South End Concept Plan

OREGON CITY

South End Concept Plan

March 2014

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Acknowledgements

Thank you to all participants in the Concept Plan development process, including these community and civic leaders, staff and consultants.

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EXECUTIVE SUMMARY

The South End Concept Plan preserves what residents value most about South End today while planning for those who will live there in the future. The Concept Plan area is located adjacent to the southwest corner of Oregon City, south of Rose Road and extending approximately one mile south along both sides of South End Road. A robust and comprehensive community engagement process formed the basis of the Concept Plan. A variety of strategies were used to define a community vision and values and engage the community early and frequently with the broadest possible participation. Today, South End is a predominantly residential area of low density single-family homes, with a mix of larger lot of county subdivisions and newly developed city subdivisions. The South End Concept Plan establishes a series of walkable and diverse new neighborhoods that are modeled after the most valued and beloved historic neighborhoods in Oregon City and throughout the region.

Community Vision and Values

Vision

Oregon City's South End is a safe, vibrant and diverse community. Parks, plazas and other public gathering places strengthen the sense of community and connectedness. A variety of housing choices and amenities are the foundation of great neighborhoods for people of all ages. South End's historic rural character is retained through a variety of means. Streams, trees, wetlands and wildlife habitat are protected and enhanced through a network of natural areas. As one center of community, McLoughlin Elementary is a hub of learning and information exchange. Paths, trails and family friendly streets provide safe travel for all. Several transportation options are available and connect South End to downtown Oregon City and the region.

Values

Rural Character
South End is a peaceful community whose pastoral nature is indicated by small farms, large fields and expansive views.

Livable
Homes and neighborhoods in South End are safe, attractive and family-friendly.

Sense of Place
South End residents respect the unique culture and history of the area.

Environmental Quality
South End residents care deeply for the streams, trees, clean air and water and other natural features.

Excellent Schools
The South End community takes pride in and supports the high quality of its schools.

Concept Plan Diagram

Key Elements

Natural Features

- Preservation of contiguous natural spaces and wildlife corridors.
- Preservation of most wetland areas with several road connections across streams/wetlands at narrow points.
- Improved access to natural areas and views.

Parks and Trails

- Network of new parks, open spaces and gathering places.
- Larger park sufficient for ball fields and other recreational opportunities.
- Trail connections to parks, natural areas, regional trails, neighborhood retail and residential neighborhoods.
- Use of utility corridors for new trails.
- Preservation of private open space for non-public uses.
- Civic uses envisioned in various parks and public spaces.

Housing

- Housing choice—a mix of single family (large, medium and small lots), multi-family and mixed-use designations.
- Small lot residential located in two neighborhood centers along South End Road.

Retail

- Limited neighborhood commercial uses along South End Road at Forest Ridge Lane and Navajo Way.

Transportation

- Complete road network promotes connectivity and increases travel options.
- Pedestrian and bicycle improvements, including new sidewalks, pathways and bike lanes.
- South End Road as three-lane arterial.
- Two family-friendly roads parallel to South End Road; the eastern-most designated a collector.
- A slow, narrow road along the bluffs to provide public access and views.
- Roundabouts to safely accommodate through-traffic at major intersections.
- Optimized number of new street connections to South End Road to preserve capacity.

Infrastructure

- New water and sewer infrastructure constructed with roads to meet community needs.
- Stormwater retention ponds and swales along natural features at edges of plan area.

BACKGROUND

The City of Oregon City has prepared the South End Concept Plan to preserve what residents value most about South End today while planning for those who will live there in the future. The South End Concept Plan project area is located adjacent to the southwest corner of Oregon City, south of Rose Road and extending approximately one mile south along both sides of South End Road. Today, South End is a predominantly residential area of low density single-family homes, with a mix of larger lot of county subdivisions and newly developed city subdivisions.

The Metropolitan Service District (Metro) requires governing jurisdictions to adopt comprehensive plan provisions for areas brought into the urban growth boundary (UGB) to guide the orderly and efficient conversion from rural to urban uses. The South End Concept Plan establishes a framework of policies and implementing ordinances before annexation can take place and urban-level development can occur. A product of extensive community engagement and technical analysis, the South End Concept Plan is adopted as an amendment to the City's comprehensive plan and zoning code, which must comply with Metro code and DLCD requirements. In compliance with Title 11 of *Metro's Urban Growth Management Functional Plan*, elements of the South End Concept Plan include housing, transportation, natural resources, parks and trails, public facilities and services, schools and financing. In accordance with the Oregon City Comprehensive Plan, the South End Concept Plan also includes commercial designations in an amount sufficient to serve the needs of the South End neighborhood.

Sample quotes from participants are included in boxes such as this throughout the document.

Process

A robust and comprehensive community engagement process formed the basis of the South End Concept Plan. A variety of strategies were used to define a community vision and values and engage the community early and frequently with the broadest possible participation. The community engagement process was designed to:

- Encourage dialogue and provide opportunities to participate meaningfully throughout the planning process.
- Identify and communicate potential Concept Plan benefits.
- Build understanding and trust in the planning process through clarity and transparency.
- Create a framework for implementation.

A 19-member Community Advisory Team (CAT) representing a variety of interests was convened to guide development of the South End Concept Plan. The CAT met seven times throughout the course of the project to review and comment on work products, advise on public involvement and community engagement efforts, act as liaisons to specific constituencies or interest groups, host public events and encourage community members to participate in the Concept Plan process. A Technical Advisory Team (TAT) also was established to review the key deliverables for technical adequacy and jurisdictional conformance. The TAT consisted of City staff and representatives from Metro, Clackamas County and other local service providers and governing agencies.

Thank you for all the hard work that everyone is doing to keep us all in the loop and asking for our input.

In addition to a host of more traditional public engagement, the City also used a variety of social media forums to enhance community engagement, including an interactive website, email blasts, and regular posts/tweets on Facebook and Twitter.

The community engagement process consisted of two phases. Phase 1 (Community Vision and Values) was designed to 1) provide South End community members with information about the project, including the history of the Urban Growth Boundary, land use planning in Oregon, and reason for concept planning; and 2) engage residents in a discussion about community values, preferred methods of participation, and desired outcomes including potential benefits of concept planning and eventual urbanization. The effort began with eight in depth interviews of residents and key stakeholders to better understand the unique qualities of South End and refine the community engagement approach. The other primary tool for achieving the Phase 1 goals was a series of Community Conversations. The CAT, with support from the City, hosted 17 Community Conversations with various community and civic organizations throughout the city of Oregon City and in the South End area. Participants were asked to respond to these questions:

1. What do you like best about South End?
2. Is there anything you would change about South End to make it better?

What people like about South End now:

• South End is a nice, safe community where you can enjoy the scenery and overall feel of the area.

• South End is one step into the country from a neighborhood. Amazing!

• I feel very safe in my neighborhood. It is very quiet. It's an easy drive to downtown Oregon City and Portland. At the same time, I'm a minute away from the beauty of the farms where I can cut my Christmas tree, buy farm fresh eggs or ride horses.

An online survey was used to augment the interviews and provide an opportunity for expanded engagement. The City received 40 responses to the same questions of what people like about South End and what they would change to make it better.

Phase 1 results were used to establish a preliminary community vision and values to guide the Concept Plan process. The vision and values were be used to develop evaluation criteria for the draft and final Plan. The vision and values were reviewed during a public open house on December 13, 2012. This was one of four community meetings to engage the broader Oregon City and South End communities. The open house also was used to identify opportunities for future enhancements to preserve South End's key attributes of the natural and built environments. An interactive online forum or "virtual open house" was launched in conjunction with open house and allowed participants to answer the same questions asked at that event. In total, more than 300 people participated in the open house and online forum.

The purpose of Phase 2 (Concept Plan Development) of the community engagement process was to translate the vision and values into a Concept Plan for South End. The City invited community participation through a video hosted on the project website (www.southendconceptplan.org). The first activity of Phase 2 was the February 27, 2013 community workshop where approximately 100 participants learned about best practices in planning and urban design then took part in a land use planning game to envision their ideal land use patterns for the future of South End, including parks, trails, roads, housing, retail and civic uses. The 18 community design maps were used to develop three design alternatives for the future of South End.

The three land use alternatives were presented at Part 1 of the Forum for the Future of South End April 12-13, 2013 where TAT, CAT and community members reviewed the alternatives through two days of events. An online forum was launched April 15th and continued throughout the month. Forum participants identified aspects of the three alternatives they most liked and disliked. These comments were used to develop a preferred community design concept that incorporated the most favored elements of the three alternatives. Community members reviewed the preferred concept Part 2 of the Forum on the Future of South End on June 1, 2013 and accompanying online survey. Participant comments were used to refine the preferred concept resulting in the draft Concept Plan and map. In total, more than 250 people participated in the Forum.

Buildings should blend with the current character of South End.

