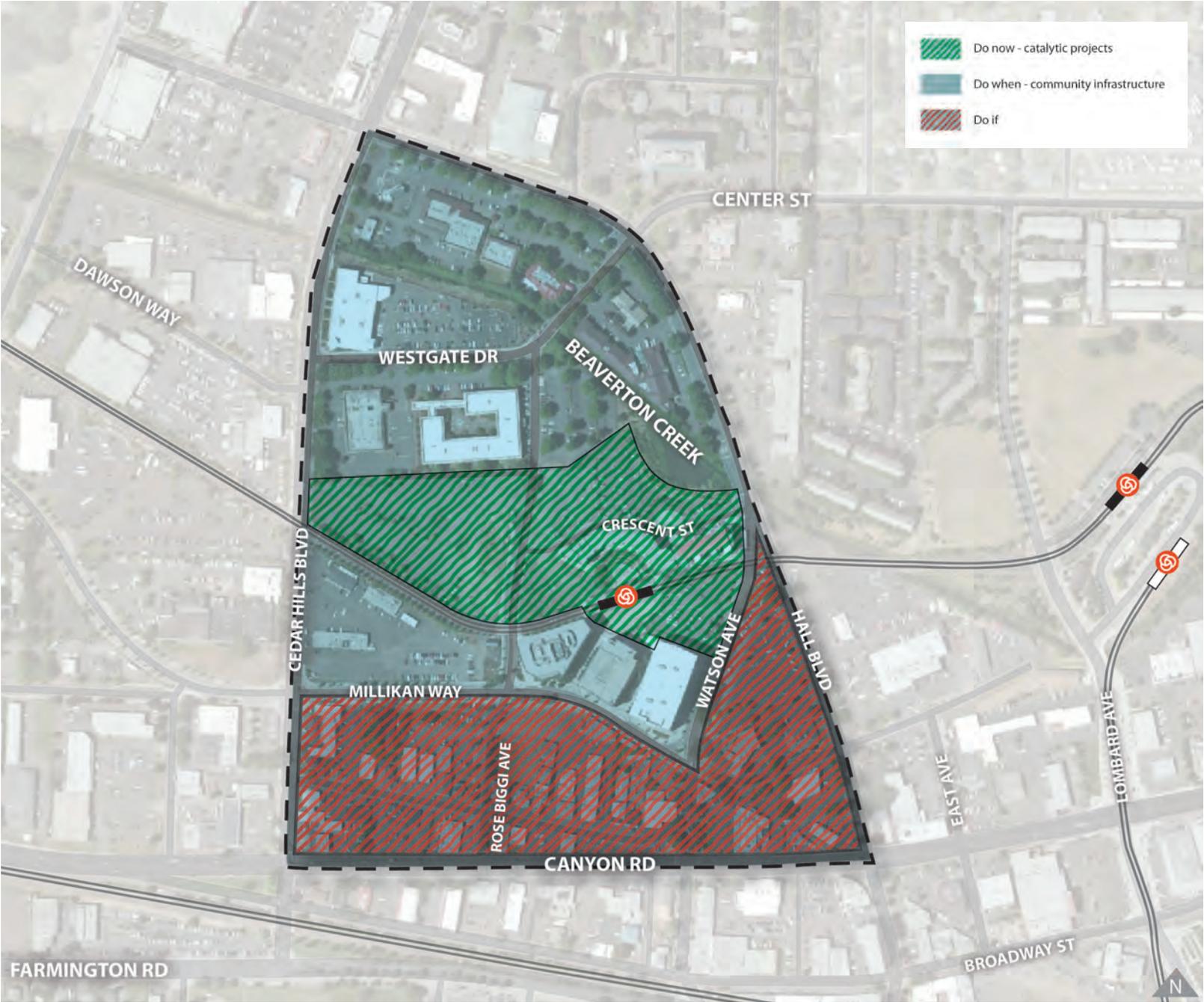


The Project Categories Timeline shows the general sequence for the implementation of projects in the three categories. Catalytic projects and policies are implemented first, in the near-term. Community infrastructure projects occur in the medium to long-term as funding becomes available. Co-investment projects happen as opportunities for partnerships arise, and have no set timeline.



Project Sheets, which provide additional detail on each implementation action item, color coded by Category, begin on page 76.

Figure 21: Creekside Phasing Diagram



This diagram shows the geographic focus for projects in the three categories. Catalytic projects are focused in the core area. Community Infrastructure projects are located throughout the district and overlap with the other two categories and have no set timeline. Co-investment projects hinge on the ability for the City to partner with property owners or developers in area near Beaverdam and Hall/Watson.

CATALYTIC PROJECTS AND POLICIES (“DO NOW”)

Core Area Investments for Short-Term Implementation

The City of Beaverton and Metro jointly own a large, strategically important parcel referred to as the Westgate site. It is adjacent to several privately-owned vacant or underutilized parcels near The Round. *The Creekside District Master Plan* identifies these properties as the best place to catalyze the transformation of the District because they are located at the heart of the District, are more ready to develop with willing partners and partial public control, and have the opportunity to catalyze development in the entire District.

The core area’s development requires a set of complex and interrelated decisions that are best made in collaboration with development partners who are prepared to jointly invest in the sites. As such, the City should put forward a solicitation that clarifies desired public outcomes for the area and creates a vehicle through which key infrastructure and open space projects in the area can be jointly planned and funded. These projects will address current infrastructure deficiencies in the area and contribute to a unique sense of identity and place.

Recommendations on core area development build the output of a series of conversations with core area property owners and stakeholders. In August 2014, the City of Beaverton convened a group of property owners and stakeholders to discuss urban design considerations. The group participated in two workshop sessions, designed to lead to recommendations to Council regarding the preferred mix of uses for the properties and the factors Council should consider when making public investments in the District.

The group recommended that the core redevelop as a civic destination that might include a performing arts and cultural center and a District-serving parking facility in the early phases of redevelopment. Apart from civic uses, the group felt that the area should include a range of urban uses (residential, office, retail) appropriate for a transit-oriented neighborhood, with high

quality design and pedestrian orientation.

The decisions will hinge on the type of development proposed and the interests of all partners who come to the table as development negotiations proceed. As a starting place for these discussions, Figure 23 outlines key infrastructure improvements

Figure 22: Core Area Investment Map (“Do Now”)

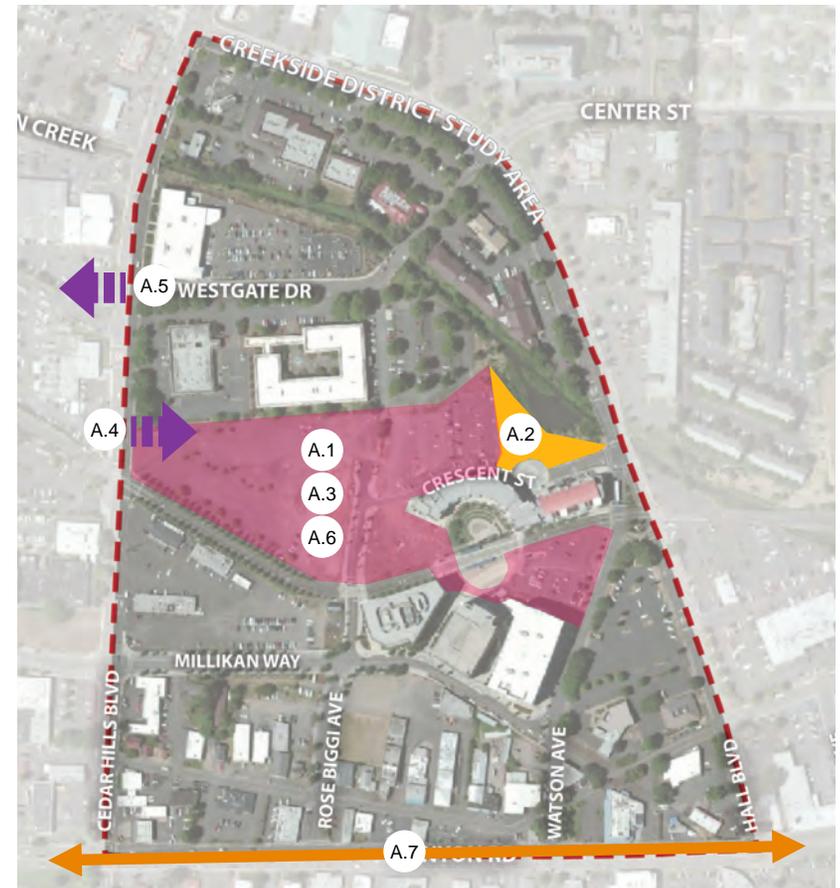


Figure 23: Core Area Investments

#	Project	Description	Lead	Potential Funding Sources	Estimated Cost
A.1	Core Area Development	With adjacent property owners, the City should jointly plan and develop the Westgate and the privately owned Round surface parking lot properties to catalyze opportunities in an emerging market.	Beaverton/ Metro	None for solicitation	Staff time and materials
A.2	Creekside Plaza Study	Planning, design and construction of an open space plaza adjacent to and overlooking Beaverton Creek. Precise location, size and configuration of plaza to be studied and will be determined through potential partnerships.	Beaverton	Utility surcharge revenues, partnerships with THPRD and CWS, private contributions, General Fund	\$1,000,000
A.3	District Parking Facility with Partial City-ownership	City commits to becoming an active owner and manager of a consolidated supply of "District-based shared parking." The City would strategically provide and manage parking both on- and off-street to support redevelopment. In some cases, this may be in partnership with private developers or property owners.	Beaverton	Many (see Project Sheet)	\$10,000,000
A.4	Core Area Street Connections and Pedestrian Enhancements	In coordination with new development, design and build key connections and pedestrian enhancements that will be critical to the development of a functioning Creekside core. Design and construction funding for these facilities will hinge upon a development agreement and cost sharing agreements with partners.	Beaverton	TDT, TIF, LIDs, revenue bonds, private contributions through development agreements, General Fund	TBD
A.5	Dawson Way / Westgate Drive Realignment	Align the offset intersections of Dawson Way and Westgate Drive at Cedar Hills Blvd to create a four-way signalized intersection.	Beaverton	General Fund, TDT, County, state or federal funds (may require application)	\$2,530,000
A.6	Beaverton Center for Arts and Culture Studies	Continue the Beaverton Arts Commission studies to evaluate the feasibility of partnering to develop and operate a performing and cultural arts center, including consideration of sites in the Creekside District.	Beaverton	<i>Capital:</i> Foundation and private donations, general obligation bond, other revenue bonds <i>Operating:</i> Endowment, ticket sales and revenues	TBD
A.7	Canyon Road Phase 1: Safety and Intersection Improvements	Phase 1 of the Canyon Road project will address serious safety, connectivity, accessibility, and water quality concerns between SW Hocken Ave and SW 117th Ave. It will upgrade key intersections to improve safety for all users; construct stormwater facilities; upgrade lighting and pedestrian infrastructure; and widen the current 3' wide sidewalk over the Beaverton Creek bridge. In November 2013 the City received approval of \$3.535 million in Federal aid through the MTIP.	Beaverton	<i>Planning and Design:</i> HUD Sustainable Communities Challenge Grant, MTIP, City of Beaverton; <i>Construction:</i> MTIP	\$3,940,000

identified in the *Master Plan*, which include civic uses that can catalyze development, public gathering spaces, a shared parking facility, streetscape enhancements, and pedestrian access to light rail.

