



A place where families and businesses thrive.

June 30, 2021

Ethan Stuckmayer, Senior Planner of Housing Program
Oregon Department of Land Conservation and Development
635 Capitol Street NE
Suite 150
Salem, OR 97301-2540

Subject: Forest Grove Infrastructure-Based Time Extension Request Application

Dear Mr. Stuckmayer,

As a city with a population of over 10,000 within the Portland Regional Urban Growth Boundary, the City of Forest Grove fully supports and will adopt regulations for large cities as needed to comply with Oregon House Bill 2001 (2019). Through this effort, Forest Grove will allow middle housing types including duplexes, triplexes, quadplexes, townhouses and cottage clusters in areas zoned for single family residential development as required by the legislation.

As part of the City's effort to implement HB 2001, the City identified areas within the Forest Grove city limits where significant upgrades to infrastructure are needed to serve development. This includes capacity upgrades to the transportation, water, sanitary sewer and storm drainage systems. This City's Westside planning area is largely undeveloped and devoid of infrastructure. This area is zoned for single family detached residential development and under HB 2001 and Oregon Department of Environmental Quality administrative rules, the City would be obligated to permit middle housing development with septic systems if sanitary sewer lines are further than 200- to 800-feet from development sites, depending on the number of housing units proposed.

While the City fully supports construction of middle housing types throughout the City, the City cannot support construction of medium density housing inside the urban growth boundary where urban services cannot currently be provided. Therefore, the City prepared this Infrastructure Based Time Extension Request so that an infrastructure remediation plan can be prepared for the Westside planning area in tandem with updates to the City's water, sanitary sewer and storm drainage master plans. Completion of this work will support extension of public facilities to serve middle housing types, within the Westside planning area, in a timely, cost-effective and efficient manner.

Please contact Senior Planner, Dan Riordan with any questions you have regarding this request. Dan may be reached by email at driordan@forestgrove-or.gov or telephone at (503) 992-3226.

Yours very truly,

Bryan Pohl, CFM
Director of Community Development

RESOLUTION NO. 2021-30

RESOLUTION AUTHORIZING CITY MANAGER TO SUBMIT AN APPLICATION FOR HOUSE BILL (HB) 2001 INFRASTRUCTURE-BASED TIME EXTENSION REQUEST (IBTER) TO OREGON DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT (DLCD) FOR DAVID HILL URBAN GROWTH AREA

WHEREAS, in 2019, the Oregon legislature approved House Bill (HB) 2001, known as the middle housing law; and

WHEREAS, HB 2001 was adopted to allow development of duplexes, triplexes, quadplexes, and townhomes in areas zoned for single family residential development; and

WHEREAS, HB 2001 provides authority to the Oregon Department of Land Conservation and Development to grant a time extension to local governments to provide time to implement rules for middle housing in areas where the local government has identified water, sewer, storm drainage or transportation services are significantly deficient; and

WHEREAS, the City of Forest Grove was awarded a grant from the Oregon Department of Land Conservation and Development (DLCD) to evaluate infrastructure deficiencies in the City's Westside planning area and prepare an IBTRER application; and

WHEREAS, the City identified the David Hill urban growth area north and south of David Hill Road and west of Thatcher Road as an area of the City with significant water, sewer, storm drainage, and transportation deficiencies; and


WHEREAS, the City prepared an application with supporting documentation needed to request a time extension as allowed by HB 2001 for review and approval by the Oregon Department of Land Conservation and Development.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF FOREST GROVE AS FOLLOWS:

SECTION 1. The City Council of the City of Forest Grove hereby authorizes the City Manager to submit a formal request to DLCD on behalf of the City for an Infrastructure-Based Time Extension as described by Exhibits A, B and C.

SECTION 2. This resolution is effective immediately upon its enactment by the City Council.

PRESENTED AND PASSED this 14th day of June, 2021.


Anna D. Ruggles, City Recorder

APPROVED by the Mayor this 14th day of June, 2021.


Peter B. Truax, Mayor

EXHIBIT A



City of Forest Grove

Infrastructure-Based Time Extension Request (IBTER)

Application

RESOLUTION DRAFT
June 14, 2021

This project is funded in part by Oregon general fund dollars through the Department of Land Conservation and Development. The contents of this document do not necessarily reflect the views or policies of the State of Oregon.

June 15, 2021

Ethan Stuckmayer, Senior Planner of Housing Program
Oregon Department of Land Conservation and Development
635 Capitol Street NE
Suite 150
Salem, OR 97301-2540

Subject: Infrastructure-Based Time Extension Request

Dear Ethan,

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As part of the City's effort to implement HB 2001, the City identified areas within the Forest Grove city limits where significant upgrades to infrastructure are needed to serve development. This includes capacity upgrades to the transportation, water, sanitary sewer and storm drainage systems. This City's Westside planning area is largely undeveloped and devoid of infrastructure. This area is zoned for single family detached residential development and under HB 2001 and Oregon Department of Environmental Quality administrative rules, the City would be obligated to permit middle housing development with septic systems if sanitary sewer lines are further than 200- to 800-feet from development sites, depending on the number of housing units proposed.

While the City fully supports construction of middle housing types throughout the City, the City cannot support construction of medium density housing inside the urban growth boundary where urban services cannot currently be provided. - Therefore, the City prepared this Infrastructure Based Time Extension Request so that an infrastructure remediation plan can be prepared for the Westside planning area in tandem with updates to the City's water, sanitary sewer and storm drainage master plans. Completion of this work will support extension of public facilities to serve middle housing types, within the Westside planning area, in a timely, cost-effective and efficient manner.

Please contact Senior Planner, Dan Riordan with any questions you have regarding this request. Dan may be reached by email at driordan@forestgrove-or.gov or telephone at (503) 992-3226.

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Bryan Pohl, CFM
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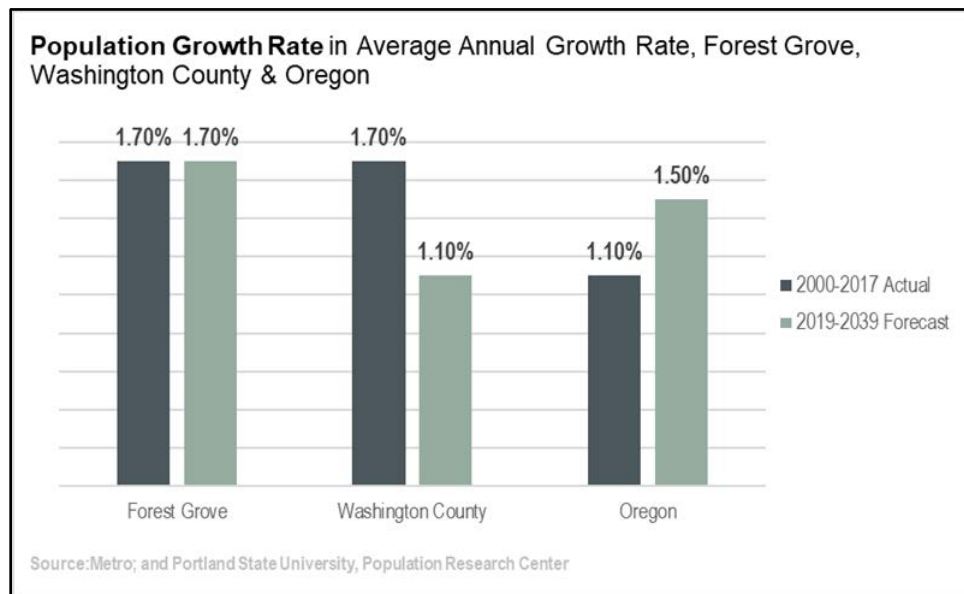
Section I. INTRODUCTION

I.A. BACKGROUND

The City of Forest Grove, located on the western edge of the Portland Metro urban growth boundary, is an Oregon municipal corporation with approximately 25,500 residents. During the past decade, the City has experienced steady growth and strong demand for housing. However, a constraint to meeting housing demand moving forward is lack of infrastructure in the City's northwest area and a specific funding strategy for needed infrastructure supported by adopted local and regional plans.