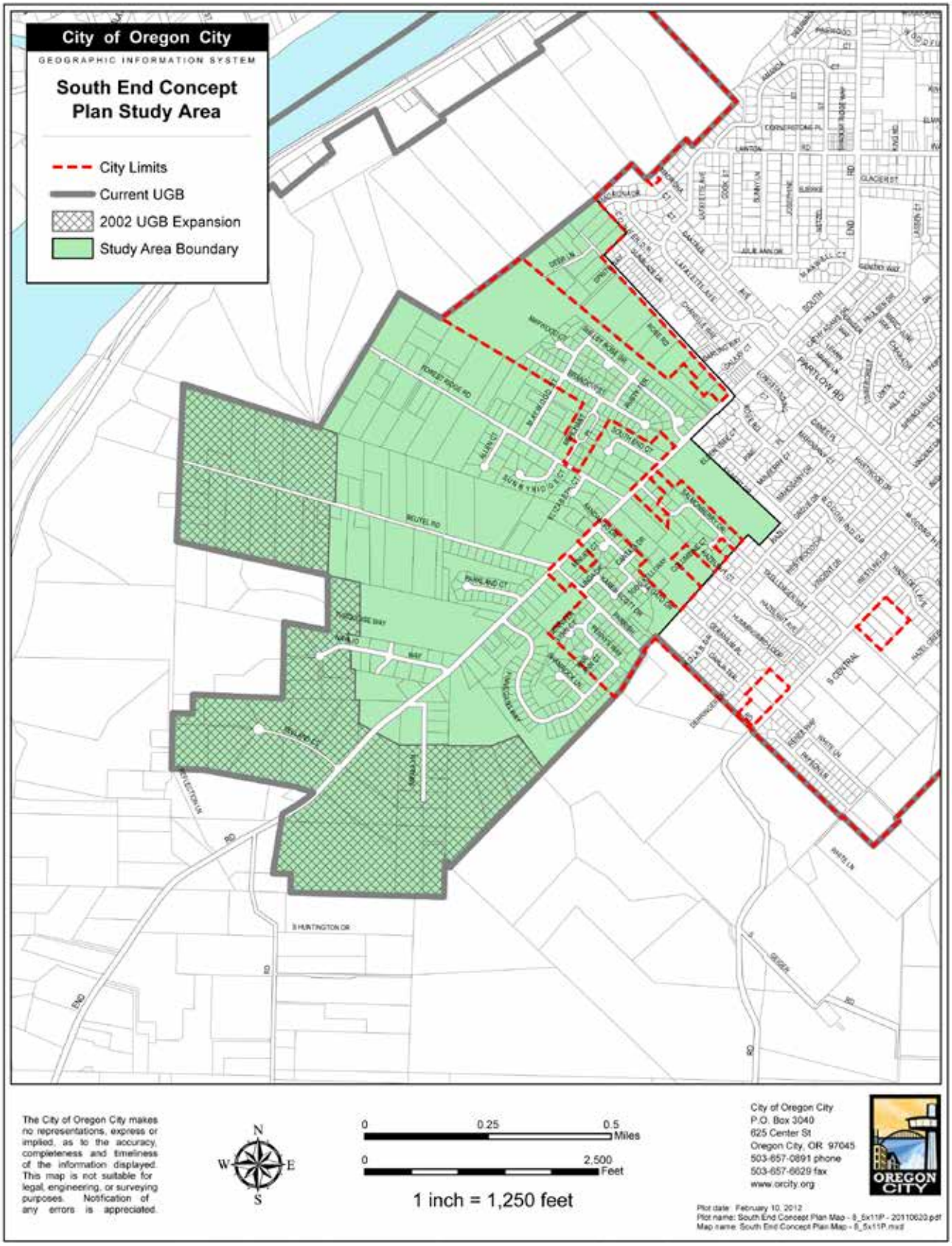
Existing Conditions

The 611-acre South End Concept Plan study area consists of 133 acres currently in the limits of Oregon City, as well as the 478 acres in unincorporated Clackamas County. The unincorporated area is comprised of approximately 188 acres brought into the Urban Growth Boundary (UGB) in 2002 and another 290 acres added to the UGB prior to 2002. That 290-acre area has not been annexed to the city. The Concept Plan Area is bordered by the City of Oregon City to the north and Clackamas County Urban and Rural Reserves to the east, west, and south. More detailed descriptions of existing conditions in South End can be found in Appendix A.

Land Use

The predominant land use in the concept plan area is low density residential subdivisions developed in the 1970s, interspersed with some limited farm and forest uses, pastures and a few institutional uses. The majority of the housing within the plan area is located along the long access roads which intersect South End Road. The northern end of the planning area, from Forest Ridge Road south, is comprised of a network of county subdivisions interspersed with larger acreage lots developed primarily between the 1970s through the 1990s. Fingers of incorporated city subdivisions interweave with these unincorporated areas.

Figure 1. South End Concept Plan Area



Beutel Road and Forest Ridge Road are long straight spine roads which both run to the east away from South End Road. The housing along these roads consists of a mix of some one or more-acre rural estate-styled housing and several dozen quarter- to half-acre lots in various configurations. The homes are a mixture of newer and older styles with a predominance of single-story, single-family houses with side and rear yard outbuildings.

At the southern end of the planning area is the Kelland Court neighborhood. Lots here tend to be larger and more spread out than the northern end of the planning area. Moving north up Sound End Road leads to several county subdivisions which consist of half to quarter-acre single-family lots and are separated from one another by fields which have yet to develop and in some cases, are privately-owned open space.

Lands in the planning area within the city limits are designated as one of two Oregon City single-family residential zoning districts. Lands within the planning area that fall under the County's jurisdiction are in one of two county zoning designations as shown in Table 1.

Table 1. Zoning within the Planning Area, Oregon City South End, 2012

Zoning	Abbreviation	Jurisdiction	Acres
R-8	Single Family Dwelling District 8,000 SF Minimum	City of Oregon City	43.2
R-10	Single Family Dwelling District, 10,000 SF Minimum	City of Oregon City	62.0
FU-10	Future Urban 10-Acre District	Clackamas County	314.1
RRFF-5	Rural Residential Farm Forest 5-Acre District	Clackamas County	191.5

Source: City of Oregon City Municipal Code, Title 17 / Clackamas County Zoning and Development Ordinance

Buildable Land Analysis[1]

Buildable lands are those within the urban growth boundary that are suitable, available, and necessary for residential or employment uses. Buildable lands include both vacant land and land that is likely to be redeveloped, and are not severely constrained by natural hazards or subject to natural resource protection measures. The amount of buildable land within the planning area is described in Table 2. The 283 net buildable acres identified in this preliminary analysis are the maximum acres projected to be available for development, as shown in Figure 2.

Table 2. Buildable Areas, Oregon City South End, 2012

Gross Area in UGB Area	498.7 Acres
Developed Land	101.8 Acres
Unbuildable Land	27.7 Acres
Buildable Land	369.2 Acres
New Roads and Utilities (25%)	92.3 Acres
Net Buildable Area	276.9 Acres

[1] Definitions related to the Buildable Land Analysis can be found in Appendix A, Existing Conditions Report.

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Figure 2. Buildable Lands Analysis – replace this sheet with 11x17 map

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Transportation

Located at the top of Canemah Bluff, the planning area is characterized by disconnected streets with large block lengths despite the relatively flat terrain. The only street providing for higher capacity motor vehicle movement through the study area is South End Road, running north-to-south connecting the study area to McLoughlin Boulevard (Highway 99E) at two locations, located roughly two miles north and south of the study area. The southerly route towards Canby has a connection at 99E that is designed for rural operating conditions, and may need to be upgraded to adequately serve higher levels of traffic. Most of the remaining streets in the planning area are non-through routes and connect directly to South End Road.

South End Road and Salmonberry Drive are generally the only routes that provide dedicated bicycle and pedestrian access in and out of the Plan area. South End Road lacks continuous sidewalks. While motor vehicle traffic volumes are not very high, the posted speed is 40 miles per hour and this section of South End Road abuts John McLoughlin Elementary School, a significant source of walking and driving trips. Continuous bike lanes along South End Road north of Beutel Road connect the study area to Warner Parrott Road. As an east-to-west through street with bike lanes, Warner Parrott Road is an important connection for bicycle travel in Oregon City, linking bicyclists to other key routes in the City, including Linn Avenue, Beavercreek Road and Molalla Avenue.

We need to make sure the roads are safe for walkers and bikers. Currently, there is nowhere to walk in many places.

While transit service is not currently provided in the study area, it is provided in Oregon City by TriMet via seven fixed bus routes connecting Oregon City to the rest of the Portland Metropolitan area.[2] An Americans with Disabilities Act (ADA) paratransit service is also available within the study area. In addition, seasonal transit service is provided to residents and tourists via the Oregon City Trolley, and regional service is provided via the Canby Area Transit system, South Clackamas Transportation District, and Amtrak. Also, the Oregon City Pioneer Community Center runs a transit bus service for seniors to access essential services through a contract with Ride Connect, which is funded with federal grant funding.

Public Infrastructure and Services

Water

As shown in the City's 2012 Water Master Plan, the South End Concept Plan area is served by Boynton and Henrici Reservoirs and the Mountainview Pump Station. Water services within the planning area are served by both the City of Oregon City and Clackamas River Water (CRW). Transmission mains within South End Road are owned by the City of Oregon City and Clackamas River Water. There is a master service meter located just southwest of S. Impala Lane and South End Road intersection, which delineates the two service districts. The City and CRW have a joint access agreement for special situations for areas outside of the City limits. A majority of the study area is serviced by CRW under this agreement as these areas

[2] TriMet discontinued service on South End Road in 2009, due to low ridership and budget reductions for local bus services.

are intermixed with unincorporated and incorporated properties. Areas outside of the City limits are serviced by Clackamas River Water District (CRW).

Stormwater

The planning area falls within the Amanda Court, Allen Court, and South End drainage basin areas as shown in the City of Oregon City Drainage Master Plan (January 1988). These basins are part of tributaries that drain to the Beaver Creek. Stormwater within the study area is currently being managed by a combination of roadside ditches, natural drainage channels, and underground storm conveyance systems. Additionally, there are a handful of existing detention ponds within the City's boundaries that service existing subdivisions and a privately owned detention pond located along the southeast side of South End Road and Kelland Court.

Sanitary Sewer

The only areas serviced by City wastewater collection are the lands located within the City limits in the northeast and east sections of the planning area. The majority of the homes within the planning area are outside city limits and currently on septic systems. The City Sanitary Sewer Master Plan indicates that the areas within the Plan boundary will drain to the South End Basin and appear to be able to handle the load at build out to urban densities. Areas within the Plan area that are inside City limits convey flows to the Parish Pump Station to the wastewater treatment plant.

Natural Resources

I really like emphasizing access for everyone to the views and beauty of the area.

Two potentially jurisdictional wetlands and seven other waters of the State/United States comprising approximately 3.7 acres and 2.38 acres respectively were identified within the Plan area. Most of the wetland acreage is comprised of a somewhat linearly-shaped depression along a stream channel located in the northernmost portion of the study area. The other wetland area is east of the intersection of Forest Ridge Road and South End Road, near the confluence of two channels.

There are no significant natural areas in South End as defined under Oregon Statewide Land Use Planning Goal 5. However, the Canemah Bluffs Natural Area is directly adjacent to South End and overlook the Willamette River. The Willamette River is an American Heritage River and the Willamette River Water Trail is one of 14 nationally recognized water trails. There are several existing wildlife habitat types in the area, including approximately 102 acres of forested area and 43 acres of open grass space.

Parks and Trails

There are no public parks within the South End study area—existing open space is privately owned and maintained and signed as restricted access. Residents living in South End can utilize nearby Madrona Open Space, owned by the City, and John McLoughlin Elementary School open space, owned by the Oregon City School District. Currently in South End, there is a precedent for privately maintained open spaces serving particular residential subdivisions. South Park Estates, Finnegan's

Terrace and Merchant Meadows are examples of subdivisions that maintain private open space areas.

The Metro-owned and maintained Canemah Bluff Natural Area, outside the urban growth boundary, provides residents of South End with opportunities for engaging in hiking, nature viewing, and other recreational activities. This 308-acre natural area is split into two distinct sections and serves as a significant wildlife habitat resource for the region. Metro anticipates developing a formal master plan for the southern section of Canemah Bluffs within the next few years. This section of Canemah Bluffs is closest in proximity to the residents of South End. Filbert Run Park is a planned 3.5-acre park site that will be located just two blocks northeast of the South End study area. Park amenities have yet to be determined.

Currently, the South End study area does not have any publicly designated walking or biking trails. The Trails Master Plan (2004) identifies several trail projects that would improve active transportation access in South End, including the proposed Oregon City Loop Trail and Canemah Bluff Trail and BPA Powerline Trail. Planned inter-neighborhood trails include Finnegan's Trail and Parkland Trail.

This area is residential and people have bought homes in this area for that reason.

Housing and Commercial Market

Oregon City had approximately 14,388 employees within the local service area in 2010, according to Metro. Metro forecasts indicate that Oregon City will add another 5,073 new households and 8,098 new jobs between 2010 and 2035, including 2,337 retail jobs, 3,263 service jobs and 2,498 other (industrial and government) jobs. Primary locations for new employment include downtown Oregon City as well as planned development areas such as Beavercreek, and locations in and around the Clackamas Community College campus. The South End area is expected to add approximately 1,539 households and 76 jobs.

Single-family detached housing units have traditionally dominated Oregon City's residential development patterns. Recent housing developments along South End Road include a mix of single-family detached homes, small lot detached homes, townhomes and duplexes.

I like the clusters of commercial areas as opposed to "strip" areas.