Core Investment Area: Westgate Catalyst Site and The Round Development

This area includes the intersection of Rose Biggi Avenue and Crescent Street and four catalyst development sites on each corner. It is the nexus of pedestrian east/west travel through the District. The area is a convenient location for a shared parking facility that can serve the central portion of the Creekside District.

Objectives for the Core Area:

- Facilitate the development of high quality, sustainability focused, transit oriented development on the Westgate site.
- Create a civic-oriented destination area with a mix of uses.
- Improve mobility for cars, bicycles, and pedestrians through the creation of a street grid.
- Add parking for the District.
- Create amenities including open space, public art, and gathering spaces.

- Expand the District heating/cooling utility (Beaverton Central Plant).
- Improve pedestrian access to light rail.
- Improve visual access to creeks; enhanced habitat and vegetation.
- Visible, attractive water quality facilities (green streets, swales, etc).

District-Wide Policies and Programs

In addition to upfront infrastructure and other projects in the core of the District, the City should also take steps to prepare for redevelopment in other parts of the District. This entails aligning its code to the vision for the District as a whole, and assembling and implementing a toolkit of incentives and programs for potential development partners. The City should also conduct studies on potential transportation improvements that can improve access and enhance pedestrian amenities within the District. Figure 24 provides an overview of the proposed programs and policies that the City should address immediately.

Figure 24: Proposed Policies or Programs to Prepare for District-Wide Investments

#	Project	Description	Lead	Potential Funding Sources	Estimated Cost
B.1	Vegetated Corridor Programs	In coordination with Clean Water Services (CWS), the City has developed a process to manage the Vegetated Corridor at the District level, which eliminates several steps for Creekside property owners seeking a Service Provider Letter (SPL) for development. This process will need to be finalized and implemented as a program available to District property owners and developers.	Beaverton	<i>Program Creation:</i> HUD Sustainable Communities Challenge Grant <i>Program Expansion (optional):</i> General Fund.	Staff time and materials; Additional funds for mapping and delineation (approx. \$25,000 to \$50,000) will be needed if the program is expanded
B.2	Business Support and Economic Development Programs	Help mitigate any negative effects of new development by developing a set of business support services, partnerships, and ongoing programs during and after construction of new development.	Beaverton	General Fund, possible grant funding (may require application)	TBD
B.3	Code Amendments: Streetscape	Create streetscape design standards and guidelines for Creekside that will be adopted into code.	Beaverton	General Fund	Consultant/ staff costs
B.4	Code Amendments: Urban Design	Create urban design standards and guidelines for the District that will be adopted into code.	Beaverton	General Fund	Consultant/ staff costs
B.5	Code Amendments: Parking	Revise existing Development Code off-street parking regulations.	Beaverton	General Fund	Consultant/ staff costs
B.6	Creek Restoration Programs and FEMA Regulations	Restore the riparian corridors in the District along Hall, Beaverton and Wessenger creeks. This is a program to conduct initial clean-up activities, remove invasive species, replant selected areas with native species, and monitor/maintain the improvements. The City should consider leading the effort with volunteers providing labor, materials, and other support. The City should also closely monitor and help shape regulatory changes resulting from the NMFS and FEMA consultation regarding the Endangered Species Act.	Beaverton	General Fund, Metro, CWS, private donations, service organizations/non-profits, Congressional delegation.	Staff time and materials
B.7	Creekside Investment Team and Funding Tools	The City should convene an Investment Team to move forward major action steps that is representative of the financial and social investors in the area. This group should identify infrastructure funding sources for the Creekside area	Beaverton	City of Beaverton	Staff time and materials
B.8	Transportation Studies	Study improvements for feasibility and costs: Hall/Watson Bike Lanes, Pedestrian/Bicycle Connection to Old Town, Crescent Connection, Millikan Extension.	Beaverton	General Fund	Consultant/ staff costs

COMMUNITY INVESTMENT PROJECTS (“DO WHEN”)

These projects help to support the long-term quality of life in the larger downtown area. Their primary function is not to support District redevelopment directly, but rather to improve City-service systems that are located in the District. These projects enhance the experience for bicyclists and pedestrians, enhance connectivity with other districts by completing or realigning a street grid, and improve the conveyance of Beaverton Creek to reduce the risk of nuisance flooding. They are phased as “do when” projects because they are anticipated to be completed largely through the City’s capital improvements program and as funding becomes available.

This list, shown in Figures 25 and 26, should be revisited regularly during ongoing implementation efforts.

Figure 25: Community Infrastructure Projects (“Do When”). Numbers refer to Project Sheet.



Figure 26: “Do When” Community Infrastructure Projects

#	Project	Description	Lead	Potential Funding Sources	Estimated Cost
C.1	Millikan and Broadway Street Bikeways	Various bike and sidewalk improvements on Millikan Way (Hocken Ave to Lombard Ave), Hocken Ave (Millikan Way to Canyon Rd), and Broadway (Canyon Rd to 117th Ave).	Beaverton	General Fund	\$541,000
C.2	Canyon Road Phase 2: Streetscape Improvements	Enhance pedestrian accessibility by upgrading all street crossings to current ADA requirements, improve truck mobility by enlarging curb returns, and enhance street appearance by undergrounding overhead utilities and install access control via landscaped medians and provide landscape strips for street trees and furnishings. Stormwater runoff will be treated to improve water quality with surface facilities and mechanical methods.	Beaverton	City of Beaverton, Oregon Department of Transportation, state and federal funds (application may be required), MTIP	\$15,500,000
C.3	Direct Pedestrian and Bicycle Connection to Old Town	Pending the results of feasibility study, design and construct an additional pedestrian and bicycle connection to provide a safe and convenient route from the Creekside District core to Farmington Road, Old Town and Beaverton High School.	Beaverton	City of Beaverton	TBD
C.4	Conveyance Improvements: Cedar Hills Bridge at Beaverton Creek	The existing bridge over Beaverton Creek at Cedar Hills Blvd will be replaced with a single span bridge at an elevation that places the road at least one foot above the 100-year water surface elevation.	Beaverton	City of Beaverton, Oregon Department of Transportation (application may be required)	\$7,000,000
C.5	Conveyance Improvements: Light Rail and 141st Ave Culverts (not shown on map)	<p><i>Light Rail Culverts:</i> The existing light rail culvert crossing over Beaverton Creek, located upstream of Murray Blvd, will be upgraded to provide additional capacity to pass flood waters. This could be accomplished through installation of two additional 6.5-foot diameter culverts or through replacement of all culverts with a bridge. Improvements to the hydraulic efficiency of the culvert inlet and outlet are believed to aid in the overall flood reduction benefits and/or reliability of the culvert hydraulic performance.</p> <p><i>141st Ave Culverts:</i> The existing 141st Ave crossing over Beaverton Creek will be upgraded by replacing the culverts with a bridge that will clear the 10-yr flood event, and not overtop until a flood event greater than the 50-yr event.</p>	Beaverton	TBD	<p><i>Light Rail Culverts:</i> \$1,000,000</p> <p><i>141st Ave Culverts:</i> \$2,700,000</p>

Figure 26: “Do When” Community Infrastructure Projects (Continued)

#	Project	Description	Lead	Potential Funding Sources	Estimated Cost
C.6	Conveyance Improvements: Hocken Bridge at Beaverton Creek (not shown on map)	Replace two 84-inch culverts with a 61-foot long by 60-foot wide concrete slab bridge over Beaverton Creek and improve 875 feet of Hocken Ave to collector street standards between Hall Blvd and the Light Rail Tracks.	Beaverton	City of Beaverton, TIF Fund, IGA w/ CWS, Economic Development Administration (EDA)	\$2,750,000
C.7	Conveyance Improvements: Beaverton Creek from Lombard Ave to Cedar Hills Blvd	Increase conveyance capacity of Beaverton Creek from Lombard Ave to Cedar Hills Blvd by widening the channel, creating a ~20ft bench 6-inches above the ordinary high-water elevation while maintaining the existing channel to provide a low flow channel.	Beaverton	TBD	\$400,000
C.8	Crescent Connection Multiuse Path	This project is to construct a 2,690 foot creek-adjacent and on-street shared-use path from the Beaverton Central MAX Station at Lombard Ave to Cedar Hills Blvd, as identified in the Beaverton Comprehensive Plan.	Beaverton, State of Oregon	City of Beaverton, Oregon Department of Transportation, MTIP, state and federal funds (may require application), Metro Nature in Neighborhoods	\$1,900,000
C.9	Millikan Way Pedestrian Enhancements	Fill sidewalk gaps and improve substandard sections of Millikan Way from Watson Avenue to Hall Boulevard to improve pedestrian safety and walkability. Also identify and implement crossing improvements at key locations, including Rose Biggi Ave, Hall Blvd, and Watson Ave.	Beaverton	General Fund	TBD

CO-INVESTMENT PROJECTS (“DO IF”)

To accommodate a more urban form, the Creekside District’s existing development and infrastructure must be retrofitted. While the City can control the timing of investments in publicly-controlled infrastructure, its ability to influence development on private property is limited. In some cases, the City’s ability to invest in infrastructure and other improvements is triggered by decisions from private properties owners to redevelop their properties. When City investments are contingent upon the actions of District property owners and/or developers, those investments are categorized as “co-investment projects,” that the City will only “do if” a development partner comes forward.

