
Bonny Slope West: Infrastructure Funding Plan

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Contact Information

ECONorthwest specializes in economics, planning, and finance. Established in 1974, ECONorthwest has over three decades of experience helping clients make sound decisions based on rigorous economic, planning and financial analysis.

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1 Introduction

This document provides a funding plan for infrastructure to serve new development in the Bonny Slope West area. This plan deals with the capital costs of infrastructure, and not the long-term operation and maintenance costs. Preliminary analysis identified certain types of infrastructure that appear to have adequate funding from existing sources. This report covers those categories of infrastructure in less detail, as they do not require policy changes or supplemental revenue streams. This report focuses on the types of infrastructure that appear to have a funding gap, based on existing policies and funding sources.

This report proposes realistic strategies to eliminate these funding gaps. In some cases, rather than a single recommendation, we present multiple options that the County Board will need to decide upon, to create the final Bonny Slope West Infrastructure Funding Plan. To the extent that funding gaps exist for infrastructure that is the responsibility of jurisdictions other than Washington County, the elected officials of those jurisdictions will also be ultimately responsible for deciding which infrastructure projects are funded, and with what funding sources.

The remainder of this document is organized according to the type of infrastructure: Water, Sanitary Sewer, Stormwater, Parks, Transportation, and Schools. Each of these sections follows the same structure, beginning with an overview of the **infrastructure costs** of potential capital projects to serve the Bonny Slope West area, then a discussion of the **proposed funding plan** for infrastructure in the area, including new funding sources, where necessary, and finally, a summary of the key **implications** for that type of infrastructure, including key decisions that remain for the County Board.

The final section of this document restates the key implications and conclusions of our analysis, including an identification of the key issues that remain to be addressed prior to implementation of the Final Infrastructure Funding Plan.

Revenue projections are based on an estimated 600 new single-family dwellings in Bonny Slope West. Certain assumptions regarding the plan designations, likelihood of redevelopment, and the proportion of density likely to be “transferred” from unbuildable areas are based on best available data.

2 Parks

2.1 Infrastructure costs

Bonny Slope West is located within the Tualatin Hills Parks & Recreation District (“THPRD”) service area. There is uncertainty about the specific infrastructure improvements needed for development of Bonny Slope West. Below we describe the possible infrastructure improvements:

- **Neighborhood Park(s)** would be relatively small facilities of approximately 1.5 to 2.0 acres each, intended to serve the needs of residents within walking distance of the facilities. It is likely that Bonny Slope West would need one or two neighborhood parks. Two parks would be ideal as it would allow for one on each side of Ward Creek (“the creek”), since the creek serves as an obstacle for residents to access park facilities located on the opposite side. The district also owns 7.27 acres of land southeast of the intersection of NW Laidlaw and Saltzman Roads and 6.85 acres of land southwest of the intersection of NW Thompson and Saltzman Roads. Both properties are anticipated to be developed as neighborhood parks.
- **Community Trails** are planned to provide access to natural areas along the creek. These facilities are typically 8 to 10-foot wide asphalt surfaces with 1 to 2-foot wide gravel shoulders. While a loop trail is under consideration for Bonny Slope West, it is possible that a trail on only one side of the creek would be developed, due to financial or logistical constraints. The ultimate alignment of the community trail in Bonny Slope West has not been determined.

One consideration for the alignment of community trails is the interaction between the trails and streets. There are multiple options for the road layout for Bonny Slope West including the possibility for portions of roads to run parallel to the creek. The road layouts will be determined through development applications. “Parkways” that would include development on only one side of the street with the other side of the street consisting of open space are a possibility. In certain areas it may be possible for the community trail to serve a dual purpose, functioning as the sidewalk on the open-space side of the parkway. The extent of this condition is not known at this time.

- **Pocket Parks** would be very small parks, roughly the size of one or two single-family lots. To preserve visual (and perhaps physical) access to the creek open space, small pocket parks could be built along streets running parallel to the creek, resulting in gaps between homes. Due to the small size and high cost to maintain a network of pocket parks, THPRD has indicated they are not interested in maintaining any new pocket park facilities in this area. Thus, if pocket parks are included as part of the development of Bonny Slope West, they would likely need to be privately-owned and maintained, but accessible to the public. They are therefore not included in this infrastructure funding plan.
- **Bridge(s)** could connect the community trails on both sides of the creek. Current plans call for two bridges over the creek. One bridge would accommodate vehicles as well as

pedestrian traffic, serving as an extension of Marcotte Road. A second bridge would be for pedestrians and bicyclists only. These bridges function as both transportation and park infrastructure, which introduces some ambiguity regarding how they should be treated for the purposes of the Infrastructure Funding Plan. Initial conversations with the County and THPRD indicate that for purposes of our analysis, the Marcotte Road Bridge should be considered a transportation project, and the pedestrian/bicycle bridge should be considered a parks project.

The pedestrian/bicycle bridge may be able to accommodate the extension of public services (sanitary sewer and/or water lines) across the creek. Cost-sharing with private development and/or other sources should be considered for this bridge.

Because of the uncertainty regarding parks infrastructure needs for Bonny Slope West, we present two scenarios (low and high) for the total cost for parks in the area. The low scenario assumes one neighborhood park, a 4,000 linear foot trail along one side of the creek, and a pedestrian bridge. The high scenario assumes two neighborhood parks, an 8,000 linear foot loop trail, and a pedestrian bridge. Cost estimates for parks infrastructure are shown in Exhibit 1, and range from a low of \$5,068,000 to a high of \$8,109,000 for the two scenarios.