Oregon City has had relatively high vacancy rates for general retail and has shown negative absorption levels for both general retail and shopping center space over the past 12 months. Within the Primary Market Area for the South End area there is significant retail trade leakage, which occurs as households travel outside the area to make retail purchases. By adding a neighborhood or community shopping center, South End could be positioned to intercept a portion of the retail trade leakage and benefit from long-term growth in household buying power that would occur as additional people move into Oregon City.

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Figure 3. Opportunities and Constraints – replace this sheet with 11x17 map

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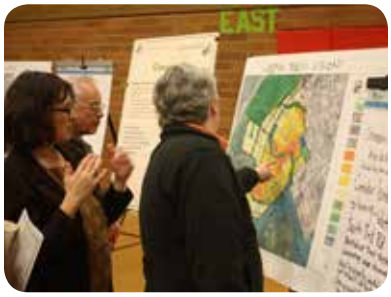
Opportunities and Constraints

Opportunities and constraints were developed based on comments received at the December 13 Community Open House and are illustrated in Figure 3.



Opportunities

- Large lot sizes within the planning area allow for large assemblages of property.
- Existing properties can be consolidated into a regionally managed stormwater system to and preserve natural resources and sensitive areas.
- New roadways, paths and trails can link homes to local and regional amenities.
- Preserve views as a lasting amenity for future residents.
- High potential for successful residential development due to a preference for suburban neighborhoods, increasing householder income levels and South End's proximity to schools and parks
- Lack of neighborhood amenities may be addressed through a combination of appropriate zoning and adequate site planning.

Constraints

- Existing development pattern and ownership fragmentation makes property assembly difficult.
- Established linear road network makes it difficult to provide new connections between existing roads.
- Large existing developments reduce the ability to link roads and trails.
- Fragmented development along main roadways has low redevelopment potential.
- Public infrastructure (sewer, water, and stormwater) are currently lacking or built to a county standard.

SOUTH END CONCEPT PLAN

Community Vision and Values

Vision

Oregon City's South End is a safe, vibrant and diverse community. Parks, plazas and other public gathering places strengthen the sense of community and connectedness. A variety of housing choices and amenities are the foundation of great neighborhoods for people of all ages. South End's historic rural character is retained through a variety of means. Streams, trees, wetlands and wildlife habitat are protected and enhanced through a network of natural areas. As one center of community, McLoughlin Elementary is a hub of learning and information exchange. Paths, trails and family friendly streets provide safe travel for all. Several transportation options are available and connect South End to downtown Oregon City and the region.

Increase the diversity, but not necessarily the density, by promoting a few small retail businesses, more housing types and more options in transportation than just the private automobile.

Values

Rural Character

South End is a peaceful community whose pastoral nature is indicated by small farms, large fields and expansive views.

Livable

Homes and neighborhoods in South End are safe, attractive and family-friendly.

Sense of Place

South End residents respect the unique culture and history of the area.

Environmental Quality

South End residents care deeply for the streams, trees, clean air and water and other natural features.

Excellent Schools

The South End community takes pride in and supports the high quality of its schools.

Figure 4. Concept Plan Diagram – replace this sheet with 11x17 map

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Concept Plan Overview

The South End Concept Plan establishes a series of walkable and diverse new neighborhoods that are modeled after the most valued and beloved historic neighborhoods in Oregon City and throughout the region.

Residents have a choice of places to work, shop, recreate and learn within a short walk or drive from their homes. Community-serving retail stores, workshops and businesses cluster in two small neighborhood centers along a new South End main street, where the greatest number of social and economic interactions occur. Most homes are within a five to ten minute (1/4 to ½ mile) walk to the neighborhood centers, where they can pick up some essentials from a small grocer or meet friends for coffee in a local deli or café.

Public parks and open spaces provide places to gather, recreate and enjoy the area's scenic beauty. These green spaces also preserve and protect sensitive resources. Small neighborhood parks are dispersed throughout the neighborhoods, just a two to three-minute walk from most residences. A large, eight-acre park has the potential to provide ball fields, group picnic areas, a dog park and other recreational facilities to users throughout the city. Natural wetlands in drainages and small creeks combine with boulevards to create several looping greenways surrounding the neighborhoods. These greenways provide a circuit that eventually joins with the John McLoughlin Elementary School open space and meet up with the new Metro Regional Canemah Bluff Natural Area with preserved natural habitat and extensive hiking trails.

Homes are grouped close together in the blocks surrounding the neighborhood centers, while lots further from the centers, toward the neighborhood edges, are increasingly larger. Many of the lots in the new neighborhoods will have rear service alleyways for accessing garages behind houses and shops. By eliminating garages from the street, houses can be designed to orient front porches and stoops to the streets, which in turn contribute to "eyes on the street" or natural surveillance of passersby. Neighbors knowing one another and keeping a watchful eye on the streets, sidewalks and parks are the best security for a community.

South End utilizes a network of streets connecting convenient destinations to which residents can walk, bike or drive. New local streets and lanes are added incrementally from one branch to the next to help disperse travelers, provide parallel routes to South End Road, and maintain slow speeds throughout the neighborhood. Eventually these "capillary" streets will form a web of ways to travel throughout the community. Some proposed roadways within the concept plan will utilize a center island which may be used for tree planting, pedestrian features, and art installations while also providing stormwater management functions.

Key Elements

Natural Features

Preservation of contiguous natural spaces and wildlife corridors.

Preservation of most wetland areas with several road connections across streams/wetlands at narrow points.

Improved access to natural areas and views.

Parks and Trails

Network of new parks, open spaces and gathering places.

Larger park sufficient for ball fields and other recreational opportunities.

Trail connections to parks, natural areas, regional trails, neighborhood retail and residential neighborhoods.

Use of utility corridors for new trails.

Preservation of private open space for non-public uses.

Civic uses in various parks and public spaces.

Housing

Housing choice—a mix of single family, multi-family and mixed use designations.

Small lot residential located in two neighborhood centers along South End Road.

Retail

Limited neighborhood commercial uses along South End Road at Forest Ridge Lane and Navajo Way.

Sidewalks and pathways on both sides of every street provide the means to travel the neighborhoods safely. Narrow street widths and on-street parking reduce traffic speeds throughout South End. Children can walk or bike safely to school on this network of interconnected paths, sidewalks and streets. The interface between the neighborhoods and the Urban and Rural Reserves at their edges is of particular interest. In most locations, a narrow, slow moving road runs along the edge of the neighborhood allowing residents throughout the community to enjoy natural parks and scenic views.

Civic uses, such as libraries, community centers, park pavilions, post offices, senior centers and interpretive centers, are places where people gather in addition to stores and cafes. While these places fit well in the neighborhood centers along the main street, they can also disperse in the neighborhoods, depending on their functions. Since civic uses are community-gathering places, they are best to be in highly visible places, perhaps at the end of an important street, or overlooking a park, plaza or square. These become the symbolic icons that people use to remain oriented and grounded in their communities.

The timing and extent of new improvements depends on many factors, including market conditions and the desire of owners to develop their properties. New development pays the majority of infrastructure costs through Systems Development Charges and other fees. The costs of large capital infrastructure such as sewer mains and pumps stations necessary to support private redevelopment of the plan area are thoroughly analyzed and properly financed before development occurs.

Key Elements

Transportation

Complete road network promotes connectivity and increases travel options.

Opportunities for new sidewalks, pathways and bike lanes.

South End Road as three-lane arterial.

Two family-friendly roads parallel to South End Road; the eastern-most designated a collector.

A slow, narrow road along the bluffs to provide public access and views with safe pedestrian crossings to Cahemah Bluffs Natural Area.

Roundabouts to safely accommodate through-traffic at major intersections.

Optimized number of new street connections to South End Road to preserve capacity.

Infrastructure

New water and sewer infrastructure constructed with roads to meet community needs.

Stormwater retention ponds and swales along natural features at

Land Use

Property owners must apply for annexation of lands within the plan area to the City before any new development may take place. Upon voters' approval the concept plan can slowly start to take form. South End currently serves primarily residential frontages. The proposed concept adds two small neighborhood commercial centers populated by several main street-oriented retail and mixed use opportunity sites. The northernmost commercial district is centered around the intersections of South End Road and S Forest Ridge Lane. The southernmost neighborhood commercial site is located around the intersections of South End Road and S Impala Lane and S Navajo Way. The remainder of the South End Road Corridor continues to provide opportunities for residential development. New developments are encouraged to limit vehicular access to South End Road, instead favoring access from a series of new local streets created as the periphery of the planning area is developed.

The concept plan is designed to retain as much of the existing rural character as possible in the outer edge of the area through large lot residential land use. The plan also reflects this notion by applying the City's large lot land use designations throughout the majority of the planning area.

While the outer edge of the plan is large lot residential, a mixture of districts provide for a diverse range of housing opportunities. A few portions of the plan are available for attached and multi-family housing. Small lot residential districts are clustered around the community's activity centers where they are supported by urban services and eventual access to transit. Large lot areas radiate out from the centers, providing a gradual transition in density to the community's edges.

Large lot residential zoning makes up the majority of the planning area with more than 245 acres of low density residential lands. A total of 132 acres of medium lot and 23 acres of small lot residential zoning is located in and near the activity centers along South End Road. Again, zoning only applies when properties are annexed to the city.

Housing

By far, the largest allotment of lands within the concept planning area is residential. Approximately 400 acres are identified within the conceptual planning area as residential lands. When annexed to the City, the lands will be assigned a variety of existing large lot zoning designations (R-10, R-8, and R-6) with 10,000, 8,000, and 6,000 square foot lots. The plan area will also contain selected medium and small lot residential areas. The City's existing R-5 and or R-3.5 zoning designations will be applied to medium lot areas resulting in parcels which range between 5,000 and 3,500 square feet. The medium lot designation will support detached residential homes as well as townhome or multiplex styled housing products. The City's existing R-2 zoning designations will be applied to the small lot residential district, resulting in average lot sizes of 2,000 square feet.

The residential mix proposed within the planning area will eventually result in a wide range of dwelling unit types and densities providing housing choice for all income levels. Table 3 illustrates the number of potential dwelling units within each residential category, ranging from a high of 2,637 units to a low of 1,747 units.

Table 3. Potential South End Dwelling Units

Residential Category	Potential Zoning	Gross Area (Acres)	Net Area (Acres)	High Density Estimate (Units)	Low Density Estimate (Units)
Large Lot Residential	R-10, R-8, or R-6	244.7	195.8	1,193	716
Medium Lot Residential	R-5 or R-3.5	132.3	105.9	1,106	774
Small Lot Residential	R-2	23.0	18.4	336	256
Neighborhood Commercial / Mixed Use	MUR	11.2	9.0	No Assumed Density	No Assumed Density
Total		400	322	2,637	1,747

Note: See Appendix B for detailed density calculations.

Oregon City is required by the Metro Urban Growth Management Functional Plan to provide for an average density of 10 units per acre in the 2002 UGB expansion area. The area added prior to 2002 is governed by the Metropolitan Housing Rule and requires the City to provide for 8 units per acre. The net acreage of the 2002 UGB expansion area is approximately 133 acres resulting in the need to provide for 1,330 units. The net acreage of the pre-2002 UGB expansion area is approximately 196 acres, resulting in the need to provide for 1,568 units. Therefore, Oregon City is required to provide for approximately 2,898 homes, 261 more units than provided at the high end of the South End Concept Plan density range.