These projects are not yet fully described and detailed, because specifics of the projects will be determined in partnership with the property owners and/or developers when projects are ripe. Timing for the investments is not currently known. Nonetheless, they are important projects that will play a role in creating the vibrant urban neighborhood envisioned for the District. The “Do If” projects are located in the area South of Millikan, in two areas: the area around Beaverdam Road, and the Hall / Watson Triangle.

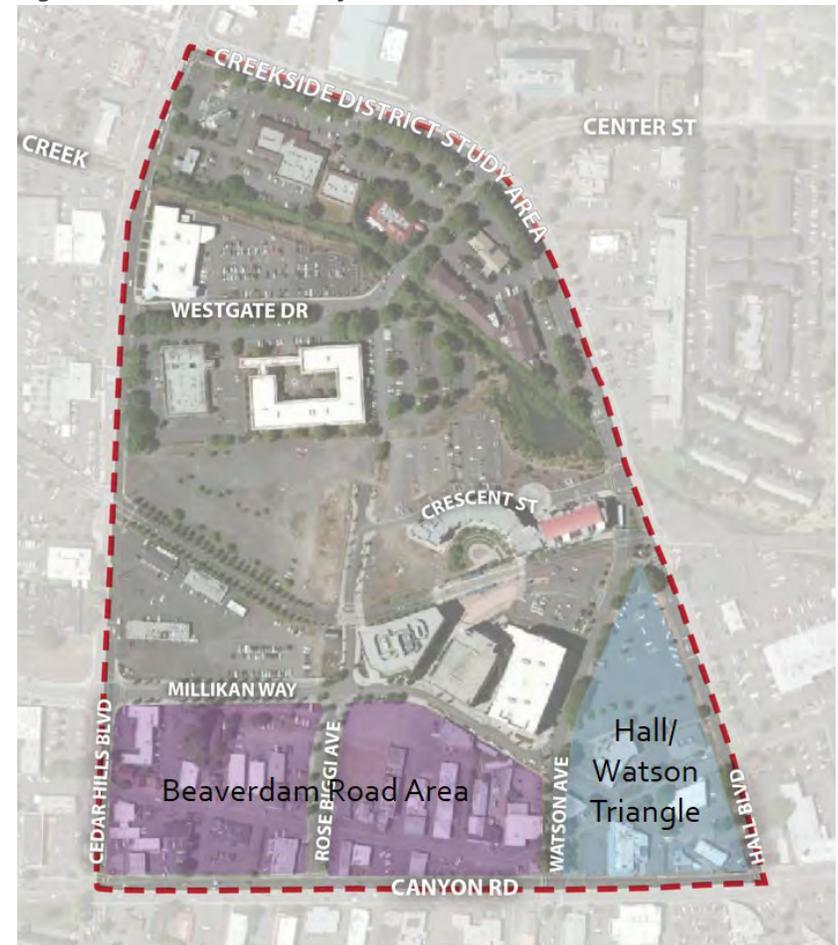
Area 1: Beaverdam Road Area

The Beaverdam Road area (between Cedar Hills Blvd and Watson Ave) contains a number of small, irregularly shaped parcels that currently house a range of small businesses, many of which are located in buildings that have outlasted their expected lifecycle. Beaverdam Road was originally designed as an alley without sidewalks, and cuts diagonally through parcels in a way that complicates auto, pedestrian, and bicycle mobility. The area is unlikely to receive substantial infrastructure improvements without private investment and redevelopment.

Should private development occur along Beaverdam Road, the street could be realigned and reconstructed in a manner that would allow for sidewalks, on-street parking, and the configuration of redevelopment parcels. However, the cost associated with relocating the road and all of the utilities under it is prohibitive

and would require the removal of existing, functional buildings and businesses. Until willing property owners agree to property consolidation that allows for the realignment of Beaverdam and the redevelopment of the area, the City should not alter the street beyond routine maintenance activities.

Figure 27: Co-Investment Projects (“Do If”)



Objectives for the Beaverdam Road area:

- Facilitate redevelopment near major planned investments on Canyon Road and create developable parcels.
- Improve mobility for cars, bicycles, and pedestrians through the creation of a street grid.
- Add parking for the District.
- Access consolidation along Canyon Road.
- Activate the streetscape on Canyon Road.
- Visible, attractive water quality facilities (green streets, swales, etc.).

“Gateway” development and features for the District.

Specific projects/improvements that could be made in the Beaverdam Road area, if private investment through parcel consolidation and development occurs:

1. Realignment of Beaverdam and improvement to full local street cross-section with sidewalks, on-street parking and consolidated property access. This may include an additional north / south connection between Rose Biggi and Watson, closure of the Short Street access point on Canyon Rd, and a partial vacation of the portion of Beaverdam Road that intersects with Canyon and Watson.

2. Strategic property acquisition and/or lot consolidation to incent and support redevelopment projects that contribute to District vitality.
3. Relocation of the utilities associated with Beaverdam realignment to match the new street location.
4. Gateway/public art, stormwater and landscape features to create a pedestrian environment and a contiguous District identity that extend beyond the core of the area.
5. Canyon Road, Cedar Hills Blvd, and Watson Ave pedestrian and bicycle improvements.
6. Rose Biggi Ave streetscape enhancements.
7. District shared parking facility (if needed).

Area 2: Hall / Watson Triangle

The area north of Canyon between Hall and Watson currently contains a number of small and irregularly-shaped parcels developed with existing businesses and surface parking. Millikan currently bisects this triangular piece of land in a way that is difficult to navigate. Beaverton’s Comprehensive Plan calls for the extension of Millikan Way from Watson Ave. to 114th Ave. Re-aligning and extending

Millikan would significantly improve mobility through the area, but will require partnerships with property owners to adjust right-of-way and improve access to development parcels. For these reasons, the Millikan realignment and extension should be considered in conjunction with the redevelopment of adjacent properties.

In 2015, the City will construct a bicycle/pedestrian connection to link Lombard and Millikan Way, providing direct access from the Beaverton Transit Center to the Creekside District. To serve these users, pedestrian improvements along Millikan Way that do not substantially impact existing properties should be implemented to serve new pedestrian and bike users.

Objectives for the Hall/Watson Triangle:

- Improve mobility for cars, bicycles, and pedestrians through the creation of a street grid
- Facilitate redevelopment near major planned investments on Canyon Rd and Millikan Way and create developable parcels
- Activate the streetscape on Canyon Road
- Visible, attractive water quality facilities (green streets, swales, etc.)

- “Gateway” development and features for the District

Specific projects / improvements that could be made in the Hall/Watson Triangle area, if private investment through parcel consolidation and development occurs:

1. Realignment of Millikan Way and improvement to Collector street standard
2. Installation of a Regional Stormwater Quality Facility (see inset to the right)
3. Strategic property acquisition and/or lot consolidation to incent and support redevelopment projects that contribute to District vitality
4. Canyon Road, Hall Blvd, Millikan Way, and Watson Ave pedestrian and bicycle improvements
5. District shared parking facility (if needed)

The following pages include detailed Project Sheets for each project in all three categories.

Regional Stormwater Facility

The Creekside District Master Plan effort analyzed stormwater management and identified several options for regional stormwater facility locations in the District. Specific siting of these facilities will need to be coordinated with redevelopment and/or public infrastructure projects as they occur. Regional stormwater facilities serve more than one property, as a result, they tend to be large enough that they can be designed as interesting and attractive public amenities. More information on the potential location & function of these facilities can be found in Volume 2 Appendix 8: Stormwater Master Plan.

A.1 Core Area Development

Project Description		Lead/Sponsor Organization
<p>With Metro and adjacent property owners, the City should jointly plan and develop the Westgate and privately owned Round surface parking lot properties to catalyze opportunities in an emerging market. Core area development requires a set of complex and interrelated decisions that are best made in collaboration with development partners who are prepared to jointly invest in the sites. Developing the area will require partnerships to address:</p> <ul style="list-style-type: none"> • Street extensions and improvements: Crescent Street extension; streetscape improvements along Rose Biggi consistent with District branding; and potentially others, as determined through further joint planning work (Project Sheets A.4 and A.5) • Amenities: Evaluate options for an urban plaza or open space (Project Sheet A.3) • Role of a potential Beaverton Center for Arts & Culture: Study is required to determine whether the Beaverton Center for Arts and Culture can and should locate in the Creekside District. If this project moves forward, it will have important implications for District identity and development form. (Project Sheet A.6) • District parking: Determining how much parking is needed, where it should be located, and which combination of sources will pay for it will be critical to redevelopment. (Project Sheets A.3 and B.5) • Policy: Components of a potential development agreement, including requirements for new buildings to be connected to and be served by the Beaverton Central Plant for heating and cooling services. • Design and identity: The area will benefit from a distinct brand expressed through consistent attention to placemaking, street furnishings and fixtures, materials, inclusion of public art, event programming, marketing, and wayfinding signage systems. (Project Sheets B.3 and B.4) <p>When additional study is complete, this effort is likely to take the form of a development solicitation for development partners on the City/Metro-controlled Westgate property. Once development partners are solidified, develop a set of agreed-upon projects with associated funding package.</p>		<p>City of Beaverton / Metro</p>
		Volume 2 Reference
		"Analysis of Opportunities and Barriers to Development"; "Core Area Focus Group Memo"; "Parking Strategy Rec."
Rationale		
<p>These properties are the logical location for catalytic public sector development support because they are located at the heart of the District, are more ready to develop with willing partners, and have the opportunity to catalyze development in the entire District. The Westgate site is currently under public ownership (City of Beaverton together with Metro). Planning and developing these properties jointly allows for more holistic solutions to site design, District parking, open space and integration with Beaverton Creek.</p>		
Implementation Steps	<ul style="list-style-type: none"> • Complete studies related to the Beaverton Center for Arts and Culture. • Outline the City's and Beaverton Urban Redevelopment Agency's incentive package, desired outcomes and development forms, and preferred approach to shared parking. • Complete studies for plaza and street improvements after or in conjunction with finalization of a development agreement. 	
Phasing	Do Now	
Public or stakeholder outreach needed	<p>The conversations associated with adoption of the Master Plan entailed significant public involvement regarding development priorities in the District and identified these sites as key to the future of the District. Ongoing public and stakeholder conversations, in particular with current Round residents and adjacent property owners, will be necessary throughout planning for the sites' development.</p>	
Internal Partners		External Partners
Community Development Department, Public Works Department		Beaverton Urban Redevelopment Agency, Metro, property owner at the Round, Beaverton Arts Committee
Estimated Cost		Possible Funding Sources
Staff time and materials		None needed for solicitation