Population and housing growth in Forest Grove continues to exceed the county and state average (see **Exhibit 1**). In 2019, the City updated and adopted its Housing Needs Analysis, which determined that there is an adequate 20-year land supply in the Forest Grove UGB to address the need for 3,682 new housing units. And with over 600 housing units already approved in various subdivisions (between 2019-2021), and only 275 lots left in approved developments, it is evident that growth management is more important now than ever before.

Exhibit 1: Population Growth Rate



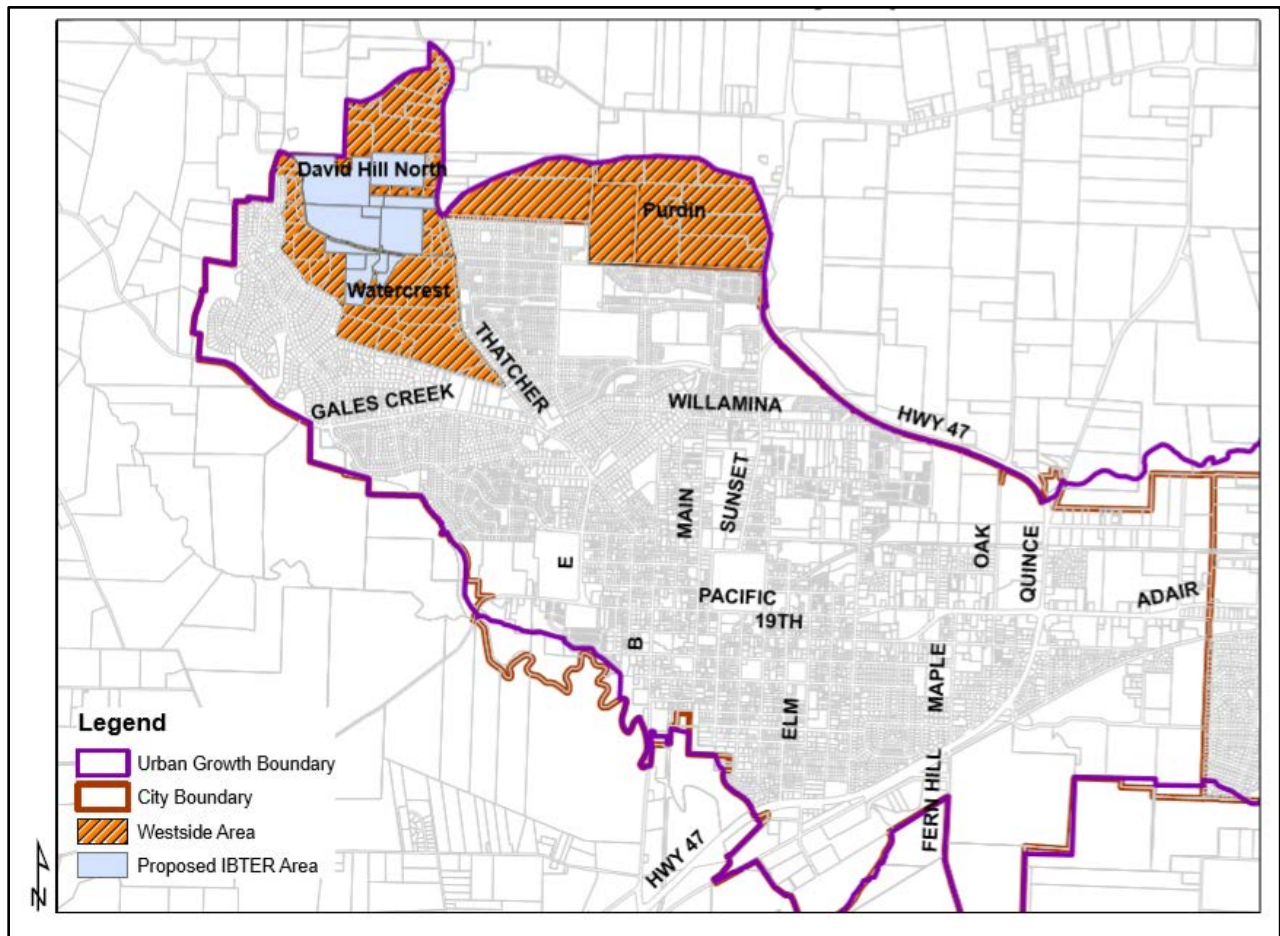
In a proactive effort to plan for growth, the Forest Grove City Council adopted the Westside Refinement Plan in 2017 for the City's northwest urban growth area. The Westside Plan includes 374 gross acres and has been partially annexed and was originally planned for 1,819 dwellings (prior to HB 2001) along with neighborhood commercial, parks and a new school. With passage of HB 2001, the Westside Plan district and adjacent land in the northwest portion of the city (see IBTER map) could potentially add 3,957 total housing units, including 1,548 middle housing units (equates to over 100% of the city's 20-year housing need of 3,682 dwellings).

The Westside Refinement Plan findings (see **Appendix A**) provides a detailed understanding of the infrastructure challenges for Forest Grove. The findings included in this IBTER application include excerpts from the Westside Refinement Plan as well prior and ongoing master plans for transportation and water systems.

The City is nearing completion of an updated Water Master Plan and the results indicate that a significant portion Westside Plan District cannot be served by adequate water pressure until a new reservoir is constructed to serve the area above the 440-foot elevation level, or a major pressure booting station and transmission lines are constructed.

In addition to the water system improvements, the Westside Refinement Plan and the Forest Grove Transportation System Plan (TSP) indicate that several collector roadways will need to be constructed or expanded to address expected trip growth in the IBTER area and to comply with Metro Regional Transportation Functional Plan requirements. As shown in **Exhibit 2**, the IBTER area includes large portions of vacant and buildable land located within the City of Forest Grove municipal boundary and the adjacent urban growth area.