While the proposed Comprehensive Plan amendments do not achieve the numerical density requirement within the 2002 expansion area of the plan, Metro recognizes that "the City's effort to successfully plan for a larger area, including developable land within the original 1980 UGB, has resulted in a well-integrated and higher density area overall. For this reason, Metro concludes that Oregon City L13-03 and L13-04 and associated Findings of compliance meet the intent of and demonstrate substantial compliance with Title 11 of the Functional Plan as well as the conditions of addition of Metro Ordinance No. 02-969B."

Neighborhood Commercial

Retain more open space and working landscape, such as farms and forest.

Areas of the plan designated as neighborhood centers are assigned the City's Neighborhood Commercial zoning designation upon annexation. The implementation of the Neighborhood Commercial zoning results in an urban services and trading zone with opportunities for smaller scaled community convenience facilities. Permitted uses within the neighborhood commercial zone include a variety of residential and commercial uses.

Parks and Trails

The South End Concept Plan provides access to a network of parks and open space within easy walking distance of residents and offers a variety of opportunities for recreation. The South End area can be organized into roughly four neighborhoods based on a quarter-mile (five-minute) walking radius. The plan utilizes bands of open space consisting of sensitive habitat and drainage areas, park land and roadways with landscaped central parkways to connect each of these neighborhoods to each other and the adjacent regional natural area at Canemah Bluffs. Neighborhood commercial uses are focused along South End Road, with several opportunities to connect to park sites adjacent to these higher density areas, including creating a village center in the form of a plaza or green space.

Also key to the development of the South End Concept Plan is an eight-acre community park. The 1999 Oregon City Park and Recreation Master Plan indicated a critical need for the City to acquire a park in this area as this portion of the City does not have access to community park facilities, is experiencing increased growth and has a limited supply of developable land. Oregon City community members were surveyed in 2008 as part of the Parks and Recreation Master Plan Update. At the top of the list of needed parks and recreation facilities were: walking and biking

trails (77%), small neighborhood parks (70%), open space and natural areas (61%), large group picnic areas and shelters (59%), large community parks (59%), and nature trails and nature center (56%). The most common reason residents traveled outside the City for recreation purposes was to participate in soccer, baseball and basketball. The overall variety of facility types in the South End should be carefully considered as part of any site specific development plan.

The Oregon City Park and Recreation Master Plan, National Recreation and Park Association's park and recreation facility guidelines provide the following standards for park development: 1-3 acres of neighborhood parks per 1,000 residents; 2-4 acres of community parks per 1,000 residents; and 6-10 acres of developed park facilities per 1,000 residents. These standards indicate the need for a minimum of 19.8 acres of developed parks, including neighborhood and community or other developed park facilities in the planning area, assuming a minimum buildout population of approximately 2,200 residents. As currently proposed, the South End Concept Plan provides 24 acres of parks and an additional 51 acres of open space, as shown in Figure 5.

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Figure 5. Proposed Parks and Open Space Improvements – replace this sheet with 11x17 map

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Natural Resources

Important natural resources occur within the South End Concept Plan area. These resources are predominately associated with unnamed stream channels located on the eastern portion of the plan area, and the area of western bluffs overlooking the Willamette River. The South End Concept Plan takes great care to preserve and integrate natural resources. An inventory map showing streams, wetlands and their buffers, and a vegetation classification map showing forest canopy and open spaces are used to inform decisions on where to plan development and where to preserve open space and natural resources. Most development is concentrated outside of and away from natural resources, while recreational areas such as trails and parks are designed to complement and preserve those resources.

Transportation

South End has an interconnected network of multi-modal streets that take advantage of the relatively flat terrain at the top of the bluff and build upon and connect with existing streets in the area. The design of the streets reflects the character of the neighborhood, reinforcing its rural nature while accommodating all modes of travel and users of all ages and abilities. The streets are more than just places for automobile travel; they are also where people gather, walk, bike, access transit, and park their vehicles. As such, they are designed to safely connect people to where they need to go, giving residents, and visitors more travel choices to destinations.

Public transportation is desperately needed, particularly as the population ages.

Multi-Modal Street System and Function

The 2013 Oregon City Transportation System Plan (TSP) street classification system consists of a scale and design appropriate to adjacent properties and land uses in South End as illustrated in Figure 6. These multi-modal classifications also provide for and balance the needs of all travel modes including pedestrians, bicyclists, transit riders, motor vehicles and freight. Within these street classifications unique circumstances may lead to alternative context sensitive designs. The Oregon City multi-modal street system standards adopted in the 2013 Oregon City TSP are further modified to reflect proposed land uses in the South End Concept Plan area, shown in Figure 7.

Figure 6. Street Design Type

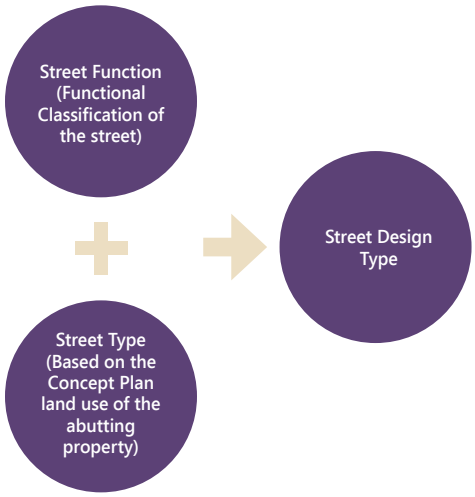

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Figure 7: Multi-Modal Street System – replace this sheet with 11x17 map

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The functional classification of a roadway defines its design characteristics (such as minimum amount of travel lanes), level of access and usage within the City and region. The street functional classification system forms a network that works together to serve travel needs on a local and regional level. Roadways with a higher intended usage generally provide more efficient motor vehicle traffic movement (or mobility) through the City, while roadways with lower intended usage provide greater access for shorter trips to local destinations. The three classifications designated for the South End Concept Plan area, include Minor Arterial Street (South End Road), Collector Streets (Beutel Road-Parrish Road, Rose Road, and Deer Lane extension), and local streets (all other streets in the South End Concept Plan area).

As the major street through the area, South End Road connects residents, commuters, and visitors to downtown and the regional transportation system. It is designed in a manner to serve the through-travel demand, while still being viewed as an asset to the neighborhood rather than a barrier. Bicyclists are accommodated with an exclusive on-street bike facility that is physically separated from motor vehicle traffic with a parking lane and/or a buffer. Where on-street parking is allowed, the cycle track is located to the curb-side of the parking (in contrast to bike lanes). Those walking are accommodated with sidewalks buffered from the street with landscaping and/or street furnishings. Safe and comfortable pedestrian and bicycle crossings are provided where facilities cross South End Road.

To the east and west of South End Road are networks of streets and shared-use paths providing on and off street connections to schools, parks, housing and shopping. Primary street connections to South End Road for those driving in the Concept Plan area are via Deer Lane-Madrona Drive, Beutel-Parrish Road, and Rose Road. These streets employ design techniques to create safe, slow streets without diminishing vehicle capacity, mitigating the impacts of the traffic on the adjacent housing and providing greater balance between safety and mobility.

I would like improvements of the street design to be simple, affordable, and therefore doable.

Street Design Types

The street types in Oregon City require a balance between street functional classification, adjacent land use, designation and the competing travel needs by prioritizing various design elements. Overall, there are 10 different design types for Streets in the South End Concept area ranging from Mixed-Use Minor Arterial to Shared Local Street as illustrated in Figures 3a to 3j of Appendix C. The applicable design type for each street section can be seen in Figure 8.

Three street types designated for the South End Concept Plan area are:

- **Mixed-Use Streets** typically have a higher amount of pedestrian activity and are often on a transit route. These streets should emphasize a variety of travel choices such as pedestrian, bicycle and transit use to complement the development along the street. Since mixed-use streets typically serve pedestrian oriented land uses, walking receives the highest priority of all travel modes. They are designed with features such as wider sidewalks, traffic calming, pedestrian amenities, transit amenities, attractive landscaping, on- street parking, pedestrian crossing enhancements and bicycle lanes.

An example of permeable pavers

An example of a planter box adjacent to the sidewalk

Preserve open space, not just in parks, but in gardens and areas of working landscapes where small farming and woodlots provide more options to wildlife than just suburban housing.

- **Residential Streets** are generally surrounded by residential uses, although various small shops may be embedded within the neighborhood. These streets often connect neighborhoods to local parks, schools and mixed-use areas. They are designed to emphasize walking, while still accommodating the needs of bicyclists and motor vehicles. A high priority is given to design elements such as traffic calming, landscaped buffers, green street treatments, walkways/ pathways/ trails, on-street parking and pedestrian safety enhancements.
- **Family Friendly Streets** to help encourage active transportation by providing comfortable, low-stress routes between neighborhoods and local parks, schools, and shopping areas. The network generally serves as a greenway that links parks, schools, jobs and other destinations in the City through a network of shared-use streets and off-street shared-use paths. These routes are considered walking and biking streets that are also used by motor vehicles for local access.

  Family friendly streets area local streets, modified to prioritize the through-movement of bicyclists and pedestrians while maintaining local access for automobiles. These routes include wayfinding signage and pavement markings, and commonly make use of traffic calming features that reduce motor vehicle speeds and discourage through traffic. Where these facilities cross major roadways, safe and comfortable pedestrian and bicycle crossings are provided. Further enhancements may include "green street" features such as bioswales and street trees, pervious concrete or asphalt, in addition to wider sidewalks and improved pedestrian amenities, such as benches and pedestrian-scale lighting.
- **Shared Streets** are roadways where bicyclists and motorists share the same travel lane. The most suitable roadways for shared bicycle use are those with low speeds (25 mph or less) and low traffic volumes (3,000 vehicles per day or fewer). These streets serve to provide continuity to other bicycle facilities (e.g. bicycle lanes) and should include shared lane markings. Common practice is to sign the route with standard Manual on Uniform Traffic Control Devices (MUTCD) green bicycle route signs with directional arrows. Shared roadways can also be signed with innovative signing that provides directional information in terms of bicycling minutes or distance (e.g., "South End Road, 3 minutes, ½ mile").

Design Elements for Streets

To better represent and strengthen the rural character of the South End Concept Plan area, and to further enhance planned driving, walking and biking infrastructure, the City should implement the following design elements as appropriate:

- Permeable pavement
- Bioswales
- Stormwater planter boxes
- Green parking
- Traffic calming

Figure 8: Street Design Types – replace this sheet with 11x17 map

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Walking and Biking

Residents of South End can travel safely and efficiently between destinations via any number of active transportation modes, such as walking, biking, or skating. A system of Family Friendly Routes, on-street sidewalks and bikeways, and shared use paths provide quality access to key destinations—improving the overall health and livability of the neighborhood. Both the trail and on-street pedestrian and bicycle network are context sensitive, addressing the rural character of South End, while also meeting the expressed community desire to have increased opportunities for walking and biking. Moreover, these networks are fully integrated with the existing trail and bikeway network and the planned active transportation projects in the Oregon City TSP. These measures help ensure that residents of South End can access goods and services without the need for an automobile within and outside of the South End area.

Proximity to the Canemah Bluffs Natural Area and potential for the development of many smaller neighborhood and larger community parks, are significant assets for the future of South End. A high quality network of low-stress pedestrian and bicycle facilities provides residents with better access to these scenic natural and recreational areas. Many streets in the South End area include large vegetated medians and/or buffers to help maintain a natural, rural feel to the street. In addition to serving a traffic calming function, these streets provide informal areas for social activity, recreation and play.