A.2 Creekside Plaza Study	
Project Description	Lead/Sponsor Organization
Planning, design and construction of an open space plaza adjacent to and overlooking Beaverton Creek. Precise location, size and configuration of plaza to be studied and will be determined through potential partnerships.	City of Beaverton
	Volume 2 Reference
	"Core Area Focus Group Memo"
Rationale	
Open space would serve as an urban oasis, an attractive destination within the Creekside District, and would provide residents and visitors the ability to view and benefit from the natural environment of Beaverton Creek. Open spaces/plazas serve as a catalyst for development, and provide a focal point for future development. Open spaces and plazas provide informal or formal gathering and event spaces for the greater District and surrounding neighborhoods. The plaza should incorporate public art, in coordination with community partners.	
Implementation steps	<ol style="list-style-type: none"> 1. Study to determine appropriate location, design, and costs. 2. Planning and design of open space/plaza. Community (public) open houses, stakeholder meetings. 3. Fundraising. 4. Property acquisition/partnership. This could include an open space provision as a portion of combined Westgate/Round development agreement. Depending on location, property acquisition may not be necessary. 5. Construction.
Phasing, and reason for phasing	Do Now – Study and discussions should be completed in tandem with development of the Round Lots 1, 2, 3.
Public or stakeholder outreach needed	Public and stakeholder outreach should accompany design work.
Internal Partners	External Partners
Community Development Department, Public Works Department	Tualatin Hills Parks and Recreation District, Clean Water Services, adjacent property owners, Beaverton Arts Committee, Metro
Estimated Cost	Possible Funding Sources
\$1,000,000 +	Utility surcharge revenues could apply if plaza can be designed to lead to improvements in water quality and conveyance, partnerships with Tualatin Hills Parks and Recreation District and Clean Water Services, private contributions through development agreements, General Fund

A.3 District Shared Parking Facility with Partial City Ownership

Project Description		Lead/Sponsor Organization
City commits to becoming an active owner and manager of a consolidated supply of “district-based shared parking”. The City would strategically provide and manage parking both on- and off-street to support redevelopment. In some cases, this may be in partnership with private developers or property owners.		City of Beaverton
		Volume 2 Reference
		“Parking Strategy Recommendations”
Rationale		
In the future, more parking will be needed. At the same time, off-street structured parking is very expensive to provide. Its cost can affect development feasibility, limiting the ability of the private sector to generate the needed new parking. For these reasons, clear and thoughtful parking management policies that: (1) identify where and how parking for Creekside residents, employees, and visitors will be accommodated; and (2) clarify the role the City will play in providing and funding that parking are critical to the area’s future vitality.		
Implementation steps	<ul style="list-style-type: none"> • In conjunction with core area redevelopment, City takes a lead role in creation of District facilities. • Identify funding sources (see below). • Initiate process to structure a strategic parking capital improvement funding plan designed to support creation of a system of publicly owned (and strategically located) shared use “district” parking facilities in the Creekside District. • Establish a Parking and Transportation Fund as a mechanism to direct funds derived from parking into a dedicated fund for use in Creekside District and/or the greater downtown area. • Acquire land parcels that are located in areas within reasonable and strategic proximity to envisioned land uses. Such parcels can serve initially as publicly controlled surface lots until funding for construction of structured facilities becomes feasible. Near-term parking entitlements that come in advance of structured parking can be harbored on publicly controlled surface lots then transitioned into garage(s) as funding becomes available. • Consolidate financing/management of off-street parking resources into construction of shared “district” facility/facilities. 	
Phasing, and reason for phasing	Do Now – Organization and evaluation of funding is essential to begin early as strategic assembly of land for shared public parking and actual construction of garage(s) requires early and strategic planning.	
Public or stakeholder outreach needed	Input from developers on the feasibility and acceptance of fees-in-lieu, parking entitlements and linking off-site parking to new development (marketability). Outreach to adjacent property and business owners, potential developers and real estate brokers	
Internal Partners		External Partners
Community Development Department, Public Works, Mayor’s Office		Financiers and developers
Estimated Cost		Funding Sources
\$10,000,000 +		<ul style="list-style-type: none"> • Fee-in-lieu or sales of parking “entitlements” (allowing developers to pay into a fund that can be used for District parking, rather than providing code-required parking in each new building) • Urban Renewal (tax increment finance) • Using City-owned land for parking • Committing existing capital funds over a planning horizon • Development agreements (public-private partnerships in individual buildings) • Local Improvement District (LID) (will need exploration) • Charging for parking (meters)

A.4 Core Area Street Connections and Pedestrian Enhancements

Project Description		Lead/Sponsor Organization
<p>In coordination with new development, design and build key connections and pedestrian enhancements that will be critical to the development of a functioning Creekside core. Design and construction funding for the following facilities will hinge upon a development agreement and cost sharing agreements with partners:</p> <ul style="list-style-type: none"> • Rose Biggi and Crescent Street Streetscape Improvements – In coordination with development of the Westgate parcel and/or Round Lots 1, 2, and 3, provide a minimum of 12-foot wide sidewalks with an enhanced pedestrian intersection at Rose Biggi Avenue and Crescent Street, pedestrian-scale lighting, street furniture and other placemaking elements. The objective of these enhancements is to create a signature intersection and high quality pedestrian space at the center of the Creekside District. • Crescent Street Extension from Rose Biggi Avenue to Cedar Hills Boulevard – In coordination with development of the Westgate parcel, design and build the segment of Crescent Street between Rose Biggi Ave and Cedar Hills Blvd. This street should be a well-lit, pedestrian-oriented local street with on-street parking, but may be implemented as a half-street to serve the Westgate parcel’s redevelopment • Pedestrian Access to Beaverton Creek: In conjunction with the redevelopment, explore the feasibility of providing a pedestrian access or walkway from Rose Biggi Avenue to Beaverton Creek, along the northern edge of Round Lots 2 & 3. • Wayfinding, public art, pedestrian plazas and gateways: In conjunction with redevelopment, or as City- (or grant) funded initiatives, implement projects to define and enhance the District’s character and identity such as the Wayfinding System Plan, public art installations, pedestrian plazas and gateway elements. 		City of Beaverton
		Volume 2 Reference
		“Core Area Focus Group Memo”; “Streetscape Guidelines”
Rationale		
New connections and access are necessary to create viable development parcels in the core area.		
Implementation steps	<ul style="list-style-type: none"> • With development partners, determine: needs for internal site circulation, trip generation for the proposed use, site driveway and access safety, multi-modal connectivity to the District, etc. • Determine project cost and funding sources, including public/private partnerships. 	
Phasing, and reason for phasing	Do Now – These projects are part of an overall development program for the core area and should be considered in tandem with potential land uses on selected parcels.	
Public or stakeholder outreach needed	Area business and property owners	
Internal Partners		External Partners
Community Development Department; Public Works Department		Beaverton Urban Redevelopment Agency, arts community, Washington County Visitors Association, adjacent property owners, adjacent businesses
Estimated Cost		Possible Funding Sources
TBD		TDT (for any streets designed as collectors, which may not apply), TIF, LIDs, revenue bonds, private contributions through development agreements, General Fund

A.5 Dawson Way/ Westgate Drive Intersection Realignment

Project Description		Lead/Sponsor Organization
Align the offset intersections of Dawson Way and Westgate Drive at Cedar Hills Boulevard to create a four-way signalized intersection.		City of Beaverton
		Volume 2 Reference
		"District Transportation Plan"
Rationale		
Access into and out of the District is challenging for vehicles and pedestrians. The existing non-signalized intersection is offset by 125 feet, posing a safety concern for cars, bicycles and pedestrians. Conversations with developers about challenges to development in the District highlighted the need to improve connectivity, access and traffic safety, further supporting the need for this re-alignment.		
Implementation steps	<ul style="list-style-type: none"> • Determine alignment options and cost estimates for acquisition of right-of-way and construction. • Preliminary design and budget estimates. • Construction. 	
Phasing, and reason for phasing	Do Now – This realignment project will assist with the development and marketability of the Westgate site and improve pedestrian and vehicular connectivity across Cedar Hills Blvd.	
Public or stakeholder outreach needed	Adjacent property owners and businesses	
Internal Partners		External Partners
Beaverton Community Development Department: Public Works Department		None.
Estimated Cost		Funding Sources
\$2,530,000		General Fund, TDT, County, state or federal funds (may require application)

A.6 Beaverton Center for Arts and Culture Studies

Project Description		Lead/Sponsor Organization
<p>The Beaverton Arts Committee is currently evaluating the feasibility of partnering to develop and operate the Beaverton Center for Arts and Culture, including consideration of sites in and out of the Creekside District. Information from these studies will inform the City’s decisions about site location and complementary infrastructure investments. The recommended building program includes the following elements: 400 seat main stage; 150 seat second stage; café; catering kitchen; multipurpose, classroom, meeting, event, and conference space.</p>		Beaverton Arts Committee
		Volume 2 Reference
		“Core Area Focus Group Memo”
Rationale		
<p>As part of the Master Planning process, the City convened a group of core area property owners and developers to discuss the future of the core area. Participants in these focus group discussions emphasized the value of a civic use for driving rents and amenities in the area to a level that might be supportive of new construction. They agreed that arts and culture can provide a significant draw for the core area and can help to attract visitors from around the region, and also residents who want to live near such a destination. A decision to locate the Beaverton Center for Arts and Culture makes a strong statement that the City is committed to the redevelopment of the area.</p>		
Implementation steps	<ul style="list-style-type: none"> Business plan Site feasibility Site design and acquisition Capital campaign Permitting and construction 	
Phasing, and reason for phasing	Do Now – The Beaverton Center for Arts and Culture emerged with a strong recommendation from the Core Area Focus Group and studies are already underway.	
Public or stakeholder outreach needed	Area residents, businesses and employees. Arts organizations.	
Internal Partners		External Partners
Community Development Department; Mayor’s Office		Arts community
Estimated Cost		Funding Sources
TBD		<p><i>Capital:</i> Foundation and private donations, general obligation bond, other revenue bonds</p> <p><i>Operating:</i> Endowment, ticket sales and revenues</p>