Exhibit 1. Bonny Slope West, parks infrastructure cost estimates (constant 2015 \$)

Project	Quantity	Units	Cost / Unit	Costs		
				Infrastructure	Land	Total
High Scenario						
Neighborhood Parks	2	Parks	\$1,000,000	\$2,000,000	\$377,000	\$2,377,000
Community Trails	8,000	Linear feet	\$420	\$3,360,000	\$346,000	\$3,706,000
Pedestrian Bridge	1	Bridge	\$2,000,000	\$2,000,000	\$26,000	\$2,026,000
Total				\$7,360,000	\$749,000	\$8,109,000
Low Scenario						
Neighborhood Parks	1	Parks	\$1,000,000	\$1,000,000	\$189,000	\$1,189,000
Community Trails	4,000	Linear feet	\$420	\$1,680,000	\$173,000	\$1,853,000
Pedestrian Bridge	1	Bridge	\$2,000,000	\$2,000,000	\$26,000	\$2,026,000
Total				\$4,680,000	\$388,000	\$5,068,000

Assumptions for the number and price of neighborhood parks and community trails are based on meeting with Aisha Willits, Planning Director, THPRD on November 21, 2014.

Construction cost estimate for the pedestrian bridge provided by T.Y. Lin International, "Area 93 Bridge Crossings Preliminary Scoping and Siting Study, Technical Memorandum," October 2014.

Land acquisition costs are assumed to be \$4.33 per SF, based on an evaluation of Washington County Assessment data in the Bonny Slope West area. Community parks are assumed to be 1.5 acres in size. Land area for community trails is calculated as the product of the assumed length (4,000 to 8,000 linear feet) and the assumed width (10 feet). Land area for the pedestrian bridge is assumed to be 6,120 SF, based on T.Y. Lin International, "Area 93 Bridge Crossings Preliminary Scoping and Siting Study, Technical Memorandum," October 2014.

2.2 Proposed funding plan

THPRD collects a Systems Development Charge ("SDC") on new development to pay for capital projects. The amount of the SDC varies depending on the type of development. For single-family homes, the 2015 rate is \$6,450. Our analysis assumes that there would be 600 single-family units developed in Bonny Slope West, resulting in \$3,870,000 of SDC revenue. If

all SDCs generated from new development in Bonny Slope West were dedicated to parks infrastructure in the area, it would result in a funding shortfall of \$1,198,000 in the low scenario, or \$4,239,000 in the high scenario. Furthermore, it is not common practice for THPRD to invest all of the SDCs generated in an area directly back into that subarea. Instead, SDCs typically generate a surplus of revenues to contribute to capital projects district wide.

Possible solutions for this funding gap include: (1) relying on district-wide SDC revenues to fund infrastructure improvements in Bonny Slope West, (2) levying an additional supplemental SDC for parks in the Bonny Slope West area, (3) looking for ways to reduce the amount and cost of parks infrastructure in the area, and/or (4) making the implementation of certain projects in the area contingent upon grant funding or other future revenue sources. Below, we describe the key implications of these four options:

- **Rely on district-wide revenues to fill the gap.** THPRD does not have an official policy that all subareas need to generate enough SDC revenue to “pay for themselves.” However, if a subarea like Bonny Slope West receives substantially more investment than it generates in SDCs, it raises the question of fairness. It is a policy question for THPRD to determine how parks infrastructure in Bonny Slope West compares to other regional priorities, and whether or not district-wide resources should be used to fill the gap.
- **Supplemental SDC.** THPRD currently charges the same SDC rate district wide, but THPRD is allowed to charge different rates for different geographies, if there are different costs to serve those geographies. THPRD could charge a “supplemental” SDC in addition to the current SDC. A supplemental SDC of \$2,996 per single-family home would be necessary to generate sufficient revenue to close the gap for the low scenario. And a supplemental SDC of \$7,065 per single-family home would be necessary for the high scenario. This would add to the cost of development, potentially affecting its financial feasibility.

Washington County is also considering the use of a supplemental SDC for transportation in this area. If THPRD desires to implement a supplemental SDC for parks, it will be important to coordinate these efforts, and consider the combined effect of both supplemental SDCs on the total development cost. Increasing the cost of SDCs affects the financial feasibility of development, with potential negative impacts on land values, and developer profits, which could result in changes to the amount, timing, or type of development that occurs in Bonny Slope West.

- **Reduce infrastructure costs.** THPRD could reduce total infrastructure costs through a variety of means: cutting back on the quantity or quality of facilities (for example, only building a trail on one side of the creek), or encouraging private developers to build the facilities themselves (typically at lower cost, due to prevailing wage rate requirements for the public sector) earning SDC credits.
- **Grant funding.** THPRD pursues State and Federal grants for capital projects when available. Although grant funding is speculative and uncertain, it is possible that some of the projects in the Bonny Slope West area could qualify for grant funding in future years.

Funding for some projects in the area could be contingent upon receiving grant funding (or other unknown sources of funding) at a later date.