Those walking in South End are accommodated primarily through street-side sidewalks or pathways. On arterial and collector streets, sidewalks are installed on both sides of the roadway. Local streets are more flexible and could include pervious pavers or other surface types as a sidewalk or sidepath. Sidepaths maintain physical separation from motor vehicle traffic via split-rail fence and/or landscaped buffer and help to retain the rural character of South End. Off the main street system, a web of safe, comfortable walking and biking routes provides access between neighborhoods and local parks, schools, and shopping areas. This network serves as a de facto linear park system linking the Concept Plan area to other parts of the City through on-street bikeways and off-street shared-use paths.

For bicyclists, dedicated facilities vary based on roadway classification. On collector and arterial streets, where traffic speeds and volumes are higher, bicyclists are provided with physically separated facilities. However, the majority of streets in South End are local streets, with lower traffic speeds and volumes. Some of these streets accommodate pedestrians and bicyclists through their designation as Family Friendly Routes (Figure 8). The Family Friendly streets prioritize the through-movement of bicyclists with shared lane markings (SLMs) to demonstrate where bicyclists should operate on the roadway—outside the parking lane door zone. SLMs also alert motorists to expect bicyclists on the roadway. Bicyclist wayfinding signage highlights key destinations, such as parks and community centers, and the best routes on which to bike. These signs improve destination and route finding for residents and visitors alike, encouraging exploration and activity.

South End Road incorporates a protected on-street bikeway, or cycle track. The cycle track is an exclusive on-street bike facility that is physically separated from motor vehicle traffic with a parking lane and/or a painted buffer. Where on-street parking is allowed, the cycle track is located to the curb-side of the parking (in contrast to bike lanes). To improve visibility of the bicyclists, the cycle track drops to a buffered bike lane and on-street parking is prohibited 30 feet in advance of the cycle track termination when approaching intersections. The cycle track either remains curb-tight or bend-in towards the roadway with curb-extensions to improve visibility of the bicyclists at the intersections.

Pedestrians are accommodated with sidewalks buffered from the street with landscaping and/or street furnishings. Safe and comfortable pedestrian and bicycle crossings are placed where facilities cross South End Road.

We need more amenities like open spaces and trails but also some neighborhood retail/ commercial so residents do not have to travel across town.

Example of a cycle track bending in towards the roadway and parking restrictions when approaching an intersection

Trails

Figure 9 also illustrates the potential active transportation network for South End. The emphasis of this network is on connecting residents to existing and future trails, as defined in the most recent Oregon City Transportation System Plan, as well as key destinations within and near to South End. Trail access also connects residents to important viewsheds in the South End area. The types of trails vary by context, from walking paths made of pervious paver walking paths to concrete shared use paths for pedestrians and bicyclists. Some streets also have a dedicated path through the wide landscaped median. User comfort on these trails is maximized due to the physical distance and separation from motor vehicle traffic.

Figure 9: Walking and Biking Network – replace this sheet with 11x17 map

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Transit

The Concept Plan sets the stage for the provision of transit, recognizing that the type and extent of service improvements will play out over time. The specifics of transit service will depend on the actual rate and type of development built, provider resources and policies, and, consideration of local options. Future redevelopment in the South End Concept Plan area may make transit a viable option in the future.* As shown in Figure 10, two conceptual options for future transit include:

- A route modification to the existing TriMet bus service between the Oregon City Transit Center and Clackamas Community College (Route 33) that would extend the route from Clackamas Community College west down Meyers Road, then south down Leland Road, and west down McCord Road and Partlow Road to South End Road. At South End Road, the route would travel south to serve the South End Concept Plan area, before heading north again returning to the Oregon City Transit Center via the Deer Lane extension, Madrona Drive, Lawton Road and South End Road.
- New local loop route that connects to the Oregon City Transit Center and serves the South End Concept Plan area, and the residential areas along South End Road, Partlow Road, Central Point Road, Warner Parrott Road, Canemah Road, Telford Road, and Center Street not currently served by transit.
- A third option would be to work with another transit provider, such as Canby Area Transit. Candy Area Transit's Orange Line (99E) currently travels from the Canby Transit Center to the Oregon City Transit Center.

* TriMet is currently exploring transit service and access improvements for the southeast area of the Portland region, of which Oregon City and South End are a part.

Reserve most of the area for open space, natural areas and parks. Densify the remaining areas and create a 15-minute community that emphasizes active transportation.

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Figure 10: Transit Options for the South End Concept Plan Area – replace this sheet with 11x17 map

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Public Infrastructure and Services

Water

The existing Oregon City water system is expanded to serve the entire South End Concept Plan area. Based on the 2002 UGB, stated and delineated within the 2012 City of Oregon City Water Distribution System Master Plan, all existing and proposed water mains, lines and services are incorporated under the ownership of Oregon City. Ownership of the Clackamas River Water (CRW) system is incorporated into Oregon City's water distribution system. CRW facilities may not be designed to handle urban levels of development and will need to be improved, expanded or replaced to continue to provide water service to corresponding customer areas. The existing CRW water system should be analyzed further to determine the need for replacement. The Master Plan forecasted sufficient water supply to accommodate build out in the South End Zone. However, the South End Concept Plan proposes development beyond what is shown in the Master Plan. Maximum Daily Demand (MDD) available pressure and available fire flow should be re-evaluated to account for the zoning densities shown on the current concept plan. As the annexation process occurs, the City will notify and work with CRW and its customers to assure transfer to the city water system transpires in a methodical way and rate payers are aware and informed of the process.

Distribution Improvements

The proposed water main system improvements are shown in Figure 11. Water main improvements consist of new water mains ranging from 8-inches to 12-inches, unless stated otherwise. Several connections are made to both the existing City of Oregon City water main and CRW main, located along South End Road. The most significant extension is the connection to the existing 12-inch main, located northwest of South End Road at the intersection of South Rose Road and South Deer Lane. A new 12-inch main runs southwest along the concept plan boundary. The 12-inch main connects back to South End Road within a street located southwest of the intersection of South Impala Lane and South End Road. Numerous 8-inch mains are constructed within the proposed street layout. The grid network created by this new system layout provides a looped distribution system, reducing the chances of pressure issues. All pipe size estimates are preliminary and should be revised with detailed flow modeling. The pipe sizes assume that the flow velocities are kept at or below 10 feet per second. Site specific studies should be performed as development occurs to test and confirm available fire flows and minimum pressures can be achieved, as outlined in the *2012 Water Master Plan, Table 4-1: City of Oregon City Planning and Design Criteria*.

Stormwater

The City Engineering Division is creating a new series of Low Impact Design (LID) standards. Therefore, a low impact stormwater approach is recommended for the planning area. Providing LID standards to the planning area limits the impact to existing and aging storm systems and reduces the infrastructure required to service the area. LID approaches mimic the natural hydrology of the catchment area. The approach manages stormwater within each basin, separating the basin into several smaller sub-basins. The stormwater within each basin can be managed utilizing the following categories: individual sites, streets and regional facilities. Figure 12 shows

where each of these approaches can be used in the South End Concept Plan. Site specific LID designs need to take the topography and soil conditions of the site into account. Specific site studies should be required to ensure that appropriate LID designs are implemented.

Individual sites include all residential areas (single family and multi-family), commercial and open spaces. Stormwater runoff is minimized by using less impervious surfaces wherever possible and integrating stormwater management facilities within the properties. Impervious areas are minimized by utilizing porous pavements (i.e. pervious concrete, and eco-roofs). Stormwater management facilities are incorporated into the landscape. For instance, a vegetated bioswale can be used in a parking lot in a landscape isle, while a small rain garden can be incorporated into a residential yard.

Runoff from roads and streets is managed utilizing 'green streets,' where possible. Green streets utilize landscape street-side planters or swales that capture and detain or infiltrate stormwater runoff. The soil and vegetation within the planter or swale filter pollution. They are designed to accommodate the traffic needs while providing a fully functional stormwater management system and landscaping. If the native soil does not allow for infiltration of the stormwater, a sub-surface detention system can decrease the size of a downstream stormwater facility. Green streets are also used to convey runoff rather than utilizing an underground conveyance system. Conceptual locations of regional stormwater ponds are shown in Figure 12 in the low spots of the basin, but can be relocated once site specific information is obtained. If a regional facility is proposed, further studies should be performed to confirm ultimate location, design, size, soil condition and over all site conditions and constraints. In addition, downstream analysis should be performed to analyze and mitigate impacts to the regional system. Potential alternate locations for regional stormwater facilities could be within power line corridors in coordination with the Portland General Electric and Bonneville Power Administration.

When soils or grading constrain the use of individual site management and green streets, a regional approach to stormwater management should be explored. Regional facilities should be located in low points within open spaces to manage large flows for both treatment and detention before releasing to a creek or river. Regional facilities are usually operated and maintained by the City.

Stormwater Conveyance

Two methods for stormwater conveyance both utilize gravity flow to either a creek or river or a regional stormwater facility. The first is surface conveyance consisting of street-side planter or swales and ditches. Surface conveyance contains ditch inlets and culverts. Some manholes may be required to link the systems together. Whenever possible, this should be the first approach to stormwater conveyance. A certain amount of treatment and retention occurs when stormwater is conveyed through a system that is vegetated.

The second is an underground system that includes many more catch basins and manholes than a surface conveyance system. Underground systems can be more expensive to construct since they are conventionally three feet or more below ground. On busier streets such as South End Road, an underground conveyance system is likely more practical.

Sanitary Sewer

The three drainage basins in the study area require pump stations and gravity sewer lines. Each pump station pumps discharge a short distance to gravity lines from each basin that convey discharge to the intersection of South End Road and Beutel Road. A new pump station and force main pump the effluence to the South End Road Interceptor, located at the intersection of South end Road and Glacier Court. An alternate to pump the entire area to the Parrish Pump Station was analyzed but not favored because it would require improvements to increase the capacity of the Parrish Pump Station as well as the associated pressure mains.

Collection Improvements

Proposed sanitary sewer system improvements are shown in Figure 13 and are described in greater detail in Appendix D. Due to the existing municipal system and topography of the future serviced area, the conveyance options for the discharge of basins E6, E7 and X1, as outlined in the Sewer Master Plan are quite limited. Basin E6 is pumped north to Beutel Road where it discharges to a proposed gravity line, then flows southeast to the proposed pump station at the intersection of South End Road and South Parrish Road. Discharge from Basin E7 utilizes two pump stations located west of South Kelland Court and approximately 1,300 feet south of the intersection of South End Road and South Kelland Court. Both pumps within basin E7 utilize discharge to a proposed gravity line located along South End Road, where it intersects the UGB. The proposed gravity line flows northeast along South End Road to the proposed pump station at the intersection of South End Road and South Parrish Road. Future developments within Basin X1 could be routed to the proposed pump station at the intersection of South End Road and South Parrish Road, utilizing the proposed gravity lines along Beutel Road and South End Road. The proposed pump station at the intersection of South End Road and South Parrish Road pumps the discharge from basins E6, E7 and X1 through a proposed forcemain along South End Road northeast to the existing gravity line at the intersection of South End Road and South Glacier Court.