Exhibit 2: IBTER Area Location Map



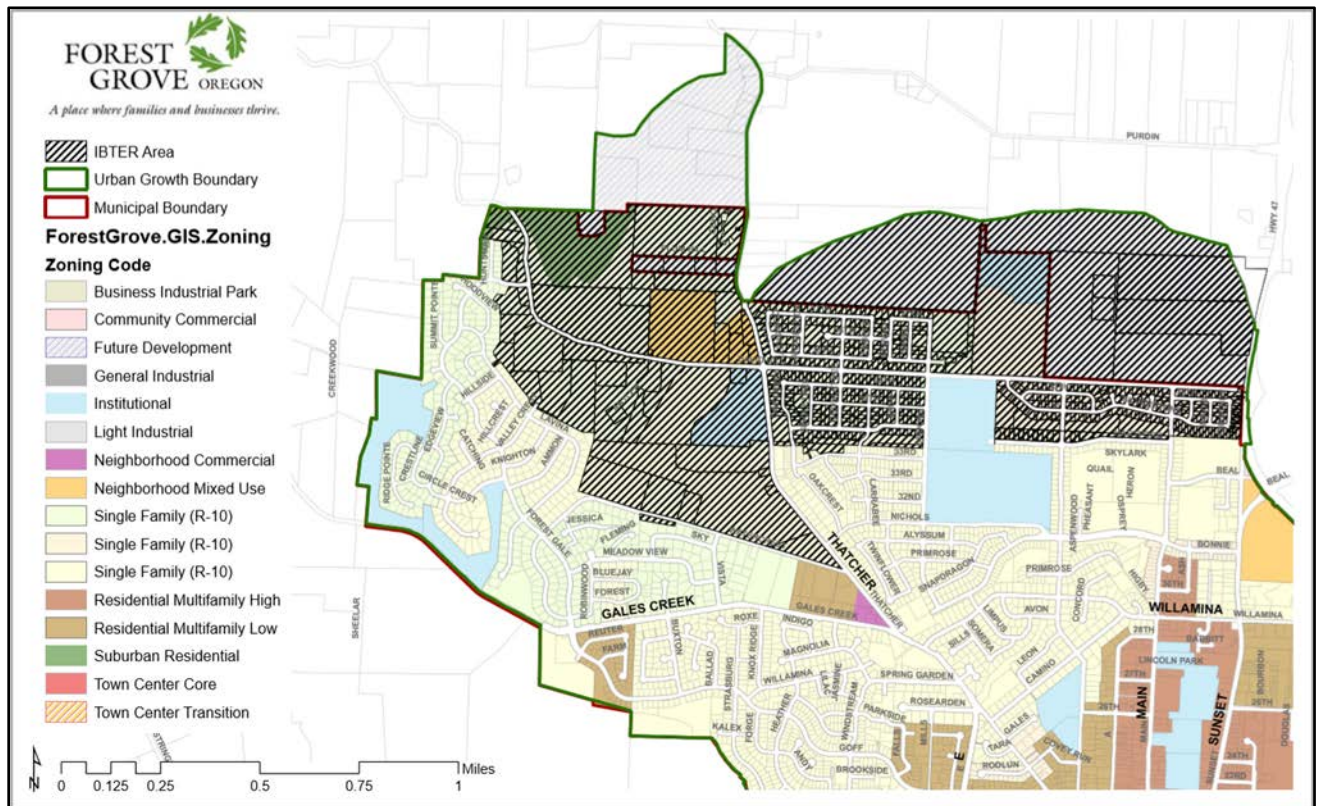
In light of the relentless residential growth pressure facing Forest Grove, capacity deficiencies in transportation, water, sewer and storm drainage systems, and the desire of the City to adopt a sustainable funding plan in advance of major increases in development (exacerbated by HB 2001), the City requests DLCD approval of this IBTER application. This application demonstrates that Forest Grove, as service provider, is unable to provide acceptable service levels within a defined portion of the City's urban growth area zoned to allow detached single-family dwellings. Additional time allowed by IBTER approval will enable the City to prepare and implement an Infrastructure Remediation Strategy, which will include new local funding sources for

transportation, water and storm drainage facilities that are necessary to provide adequate levels of service and to ensure the health and welfare of all residents, employees, students and visitors.

I.B. IBTER AREA OVERVIEW

The IBTER area includes the Westside Planning Area (includes the David Hill and Purdin Road subareas) and surrounding lands inside the city limits. The underlying zoning for this area includes a mix of single family (R-10), neighborhood mixed-use, and institutional (**Exhibit 3**).

Exhibit 3: IBTER Area Zoning Designations



I.C. METHODOLOGY

This IBTER application presents findings from prior and ongoing transportation and infrastructure master plans, and the Westside Refinement Plan (**Attachment A**). The IBTER is part of a proactive multipronged approach to sustainable infrastructure funding for the City. During the Fall/Winter 2020/21, the City initiated a Westside Funding Strategy, which includes a detailed review of baseline funding conditions in the city, and an infrastructure remediation plan for addressing funding gaps. The City formed a Technical Advisory Committee that has met twice with project consults to identify key infrastructure issues, deficiencies, project capital costs, and project priorities. A community wide stakeholder meeting to discuss these issues is scheduled for May 2021.

Results from the Westside Funding Strategy are expected by mid-June, 2021. The recommended Funding Strategy will reflect stakeholder input, ensure housing needs are met as required under Oregon Land Use Planning Goal 10 (Housing) and to promote funding equity. In addition, the approach will include methods to incentivize middle housing types as defined in Oregon House Bill 2001 (2019) and House Bill 2003 (2019).

Finally, the recommend infrastructure approach will provide a clear path for implementation to include in an HB 2001 infrastructure-based time extension request application for Oregon Department of Land Conservation and Development approval.

I.D. SUMMARY

The City's transportation, water, sewer and stormwater infrastructure have been determined to have a localized significant deficiency that results in unacceptable service levels, which would be severely exacerbated by induced development attributed to HB 2001.

The City will be requesting a time extension to comply with HB 2001. The application materials and associated documentation included in this report is organized as follows:

Section I: Introduction

Section II: Transportation System Deficiencies

Section III: Waster System Deficiencies

Section IV: Sewer System Deficiencies

Section V: Stormwater System Deficiencies

Section II. TRANSPORTATION

DEFICIENCY

II.A. BASELINE EXISTING DWELLING UNITS

In accordance with the IBTER requirements, the City performed an analysis of areas likely to be impacted by middle housing development. The City identified two general areas denoted as the Westside Refinement Plan Area and Other IBTER Area. The Westside Refinement Plan Area contains two subareas, identified as the David Hill Area and the Purdin Road Area.

Per the IBTER requirements, the City prepared a baseline estimate of the level of development that could potentially be permitted within these areas by December 31, 2023 based on historic building permits. The baseline estimate of dwelling units by housing type are shown in **Exhibit 4**.

Exhibit 4: Total IBTER Area Dwelling Unit Distribution (Baseline Estimate)

Housing Type	Westside Refinement Plan Area			Total Dwelling Units
	David Hill	Purdin Road	Other IBTER Area	
SFD	581	604	1,223	2,409
SFA	240	250	387	877
Multifamily	119	124	428	671
Total	940	978	2,039	3,957

The baseline dwelling unit forecast for the IBTER area assumes a total of 3,957 dwelling units, with 60.9 percent as single family detached and 39.1% middle housing types. These figures serve as the baseline estimate for the purposes of determining the impact to transportation system service levels due to middle housing development required by HB 2001.

II.B. POTENTIAL CHANGE IN DWELLING UNITS DUE TO MIDDLE HOUSING DEVELOPMENT

Per the IBTER requirements, Cities can plan for a one percent increase in the number of dwelling units produced due to middle housing for infill and redevelopment areas. Undeveloped and underdeveloped areas may assume a three percent increase in the number of dwelling units produced due to middle housing.

For the purposes of this analysis, the area identified as the Westside Refinement Plan Area (including the subareas of David Hill and Purdin Road) is assumed to be undeveloped or underdeveloped and is applied a three percent increase in dwelling units in baseline estimates. The area identified as Other IBTER Area is assumed to be an infill or redevelopment area and is applied a one percent increase in dwelling units to baseline estimates. Baseline housing unit growth estimates and additional middle housing development due to HB 2001 requirements are shown in **Exhibit 5**.

Exhibit 5: IBTER Area Dwelling Unit Distribution (Change Due to Middle Housing Development)

Housing Type	Baseline Housing Unit Growth	Additional Middle Housing Adjustment	Post HB-2001 Adjustment Net New Dwellings
SFD	2,409	-	2,409
SFA	877	-	877
Multifamily	671	78	749
Total	3,957	78	4,035

Based on the estimated growth allowable per the IBTER requirements, the City can assume an additional 78 dwelling units due to middle housing development required by HB 2001. As a result, total net new dwelling units of 4,035 in the study area. While a portion of the amount of induced middle housing development attributed to HB 2001 will likely consist of plexes (2 to 4 units per structure), this analysis conservatively assumes that the increase in middle housing development will consist of multifamily development (5+ units per structure).