This Infrastructure Funding Plan does not identify the specific strategy that THPRD will use to fund parks infrastructure in the area. Ultimately, THPRD will need to make a decision on which of these potential strategies (or which combination of these strategies) to pursue to ensure adequate parks infrastructure in Bonny Slope West.

Another financial issue for parks infrastructure is the cost of half-street improvements for local roads adjacent to parks facilities. Local roads are the financial responsibility of adjacent development, and therefore the costs for these roads are typically not included in an Infrastructure Funding Plan. However, in instances where the development is a public park, instead of a private development, the cost of the half-street improvement ultimately becomes a public cost.

The cost estimates shown in Exhibit 1 do not include the cost of half-street improvements. Some land use and transportation scenarios will lead to higher transportation costs for THPRD. Additional analysis would be necessary to determine the magnitude of these potential costs, and how it would affect the financial feasibility of parks infrastructure for Bonny Slope West.

2.3 Implications

This Infrastructure Funding Plan does not identify the specific strategy that THPRD will use to fund parks infrastructure in the area. Ultimately, THPRD will need to make a decision on which of these potential strategies (or which combination of these strategies) to pursue to ensure adequate parks infrastructure in Bonny Slope West. Additionally, THPRD will need to decide on the level of service to provide for the area. This document identifies two potential scenarios: high and low, illustrating the range of infrastructure investment that might be appropriate for Bonny Slope West.

3 Transportation

3.1 Infrastructure costs

The Washington County 2014 Transportation System Plan calls for development within urban growth boundary expansion areas to provide adequate funding for transportation. Strategy 10.2.4 states *“Prior to allowing urban development within urban growth boundary expansion areas, develop and implement financing strategies that provide adequate funding for the transportation systems and services necessary for the anticipated urban development as appropriate.”* As part of adoption of the Bonny Slope West Plan, the Board of County Commissioners is charged with the task of how to implement this strategy by determining what is “adequate”, “necessary”, and “appropriate.”

Transportation infrastructure for Bonny Slope West will likely include:

- **Collector and arterial roads:** major roads that carry traffic to, from and through the area. There are several existing collector and arterial roads in the area that, in the long term, will need to be upgraded. In Washington County collector and arterial roadways may be built or improved through either public roadway projects or as conditions of development approval. Many roadways are improved incrementally as development occurs.
- **Local roads:** provide property access and connections to the rest of the system. A network of local roads will be necessary to allow circulation throughout Bonny Slope West. The construction of local roads is the responsibility of development, and therefore is typically not included as part of a public infrastructure plan. One possible exception may be a local street connection from the southwest quadrant of Bonny Slope West to Thompson Road. County staff has identified this local road as a potential project for inclusion in the funding plan, as it is unlikely for the road to be built by private developers, and construction of the road could have benefits for circulation in the area, in particular, relieving traffic impacts on Milford Road.
- **Marcotte Bridge:** potential infrastructure project identified to provide a new connection across the creek between Laidlaw Rd and Thompson Rd. The bridge would align with the existing NW Marcotte Road and provide vehicular and pedestrian crossing. In addition to construction of the bridge itself, the project could include the purchase of right-of-way, approaches to the bridge and reconstructing the existing roadway.

County staff considered the following potential transportation projects in the vicinity of Bonny Slope West for inclusion in the Infrastructure Funding Plan:

- Thompson Road improvements to urban arterial standards from Saltzman Road to Marcotte Road
- Laidlaw Road improvements to urban collector standards from Saltzman Road to Marcotte Road
- Marcotte Road right-of-way acquisition to connect Thompson Road with Laidlaw Road

- Interim improvements to Saltzman Road’s existing alignment from Laidlaw Road to Thompson Road
- Saltzman Road realignment and construction to urban collector standards from Laidlaw Road to Thompson Road
- Construction of Marcotte Road auto, pedestrian and bicycle bridge to connect Thompson Road with Laidlaw Road
- Local street connection from the southwest quadrant of Bonny Slope West to Thompson Road

For most of these potential projects, more detailed project descriptions and underlying assumptions for estimated costs are included in a Washington County technical memorandum, dated November 13, 2014, titled “Area 93 / Bonny Slope West Cost Estimate Technical Memorandum.” This memorandum is included as an attachment to this Infrastructure Funding Plan.

Four of these potential projects were considered to be most directly related to, and potentially impacted by, the urban development of Bonny Slope West. On that basis, these four potential projects were deemed most appropriate for inclusion in the infrastructure funding plan: the Thompson Road improvements, the Laidlaw Road improvements, the Marcotte Road right-of-way acquisition, and the interim improvements to Saltzman Road’s existing alignment. The estimated costs for each of these projects are shown in Exhibit 2. The total cost for all four of these projects (Scenario 1) is \$10,950,000. An alternate scenario (Scenario 2) would exclude the interim Saltzman Road improvements from the Funding Strategy, further reducing transportation project costs to a total of \$9,750,000.