A.7 Canyon Road Phase 1: Safety and Intersection Improvements

Project Description		Lead/Sponsor Organization
Phase 1 of the Canyon Road project is intended to address serious safety, connectivity, accessibility, and water quality concerns between SW Hocken Ave and SW 117 th Ave. The project will upgrade key intersections to improve safety for all users traveling through and across the corridor and widen the current 3' wide sidewalk over the Beaverton Creek bridge. In November 2013 the City received approval of \$3.535 million in Federal aid through the MTIP.		City of Beaverton
		Volume 2 Reference
		"Mobility Audit"; "Transportation Plan"
Rationale		
The Canyon Road Safety and Streetscape Project was a recommendation of the 2011 Beaverton Civic Plan, which investigated projects to address Community Vision Actions related to downtown revitalization and transportation. Through the Creekside District Master Plan process, coordination with the Oregon Department of Transportation (ODOT) and other stakeholders has begun in order to develop the project from concept to design. In 2012, a Creekside District Mobility Audit was conducted, which reinforced the priority for these improvements and led to Canyon Road planning and design sessions with ODOT, preliminary corridor design documents, public outreach and a 30% design.		
Implementation steps	<ul style="list-style-type: none"> • Begin design (Oct 2015) • Acquire right-of-way (FY16-17) • Begin construction (FY17-18) 	
Phasing, and reason for phasing	Do Now – Canyon Road is a heavily used highway with serious safety concerns. This project will alleviate many of those concerns, as well as provide needed North/South connectivity. Funding for the project has already been obtained.	
Public or stakeholder outreach needed	Property owner coordination, Special Transportation Area (STA) outreach as needed	
Internal Partners		External Partners
Community Development Department, Public Works Department		Oregon Department of Transportation (ODOT), Tualatin Valley Fire & Rescue (TVF&R), Metro, property and business owners
Estimated Cost		Funding Sources
\$3,940,000		<i>Planning and Design:</i> HUD Sustainable Communities Challenge Grant, MTIP, City of Beaverton; <i>Construction:</i> MTIP

B.1 Vegetated Corridor Program	
Project Description	Lead/Sponsor Organization
In coordination with Clean Water Services (CWS), the City has developed a process to manage the Vegetated Corridor at the district level, which eliminates several steps for Creekside property owners seeking a Service Provider Letter (SPL) for development. This process will need to be finalized and implemented as a program available to District property owners and developers.	City of Beaverton/ Clean Water Services
	Volume 2 Reference
	"Stormwater Master Plan"
Rationale	
For properties within 200 feet of a Water Quality Sensitive Area such as a creek or wetland, CWS requires a SPL for development or redevelopment activities. Obtaining the SPL typically involves mapping the sensitive area and working with CWS to determine the precise location and extent of the Vegetated Corridor. By utilizing the district-wide Vegetated Corridor approach, property owners would not be required to undertake their own mapping and coordination with CWS as these steps will have already been completed.	
For property owners who would rather pursue the standard procedure for development along the creek, that option would remain available through CWS. (More information on the CWS standard procedure is available in the Clean Water Service Design and Construction Manual, Chapter 3.)	
Implementation steps	<ul style="list-style-type: none"> In coordination with CWS, formally adopt, via IGA or other means, the program maps and procedures. Finalize the Vegetation Management and Maintenance details and costs. Administer the program as part of the City's Development Review process. Consider expanding geography beyond Creekside area if program is successful. Consider expanding the program to include wetland delineations in addition to Vegetated Corridor mapping.
Phasing, and reason for phasing	Do Now – Implementing the new program will save time and money for developers in the District
Public or stakeholder outreach needed	Completed. If program is expanded beyond the current geography or scope, additional outreach to property owners and coordination with Clean Water Services will be needed.
Internal Partners	External Partners
Community Development Department, Public Works Department	Clean Water Services
Estimated Cost	Funding Sources
Staff time and materials; Additional funds for mapping and delineation (approx. \$25,000 to \$50,000) will be needed if the program is expanded.	<i>Program Creation:</i> HUD Sustainable Communities Challenge Grant <i>Program Expansion (optional):</i> General Fund

B.2 Business Support and Economic Development Programs

Project Description		Lead/Sponsor Organization
<p>The City envisions a transition in the District to a more urban, higher-amenity neighborhood. While stakeholders support this transition, the City recognizes that change can be challenging for businesses, especially small and minority-owned businesses. The City already has a variety of economic development programs and tools in place that support businesses. It will additionally implement a set of business support services, partnerships, and programs during and after construction of new development to mitigate the impacts of change and support ongoing business development. The proposed policies include:</p> <ul style="list-style-type: none"> • Programs and services. A mix of technical and business support services, partnerships, and ongoing programs that the City can provide to increase business vitality during Creekside Master Plan implementation. These include: the creation of a Creekside Business Association, technical assistance for property owners interested in Crime Prevention Through Environmental Design (CPTED), and graffiti abatement programs. • Business improvement and expansion incentives. This category includes incentives for businesses to improve their physical space. At this time, there is one idea in this category (a storefront / tenant improvement program), but others may be added as the strategy evolves and implementation continues. • City or Beaverton Urban Redevelopment Agency (BURA) development projects. These are ideas for changes to City or BURA policies or approaches to undertaking publicly-supported projects in the City. Specifically, the strategy recommends consideration of community benefit agreements and local sourcing requirements for City- or BURA-funded projects, where appropriate. 		City of Beaverton
		Volume 2 Reference
		"Business Continuity Strategy"
Rationale		
<p>Overall, business owners and community members that participated in the planning process supported the vision for redevelopment. However, these transitions could lead to any of the following negative outcomes for businesses over time: (1) Direct displacement of some businesses that are currently located in buildings that redevelop, (2) Changes in the demographics of the nearby residents who currently patronize these businesses, or in the business climate as other small business choose to relocate, (3) Changes in the real estate market, resulting in increased rent. Some businesses, especially small and minority-owned businesses, may be more vulnerable to these impacts because they already operate on thin margins with limited available capital to adjust their business model in response to rapid transitions.</p>		
Implementation steps	<ul style="list-style-type: none"> • Identify a champion, or a small group of champions that will ensure ongoing implementation of the programs. • Determine the need for a policy framework or guidelines that outlines City Council involvement, benchmarks, etc. • Prioritize actions for initial implementation that considers construction phasing and available funding sources. • Develop a meeting schedule for staff leads. • Develop an ongoing business engagement strategy. 	
Phasing, and reason for phasing	Do Now – Develop the programs so that the City can respond as development occurs.	
Public or stakeholder outreach needed	Outreach with business owners to shape and promote services	
Internal Partners	External Partners	
Community Development Department, Mayor's Office, Beaverton Urban Redevelopment Agency	Chamber of Commerce, Beaverton Downtown Association, Micro Enterprise Services of Oregon	
Estimated Cost	Funding Sources	
TBD	General Fund, possible grant funding (may require application)	

B.3 Code Amendments: Streetscape	
Project Description	Lead/Sponsor Organization
This project will create streetscape design standards and guidelines for the District that will be adopted into code.	City of Beaverton
	Volume 2 Reference
	"Streetscape Guidelines"
Rationale	
Creekside’s streetscapes will play a significant role in the future development of the District and will be a vital component of creating an identifiable and unified district. As part of the Master Plan process, the City is preparing District Streetscape Guidelines to provide guidance and cohesive order to new and re-developed streetscapes within the District. To move the guidelines to implementation, the next step is to refine and adopt them into code.	
Implementation steps	<ol style="list-style-type: none"> 1. Determine scope and approach to code amendments. Identify what sections of code are being amended and what sections are not. 2. Refine the guidelines. Compile and review right-of-way information, site surveys, as-built drawings, and other information regarding site conditions. Refine/reality-check the guidelines to fit and tailor to existing conditions. For improved streets, identify whether existing improvements should be enhanced in a phased manner over time. 3. Prepare preliminary cross-sections and related standards for each street type. Prepare working recommendations. Involve stakeholders in review and comment of the cross-sections and standards. 4. Hold work sessions. Conduct formal work sessions with Planning Commission and City Council. 5. Adopt the amendments. Hold hearings and adopt the Code amendments.
Phasing, and reason for phasing	Do Now – Updating the Code is a logical early implementation step to support near term street investments.
Public or stakeholder outreach needed	Key developers and property owners should be informed of results in step 3 above.
Internal Partners	External Partners
Community Development Department, Public Works Department, Mayor’s Office	Property owners, business owners, developers, service providers (including emergency service providers)
Estimated Cost	Funding Sources
Consultant and/or staff costs	General Fund