Based on the estimated net new dwelling units due to HB 2001 middle housing requirements, the City can estimate additional trip generation impacts in the Total IBTER Area. The total additional peak hour vehicle trips in the Total IBTER Area are estimated to be 3,329, as shown in **Exhibit 6**.

Exhibit 6: Trip Generation Impacts, Total IBTER Area

		Net New Dwellings	Adjusted Net New Dwellings (post HB 2001)	Peak Hour Vehicle Trips per Unit	Total Peak Hour Vehicle Trips (baseline)	Total Peak Hour Vehicle Trips (post HB 2001)
	ITE Code	(baseline)	(post HB 2001)			
Single Family Detached	210	2,409	2,409	1.00	2,409	2,409
Single Family Attached	230	877	877	0.52	456	456
Multifamily	220	671	749	0.62	416	464
Total		3,957	4,035		3,281	3,329

It should be noted that while the induced level of middle housing development attributed to HB 2001 may be relatively low (48 net new peak hour trips), any level of net new development within the IBTER area will decrease service levels and increase vehicular/pedestrian safety conflicts below acceptable levels of service, as discussed below.

II.C. TRANSPORTATION SPECIFIC THRESHOLDS

The David Hill urban growth area, west of Thatcher Road, exhibits significant safety issues due to existing geometric deficiencies that will be compounded by potential middle housing development. (See the attached Westside Refinement Plan analysis in Appendix A for additional details). The City seeks a Transportation IBTER based on the David Hill Road deficiencies so that future both single family detached residential and middle housing types can be served with transportation facilities meeting adopted City standards.

Under OAR 660-046-0340(1), a local government may use the following circumstances to justify a transportation-based IBTER:

- (a) Areas where the supporting roadways, intersections, or both are operating or anticipated to operate over capacity, not meet currently acceptable service levels, or have existing***

geometric/safety limitations. Supporting information regarding the magnitude and severity of the deficiency must support a determination that the deficiency has a significant impact on transportation function or safety in the affected area. This type of transportation IBTER applies only to areas where mitigation is planned and is either within the jurisdiction and financial capacity of the local government, or is planned, financed, and scheduled in partnership with county, state, or other governmental partners, or private partners.

As noted in OAR 660-046-0320(6)(c), there is no single service level for demonstrating a significant infrastructure deficiency for transportation infrastructure. Information regarding the magnitude and severity of the deficiency must support a determination that the deficiency has a significant impact on transportation function or safety in the affected area. Higher street classifications, traffic volumes, and impacts to the function of transportation corridors, rather than a single intersection, will help support the significance of the transportation deficiency. The severity of safety issues may be supported with information such as crash data, posted speed limits, sight distance at intersections, or similar information.

II.C.1. David Hill Urban Growth Area Transportation Deficiency

The David Hill urban growth area is located in the northwestern portion of the City of Forest Grove and has been included in the urban growth boundary since about 1980. The David Hill area is one of the City's prime growth areas and Metro projected that over 90% of the area would be projected to develop by 2025. This has not occurred largely due to lack of infrastructure, including significant transportation infrastructure deficiencies needed to serve development.

The David Hill urban growth area is served by two primary transportation facilities: David Hill Road and Thatcher Road. David Hill Road, west of Thatcher Road, shown below (**Exhibit 7**), is classified as a collector roadway on the Forest Grove Transportation System Plan Street Functional Classification System Map. The David Hill Road corridor provides access to the Summit Pointe neighborhood, Thatcher Park and Highway 47, a distance of about 5,100 feet.

Exhibit 7: David Hill Road Corridor



II.C.1.a David Hill Road

Currently, David Hill Road is a narrow, paved two-lane roadway with minimal shoulders, no sidewalks and no bike lanes. While the capacity of David Hill Road is not currently exceeded and intersections are expected to continue to operate at acceptable levels, existing geometric/safety limitations of the facility create significant safety conflicts between motorists, bicyclists and pedestrians.

Based on guidance from the Institute of Transportation Engineers (ITE), geometric design refers to the dimensions and arrangements of the visible features of a roadway. This includes pavement widths, horizontal and vertical alignment, slopes channelization, intersections and other features that can significantly affect the operations, safety and capacity of the roadway network.

The current design of David Hill Road is significantly substandard and inadequate in terms of serving incremental development including single family detached housing in subdivisions. Since improvement of David Hill Road is constrained by topography and an adjacent vegetated corridor and drainage way paralleling the facility the infrastructure deficiency cannot be resolved through frontage improvements alone and requires a comprehensive approach.

The images below, in **Exhibit 8**, show existing conditions typical of the David Hill Road corridor. The facility is narrow, winding and creates challenges for pedestrians.

Exhibit 8: David Hill Road Existing Conditions

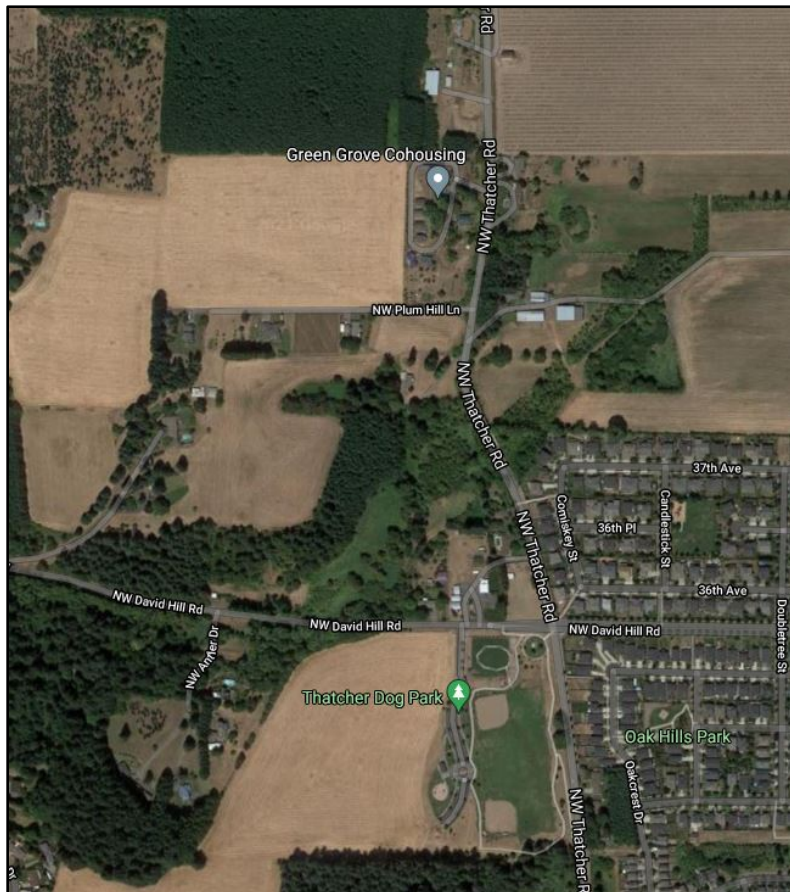


In conclusion, the City of Forest Grove is unable to provide acceptable service levels for transportation based on safety within the developing area along David Hill Road, west of Thatcher Road and east of Forest Gale Drive. Resolution of this significant infrastructure deficiency to provide acceptable service levels requires a comprehensive approach to ensure safety and improved mobility along the corridor for all facility users.