Exhibit 2. Potential transportation infrastructure cost estimates (constant 2015 \$)

Project Name	Location	Description	Total cost	Include in Funding Strategy?
Thompson Road	Saltzman Rd to Marcotte Rd	Improve to urban arterial standards	\$4,000,000	Yes
Laidlaw Road	Saltzman Rd to Marcotte Rd	Improve to urban collector standards	\$5,400,000	Yes
Marcotte Road ROW	Laidlaw Rd to Thompson Rd	ROW only	\$350,000	Yes
Interim Saltzman Road improvements ¹	Laidlaw Rd to Thompson Rd	Interim improvements to existing alignment	\$1,200,000	Maybe
Total - Scenario 1			\$10,950,000	
Total - Scenario 2			\$9,750,000	

Except where otherwise noted, cost estimates from Washington County memo, November 13, 2014, “Area 93 / Bonny Slope West Cost Estimate Technical Memorandum.” These estimates have been rounded to reflect that they are planning level estimates.

Notes:

1 - Cost estimate was provided by the County Engineer, January 2015.

3.2 Proposed funding plan

No existing revenue sources are currently allocated to fund transportation improvements prior to development within Bonny Slope West. As development occurs in this area, revenue can be collected from existing and supplemental sources to pay for improvements that benefit the existing and new residents of the area.

Local Streets and Neighborhood Routes are generally designed, engineered and constructed as part of development to provide site access and circulation. Furthermore, development along Arterial and Collector roadways is often required to complete frontage improvements to those facilities as a condition of approval. Such improvements may also include safety and access related enhancements in the vicinity of the site. Improvements to Collectors and Arterial may be eligible for credits toward the Transportation Development Tax.

Existing funding sources

Two existing, ongoing sources of funding for transportation projects in Washington County are the Transportation Development Tax (TDT) and the Major Streets Transportation Improvement Program (MSTIP). In addition a special funding mechanism known as the Residential High-Growth Areas Transportation Funding Program has been made available in Bonny Slope West.

Transportation Development Tax

The TDT functions as a countywide System Development Charge – revenue from this charge is allocated to transportation capital improvements that provide capacity to serve growth-related needs. The TDT applies as a non-discretionary voter approved tax on development throughout Washington County including within incorporated cities. Washington County collects the TDT from new development within unincorporated areas. The rate of the TDT is based on the type of development and on the average transportation impact for a development of that type. The TDT rates are indexed and change annually based on index factors.

For single-family homes, the 2015-16 TDT rate is \$8,110 per unit. Assuming 600 single-family units develop in Bonny Slope West, the current TDT rate could generate \$4,866,000 from development to be available for transportation infrastructure projects, once all the development in Bonny Slope West has been completed. However, the County has the discretion to spend these funds to achieve the greatest benefits to the transportation system, and the funds are not required to be spent in the vicinity of Bonny Slope West. Development within Bonny Slope West that is required to make improvements to Arterial and Collector roadways may be eligible for credit towards the TDT.

Major Streets Transportation Improvement Program

MSTIP is funded through annual county property taxes, as opposed to a one-time fee at the time of development. MSTIP's share of the property tax rate currently amounts to approximately \$0.65 per \$1,000 of assessed value. The tax is collected countywide and is technically part of the County general fund. However, long-standing County policy has set

aside MSTIP to be used for major transportation improvements. MSTIP has generally been used to address existing transportation issues. The Board of County Commissioners makes decisions regarding the MSTIP program.

Because MSTIP funding is a discretionary allocation of the County general fund, it is difficult to identify for specific projects in a long-term infrastructure funding plan like this one. MSTIP is subject to the policy direction of future Boards of County Commissioners, including the potential of being used for non-transportation purposes. The ability of Bonny Slope West projects to receive MSTIP funding depends on how high of a priority these projects are compared to other potential projects throughout the County.

Residential High-Growth Areas Transportation Funding Program

This program, adopted by the Board of County Commissioners on June 23, 2015, allows the county to utilize the existing MSTIP funding stream to address transportation needs in four high-growth areas of the county: North Bethany / Bonny Slope West, South Hillsboro, South Cooper Mountain, and River Terrace. The latter three areas involve partnerships with the cities of Hillsboro, Beaverton and Tigard, respectively.

The program will finance a pre-determined list of 20 capacity and safety improvement projects on county and state roads located in or adjacent to the four high-growth residential areas. One of the projects on this list is widening NW Thompson Road to 3 lanes between NW Saltzman Road and NW Marcotte Road, within and proximate to Bonny Slope West.

The program is financed through a bond issue paid back by subsequent growth in countywide MSTIP funds. It also requires a 33% local match. In the case of Bonny Slope West, the county would match the High-Growth program funds with TDT or a new transportation revenue tool. As such, the \$4 million NW Thompson Road project would utilize \$2,665,500 from the High-Growth program and \$1,334,500 in TDT or other funds.

Potential supplemental funding sources

In addition to the existing funding sources, described above, there are potential supplemental funding sources that Washington County could adopt to pay for transportation projects in Bonny Slope West. Based on the experience of other communities in Oregon and around the country, we have identified two potential sources of supplemental transportation funding that could potentially be secured for Bonny Slope West: (1) supplemental System Development Charge, and (2) special property taxing district.

Supplemental System Development Charge (SDC)

Washington County could charge a “supplemental” transportation SDC in addition to the current TDT. The amount and structure of this charge will depend on the projects selected and other revenue sources allocated towards these projects. The primary advantage of a supplemental SDC is this revenue is available as development occurs. Such a supplemental transportation SDC was created for North Bethany.

The North Bethany Transportation System Development Charge (NBTSDC) is structured similarly to the TDT. For single-family homes, the 2015-16 NBTSDC rate is \$6,111 per unit. Assuming 600 single-family units develop in Bonny Slope West, such a charge would generate \$3,666,600 for capacity increasing transportation infrastructure capital improvements.