B.4 Code Amendments: Urban Design

Project Description		Lead/Sponsor Organization
This project will create urban design standards and guidelines for the District that will be adopted into code.		City of Beaverton
		Volume 2 Reference
		"Streetscape Guidelines"
Rationale		
<p>Updates to the Development Code are needed in order to: (1) Provide predictability regarding the overall design character of the District and individual development requirements of the City; (2) Update the code to be consistent with, and implement, the Creekside Master Plan; and, (3) Ensure consistency in quality and character of public and private development so they are complementary and enhance the positive identity and transformation of the District. The code should include modifications to landscape regulations that help to create a creek greenway and require new development to incorporate on-site stormwater treatment in a way that is both attractive and functional. Creation of policy to support the daylighting of creeks and to prevent further creek piping should also be considered.</p>		
Implementation steps	<ol style="list-style-type: none"> 1. Identify needed amendments. Complete preliminary work on what regulatory amendments are needed to implement the Master Plan. 2. Determine Code format. Evaluate options, and a preferred approach, for how to incorporate the various amendments into the Code. 3. Prepare preliminary amendments. Prepare a preliminary mock-up of the amendments, with explanatory notes. 4. Involve stakeholders and test working code. Conduct work sessions with stakeholders and participants in the development review process to obtain input of the approach and content. "Test" the code on sites and case study projects through discussions with developers and other stakeholders. 5. Hold work sessions. Conduct formal work sessions with Planning Commission and City Council. 6. Adopt the amendments. Hold hearings and adopt the code amendments. <p>Potential topics for amendments include minimum FAR clarification and update; Canyon Road special setback; Pedestrian Corridor development standards; surface parking lot edges standard; landscaping along Beaverton Creek; parking access locations; Major Pedestrian Route Map and categorization update; transparency standards for storefronts; quality design and materials guidelines; incentives for Low Impact Development Approaches; and code for crime prevention through environmental design. Policy amendments to support the daylighting of creeks and to prevent further creek piping should also be considered.</p>	
Phasing, and reason for phasing	Do Now – Updating the Development Code is a logical early implementation step to support near term development.	
Public or stakeholder outreach needed	See Implementation Steps above.	
Internal Partners		External Partners
Community Development Department		Property owners, residents, business owners, developers, service providers
Estimated Cost		Funding Sources
Consultant and/or staff costs		General Fund

B.5 Code Amendments: Parking	
Project Description	Lead/Sponsor Organization
The City needs to engage in a near-term effort to revise its existing off-street parking regulations, which are currently a barrier to development in the District and create unnecessary expense for developers.	City of Beaverton
	Volume 2 Reference
	"Parking Strategy Recommendations"
Rationale	
Without significant changes in current standards, requirements and allowances in the Multiple Use sections of Beaverton’s existing parking code, it is unlikely that the type of development expected in the Creekside District will be realized. The impacts of inefficient parking, both on land consumption and cost are significant. Additionally, the resultant surface parking lots will erode the urban design and development aspirations for the District.	
Implementation steps	<p>Changes and/or modifications to the Development Code that better facilitate shared parking opportunity should be pursued.</p> <ol style="list-style-type: none"> 1) Expand parking standards now in place for Old Town Districts 1 & 2 (Regional Center – Old Town) to the Creekside District. This would result in much lower minimums for residential and elimination of minimums for most commercial and retail uses. The parking standards of Table 60.30.10.6 in the Development Code would then apply to the Creekside District. 2) Eliminate any “accessory” parking limitations related to new parking development. All new parking development should not have any restrictions as to type of use that it serves. Similarly, procedural hurdles for the use of under-utilized or excess parking (as evidenced by 40.55.15.3 in the Development Code) should be eliminated to allow for, and support, flexible and efficient management of parking supplies. 3) Eliminate code provisions that allow for the development of new, privately owned surface parking in the Creekside District. 4) Evaluate current parking design standards within the context of shared parking; particularly in the development of structured parking (e.g., building design that facilitates shared use parking brings the parker to a plaza connected to both the street and the building’s private space (and further building access).
Phasing, and reason for phasing	Do Now – Current Code requirements limit an effective shared parking strategy. Removing those barriers now will greatly facilitate the larger development effort.
Public or stakeholder outreach needed	Continuing conversations with the Planning Commission and the development community will be necessary to assist in educating the public and stakeholders on how the code facilitates design and outcomes.
Internal Partners	External Partners
Community Development Department	Financiers and developers
Estimated Cost	Funding Sources
Consultant and/or staff costs	General Fund

B.6 Creek Restoration Program and FEMA Regulations

Project Description		Lead/Sponsor Organization
<p>This project will restore the riparian corridors in the District along Hall, Beaverton and Wessenger creeks. This is a program to conduct initial clean-up activities, remove invasive species, replant selected areas with native species, and monitor/maintain the improvements. The City should consider leading the effort with volunteers providing labor, materials, and other support. As part of this program, the City should closely monitor and help shape regulatory changes resulting from the NMFS and FEMA consultation regarding the Endangered Species Act, as well as forthcoming regulatory changes under the Clean Water Act and Municipal Separate Storm Water System (MS4) permit program.</p>		City of Beaverton
		Volume 2 Reference
		None
Rationale		
<p>Many of the reaches of the Beaverton, Wessenger and Hall creeks that pass through the downtown Creekside District have been neglected for many years. The appearance is unsightly, there are dense thickets of invasive plants, and refuse along the creeks. Removal of invasive and non-native plants and general cleanup of trash and rubble would greatly enhance the appearance and give the area a more unified aesthetic. Additionally, replacing weeds with native trees and shrubs would improve water quality over time. The objective is to create an attractive natural environment for users and a healthy riparian area for habitat. Ultimately, the restored and beautified creek corridor is expected to add value to adjacent properties. Anticipated regulatory changes for floodplain development could have a dramatic effect on the District's future development patterns, so the City should actively participate in the creation of those regulations, if possible.</p>		
Implementation steps	<p>Step 1 – Prepare a restoration plan. The initial phase be a several year pilot program that could be renewed and continued at the end of the pilot period. The restoration plan will outline actions that are aligned with City goals to improve the riparian area of Downtown creeks, and will include:</p> <ul style="list-style-type: none"> • Identification of project partners along with staff, resource, and materials needs. • A plan for ongoing maintenance. • Staff and budget for supervising improvement program. Engage a qualified volunteer coordinator that can act as foreman for any of the improvement activities, i.e. cleanup, invasive removal, and restoration planting. • A strategy for addressing anticipated new FEMA regulations for floodplain development <p>Step 2 – Identify and partner with willing property owners. Private landowners need to provide permission for City staff and/or volunteers to enter their property and conduct the cleanup activities. Easements may be necessary for cleanup and ongoing maintenance.</p> <p>Step 3 – Creek restoration. Initial clean-up, hauling of trash; regarding (as needed) and re-vegetation with native plants.</p> <p>Step 4 – Monitoring and maintenance.</p>	
Phasing, and reason for phasing	Do Now – Transforming the degraded creeks into a healthy and attractive system can serve as an amenity for the District.	
Public or stakeholder outreach needed	District residents, property and business owners; Clean Water Services; service organizations/non-profits.	
Internal Partners	External Partners	
Community Development Department, Public Works Department	Clean Water Services, Metro	
Estimated Cost	Funding Sources	
Staff time and materials	General Fund, Metro, Clean Water Services, private donations, service organizations/non-profits, Congressional delegation	

B.7 Creekside Investment Team and Funding Tools	
Project Description	Lead/Sponsor Organization
<p>The City should convene an Investment Team to move forward major action steps that is representative of the financial and social investors in the area— City, businesses, residents, property owners, and service organizations/non-profits. Ideally, these representatives are people who control or have direct influence on financial resources or who will be directly affected by investments. The Investment Team should only meet when there is work to be done, but a minimum of three times a year is likely. The Investment Team’s first priority will likely be implementation of the Core Area Development strategy (Action A.1). The meetings of the Investment Team should be coordinated with budgeting processes of public sector partners.</p> <p>The Team would be an autonomous body, charged by the governing boards of each partner jurisdiction, articulating the most efficient and effective investment options to advance the Master Plan, seeking coordination from multiple investors and from any source available. Priorities from the process would be forwarded to relevant budget / investment processes of each jurisdiction. The Team could initially be a pilot to provide some opportunity for honing the process and to test how it can best interface with various public and private budgeting processes. If successful, the Investment Team model could be replicated and used in other areas. The Urban Renewal Advisory Committee could be an integral part of the committee process either by serving as sounding board or participating in team meetings as an investment partner.</p>	City of Beaverton
	Volume 2 Reference
Rationale	
<p>The Investment Team solves a governance challenge that many multidisciplinary planning processes have stumbled upon at implementation: there is no process by which specific projects are identified and implemented that crosses agency and organizational boundaries and that consistently brings private sector investors and community stakeholders into the prioritization and budgeting process. There is no existing “body” that can look holistically across the many social, environmental, and economic systems to identify opportunities and resources for investment in the revitalization of the Creekside District. As a result, scarce resources are not as coordinated as they could be, and investments from one organization may miss opportunities to leverage other investments or other resources. The lack of funding to implement many community plans underscores the importance of coordination across traditional jurisdictional lines.</p>	
Implementation steps	<ol style="list-style-type: none"> 1) Identify staffing needs and/or third-party contracting needs as an interim staffing solution. 2) Determine Investment Team structure, participants, and work plan. 3) Identify near-term investments that must be coordinated across groups.
Phasing, and reason for phasing	Do Now – To maintain momentum from the Master Planning process, the City should work to convene partners as soon as the implementation chapter is finalized.
Potential participants	District businesses, residents, property owners, and service organizations/non-profits. Ideally, these representatives are people who control or have direct influence on financial resources or who will be directly affected by investments.
Internal Partners	External Partners
Community Development Department, Mayor’s Office, Public Works Department, Finance Department, Urban Renewal Advisory Committee	Clean Water Services, Washington County, Metro, Oregon Department of Transportation, District property owners
Estimated Cost	Funding Sources
Staff time and materials	City of Beaverton