II.C.1.b Thatcher Road

Thatcher Road is classified as an arterial roadway on the Forest Gove Transportation System Plan Street Functional Classification Map. Thatcher Road runs north-south along the eastern edge of the David Hill urban growth area for a distance of about 4,050 feet.

Exhibit 9: Thatcher Road Corridor



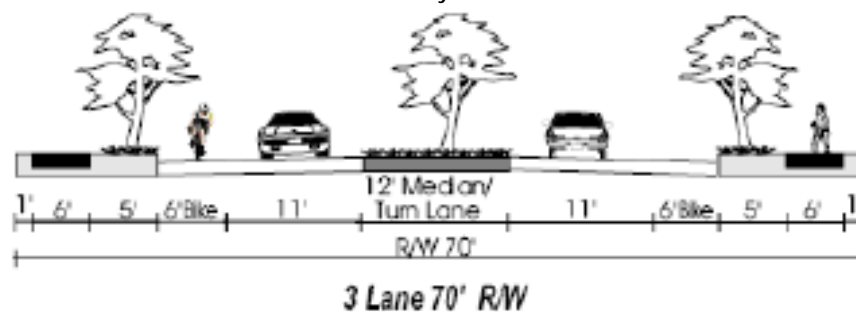
Similar to David Hill Road, Thatcher Road is a two-lane facility with soft shoulders and no turn lanes. Sight lanes are poor in some areas due to vertical and horizontal curves as shown below. Sight lines are especially poor near Coho Circle near the Green Grove cohousing project (**Exhibit 10**).

Exhibit 10: Thatcher Road Corridor



The area east of Thatcher Road and north of 37th Avenue, is designated as Rural Reserve by Washington County. This limits the opportunity for construction of a full arterial roadway cross-section along the David Hill urban growth area since urban development is not permitted in the Rural Reserve area, frontage improvements are unlikely and the City will not be able to provide a full arterial cross-section in this area. The lack of a complete arterial roadway cross-section (**Exhibit 11**) will have a significant impact on transportation function and safety along this portion of the Thatcher Road corridor.

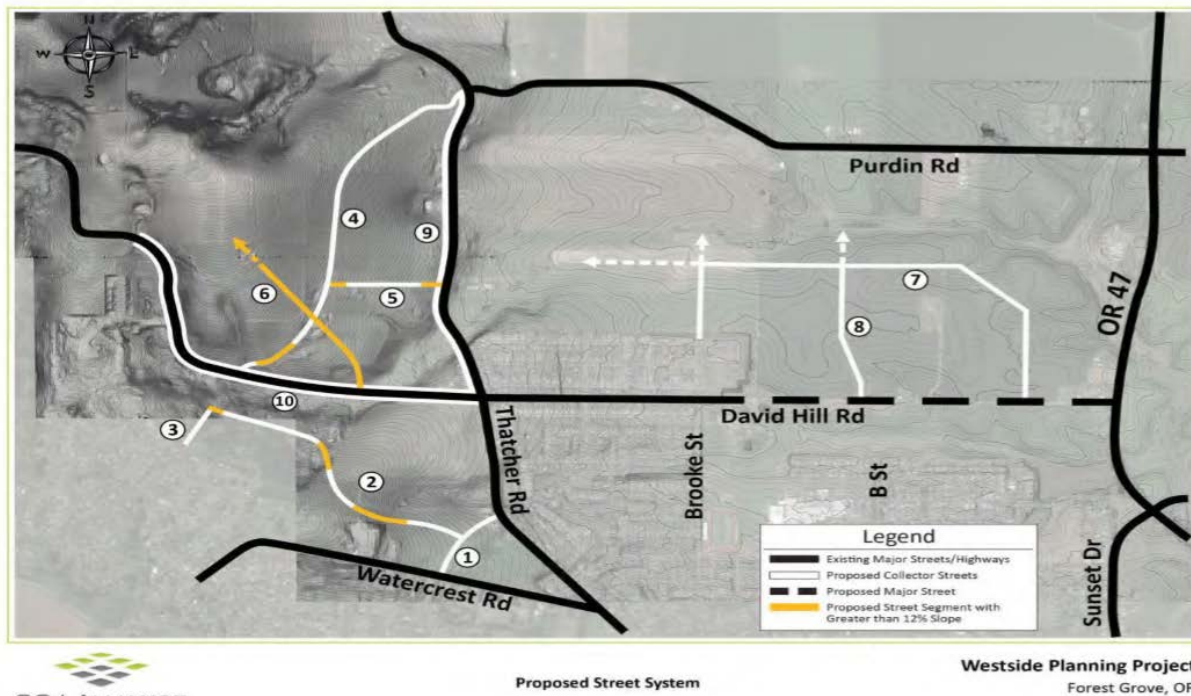
Exhibit 11: Arterial Roadway Cross-Section



II.D. CAPITAL REQUIREMENT

Per the IBTER requirements, the City has applied the post HB 2001 net new dwelling unit estimates to determine impacts to the transportation system and corresponding levels of service. Based on the two main areas of concern, the City determined future infrastructure needs to support post HB 2001 development in the Westside Refinement Plan Area (including the subareas of David Hill and Purdin Road) and the Other IBTER Area. Additional roadway and pedestrian system improvements necessary to support transportation service levels in both areas are illustrated in **Exhibit 12** and detailed in **Exhibit 13**.

Exhibit 12: Transportation Facility System Plan



Based on adopted capital facilities plans, including the Westside Refinement Plan and the City of Forest Grove Transportation System Plan (2014), the City identified the planned capital projects that are required to serve the IBTER area. Total capital facilities costs are based on the City's adopted capital facilities plans and escalated to 2021 dollars using the Washington County Transportation Development Tax 5-year rolling average weighted index (3.36%).