Special taxing district

A special taxing district could be established to generate an ongoing revenue source for transportation infrastructure. This approach was used in North Bethany and has been considered in other urban growth boundary expansion areas. In North Bethany, the tax rate is \$1.25 per \$1,000 of assessed value. Although there are multiple variations of special taxing districts allowed under State law, the specific type of district used in North Bethany is a County Service District (CSD). For the purposes of our analysis, we assume that a CSD would also be the most appropriate type of taxing district for Bonny Slope West.

To determine the amount of revenue a CSD for Bonny Slope West might generate, a number of assumptions about the future are required. Primary assumptions include the rate of new development within the area as well as the assessed market value of the new dwellings. As these are phased in over time the total number of properties contributing to the district and amount collected goes up. Based on preliminary assumptions on the phasing¹ and value of new development, a CSD with a rate of \$1.25 per \$1,000 of assessed value could generate approximately \$3,660,000 in revenue over a 30-year period (in constant 2015 \$), although this estimate is subject to change based on more refined development assumptions.

While a CSD does not generate revenue up front at the time of development, such a taxing district does have several benefits. The tax is applied annually to all properties within the district and this spreads the financial burden out over time. Shifting some of these costs to the property owners and spreading the costs out over time can mitigate the cost of development. Another benefit of a CSD is its flexibility. Taxing districts can be retired earlier or last longer, depending on the revenue needed. So if project costs exceed original estimates, extending the taxing district for another year or two could generate additional revenue to cover these costs. SDCs on the other hand have a more limited ability to respond to changing project costs, because they are paid at the time of development.

A CSD must be approved by registered voters in the area. One potential downside of including a CSD as a funding tool in a transportation infrastructure funding plan for Bonny Slope West is the uncertainty about whether this tool would be approved by the voters in a required election. If a CSD was not approved by voters, then the area would have a funding gap for transportation improvements.

¹ Assuming a beginning assessed value of \$288,000 per home and 20 new homes per year over a 30-year period in current year dollars.

Funding Plan

Conversations with County staff recommended North Bethany be looked at as a model for the Bonny Slope West Infrastructure Funding Plan. In particular, County staff recommended two key concepts for the Funding Plan. Bonny Slope West should:

- Allocate 75% of TDT generated in the area for projects in the area.
- Adopt a supplemental SDC.

A special taxing district (CSD) is a component of the North Bethany funding plan, but is not included in the Bonny Slope West funding plan, as it was not clear that Bonny Slope West residents would support that tool in an election. Instead, the funding plan focuses on tools that expedite the funding process and allow the urban development process to begin as soon as possible. The lack of a CSD for Bonny Slope West requires a supplemental SDC rate of \$7,725 per dwelling unit to result in a financially feasible funding plan for all transportation projects in the area. This supplemental SDC rate is somewhat higher than the rate charged in North Bethany.

As described above, development in Bonny Slope West is anticipated to generate \$4,866,000 in TDT revenue. If 75% of that TDT revenue were dedicated to infrastructure projects in the area, that would result in \$3,649,500 in TDT revenue. A supplemental SDC with a rate of \$7,725 per single-family home would generate an additional \$4,635,000 in revenue. Combined with the \$2,665,500 in funding from the Residential High Growth Areas Transportation Funding Program, these revenue sources would generate \$10,950,000 in revenue for transportation projects in the area (all numbers in constant 2015 dollars), as shown in Exhibit 3.

Exhibit 3. Potential transportation funding sources (constant 2015 \$)

Funding Source	Description	Revenue Generated
Transportation Development Tax (TDT)	Single-family detached rate of \$8,110 per unit; apply 75% of BSW TDT toward BSW transportation projects	\$ 3,649,500
Supplemental Transportation SDC	Single-family detached rate of \$7,725/unit	\$ 4,635,000
Residential High Growth Areas Transportation Funding Program	Two-thirds of \$4.0M cost for Thompson Road improvements	\$ 2,665,500
Total - All Funding Sources		\$10,950,000

This funding strategy generates sufficient revenue to address either Scenario 1 or Scenario 2 project costs.

3.3 Implications

There are three to four transportation infrastructure projects that county staff consider most directly related to, and potentially impacted by, the urban development of Bonny Slope West. These potential projects are therefore appropriate to include as part of the infrastructure funding responsibility of Bonny Slope West. The total cost of these potential projects, however, exceeds the revenue potential of the area. Supplemental funding sources are needed. North Bethany provides a useful model for the Bonny Slope West area. Assuming a supplemental SDC with a rate of \$7,725 per dwelling, funding of \$2,665,500 from the Residential High Growth Areas Transportation Funding Program, and assuming that 75% of the TDT generated in the area is committed to infrastructure projects within the area, Bonny Slope West can generate sufficient revenue to cover the planned transportation infrastructure projects.

Expanding the resources and prioritizing the improvements results in a funding plan that is technically feasible. The rate of the proposed supplemental SDC is somewhat higher than in the North Bethany area, but inline with the rates proposed for other high growth areas of Washington County (e.g., South Hillsboro, South Cooper Mountain, and River Terrace), which indicates that this approach is feasible.