B.8 Transportation Studies

Project Description		Lead/Sponsor Organization
<p>Hall/Watson Bicycle Lanes: Study the phased implementation of bicycle improvements along Hall Boulevard and Watson Avenue between Cedar Hills Boulevard and Canyon Road, including both short-term improvements that fit within the existing curb as well as long-term ultimate improvements (full bike lanes) that would require additional width and right of way.</p> <p>Crescent Connection Multiuse Path: Study the alignment options and select a final alignment for the 2,690 foot creek adjacent and on-street shared-use path from the Beaverton Central MAX Station at Lombard Ave to Cedar Hills Blvd, as identified in the Beaverton Comprehensive Plan.</p> <p>Direct Pedestrian & Bicycle Connection to Old Town: Direct Pedestrian & Bicycle Connection to Old Town: Study the feasibility, costs and alignment options for a pedestrian and bicycle connection from the Creekside District core to Farmington Road, Old Town and Beaverton High School.</p>		City of Beaverton
		Volume 2 Reference
		"Mobility Audit"; "District Transportation Plan"
Rationale		
<p>Hall/Watson Bicycle Lanes: Although this project would improve pedestrian and bicycle connections through the District and regional access to Beaverton Transit Center, more study is needed to:</p> <ul style="list-style-type: none"> • Identify and review potential bicycle treatments along Hall and Watson, such as a "road diet" to convert one lane of travel in each direction into a buffered bike lane. • Examine the feasibility of a pilot project. One potential candidate section may be Watson Avenue between Hall Boulevard (north end of couplet) and Canyon Road. • Determine whether future traffic levels would require reclaiming the existing travel lanes for motor vehicle use. • Consider how the project fits into the larger bicycle network and identify needed improvements (signage, bike lanes, and signalization) outside of the project area. <p>Crescent Connection Multiuse Path: The path will provide an important connection between the District and Beaverton Transit Center, as well as an opportunity to showcase the creeks through viewpoints; however an alignment alternatives analysis is needed to identify the alignment that best balances considerations such as:</p> <ul style="list-style-type: none"> • Impacts to the vegetated corridor and creek habitat • Safety, directness, and accessibility for users • Attractiveness for the District and surrounding areas <p>Direct Pedestrian & Bicycle Connection to Old Town: While the pedestrian and bike connection has the opportunity to improve pedestrian safety and visually enhance the District, additional feasibility analysis is needed to better understand design challenges and costs. Some of these considerations include:</p> <ul style="list-style-type: none"> • Alignment options • Rail crossing options • Cost, funding opportunities and timing 		
Implementation steps	Complete the studies identified above and proceed with the projects determined to be feasible.	
Phasing, and reason for phasing	Do Now – Complete the studies as they will be necessary to determine costs, project scopes, and right of way impacts.	
Public or stakeholder outreach needed	Property and business owner coordination	
Internal Partners		External Partners
Community Development Department, Public Works Department		TBD
Estimated Cost	Funding Sources	
Staff and/or consultant time	General Fund	

C.1 Millikan and Broadway Street Bikeways

Project Description		Lead/Sponsor Organization
Various bike and sidewalk improvements on Millikan Way (Hocken Ave to Lombard Ave), Hocken Ave (Millikan Way to Canyon Rd), and Broadway (Canyon Rd to 117 th Ave).		City of Beaverton
		Volume 2 Reference
		"Mobility Audit"; "District Transportation Plan"
Rationale		
The Millikan Way and Broadway St bikeways will serve as a low stress bikeway options paralleling Canyon Road which will provide safe and comfortable bicycle connections through Downtown Beaverton and Creekside District.		
Implementation steps	<ul style="list-style-type: none"> • Complete design • Acquire right-of-way • Construction 	
Phasing, and reason for phasing	Do When – This project is required to occur prior to or simultaneously with the Canyon Road Phase 1 project, as a condition of MTIP funding. It is also a highly needed project to increase the safety and ease of bicycling in Downtown Beaverton.	
Public or stakeholder outreach needed	Property owner coordination	
Internal Partners		External Partners
Community Development Department, Public Works Department		Bicycle Transportation Alliance (BTA), Bicycle Advisory Committee
Estimated Cost		Funding Sources
\$541,000		General Fund

C.2 Canyon Phase 2: Streetscape Improvements

Project Description		Lead/Sponsor Organization
Phase 2 of the Canyon Road project is intended to address pedestrian comfort, safety, and mobility. Improvements will enhance pedestrian accessibility and enhance street appearance by undergrounding overhead utilities and install access control via landscaped medians and provide landscape strips for street trees and furnishings. Storm water runoff will be treated to improve water quality with surface facilities and mechanical methods.		City of Beaverton/ State of Oregon
		Volume 2 Reference
		"Mobility Audit"; "District Transportation Plan"
Rationale		
Pedestrian accessibility is restricted due to non-standard ADA ramps and varying sidewalk conditions. All the pedestrian ramps and signalized crossings will be improved to current standards, including two Rapid Rectangular Flashing Beacons proposed at non signalized crossings. Truck mobility is hampered by the sharp curb returns. Truck turning movements will be improved by enlarging curb returns for WB-50 and WB-67 trucks. The visual appearance is compromised by the aerial wires, poles, and the variety of street lighting and street trees. The overhead power and communication lines will be relocated underground, clearing the aerial view. The existing curb tight sidewalks will be reconstructed to provide a planter strip for new street trees and lighting. These improvements will improve safety for motorists and pedestrians and enhance the appearance of Canyon, encouraging redevelopment of the area.		
Implementation steps	When funding for construction is approved it will become imperative to fully engage public involvement activities and commence preparation of construction plans so that acquisition of right-of-way and permanent utility easements can be completed as soon as possible to meet any external funding delivery schedules. Canyon Road is an ODOT facility and the project will require ODOT approval of proposed improvements, including design exceptions for non-standard improvements. The relocation of overhead utilities to underground facilities will require substantial coordination effort with the various utilities and the design team.	
Phasing, and reason for phasing	Do When – 30% concept plans are being prepared to determine the impacts of the proposed improvements. The plans include roadway improvements, storm drainage improvements, traffic signal improvements, illumination, landscaping, utility undergrounding, and right-of-way impacts. Additional funding is required for preparation of construction plans, property acquisition, and construction.	
Public or stakeholder outreach needed	The project will affect the existing right-of-way behind the existing curb, and will require additional right-of-way and permanent utility easement acquisition affecting existing landscape frontages, driveways and buildings. Access to some driveways will also be restricted as result of potential median improvements. A few driveways will be closed due to the curb return enlargement. All these impacts will require notification to property owners and negotiations.	
Internal Partners		External Partners
Community Development Department, Public Works Department		ODOT, Washington County
Estimated Cost		Funding Sources
\$15,500,000		City of Beaverton, Oregon Department of Transportation, state and federal funds (application may be required), MTIP

C.3 Direct Pedestrian & Bicycle Connection to Old Town	
Project Description	Lead/Sponsor Organization
This project would construct a pedestrian and bicycle bridge that provides a grade-separated crossing from Millikan Way to the south side of Farmington Road and serves as a gateway to the District.	City of Beaverton
	Volume 2 Reference
	None
Rationale	
Canyon Road and Farmington Road are major east-west arterial routes with high vehicle flows that create barriers for north/south pedestrian and bicycle movements that need to cross the arterials. Providing a grade-separated crossing for pedestrians and cyclists would improve safety by reducing multimodal conflicts at the arterials and would connect the District with locations south of Farmington Road, including Beaverton High School, Beaverton Library, and Downtown Beaverton. The elevated bridge also provides an opportunity to incorporate artistic design elements that could create a visual landmark gateway for the District.	
Implementation steps	<p>Phase 1: Feasibility, Cost and Alignment Options Study (See project sheet B.8)</p> <p>Phase 2: Funding, Design, ROW, Engineering, if project is approved to move forward</p> <p>Phase 3: Construction</p>
Phasing, and reason for phasing	Do When – When funding becomes available, proceed with feasibility analysis to understand ultimate potential and implementation schedule; if project is approved to move ahead, continue with design, ROW, engineering and construction as funds become available.
Public or stakeholder outreach needed	ODOT Rail, Beaverton High School, adjacent business and property owners
Internal Partners	External Partners
Community Development Department, Public Works Department	Oregon Department of Transportation
Estimated Cost	Funding Sources
TBD	General Fund

C.4 Conveyance Improvements: Cedar Hills Bridge at Beaverton Creek

Project Description		Lead/Sponsor Organization
<p>The existing bridge over Beaverton Creek at Cedar Hills Blvd will be replaced with a single span bridge at an elevation that places the road at least one foot above the 100-year water surface elevation. This includes rebuilding the road approaches so that all of Cedar Hills Blvd is elevated above the 100-year water surface elevation of Beaverton Creek. Road approach work will need to extend north to and include the intersection with Hall Blvd. A regional stormwater facility solution has also been identified to provide water quality treatment for the road and bridge improvements, as well as clean the additional stormwater from a large area to the north that is currently discharged to Beaverton Creek un-treated. Because of its location at the edge of the District, the new bridge should receive additional design treatments to enhance its appearance. Design treatments may include special building materials, incorporation of public art, and/or distinct lighting.</p>		City of Beaverton
		Volume 2 Reference
		"Stormwater Master Plan"
Rationale		
<p>Cedar Hills Blvd is an important and well-traveled transportation connection that is prone to frequent flooding from Beaverton Creek during small storm events. Flood water flows over the bridge and across Cedar Hills Blvd north of Beaverton Creek, extending all the way north to the intersection with Hall Blvd. The existing bridge is a low timber-pier bridge that raises upstream water levels during flood events and forces water onto adjacent properties. Flooding is a hazard to road users, limits emergency response, and costs nearby businesses through direct flood damages or reduced revenue due to difficult access. This project will make Cedar Hills Blvd passable during flood events up to the 100-year flood and reduce the frequency of flooding to creek adjacent properties by reducing upstream flood by approximately 0.7 ft for flood events up to the 10-yr and approximately 0.4 ft for flood levels up to the 100-yr. The project description assumes all of the proposed conveyance improvements are implemented and there will be a cumulative flood reduction benefit greater than what is described in the rationale.</p>		
Implementation steps	<ul style="list-style-type: none"> • Identify funding • Engineering and permitting • Right-of-way acquisition • Construction 	
Phasing, and reason for phasing	<p>Do When – This project should be constructed after conveyance improvements for Hocken Ave and Rose Biggi Ave are completed. Within the Creekside District, upgrading the Cedar Hills Blvd bridge will have the largest impact on increased conveyance capacity and reducing upstream flooding to Lombard Ave. The bridge replacement at Hocken Ave will have limited effect on upstream flooding until this project is also completed.</p>	
Public or stakeholder outreach needed	<p>Outreach to adjacent property owners for right-of-way acquisitions and possible fill of properties to raise above the base flood elevation.</p>	
Internal Partners		External Partners
Community Development Department, Public Works Department		TBD
Estimated Cost		Funding Sources
\$7,000,000		<p>This bridge is submitted to the Oregon DOT for federal funding considerations every two years and continues to move up the priority list. The structure is supported by wood timbers and will eventually need to be replaced.</p>