Exhibit 13: Transportation Facility Cost Estimate

WRP #	TSP #	Project / Facility Name	Project Limits	Description	David Hill Area Cost	Purdin Road Area Cost	WRP Total Cost	Other IBTER Area	Total IBTER Area
Westside Refinement Plan (WRP) Projects									
2		Road 2	From Vista Drive Extension west 3,200	Construct new east-west urban collector street	\$ 4,846,073	\$ -	\$ 4,846,073	\$ -	\$ 4,846,073
3		Road 3 (Valley Extension) Crest	From terminus of Valley Crest Way north to Road 2	Construct new 600-foot urban collector street	\$ 898,452	\$ -	\$ 898,452	\$ -	\$ 898,452
4		Road 4	David Hill Road North to Purdin	Construct new 4,700-foot urban collector street	\$ 7,314,992	\$ -	\$ 7,314,992	\$ -	\$ 7,314,992
5		Road 5 - (Plum Improvement) Hill	Existing Plum Hill Lane (privately-owned) to Road 4	Improve Plum Hill Lane to urban collector standards	\$ 1,383,516	\$ -	\$ 1,383,516	\$ -	\$ 1,383,516
6		Road 6	David Hill road to urban growth boundary	Construct new 2,300 foot urban collector street	\$ 2,728,912	\$ -	\$ 2,728,912	\$ -	\$ 2,728,912
7		Road 7 Brooke (Extension) Street	Brooke Street to David Hill Road	Construct new 5,500-foot urban collector street	\$ -	\$ 2,719,896	\$ 2,719,896	\$ -	\$ 2,719,896
9a		Road 9 (Thatcher Improvement)	David Hill Road to Purdin Road	Full improvements to Council Creek crossing (short-term)	\$ 1,659,489	\$ -	\$ 1,659,489	\$ -	\$ 1,659,489
9b		Road 9 (Thatcher Improvement)	David Hill Road to Purdin Road	Half street reconstruction between David Hill Road to Purdin Road excluding Council Creek crossing (long-term)	\$ 2,781,984	\$ -	\$ 2,781,984	\$ -	\$ 2,781,984
10		Road 10 (David Improvement) Hill	Thatcher Road to urban growth boundary	Full street reconstruction for 5,100 feet to urban collector street standards	\$ 4,500,822	\$ -	\$ 4,500,822	\$ -	\$ 4,500,822
Subtotal					\$ 26,114,241	\$ 2,719,896	\$ 28,834,137	\$ -	\$ 28,834,137
Other Transportation System Plan (TSP) Financially-Constrained Plan Projects (assumed to be in IBTER Area)									
	5	Bike Lanes and Sidewalks		Thatcher (Gales CK-David Hill), Willamina (Gales CK-Sunset), B Street (26th-Willamina) Ped & Bike Improvements	\$ -	\$ -	\$ -	\$ 5,532,579	\$ 5,532,579
	12	Highway 47 / Martin Rd		Construct improvements (e.g. roundabout) at Highway 47 intersection with Holladay Street Extension, Martin Road, and 23rd Avenue Extension	\$ -	\$ -	\$ -	\$ 1,930,833	\$ 1,930,833
	23	19th Avenue / Strasburg Dr Extension		Construct 2-lane collector between southern terminus of Strasburg Drive and E Street at 19th Avenue	\$ -	\$ -	\$ -	\$ 5,421,185	\$ 5,421,185
	24	Hawthorne Street Extension		Construct 2-lane collector between Willamina Street and 26th Avenue	\$ -	\$ -	\$ -	\$ 1,609,028	\$ 1,609,028
	26	26th Ave Extension		Construct 2-lane industrial road between Boyd Lane and Oak Street	\$ -	\$ -	\$ -	\$ 2,648,707	\$ 2,648,707
Subtotal					\$ -	\$ -	\$ -	\$ 17,142,332	\$ 17,142,332
Grandtotal					\$ 26,114,241	\$ 2,719,896	\$ 28,834,137	\$ 17,142,332	\$ 45,976,469

To upgrade the City's transportation system to meet required levels of service in the IBTER Area, the City will require a major transportation investment of \$45,976,469 for the collector and bicycle/pedestrian network. While a portion of this funding requirement will likely be derived from private developer right-of-way dedications and existing transportation development tax (TDT) revenue, the majority of these costs are unfunded at this time. This analysis assumes that the value of non-TDT creditable developer contributions to the transportation system improvements listed above equates to 10 percent of the Westside/IBTER Area project costs.

II.E. FUNDING GAP ANALYSIS

The IBTER Area will require significant public facility investment in roads, water, sewer, storm and parks systems. As shown in **Exhibit 14**, based on current facility plans that have been adopted by the city, overall capital cost requirements are expected to exceed \$70.3 million in order to accommodate planned buildout of the area.

Exhibit 14: IBTER Area Infrastructure Capital Costs

Costs by Subarea (adjusted 2021 dollars)			Westside		
Infrastructure Type	David Hill	Purdin Road	Total	Other IBTER Area	Total
Transportation*	\$ 26,114,241	\$ 2,719,896	\$ 28,834,137	\$ 17,142,332	\$ 45,976,469
Water	8,070,196	5,017,237	13,087,433	1,108,158	\$ 14,195,591
Sewer	2,810,970	1,345,497	4,156,467	-	\$ 4,156,467
Storm	1,074,968	740,662	1,815,630	-	\$ 1,815,630
Parks	320,041	3,885,304	4,205,344	-	\$ 4,205,344
Total	\$ 38,390,415	\$ 13,708,596	\$ 52,099,011	\$ 18,250,489	\$ 70,349,500

*Assumes TSP cost estimates where projects appear on both the TSP and TDT lists.

FCS evaluated the potential revenue that the city would expect after applying its current system development charges (SDCs) and transportation development tax (TDT) to future development. The current charges on new development are shown in **Exhibit 15**.

Exhibit 15: Current Charges on New Development, City of Forest Grove

Infrastructure Type	Single-Family Detached	Single-Family Attached	Multi-Family	Weighted Avg. for study area based on mix
Transportation (Washington Co TDT)	\$9,269	\$5,544	\$6,064	\$7,794
Water (City) - average charge	\$6,371	\$3,982	\$2,124	\$4,990
Sewer (CWS)*	\$5,800	\$3,625	\$1,933	\$4,543
Stormwater (CWS)**	\$560	\$560	\$560	\$560
Parks (City)	\$6,010	\$6,010	\$6,010	\$6,010

Based on current charges and the forecasted level of future development, the estimated TDT and SDC revenue for the study area is shown in **Exhibit 16**. The results of this analysis indicate that without supplemental charges, the development of the Westside Area is projected to generate funding gaps for transportation, water and storm systems.

Exhibit 16: Projected Public Facility Revenues and Funding Gaps

SDC Revenue by Subarea (Post HB-2001 Adjustment)			Westside		
Infrastructure Type	David Hill	Purdin Road	Total	Other IBTER Area	Total
Transportation (TDT)	\$ 7,546,382	\$ 7,851,449	\$ 15,397,831	\$ 7,851,449	\$ 23,249,280
Water	4,831,347	5,026,657	9,858,004	5,026,657	\$ 14,884,661
Sewer	4,398,338	4,576,144	8,974,482	4,576,144	\$ 13,550,626
Storm	542,192	564,110	1,106,302	564,110	\$ 1,670,413
Parks	5,818,882	6,054,113	11,872,995	6,054,113	\$ 17,927,109
Total	\$ 23,137,142	\$ 24,072,473	\$ 47,209,616	\$ 24,072,473	\$ 71,282,089

Projected Capital Cost Surplus / Deficit by Subarea (Post HB-2001 Adjustment)

			Westside		
Infrastructure Type	David Hill	Purdin Road	Total	Other IBTER Area	Total
Transportation	\$ (15,956,435)	\$ 5,403,543	\$ (10,552,892)	\$ (7,576,649)	\$ (18,129,541)
Water	\$ (1,624,809)	\$ 1,012,867	(611,942)	\$ 4,140,131	\$ 3,528,189
Sewer	\$ 3,555,048	\$ 4,172,495	7,727,542	\$ 4,576,144	\$ 12,303,686
Storm	\$ (210,286)	\$ 45,647	(164,638)	\$ 564,110	\$ 399,472
Parks	\$ 5,498,841	\$ 2,168,810	7,667,651	\$ 6,054,113	\$ 13,721,764
Total	\$ (8,737,641)	\$ 12,803,361	\$ 4,065,721	\$ 7,757,849	\$ 11,823,570

II.F. POTENTIAL FUNDING SOURCES

In addition to the existing funding sources, there are several potential funding sources that could be considered to address potential funding gaps. Based on experience in other Oregon cities, the most commonly used infrastructure funding techniques include:

- Supplemental SDCs
- Supplemental Utility Rates
- Local Improvement Districts
- Reimbursement Districts
- Development Agreements and Special Assessments
- Exactions and Dedications
- Debt Financing (public)

In order to pay for the transportation capital facility needs stated above, the City will need to supplement current funding resources with new funding mechanisms. Approval of this IBTER request will provide the City additional time required to create an infrastructure remediation strategy and to move towards adoption of one or more of the supplemental funding sources identified above.

In summary, the City's transportation infrastructure has been determined to have significant localized deficiencies that result in unacceptable service levels. This includes substandard roadway design cross sections and line of sight deficiencies that will lead to safety conflicts once additional development is permitted in the IBTER area. The City will be requesting a time extension to comply with HB 2001.