Other considerations

The following issue is not central to the decisions on the Infrastructure Funding Plan (i.e., what are the total project costs, and what revenue sources should be used?), but raise additional questions related to infrastructure funding and financing.

Coordination with parks on projects that are both parks and transportation issues

There are some potential infrastructure projects that could serve dual purposes for both parks and transportation. These projects include bridges across the creek, and community trails. This Infrastructure Funding Plan assumes that the trails and the pedestrian/bicycle bridge would be treated as parks projects, and therefore are the primary responsibility of THPRD. Conversely, we assume Marcotte Bridge would be treated as a transportation project, and therefore is the primary responsibility of the County. If, in the future, the County or THPRD come to a different conclusion on the categorization of these projects, it could shift some of the funding burden from parks to transportation, or vice versa. As with many projects identified in the Transportation System Plan, specific funding mechanisms for these projects have not been identified.

4 Water

4.1 Infrastructure costs

Water service in Bonny Slope West will be provided by the Tualatin Valley Water District (TVWD). Although most of the area is currently outside of the TVWD service area, properties in Bonny Slope West will be annexed to TVWD as development occurs, with plans for the entire area to be annexed over time.

Existing water lines in Laidlaw Road and Thompson Road are adequate to serve development in Bonny Slope West. The Laidlaw line is 16-inches in diameter and was recently installed by TVWD. This line currently provides service to the Arbor Heights development, but also has sufficient capacity to serve development north of the creek in Bonny Slope West. Under Thompson Road are two water lines: an older 12-inch line and a newer 18-inch line for discharge out of the Thompson reservoir and pump station, which is located just south of Bonny Slope West. The 12-inch line in Thompson would likely provide service for development of Bonny Slope West on the south side of the creek.

Because of the sufficient trunk line infrastructure that already exists in the area, it is not expected that there will be any specific water infrastructure projects that need to be built to accommodate new development in Bonny Slope West.

New development in the area will be responsible for building their own smaller water lines (likely 12-inches or less in diameter) to connect new development to the trunk lines on Laidlaw and Thompson. Based on existing TVWD policy, these would be non-creditable expenditures for private developers.

4.2 Proposed funding plan

TVWD collects an SDC on new development to pay for capital projects. The amount of the SDC varies depending on the meter size and weighting factors. For single-family homes, the SDC rate is \$6,522 per unit, assuming a meter size of 5/8 inch x 3/4 inch. Assuming 600 single-family units develop in Bonny Slope West, it would generate \$3,913,200 in SDCs for water infrastructure. The proposed funding plan for water in Bonny Slope West is to rely on developer contributions for non-creditable expenditures, and SDCs for any larger water projects (although no projects are anticipated at this time, given the sufficient trunk line infrastructure that already exists in the area).

4.3 Implications

Water infrastructure is financially feasible for Bonny Slope West, since there are no immediate public water infrastructure projects that are necessary to support development in the area. SDC revenues generated in the area will be used by TVWD to fund other regional facilities

throughout the district, like developing source, upsizing lines and building more storage capacity to provide for growth due to development. Note that there are two issues that could result in some water infrastructure costs in the area:

- **Transportation projects that rebuild or realign Thompson or Laidlaw Roads could have impacts on water infrastructure.** It is possible that grade alignment might be an issue for existing lines and modifications to the existing lines may be required. The existing water lines in Thompson Road and Laidlaw Road are located within the right-of-way under the paved roadway section. At this time, TVWD is not expecting that any changes to their existing water infrastructure in the area will be necessary.
- **Planned bridges over Ward Creek have implications for water infrastructure in the area.** A bridge would allow for a waterline to cross the creek. Although this connection is not necessary to serve the area, it would provide a redundant water line for the system, which is beneficial. Although there would be a capital cost to make this connection, it may allow for private development in some areas of Bonny Slope West to use 8-inch diameter lines rather than 12-inch lines. This could result in somewhat lower costs for the affected developers. Note that conversations with TVWD staff indicate it is unlikely that TVWD would fund a portion of the bridge construction costs, even if the bridge did carry a water line, as existing TVWD policy is not to fund these types of projects that serve new development.

5 Sanitary Sewer

5.1 Infrastructure costs

Sanitary sewer service in Bonny Slope West is provided by Clean Water Services (“CWS”). Existing downstream sewer lines are adequate to serve development in Bonny Slope West. Because of the sufficient sanitary sewer infrastructure that already exists in the area, it is not expected that there will be any specific sanitary sewer infrastructure projects that need to be built to accommodate new development in Bonny Slope West.

New development in the area will be responsible for building their own smaller sanitary sewer lines (likely 12-inches or less in diameter) to connect new development to existing downstream sewer lines. Based on existing CWS policy, these would be non-creditable expenditures for private developers.

5.2 Proposed funding plan

CWS collects an SDC on new development to pay for sanitary sewer capital projects, including trunk lines, regional pump stations and force mains, and sanitary sewer treatment plants. The amount of the SDC varies depending on the type of development and its equivalent use of the sanitary sewer. For single-family homes, the Fiscal Year 2015 SDC rate is \$4,900 per unit. The local sanitary sewer in Bonny Slope West, up to 12 inches, will be constructed by developers as a non-creditable expenditure. SDCs will be spent on regional facilities or the upsizing of sanitary sewer treatment plants.