Routing basins E6, E7 and X1 to the existing Parrish Road Pump Station would require upsizing the existing gravity lines, constructing a parallel force main along the existing force main and would leave a spare capacity to serve only an additional 375 people. Additional service would require upsizing the pump station or routing discharge directly to the South End Road Interceptor. Basin E7 will be serviced by two pump stations, due to its topography. The proposed pump station at the

intersection of South End Road and South Parrish Road will accommodate the peak flow of all three basins. Sizing of the proposed pump stations is based on the buildout peak flow for the average density for the UGB expansion area. Further flow monitoring is recommended to verify previous Inflow/Infiltration assumptions for basins E6, E7 and X1. Locations of proposed pump stations and sewer lines are preliminary and can be relocated based on further studies and site specific information.

Figure 11. Proposed Water System Improvements – replace this sheet with 11x17 map

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Figure 12. Proposed Stormwater Improvements – replace this sheet with 11x17 map

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Figure 13. Proposed Sanitary Sewer Improvements – replace this sheet with 11x17 map

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Public Services

Police

Upon annexation, responsibility for providing police services to new City properties is transferred from the Clackamas County Sheriff's Department to the Oregon City Police Department. The Police Department workforce consists of approximately 1.3 officers per 1,000 residents. Therefore, the Police Department will need an additional six to nine officers to maintain that rate at buildout of the South End area. Transfer of service from Clackamas County to Oregon City will result in an increased police presence and decreased response times.

Extend sidewalks further down South End Road for kids to safely walk to the elementary school.

Fire

Clackamas County Fire District #1 serves within and outside Oregon City city limits and therefore continues to provide fire protection services to the South End. The Concept Plan area is served by Fire Station 17, located 0.2 miles to the north on South End Road. The South End Fire Station 17 currently is staffed with a minimum of two firefighters at all times and responds to approximately 50-60 calls for service per month within its own response area. The Fire District's current standard for response time in the Concept Plan area is approximately seven minutes. It is the long-term intent of the Fire District to staff that station with a minimum of three firefighters at all times.

Schools

The Oregon City School District indicates John McLoughlin Elementary School, located within the South End Plan area, currently enrolls 560 students and can accommodate 30 more for a total capacity of 590 students. If future enrollment exceeds the capacity at McLoughlin Elementary, the School District plans to re-open King Elementary School, located less than one mile north on South End Road. King Elementary provides an initial capacity of 400 students with a plan to add capacity if necessary.

The nearest middle and high schools are Gardiner Middle School and Oregon City High School, two and four miles away respectively. Current enrollment at Gardiner is 777 students for grades 6-8. Total capacity for the school is 930 students. Ogden Middle School has a capacity for 960 6-8 students. Oregon City High School has a capacity of 2,510 students based on an average of 25 students per classroom. Maximum capacity is 2,800 with current enrollment at slightly more than 2,300 students.

Based on the methodology used by the School District and Portland State University's Population Research Center, development in the study area at buildout will result in the addition of approximately 988 students: 456 elementary school, 228 middle school and 304 high school students. These increases in enrollment are expected to occur gradually over the next thirty or more years, depending on the pace of annexation and development in the planning area. Moreover, future enrollment for these elementary schools is projected to remain relatively flat, as new households in their service area are projected to include fewer young children. Therefore, No new school sites are identified in the South End Concept Plan. The City and School District will continue to coordinate as the South End area develops.

IMPLEMENTATION

Title 11 of Metro's *Urban Growth Management Functional Plan*, "Planning for New Urban Areas," governs growth within the region. The Functional Plan requires changes to city and county comprehensive plans and associated ordinances to implement regional goals and objectives for bringing needed land into the regional UGB. It "calls for long-range planning to ensure that areas brought into the UGB are urbanized efficiently and become or contribute to mixed-use, walkable, transit-friendly communities." Concept plans set the framework for governing jurisdictions' eventual adoption of comprehensive plan policies and implementing ordinances for these additional lands.

Extend sidewalks further down South End Road for kids to safely walk to the elementary school.

The Concept Plan is adopted as an amendment to the City's Comprehensive Plan and its documents.

In Oregon City, the South End Concept Plan guides the orderly and efficient conversion of land in the South End area from rural to urban uses. The Plan consists of the following elements in accordance with Metro title 11:

- Annexation
- Housing (density, diversity, and affordability)
- Transportation
- Natural resources
- Public facilities
- Public schools
- Parks and trails
- Funding and Finance Sources
- Overall urban growth diagram
- Agency Coordination

To facilitate implementation of the South End Concept Plan, the following goals, policies and strategies have been developed by a team of staff, consultants and citizen advisors for consideration for adoption by reference into the City's Comprehensive Plan. Appendix H includes a more detailed descriptions of specific revisions to the Oregon City Municipal Code.

South End Concept Plan

Goal

The orderly and efficient conversion of the South End area from rural to urban land uses as guided by the South End Concept Plan.

Policies

- Ensure that annexation of land within the planning area is consistent with other goals, policies and strategies in the Concept Plan.

Implementation Strategies

Review annexations proposals for adherence to the vision, values, goals and policies identified in the Concept Plan, including adequacy of existing and planned services.

Subdivisions

Goal

Development takes place in a manner that results in a cohesive South End community.

Policies

- Create an interconnected local street network through incremental subdivision of land.

Implementation Strategies

- Incentivize larger subdivisions through changes to the City's fee structure or other means.
- "Stub" new streets to adjacent parcels so that future development can complete the connections.
- Whenever possible, locate streets in the midline of long parcels or straddling property lines.
- Create a "T" street at the back end of long parcels so that a new east/west street network can be established.

Housing

Goal

A diversity of housing types and densities that meets the needs of households with a range of incomes.

If more neighborhoods are developed, we will need more community park spaces.

Policies

- Zone land to allow for a mix of single family, multi-family and neighborhood commercial/mixed use designations, including those typically more affordable to households with low and moderate incomes.
- Incorporate an "urban-to-rural transect" approach, where more "urban" conditions are closer to the center of the community, while more rural conditions are located at the more natural edges.
- Design housing to enhance the quality of the streetscape experience and promote neighborly interaction and local surveillance of the streets.
- Require the inclusion of private outdoor space on each lot, primarily in the rear or side of the houses.
- Require landscaped features along the edges of private lots to help maintain rural character.

Implementation Strategies

- Adopt the South End urban growth diagram found on page 43 of the Concept Plan.
- Create flexibility in development standards to allow for cluster housing, accessory dwelling units and other alternative housing types.
- Encourage architectural elements to present lively building frontages to the street.
- Create a Frontage Zone between the sidewalk and primary building façade to accommodate street-facing elements.

I would like to see additional retail services. It's walkable in neighborhoods, but not to anything.

- Require entry floor levels be raised as in proportion to its proximity to the sidewalk. The closer the house is to the sidewalk, the higher the entry floor level should be raised.
- When rear alleys are present, limit garage setbacks and require additional parking be located beside the garage.
- Encourage the use of detached garages.
- Recommend urban and rural "edge types," such as low fences, hedges and walls, for placement around residential lots.

Neighborhood Retail

Goal

Small clusters of retail stores and businesses within a ten minute walk of most homes provide essential services and community meeting places.

Policies

- Create an active retail environment and streetscape experience along South End Road within the Neighborhood Commercial (NC) zone.
- Encourage neighborhood retail that serves local and area customers.
- Provide for meeting places and opportunities for social gathering.

Implementation Strategies

- Consider limiting allowed NC uses along South End Road at Forest Ridge Lane and Navajo Way in accordance with community vision and values.
- Require retail on the first floor of any development in the NC zone within 200 feet of the intersections of South End Road and Forest Ridge Road and Navajo Lane.
- Provide on-street parking for easy and convenient access and visibility to shop front.
- Locate retail on both sides of South End Road in order to provide a "main street" retail format.
- Require on-street parking with additional on-site parking in the rear of building accessed by alleys.
- Create a Frontage Zone between the sidewalk and primary building façade to accommodate street-facing elements.
- Site retail buildings within 0' to 10' of the South End Road right-of-way.
- Encourage retail buildings that have a more distinct storefront retail character.

Transportation

Goal

A connected transportation system that provides a variety of travel options, allowing people to move safely within the community and to other parts of the city and region.

Policies

- Use a complete road network to promote connectivity and increase travel options.
- Create a safe, friendly environment for walkers and cyclists.

Implementation Strategies

- Identify updates to City, County and regional transportation plans to incorporate proposed improvements to major facilities.
- Include proposed transportation improvements in the City's Capital Improvement Plan (CIP).
- Apply appropriate road standards as development occurs and facilities are designed and constructed.
- Coordinate with Clackamas County in planning for improvements to county facilities.
- Reference the multi-model street system plan and specify that the City's planned level of service on all public streets includes planned connections as identified in the Concept Plan.
- Optimize the number of new street connections to South End Road to slow traffic speeds on South End and increase access to neighborhood retail.
- Use roundabouts to safely accommodate through-traffic at major intersections.
- Encourage rear alleyways to provide additional connectivity for cyclists and pedestrians and break up overly-long blocks.
- Review and refine the municipal code to resolve potential conflicts between sidewalk, street and accessway design codes and the South End Concept Plan (e.g., walking throughway, cycle track, accessways).
- Use more urban and hardscape elements (e.g., curbs and gutters) closer to the neighborhood center, and more rural and natural characteristics (e.g. gravel and bioswales) in the residential and outer edge zones.

Parks and Natural Resources

Goal

Streams, trees, wetlands and wildlife habitat are protected and enhanced through a network of natural areas.

Policies

- Preserve contiguous wetland areas, natural spaces and wildlife corridors.
- Improve access to natural areas and views.

My dream park, if I were a kid, would be one that has a covered playground. The area would be dry all year and cool during those hot summer afternoons.

Implementation Strategies

- Apply the Natural Resource Overlay District (NROD) to the two potentially jurisdictional wetlands and waters of the State/United States within the Plan area upon annexation, recognizing that development applications will be required to submit site specific delineations for these features to confirm their exact location.
- Adopt a habitat conservation plan (HCP) that identifies and describes habitat areas and prescribes voluntary measures to protect and preserve those resources.
- Protect Canemah Bluff extensions (OS1 and OS2) by identifying them on an official inventory map or adopt the Concept Plan by reference as an official inventory.
- Amend the Oregon City Parks, Open Space and Trails Master Plans to preserve views provided by trails within or adjacent to natural resources.

Public facilities

Goal

Public water, wastewater and stormwater services meet the needs of current and future residences, businesses and institutions.

Policies

- Construct new water and sewer infrastructure with roads to meet community needs.
- Treat stormwater with retention ponds and swales along natural features at edges of plan area.

Implementation Strategies

- Develop and implement Low Impact Design (LID) standards in South End.
- Re-evaluate Maximum Daily Demand (MDD) for water and available fire flow to account for the zoning densities shown on the current concept plan.

Parks and Trails

We need some small community play grounds or green spaces to keep nature in our lives.

Goal

Parks, plazas and other public gathering places strengthen the sense of community and connectedness.

Policies

- Provide a network of new parks, open spaces and gathering places, including a facility sufficient for ball fields and other recreational opportunities.
- Incorporate trail connections to parks, neighborhood amenities and the regional trails system.
- Use utility corridors for new trail opportunities.
- Incorporate civic uses in various parks and public spaces.

Implementation Strategies

- Update City the Oregon City Park and Recreation Master Plan to include all South End Concept Plan parks so that their costs are adequately factored into the Capital Improvement Program and System Development Charge charges.
- Require subdivision applicants to review the South End Concept Plan and identify the location of future parks, open spaces and trails on their preliminary plat.