Section III. WATER DEFICIENCY

III.A. BASELINE EXISTING DWELLING UNITS

In accordance with the IBTER requirements, the City performed an analysis of areas likely to be impacted by middle housing development. The City identified two general areas denoted as the Westside Refinement Plan Area and Other IBTER Area. The Westside Refinement Plan Area contains two subareas, identified as the David Hill Area and the Purdin Road Area.

Per the IBTER requirements, the City prepared a baseline estimate of development that could potentially occur in these areas by December 31, 2023 based on historic building permits. The IBTER areas and a baseline estimate of dwelling units by housing type are described in the prior section.

The baseline dwelling unit forecast for the IBTER area assumes a total of 3,957 dwelling units, with 60.9 percent as single family detached and 39.1% middle housing types. These figures serve as the baseline estimate for the purposes of determining the impact to transportation system service levels due to middle housing development required by HB 2001.

III.B. POTENTIAL CHANGE IN DWELLING UNITS DUE TO MIDDLE HOUSING DEVELOPMENT

Per the IBTER requirements, Cities can plan for a one percent increase in the number of dwelling units produced due to middle housing for infill and redevelopment areas. Undeveloped and underdeveloped areas may assume a three percent increase in the number of dwelling units produced due to middle housing.

Based on the estimated growth allowable per the IBTER requirements, the City can assume an additional 78 dwelling units due to middle housing development required by HB 2001. As a result, total net new dwelling units of 4,035 in the study area.

III.C. CAPITAL REQUIREMENT

Per the IBTER requirements, the City may use the post HB 2001 net new dwelling unit estimates to determine impacts to the water system and corresponding levels of service. The City determined future water system infrastructure needs to support post HB 2001 development in the Westside Refinement Plan Area (including the subareas of David Hill and Purdin Road) and the Other IBTER Area. Additional infrastructure improvements necessary to support water system service levels in both areas are detailed in **Exhibit 17**.

Based on adopted capital facilities plans, including the Westside Refinement Plan and the City of Forest Grove Water Master Plan (2010), the City determined which approved capital project costs apply to the IBTER Area. Total capital facilities costs are based on the City's adopted capital facilities plans and escalated to 2021 dollars using the Engineering New-Record Construction Cost Index 10-year average for Seattle (3.62%).

To upgrade the City's water system to meet required levels of service in the IBTER Area, a public facility capital investment of over \$24 million is required. The share of capacity needed to serve the IBTER area is estimated at \$14.2 million (**Exhibit 17**).

Exhibit 17: Water Facility Cost Estimates

WMP # Description		Estimated Cost Westside Planning Area	Other IBTER Area	Total IBTER Area	Area of Benefit
Short Term Projects					
	ST08	One 0.5 MG reservoirs¹	\$ 1,008,683		\$ 1,008,683 David Hill UGB
		Short Term Subtotal	\$ 1,008,683		\$ 1,008,683
Long Term Projects					
		Road 1 Water main	\$ 72,625		\$ 72,625 David Hill UGB
		Road 2 Water main	\$ 221,334		\$ 221,334 David Hill UGB
		Road 3 Water main	\$ 41,500		\$ 41,500 David Hill UGB
	DP33	Road 4 Water main	\$ 325,084		\$ 325,084 David Hill UGB
		Road 5 Water main	\$ 86,459		\$ 86,459 David Hill UGB
		Road 6 Water main	\$ 159,084		\$ 159,084 David Hill UGB
	DP34	Road 7 Water main	\$ 380,418		\$ 380,418 Purdin Road UGB
	DP34	Road 8 Water main	\$ 121,042		\$ 121,042 Purdin Road UGB
		Road 9 Water main	\$ 605,210		\$ 605,210 David Hill UGB
	ST04 / ST05	Two 0.3 MG reservoirs²	\$ 2,247,923		\$ 2,247,923 Entire WRP Area
	ST07	One 2.25 MG reservoir near Watercrest Road	\$ 783,891		\$ 783,891 Entire WRP Area
		Contingencies and Engineering	\$ 3,783,427		\$ 3,783,427 Entire WRP Area
		Long Term Subtotal	\$ 8,827,996		\$ 8,827,996
WRP Total		\$ 9,836,679		\$ 9,836,679	
WMP Capital Improvement Program (assumed to be in Other IBTER Area)					
	ST01	Land Acquisition for Upper Zone storage		\$ 142,681	\$ 142,681 Other IBTER Area
	ST02	Land Acquisition for Lower Zone storage		\$ 142,681	\$ 142,681 Other IBTER Area
	ST03	Land Acquisition for David Hill Area	\$ 142,681		\$ 142,681 David Hill UGB
	ST06	2.25 MG Lower Reservoir		\$ 3,039,110	\$ 3,039,110 Other IBTER Area
	ST09	David Hill URA Pump Station	\$ 499,384		\$ 499,384 David Hill UGB
	ST10	David Hill URA PRV	\$ 285,362		\$ 285,362 David Hill UGB
	DP36	David Hill Pump Station Upgrade (additional pump)	\$ 107,011		\$ 107,011 David Hill UGB
WMP Total		\$ 1,034,439	\$ 3,324,473	\$ 4,358,912	
TOTAL IBTER Area				\$ 14,195,591	

III.D. FUNDING GAP ANALYSIS

While new water main improvements are often dedicated by private developers, more costly improvements such as pump stations and new reservoirs usually require new sources of funding through utility rates or system development charges. This analysis assumes that the value of non-SDC creditable developer contributions to the water system improvements listed above equates to 20

percent of the Westside/IBTER Area project costs. In order to pay for the water capital facility needs stated above, the City will need to supplement current funding resources with new funding mechanisms. Current charges associated with existing water system development charges are summarized below (**Exhibit 18**).

Exhibit 18: Current Charges on New Development, City of Forest Grove

Infrastructure Type	Single-Family Detached	Single-Family Attached	Multi-Family	Weighted Avg. for study area based on mix
Transportation (Washington Co TDT)	\$9,269	\$5,544	\$6,064	\$7,794
Water (City) - average charge	\$6,371	\$3,982	\$2,124	\$4,990
Sewer (CWS)*	\$5,800	\$3,625	\$1,933	\$4,543
Stormwater (CWS)**	\$560	\$560	\$560	\$560
Parks (City)	\$6,010	\$6,010	\$6,010	\$6,010

¾" inch meter up to 35 fixture counts, SDC: \$6,371 per dwelling unit (maximum 16 fixtures per unit)
1" meter up to 90 fixtures (up to about 8 apartment units), SDC \$15,928.
2" inch meter up to 500 fixtures (up to about 48 apartments), SDC \$50,970.

The figures above are approximations (except for the SDC amount) and actual mileage may vary.

For water system improvement revenues, the City can assume average SDC rate of \$6,371 per single-family detached, \$3,982 for single-family attached, and \$2,214 for multi-family dwelling units. Based on current rates, the estimated TDT and SDC revenue for the IBTER Area is shown in **Exhibit 19**.