5.3 Implications

Sanitary sewer infrastructure is financially feasible for Bonny Slope West. SDC revenues generated in the area will be used by CWS to fund regional facilities throughout the district, like upsizing lines and increasing capacity at treatment facilities.

The planned pedestrian/bicycle bridge over Ward Creek has implications for sanitary sewer infrastructure in the area. The bridge could allow for a sanitary sewer line to cross the creek on the bridge’s underside. Although this connection is not necessary to serve the area, it would provide a redundant sanitary line for the system. There would be a capital cost to make this connection, but it may allow for private development in some areas of Bonny Slope West to connect to sanitary sewer service for a lower cost than other connection options. Note that conversations with CWS staff indicate it is highly unlikely that CWS would fund a portion of the bridge construction costs, even if the bridge did carry a sanitary sewer line.

6 Stormwater

6.1 Infrastructure costs

Stormwater service in Bonny Slope West is provided by CWS. Unlike water, and sanitary sewer, the cost for stormwater infrastructure is not typically covered by an SDC. Traditionally, stormwater management facilities have been the responsibility of private developers, with individual developers building stormwater management facilities onsite that are sufficient to manage the stormwater generated by their development.

Because new development in Bonny Slope West is expected to provide their own stormwater management infrastructure, we anticipate no public costs for stormwater infrastructure.

6.2 Proposed funding plan

CWS imposes a nominal SDC on new development to pay for stormwater capital projects. Based on current policy, developers receive a partial or total credit for their onsite stormwater management that reduces stormwater SDC revenue for CWS. For single-family homes, the Fiscal Year 2015 SDC rate is \$500 per unit. We assume all development in Bonny Slope West would receive a credit for the stormwater quality portion of the SDC for their privately-constructed onsite stormwater management infrastructure, resulting in reduced stormwater SDC revenue for CWS. The proposed funding plan for stormwater in Bonny Slope West is to rely on developer contributions, as all development will be required to build the infrastructure necessary to meet stormwater management standards.

6.3 Implications

Stormwater infrastructure is financially feasible for Bonny Slope West, since there are no necessary public stormwater infrastructure projects to support development in the area. All developments will be required to build the infrastructure necessary to meet the stormwater management standards in place at the time of application.

7 Schools

7.1 Infrastructure costs

Bonny Slope West is located within the Beaverton School District (“BSD”), providing K-12 education services for the area. The School District’s infrastructure includes elementary, middle, and high-schools, but none these facilities is currently present within the Bonny Slope West area, and students who live in Bonny Slope West will be expected to attend schools outside of the area unless a new school is included in the Bonny Slope West Plan.

Bonny Slope West is currently within the boundaries of Bonny Slope Elementary, Cedar Park Middle, and Sunset High schools. These are what are referred to as the “home schools” for the area. Exhibit 4 shows the current enrollment and occupied capacity of each school. As of October 2014, the elementary school has additional capacity, the middle school is at capacity, and the high school is over capacity.

Exhibit 4. BSD home schools for Bonny Slope West as of the 2014-15 school year

School Name	Enrollment	Occupied capacity
Bonny Slope Elementary	654	84%
Cedar Park Middle	1,009	101%
Sunset High	2,025	116%

Data provided by BSD as of 10/14/2014.

Note: does not include students enrolled in Self Contained Special Education programs.

Cedar Park Middle capacity includes 6 portable classrooms

As development occurs in and around Bonny Slope West, additional school capacity will be needed. BSD already has several projects planned or underway to provide additional capacity. These projects include:

- North Bethany Elementary School: A new elementary school is currently scheduled to open in 2017, with capacity for 750 students.
- Rebuilding of existing K-5 elementary schools: William Walker, Hazeldale, and Vose elementary schools will be rebuilt, providing additional capacity at these school sites. Remodel and expansion of Raleigh Hills K-8 and Five Oaks Middle School are also planned.
- Timberland Middle School: A new middle school is currently planned to open in 2020, with capacity for 1,100 students.

In addition to these planned infrastructure improvements, demographic studies performed by the Portland State University Population Research Center on behalf of BSD demonstrate that additional schools will be needed. BSD may purchase sites in and around Bonny Slope West for the potential future development of additional schools. The purchase of additional school sites will help provide the community with relief from classroom overcrowding as the population increases. When crowding relief becomes necessary, BSD will also consider other means of

obtaining relief from overcrowding, which include boundary changes, addition of portable classrooms, and limiting transfers among schools.

At this time, funding is not available to the School District for school infrastructure projects within Bonny Slope West. An estimate of the future capital costs of school infrastructure in Bonny Slope West has not been developed.

7.2 Proposed funding plan

Unlike other types of infrastructure (*e.g.*, transportation, parks, water, sanitary sewer, and storm water), schools are not allowed to collect SDCs to fund capital improvements. For an SDC to be applied to school infrastructure in Bonny Slope West, it would require the State Legislature to take action to amend Oregon Revised Statutes (“ORS”) Chapter 223. Given the small size of Bonny Slope West, it is unlikely that such a major change in State Statutes would be politically viable.