C.5 Conveyance Improvements: Light Rail and 141 st Ave Culverts	
Project Description	Lead/Sponsor Organization
<p>Light Rail Culverts: The existing light rail culvert crossing over Beaverton Creek, located upstream of Murray Blvd, will be upgraded to provide additional capacity to pass flood waters. This could be accomplished through installation of two additional 6.5 ft diameter culverts or through replacement of all culverts with a bridge. Improvements to the hydraulic efficiency of the culvert inlet and outlet are believed to aid in the overall flood reduction benefits and/or reliability of the culvert hydraulic performance.</p> <p>141st Ave Culverts: The existing 141st Ave crossing over Beaverton Creek will be upgraded by replacing the culverts with a bridge that will clear the 10-yr flood event, and not overtop until a flood event greater than the 50-yr event.</p>	City of Beaverton
	Volume 2 Reference "Stormwater Master Plan"
Rationale	
<p>Light Rail Culverts: The light rail crossing over Beaverton Creek between Murray Blvd and Schottky Rd consists of 5 barrels of 6.5 ft CMP culverts with a sharp entrance and exit turn angle of ~75 degrees. This crossing is undersized and results in a water surface elevation drop of over 2 ft and overtopping of the railroad embankment for the 100-yr event. Improvements will prevent overtopping of the light rail embankment for up to the 100-yr flood, reduce upstream water surface elevations to 141st Ave by 0.7 ft to 1.3 ft for the 10-yr to 50-yr event, and reduce water surface elevations in the Creekside District by ~0.3 ft. Upgrading with additional bored culverts should allow for the work to be performed without interrupting Light Rail service, but will require construction in close proximity to an active rail line. A rapid bridge construction technique to replace all of the culverts with a bridge might prove to be less of a disruption to train service. The project description assumes all of the proposed conveyance improvements are implemented and there will be a cumulative flood reduction benefit greater than what is described in the rationale.</p> <p>141st Ave Culverts: The existing 141st Ave Beaverton Creek crossing consist of 4 barrels of 7 ft CMP culverts. Conveyance capacity is limited and causes a jump in the water surface elevation from one side of the bridge to the other. Upgrading this crossing to increase conveyance capacity will lower the upstream water surface elevation to Hocken Ave by between 1.7 ft to 1.0 ft for the 10-yr to 50-yr flood events respectively. The project description assumes all of the proposed conveyance improvements are implemented and there will be a cumulative flood reduction benefit greater than what is described in the rationale.</p>	
Implementation steps	<ul style="list-style-type: none"> • Coordination with TriMet, Washington County and adjacent property owners • Identify funding, Engineering and permitting, Easement acquisition • Construction
Phasing, and reason for phasing	<p>Light Rail Culverts: Do When – This project should be completed in coordination with TriMet when funding can be secured. The area in the immediate vicinity of this crossing does not contain vulnerable structures; however, flooding of private roads near the creek may limit access to large campuses. Improving this crossing will help reduce nuisance flooding within the Creekside District during smaller, more frequent floods.</p> <p>141st Ave Culverts: Do When – This project should be completed when funding becomes available or nearby development triggers a need to make other roadway improvements.</p>
Public or stakeholder outreach needed	<p>Light Rail Culverts: Trimet will be the major stakeholder for this project. Work will likely require easements on private property to access and build the project.</p> <p>141st Ave Culverts: Proposed improvements should fit within the right-of-way but may require temporary construction easements. SW 141st is a Washington County road. Construction would disrupt access to a park and ride lot. There are detour routes available.</p>
Internal Partners	External Partners
Community Development Department, Public Works Department	TriMet, Washington County
Estimated Cost	Funding Sources
Light Rail Culverts: \$1,000,000; 141st Ave Culverts: \$2,700,000	TBD

C.6 Conveyance Improvements: Hocken Avenue Bridge at Beaverton Creek

Project Description		Lead/Sponsor Organization
Replace two 84-inch culverts with 61-foot long by 60-foot wide concrete slab bridge over Beaverton Creek and improve 875 feet of Hocken Ave to collector street standards between Hall Blvd and the Light Rail Tracks.		City of Beaverton
		Volume 2 Reference
		"Stormwater Master Plan"
Rationale		
Replacement of the Hocken Ave culverts with a bridge is needed to reduce the frequency of flooding from the 20-percent-annual-chance storm through the 2-percent-annual-chance storm (5 year through 50 year flood events). These street and storm drainage improvements will facilitate redevelopment in the Creekside District.		
Implementation steps	<ul style="list-style-type: none"> • Complete ROW acquisition and land use • Secure external funding, if possible • Construction 	
Phasing, and reason for phasing	Do When – The project has been approved for construction in the annual CIP for the past 2 years.	
Public or stakeholder outreach needed	Property owner coordination	
Internal Partners		External Partners
Community Development Department, Public Works Department, Mayor's Office		Clean Water Services, Tualatin Valley Water District
Estimated Cost		Funding Sources
\$2,750,000		City of Beaverton, TIF Fund, IGA w/ Clean Water Services, Economic Development Administration (EDA)

C.7 Conveyance Improvements: Beaverton Creek (Lombard Ave - Cedar Hills Blvd)

Project Description	Lead/Sponsor Organization
Increase conveyance capacity of Beaverton Creek from Lombard Ave to Cedar Hills Blvd by widening the channel, creating a ~20ft bench 6-inches above the ordinary highwater elevation while maintaining the existing channel to provide a low flow channel.	City of Beaverton
	Volume 2 Reference
	"Stormwater Master Plan"
Rationale	
Development along Beaverton Creek between Lombard Ave and Cedar Hills Blvd is very close to the creek and prone to flooding. Increasing the stream width will improve conveyance, reduce channel shear stress along the stream banks, increase the channel resistance to streambank erosion by bringing vegetation lower down the bank, increase habitat complexity for wildlife, move stormwater outfalls further from the main stream channel, and reduce flooding within the Creekside District if all proposed conveyance improvements are constructed. The stream bench is located primarily within the vegetated corridor area and would therefore not encroach upon otherwise developable lands. This project will reduce flood water surface elevations by 0.3 to 0.4 ft within the Creekside District. This project may help to provide mitigation for floodplain fill needed for redevelopment in the Creekside District.	
Implementation steps	This project is expected to be implemented over time as creek adjacent projects are implemented and should be included with any vegetated corridor enhancement or mitigation efforts along Beaverton Creek. <ul style="list-style-type: none"> Identify funding Engineering and permitting Easement dedication Construction
Phasing, and reason for phasing	Do When – This project should be completed when creek adjacent projects are being implemented and should be included with any vegetated corridor enhancement or mitigation efforts along Beaverton Creek. This would include both public infrastructure projects (i.e. Crescent Connection Trail) and private development projects.
Public or stakeholder outreach needed	Creek adjacent property owners
Internal Partners	External Partners
Community Development Department, Public Works Department	Clean Water Services
Estimated Cost	Funding Sources
\$400,000	TBD

C.8 Crescent Connection Multiuse Path

Project Description		Lead/Sponsor Organization
This project is to construct a 2,690 foot creek adjacent and on-street shared-use path from the Beaverton Central MAX Station at Lombard Ave to Cedar Hills Blvd, as identified in the Beaverton Comprehensive Plan.		City of Beaverton State of Oregon
		Volume 2 Reference "Mobility Audit"; "District Transportation Plan"
Rationale		
The Beaverton Comprehensive Plan's Bicycle and Pedestrian Master Plans show a multiuse path connection from the Beaverton Transit Center along Beaverton Creek to the west tying into the Tualatin Hills Park and Recreation District's Beaverton Creek Trail to the west. The path provides an alternative route through the District for both commuters and recreational users. The path will also open up the creek corridor allowing public viewing and overlooks helping move the creek from a stormwater drainage channel to a community feature and asset.		
Implementation steps	An alignment analysis is underway and needs to be completed. The chosen alignment will require construction documents completed and ROW purchased. The design will need to meet the requirements of ODOT, Clean Water Services, and the City.	
Phasing, and reason for phasing	Do When – The project has received funding for alignment alternatives analysis, final design and right-of-way acquisition. The plans include roadway improvements, storm drainage improvements, traffic signal improvements, illumination, landscaping, utility undergrounding, and right-of-way acquisition. Additional funding will be required for construction.	
Public or stakeholder outreach needed	Property owners on both sides of the creek and, if the project includes a shared on-street section, property owners on both sides of the roadway.	
Internal Partners		External Partners
Community Development Department, Public Works Department		Oregon Department of Transportation, Tualatin Hills Parks and Recreation District, adjacent property and business owners
Estimated Cost		Funding Sources
\$1,900,000		City of Beaverton, Oregon Department of Transportation, MTIP, state and federal funds (may require application), Metro Nature in Neighborhoods

C.9 Millikan Way Pedestrian Enhancements	
Project Description	Lead/Sponsor Organization
Fill sidewalk gaps and improve substandard sections of Millikan Way from Hocken Road to Hall Boulevard to improve pedestrian safety and walkability along the corridor. Also identify and implement crossing improvements at key locations, including Rose Biggi Ave, Hall Blvd and Watson Ave.	City of Beaverton
	Volume 2 Reference
	"Mobility Audit"; "District Transportation Plan"
Rationale	
The improvements along Millikan Way will provide pedestrian mobility to and through the District to enable and attract pedestrian visitors as the District develops. Millikan Way provides a key east-west route through the District and will connect to the Beaverton Transit Center when the shared use path connects to Lombard Avenue (see project sheet C.1). The combination of improvements to both substandard sidewalk sections and intersection crossing locations will both be needed in order to make the corridor attractive, comfortable and safe for pedestrians.	
Implementation steps	Project implementation elements and relation to other efforts include: <ol style="list-style-type: none"> 1) Complete Millikan and Broadway bikeways shared use ped/bike connection (see project sheet C.1). 2) Plan, design and construct sidewalk improvements for substandard sections and fill existing gaps along Millikan Way. 3) Identify pedestrian crossing improvements at cross streets. These treatments may vary by location and may contain improvements to sight distance, crossing distance reduction, signing/striping/flasher treatments, etc.
Phasing, and reason for phasing	Do When – Project is needed to improve pedestrian connectivity through the District and regional access to Beaverton Transit Center.
Public or stakeholder outreach needed	Adjacent property and business owners
Internal Partners	External Partners
Community Development Department, Public Works Department	ODOT, Bicycle Advisory Committee
Estimated Cost	Funding Sources
TBD	General Fund