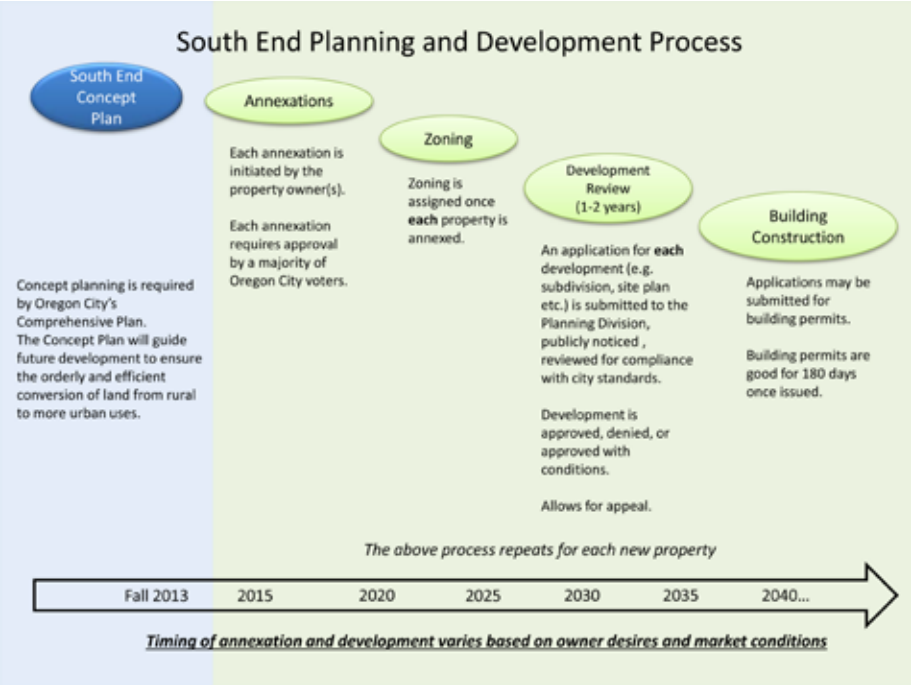
Planning and Development Process

Once this Concept Plan is adopted, the development process can begin. The actual process of development is driven by willing property owners and sellers. Oregon City annexations are subject to a vote of approval by city residents following approval by the City Commission pursuant to the City Charter. This process includes multiple elements: an application for annexation, annexation vote by the voters of Oregon City, application of an Oregon City zoning designation and the development review process (land division and site planning). Each element is a separate process subject to review and approval with the opportunity for public comment through at the Planning Commission and City Commission.

The timing and location of improvements required through the development process is difficult to predict since it depends on individual private owners interest in annexing and developing their property. The Concept Plan serves as a guide for these improvements if and when they occur. Figure 14 illustrates shows how these processes relate to one another.

Annexation of any portion of any portion of South End will be dependent upon the availability, capacity and status of existing water, wastewater, drainage, transportation, park and school facilities; increased demand for such facilities to be generated by the proposed development; additional facilities required to meet the increased demand and the method and source of financing required to provide additional facilities. Areas adjacent to existing city boundaries, facilities, and services are likely to be annexed first.

Figure 14. Planning and Development Process



I support well planned unit development that mixes housing types in a more natural, less traditional way. For instance, a small senior housing facility which includes some single family residences, some townhomes, a recreation center and possibly some neighboring small farm use.

The official urban growth diagram is on page 11 of the Concept Plan. The Proposed Implementation Map, Figure 15, illustrates one scenario in which the South End area could develop in accordance with the Concept Plan. The locations of the features shown on this map, including future land uses, roads and open areas are for concept planning purposes. The final location of these features will be determined when a site specific development plan is proposed following annexation initiated by property owners. Existing lawfully established land uses and structures within the UGB are regulated by Clackamas County and are permitted to remain until such time as the property owners decides to annex to Oregon City and develop their property subject to Oregon City zoning and development regulations.

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Figure 15. Proposed Implementation Map – replace this sheet with 11x17 map

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FUNDING AND FINANCE

This section addresses funding considerations for the Concept Plan including identification of major infrastructure capital improvement costs and funding options. Potential implementation action strategies are also identified.

Provision of Urban Services

The South End Concept Plan will serve as a framework for delivering urban services and public facilities and guiding private development. Developers will generally be responsible for dedicating required pubic facility right-of-way easements and providing local streets and utility connections to trunk line systems. Hence, this funding strategy focuses primarily on collector and arterial roadway improvements, and water and sewer trunk lines, and storm water collection systems, and parks/trails, which will require significant levels of public investment.

A combination of existing and potential new funding sources will be required to ensure that the South End area is developed over time in a manner that is fiscally sustainable and consistent with the objectives set forth in the Concept Plan. The primary service providers that are identified for the South End Concept Plan area are listed in Table 4. The Existing Conditions report, located in Appendix A of the Concept Plan, includes a more detailed discussion of each service provider.

Table 4. Primary Service Providers

Public Facility/Service	Primary Service Providers After Annexation
Annexation & General Government Administration	Oregon City, with voter-approval
Land Use	Oregon City
Transportation	Oregon City, Clackamas County, ODOT, TriMet
Stormwater and Natural Resources	Oregon City
Water	Oregon City and Clackamas River Water
Sanitary Sewer	Oregon City, Tri-City Service District
Schools	Oregon City School District
Energy/Power	Portland General Electric
Police Services	Oregon City
Fire and Emergency Services	Clackamas County Fire District #1

Public Facility Capital Costs

Total capital costs for major roads, sewer, water, stormwater and parks/trails systems have been estimated for build-out of the South End area and are summarized in this section. A more detailed description of these costs is provided in Appendices C, F and G. Unit costs were prepared based on local and regional experience with a variety of capital projects. The preliminary capital cost estimates do not include extraordinary cost for right-of-way acquisition, permitting or geotechnical soils work. Such extraordinary costs may include special environmental mitigation, subsurface soil enhancements, structural engineering systems, and business/residential relocation assistance.

In addition to water and sewer trunk line improvements, the Concept Plan envisions the South End area to be developed with new public parks/trails and storm water improvements needed to serve planned development in the area. The transportation elements assume "Family Friendly Collector" design standards for a segment of Madrona Drive and "Mixed Use Minor Arterial" design standards for segments of South End Road, along with several pedestrian-oriented intersections. As defined in the City's Transportation System Plan, Family Friendly Collector streets consist of multiple travel lanes with landscaped buffer strips, on-street parking, and wide paths for bicycles and pedestrians.

The total estimated capital cost for the major public facility improvements needed in the South End Area is shown in Table 5. While these costs are stated in 2013 dollars, the improvements are expected to be phased over 20-30 years, depending upon market conditions for development and the availability of funds.

Table 5. Capital Infrastructure Costs for South End Concept Plan Area

Public Facility System	Capital Cost	Primary Funding Area	Likely Funding Sources[5]
Transportation (collectors, arterials, traffic signals)[1]	**$20,235,000**		SDCs, Grants, LIDs, Street Utility rates, Developer Financing, Road Fund
South End Road Improvements	$ 3,870,000	City/County	
Other Collectors & Arterials	$16,365,000	South End	
Parks & Trails[2]	**$19,334,190**		SDCs, Grants, General Fund, Local Parks Utility Rates, Developer Dedications, Public/Private Partnerships, Voter-approved GO Bond
Shared-Use Paths	$6,045,375	South End	
Family-Friendly Street Pathways	$2,193,815	South End	
Community Park with Community Center	$7,500,000	City/South End	
Village Center Park	$1,450,000	South End	
Neighborhood Park	$765,000	South End	
PGE/BPA Corridor Greenway Trail	$1,380,000	City/South End	Agency partnerships
Water (mainline system)[3]	**$5,156,600**	South End	SDCs, Connection Charges, Utility rates, Developers
Sanitary Sewer (trunk system)[3]	**$4,056,800**		SDCs, Connection Charges, Utility rates, Developers
Stormwater System[3]	**$21,164,950**		SDCs, Connection Charges, Utility rates, Developers; Regional Mitigation Bank
Stormwater collection	$ 3,126,000	South End	
Green streets	$11,343,950	South End	
Regional Ponds	$ 6,695,000	City/Drainage Basin	
Subtotal	$ 69,947,540		
Other (planning/legal/admin.)[4]	**$2,798,000**	South End	General Fund, Planning fees, Grants
Total	**$72,745,540**		

[1] Derived from Table 3 of South End Concept Plan—Transportation Element Memorandum from DKS dated August 7, 2013.
[2] Based on preliminary conceptual cost estimates by Alta.
[3] Based on preliminary cost estimates by 3J Consulting.
[4] Preliminary estimate based on 4% of capital cost requirements.
[5] These existing funding sources may be supplemented with new funding mechanisms, such as urban renewal districts or parks utility fees; to be determined during preparation of the Public Facility Plan for the South End Area.

It is important to note that certain major investments, such as improvements to South End Road, are major investments (e.g. $3,870,000) that would likely require some level of investment over the next 20 years even if the South End Concept Plan area was not fully developed. Table 6 shows how a preliminary allocation of general funding responsibilities can be based upon the area of benefit.

Table 6. Estimated Capital Costs by Area of Benefit

	South End Public Facilities (Low-end cost)	Other City/County Facilities	Total Cost (High-end cost)
Transportation	$16,365,000	$3,870,000	**$20,235,000**
Parks & Trails	$10,454,190	$8,880,000	**$19,334,190**
Water (mainline system)	$5,156,600		**$5,156,600**
Sanitary Sewer System	$4,056,800		**$4,056,800**
Stormwater System			
Stormwater Collection	$3,126,000		$3,126,000
Green Street Enhancements	$11,343,950		$11,343,950
Regional Ponds		$6,695,000	$6,695,000
Subtotal	**$50,502,540**	**$19,445,000**	**$69,947,540**
Other (administration)	$2,020,102	$777,800	$2,797,902
Total	**$52,522,642**	**$20,222,800**	**$72,745,442**
Equivalent Residential Units (ERUs)	**2,447**		
Cost Per ERU	**$21,464**		

Source: derived from preceding analysis; with preliminary Equivalent Residential Unit (ERU) estimates.

Funding Strategies: Existing and Potential Sources

As with most successful large urbanizing areas with multiple property owners, the South End Area is expected to be developed incrementally over time with a mix of public and private funding and financing sources.

Existing Funding Sources

It will be important for the City to utilize full capital-cost and operating-cost recovery methods to avoid unsustainable fiscal impacts to the City's General Fund. Hence, existing funding sources, including local System Development Charges (SDCs), utility fees, and connection charges and rates (and capital improvement programs) need to be updated prior to annexation and development.

The existing local SDCs that currently apply to the South End area (after annexation) would generate significant amounts of funding that would be used to pay for adequate public facilities over time. The level of funding generated by SDCs (upon build-out of the South End Concept Plan area) is summarized in Table 7.