The 2010 Beaverton School District Facility Plan identifies the funding sources that are available to the district. These funding sources are: construction excise tax (“CET”), property tax local option levies, and property tax general obligation bonds. Below, we discuss the relative merits of these potential funding sources:

- **CET:** ORS Chapter 320 allows school districts to impose a construction excise tax. CET functions similar to an SDC, as it is a one-time charge on new development. CET is imposed as a rate per square foot of new structures. ORS 320.176 defines the maximum rates that districts can impose, with separate limits for residential and nonresidential construction. In 2014, the maximum allowable rates are \$1.14 per SF of residential construction, and \$0.57 per SF of non-residential construction. These limits are indexed to inflation, and therefore will change over time.

BSD already imposes a CET district-wide at the maximum rate allowed by State Statute. In past years, BSD has collected \$1.2 to \$2.1 million in CET annually. These funds are used for capital facility needs district-wide. The ability of these revenues to contribute to future capital projects is limited by debt service obligations for previous projects. BSD has outstanding debt for Full Faith and Credit Obligation bonds, which require \$1.1 to \$1.4 million per year in CET revenue to pay debt service. This is a long-term obligation, with debt service scheduled to be retired in 2036. Only CET revenues above and beyond those required for existing debt service would be available for new capital projects, and again, this is a district-wide funding source, with no obligation for any spending to occur within the Bonny Slope West area.

- **Local option levies** are temporary property tax increases, approved by voters, to fund operations of local government services. Local option levies cannot exceed six years, though they can be renewed and extended indefinitely at six-year intervals, if the public continues to vote in favor of the levies. The temporary nature of local option levies does not align well with the needs for major capital projects (*e.g.*, school construction), which

typically need to issue long-term bonds to finance these projects, requiring a stable revenue source for the duration of the debt service obligations (typically 20 years or more). It is impractical, to assume that a local option levy would be a meaningful option for funding school infrastructure in Bonny Slope West.

- **General obligation bonds** are similar to local option levies, as they are a temporary, voter-approved obligation to pay debt service with property tax revenues. General obligation bond levies, however do not have a limit on the maximum duration of the levy, and therefore are commonly used to finance capital projects that require long-term debt service obligations (like school construction).

General obligation bonds have traditionally been used by BSD and all other school districts across Oregon to fund new capital projects. This is the most likely funding source for new capital facilities to serve students in Bonny Slope West, should BSD determine that additional facilities are needed.

The proposed funding plan for schools in Bonny Slope West is to rely on a district-wide general obligation bond. Although there are multiple sources that BSD can legally use to fund capital projects, the only funding source that has practical applicability is a property tax general obligation bond.

7.3 Implications

The exact capital facility needs to serve future residents of Bonny Slope West are unknown at this time. The State does not allow school districts to impose SDCs to pay for schools, which means BSD must rely on other funding sources to address capital facility needs. Although there are multiple sources that BSD can legally use to fund capital projects, the only funding source that has practical applicability is property tax general obligation bonds.

General obligation bonds must be approved by voters district-wide, which adds some political uncertainty into the question of how much funding could be available for Bonny Slope West and when. However, BSD has a long and successful track record of using general obligation bonds to address capital needs. BSD has completed several construction bond programs in recent years for the purpose of adding capacity to meet growing enrollment and to modernize and refurbish older school buildings. From 1996 through 2006, BSD residents supported the completion of approximately \$500 million in capital improvements. In 2014, BSD residents approved an additional \$680 million in capital improvements for school improvements, including the construction of new elementary, middle and high schools.

The Beaverton School District is fully utilizing all the available funding sources available to school districts.

8 Conclusions and implications

Our analysis yields the following conclusions and implications:

- **There should not be a funding gap for water, sanitary sewer, and stormwater infrastructure.** For these categories of infrastructure, there are no significant public infrastructure projects needed to serve new development in Bonny Slope West. Existing policies dictate that private developers will be responsible for providing all new infrastructure. SDC revenue generated from new development in the area will be used on projects that add capacity region-wide, for example upsizing lines and increasing capacity at treatment facilities.
- **The Beaverton School District is fully utilizing all the available funding sources available to school districts.** The exact capital facility needs to serve future residents of Bonny Slope West are unknown at this time. The State does not allow school districts to impose SDCs to pay for schools, which means BSD must rely on other funding sources to address capital facility needs. Although there are multiple sources that BSD can legally use to fund capital projects, the only funding source that has practical applicability is property tax general obligation bonds. BSD has a long and successful track record of using general obligation bonds to address capital needs.
- **Parks infrastructure has a funding gap.** Project cost estimates for parks range from \$5.2 to \$8.0 million, while parks SDCs are projected to generate only \$3,870,000. This Infrastructure Funding Plan does not identify the specific strategy that THPRD will use to fund parks infrastructure in the area. Ultimately, THPRD will need to make a decision on an infrastructure funding strategy to ensure adequate parks infrastructure in Bonny Slope West. Additionally, THPRD will need to decide on the level of service to provide for the area.
- **The proposed funding plan would result in no funding gap for transportation infrastructure.** There are three to four potential transportation infrastructure projects considered to have a direct nexus to urban development of the Bonny Slope West area. The total cost of these potential projects, however, exceeds the revenue potential of the area. Supplemental funding sources are needed. Assuming a supplemental SDC, funding of \$2,665,000 from the Residential High Growth Areas Transportation Funding Program, and assuming that 75% of the TDT generated in the area is committed to infrastructure projects within the area, Bonny Slope West can generate sufficient revenue to cover the planned transportation infrastructure projects. This results in a funding plan that is technically feasible.