Table 7. Schedule of SDC Charges and Revenues before Credits, Oregon City South End

	SDC per ERU	Gross Revenue (before credits)
Transportation	**$7,833.90**	**$19,169,561**
Vehicles	$7,616	$18,635,766
Bicycles and pedestrians	$218	$533,795
Sanitary sewer	**$3,864**	**$9,456,139**
Oregon City	$1,844	$4,513,199
Tri-City Sanitary District	$2,020	$4,942,940
Stormwater	**$701**	**$1,714,429**
Oregon City Charge on New Development	$701	
Water	**$4,840**	**$11,843,292**
Oregon City	$3,374	$8,256,634
South Fork Water Board	$1,466	$3,586,658
Parks	**$3,543**	**$8,669,154**
Oregon City	$3,543	$8,669,154
Total SDC and Agency Summary	**$20,782**	**$50,852,575**
Oregon City	$17,296	**$42,322,977**
South Fork Water Board	$1,466	$3,586,658
Tri-City Sanitary District	$2,020	$4,942,940

Source: derived from Oregon City SDC calculator; analysis by FCS GROUP, based on 2,447 equivalent residential units added in the South End area.

To illustrate the level of potential funding "gaps" for major infrastructure improvements in the South End area, an analysis comparing the required level of capital investment to the potential amount of SDC revenues collected assuming the existing regime of SDCs per unit of development, and a range in capital costs from low (reflects improvements that primarily serve the South End area) to high (reflects total capital costs) is summarized in Table 8 and based on the mid-point level of development that is anticipated to occur over the next 20 years, which assumes 2,447 ERUs.[3]

The results of the status quo funding analysis generally indicates that the City may need to consider additional funding sources to help cover the capital costs of transportation, parks and trails, and stormwater systems that are required to accommodate new development in the South End area. The facilities with the greatest funding challenge include:

- Transportation: funding gap of $1.87 million
- Parks and Trails: funding gap of $2.2 to $11.4 million
- Stormwater System: funding gap of $13.3 to $20.3 million

While the analysis indicates that the SDCs for water and sanitary sewer should be adequate to cover capital costs, the issue of advance financing required system up-sizing and new sewer lift stations will likely require some form of developer or City financing. Advance financing options are discussed in the following pages.

[3] The ERU estimates are based the midpoint of a range in development, including: 1,747 to 2,637 single family dwellings and 170,000 to 340,000 commercial/office floor area, with 1 job per 500 square feet, and 1 ERU per 2 employees.

Table 8. Potential Capital Funding Requirements, Oregon City South End

	Capital Cost [1]		Potential SDC Revenue at Build-out	Potential Net Revenue/(Gap) before SDC Credits		Funding Strategies
	Low-end Est.	High-end Est.		Low-end Est.	High-end Est.	
Transportation	$17,019,600	$21,044,400	$19,169,561	**$2,149,961**	**($1,874,839)**	New subarea SDC and/or LIDs and other sources may be required
Parks & Trails	$10,872,358	$20,107,558	$8,669,154	**($2,203,204)**	**($11,438,404)**	New subarea SDC and/or parks utility fee and/or LIDs and other sources may be required
Water (mainline system)	$5,362,864	$5,362,864	$8,256,634	**$2,893,770**	**$2,893,770**	Existing SDC appears adequate
Sanitary Sewer System	$4,219,072	$4,219,072	$4,513,199	**$294,127**	**$294,127**	Existing SDC appears adequate
Stormwater System	$15,048,748	$22,011,548	$1,714,429	**($13,334,319)**	**($20,297,119)**	New subarea SDC and/or stormwater utility fee and/ or LIDs may be required
Total	**$52,522,642**	**$72,745,442**	**$42,322,977**	**($10,199,665)**	**($30,422,465)**	

[1] Derived from preceding tables. Analysis by FCS GROUP.

A list of existing and potential funding sources and preliminary strategies to be considered as a means of meeting funding needs for the South End area is provided in Table 9.

Table 9. Potential Funding Strategies for South End Concept Plan Area

Funding Source	Existing or Potential Funding Source	Oregon City South End Funding Strategies
SDCs for water, transportation, sewer, stormwater and parks	Existing SDCs should cover about 60% of capital cost.	Consider updates to Oregon City SDC methodology reports; and/or consider South End subarea SDC charges.
Utility rates for transportation, water, sewer, stormwater	Rates should be adjusted to cover most water, sewer and stormwater facility needs.	Rate updates for stormwater now in process.
Parks utility rate	Potential	City could consider new city-wide funding source for parks O&M and capital improvements; to free up some general fund dollars for other uses.
General Fund (such as property tax revenues)	Existing	At build-out the South End area is estimated to generate over $9.8M in annual property tax revenues (all districts) and $2M in annual general funds to Oregon City though the state-shared tax contributions.[1] The City could dedicate general funds to South End area by issuing bonds backed by current and anticipated General Fund revenues.
Developers (Right-of-Way easement dedications and Advance Financing Agreements)	Potential	Developers should be required to dedicate right-of-way for planned public facility easements, and may provide advance funding/financing for required infrastructure, such as sewer lift stations, with compensation via SDC credits, local improvement districts, or reimbursement districts.
TriMet	Existing	TriMet funding through payroll tax, firebox, and other revenues would support Route 33 bus transit service.

[1] State shared tax assumptions are derived from the Oregon City Transportation System Plan, assuming $389 per capita and 5,612 people added (mid-point of development forecast, 2,192 dwellings with 2.56 persons per dwelling).

Funding Source	Existing or Potential Funding Source	Oregon City South End Funding Strategies
Grants	Potential	ODOT STIP funds for transportation enhancements could match portion of improvements to South End Road, and Metro funds may be available for constructing regional trails.
Full Faith and Credit Bonds, Revenue Bonds	Potential	Oregon City and/or local service providers could consider issuing Full Faith & Credit Bonds or revenue bonds with specified sources of dedicated revenues to pay interest and principle amounts for certain utilities (such as sewer, sewer, stormwater).
General Obligation Bonds	Potential	Local voter-approved general obligation bonds secured by ad valorem property taxes could provide funding for specific capital facilities. Parks and trail improvements are often good candidates for new local GO bond issue.
Loans (financing)	Existing	Loans from Oregon Special Public Works fund could be used to advance finance construction of roads and other infrastructure.

Other Potential New Funding Sources

Additional funding sources can be considered as a means to enhance General Fund revenues or as a means to pay for public facilities in the South End area. While some of these additional funding sources require public voter approval, they can be considered as potential means to pay for expanded urban services into the South End area as shown in Table 10.

Table 10. Additional Potential New Funding Sources

Funding Source	Voter Approval Required?	Eligible Pubic Facilities
Local sales tax	No	All
Franchise fees	No	All
Transient lodging tax	No	Up to 30 percent maximum can be used for transportation facilities.
Transportation Management Association (TMA; new non-profit entity)	No	Transit operations (local loop route) would require dedicated source of funding within a TMA District (could include parking fees or employer charges).
County Service District, Funding via property tax	Yes	All, per district formation per ORS 198. Requires city/county joint adoption and agreements.
Urban Renewal District	Yes[1]	All, per Urban Renewal Plan if adopted per ORS 457 and per County Measure 3-386.
Local fuel tax	Yes	Transportation

[1] Measure 3-386 was approved by Clackamas County voters in November 2011 and requires countywide voter approval to create or make a "substantial change" to urban renewal districts. The measure applies only to districts in unincorporated portions of the county, not within cities.

Development Phasing

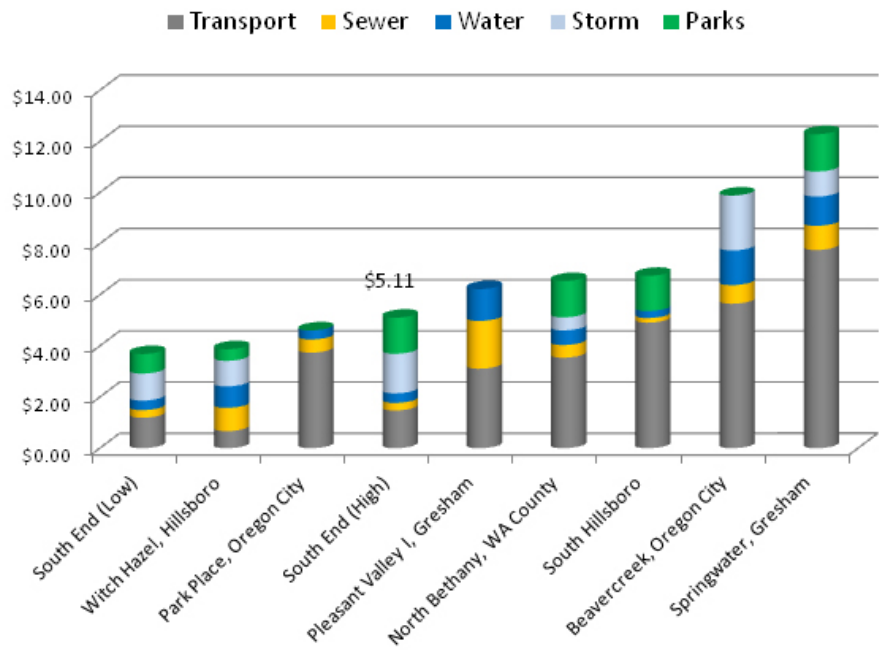
The South End Concept Plan area includes between 2,192 and 2,637 new dwelling units by year 2035. In addition, the South End area may also include a neighborhood commercial/office/mixed-use development of between 170,000 and 340,000 square feet of floor area.

The market analysis conducted as part of the Existing Conditions report expects short- and mid-term demand (years 1-15) to be focused on housing, which would be provided incrementally in accordance with the City's annexation policy.

The cost of public facilities within the South End area ranges from $3.69 to $5.11 per gross buildable square foot of land area. The expected public facility cost per square foot of buildable land area in the South End compares favorably with other urbanizing areas within the greater Portland Region, as indicated in Figure 16. This cost comparison takes into account other adopted cost plans, with costs converted to 2013 dollars. Given the ongoing private housing development underway in other urbanizing areas (including North Bethany and Pleasant Valley) which have higher public facility costs than South End Concept Plan area, it is likely that the public facilities that are planned within the South End area can be reasonably funded in a manner that results in an adequate development return on investment.

Major capital improvements required to serve the South End area will be constructed incrementally over time based on market conditions and permitted annexations. The City should require planned public facilities to be "reasonably funded" prior to allowing new development to occur. This entails updates to the City's Capital Improvement Program, with specific projects identified along with anticipated funding sources, as a condition of development within new annexation areas.

Figure 16. Comparative Public Facility Cost per Sq.Ft. of Buildable Land Area



Source: compiled by FCS GROUP based on adopted concept plans, 2013 dollars.

Near-term Implementation Actions

Implementation of the South End Concept Plan area will require proactive work by Oregon City staff and leadership. Key steps to be undertaken over the next four years include:

- Adopt the South End Concept Plan.
- Prepare and adopt recommended local ordinance amendments.
- Document potential fiscal impacts to the city, county and service districts, including potential tax and fee revenues and service costs that are associated with South End annexation.
- Perform value engineering to scale down costs for green streets, parks and stormwater improvements.
- Consider public-private partnerships for providing community park facilities; and work with local citizens, property owners and service providers to further evaluate and adopt new funding sources that have been identified in this plan document.
- Prepare a detailed Public Facility Plan that refines project capital cost estimates, and identifies short-term public facilities and their funding sources.
- Revisit inter-local urban service agreements with Clackamas County and utility service providers to ensure that the roles and responsibilities for advance financing required public infrastructure and providing adequate operations and maintenance service levels are clarified.