Exhibit 19: Total IBTER Area Estimated SDC Revenue

SDC Revenue by Subarea (Post HB-2001 Adjustment)			Westside		Other IBTER Area	Total
Infrastructure Type	David Hill	Purdin Road	T total			
Transportation (T DT)	\$ 7,546,382	\$ 7,851,449	\$ 15,397,831	\$ 7,851,449	\$	23,249,280
Water	4,831,347	5,026,657	9,858,004	5,026,657	\$	14,884,661
Sewer	4,398,338	4,576,144	8,974,482	4,576,144	\$	13,550,626
Storm	542,192	564,110	1,106,302	564,110	\$	1,670,413
Parks	5,818,882	6,054,113	11,872,995	6,054,113	\$	17,927,109
Total	\$ 23,137,142	\$ 24,072,473	\$ 47,209,616	\$ 24,072,473	\$	71,282,089

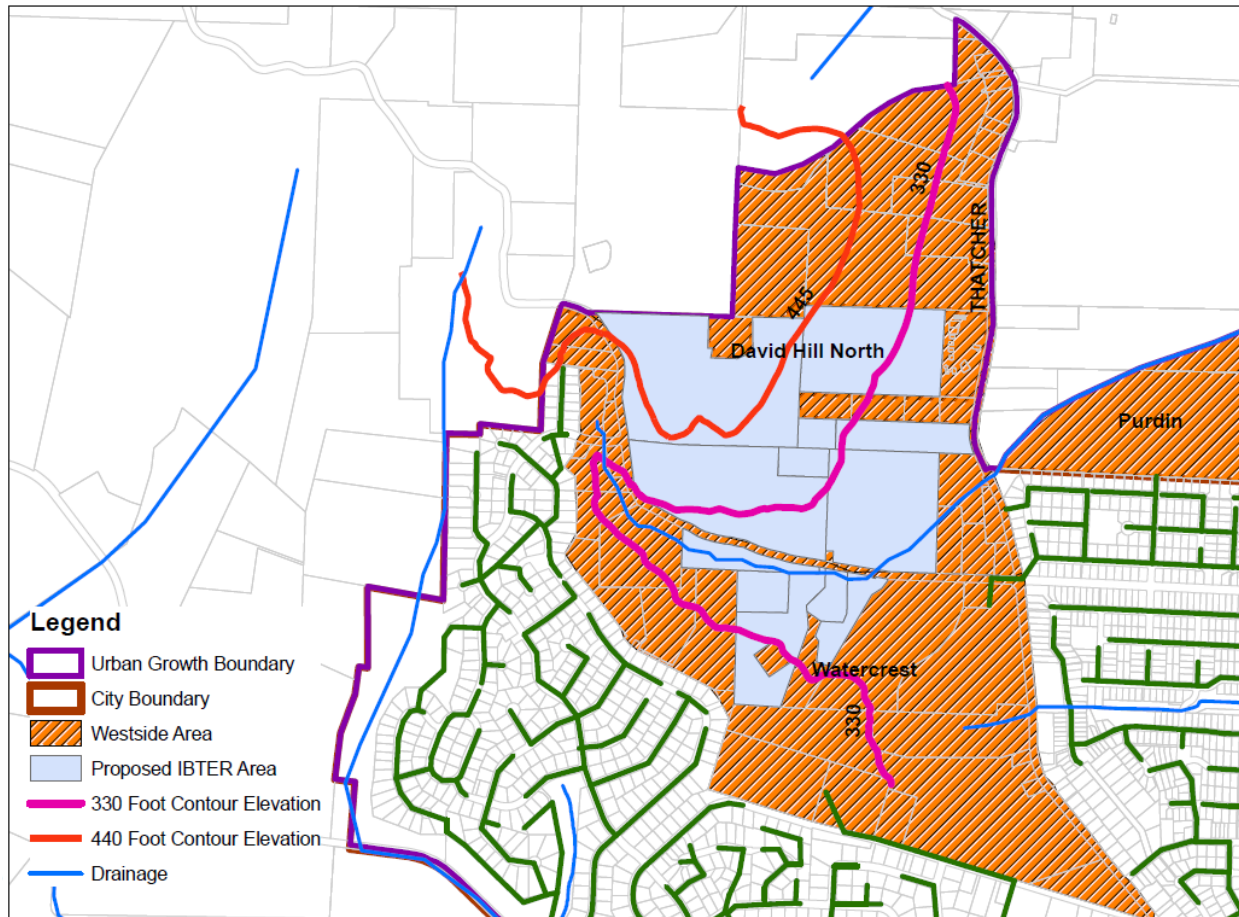
Projected Capital Cost Surplus / Deficit by Subarea (Post HB-2001 Adjustment)

Projected Capital Cost Surplus / Deficit by Subarea (Post HB-2001 Adjustment)			Westside		Other IBTER Area	Total
Infrastructure Type	David Hill	Purdin Road	T total			
Transportation	\$ (15,956,435)	\$ 5,403,543	\$ (10,552,892)	\$ (7,576,649)	\$	(18,129,541)
Water	\$ (1,624,809)	\$ 1,012,867	\$ (611,942)	\$ 4,140,131	\$	3,528,189
Sewer	\$ 3,555,048	\$ 4,172,495	\$ 7,727,542	\$ 4,576,144	\$	12,303,686
Storm	\$ (210,286)	\$ 45,647	\$ (164,638)	\$ 564,110	\$	399,472
Parks	\$ 5,498,841	\$ 2,168,810	\$ 7,667,651	\$ 6,054,113	\$	13,721,764
Total	\$ (8,737,641)	\$ 12,803,361	\$ 4,065,721	\$ 7,757,849	\$	11,823,570

Current SDC rates, if applied to new development in the IBTER Area would result in a significant funding gaps for water improvements that would vary by subarea. The overall water funding gap for the Westside Refinement Plan Area is estimated at over \$1.6 million for the David Hill Subarea.

In addition to funding short falls, properties above the 440-foot elevation in portions of the David Hill Subarea cannot be served currently by water pressure zones. The City cannot allow development in those locations until a new reservoir is built or pump stations are constructed. The David Hill Subarea, including the portions of the IBTER study area above the 440-foot elevation, is represented in **Exhibit 20**.

Exhibit 20: David Hill Subarea



The City's water infrastructure has been determined to have a localized significant deficiency that results in unacceptable service levels. The City will be requesting a time extension to comply with HB 2001.

Section IV. SANITARY SEWER DEFICIENCY

IV.A. BASELINE EXISTING DWELLING UNITS

In accordance with the IBTER requirements, the City performed an analysis of areas likely to be impacted by middle housing development. The City identified two general areas denoted as the Westside Refinement Plan Area and Other IBTER Area. The Westside Refinement Plan Area contains two subareas, identified as the David Hill Area and the Purdin Road Area.

Per the IBTER requirements, the City prepared a baseline estimate of the level of development that could potentially be permitted within these areas by December 31, 2023 based on historic building permits. The baseline estimate of dwelling units by housing type are described in Section II.

The baseline dwelling unit forecast for the IBTER area assumes a total of 3,957 dwelling units, with 60.9 percent as single family detached and 39.1% middle housing types. These figures serve as the baseline estimate for the purposes of determining the impact to transportation system service levels due to middle housing development required by HB 2001.

IV.B. POTENTIAL CHANGE IN DWELLING UNITS DUE TO MIDDLE HOUSING DEVELOPMENT

Per the IBTER requirements, Cities can plan for a one percent increase in the number of dwelling units produced due to middle housing for infill and redevelopment areas. Undeveloped and underdeveloped areas may assume a three percent increase in the number of dwelling units produced due to middle housing.

For the purposes of this analysis, the area identified as the Westside Refinement Plan Area (including the subareas of David Hill and Purdin Road) is assumed to be undeveloped or underdeveloped and is applied a three percent increase in dwelling units in baseline estimates. The area identified as Other IBTER Area is assumed to be an infill or redevelopment area and is applied a one percent increase in dwelling units to baseline estimates. Baseline housing unit growth estimates and additional middle housing development due to HB 2001 requirements are described in Section II.

Based on the estimated growth allowable per the IBTER requirements, the City can assume an additional 78 dwelling units due to middle housing development required by HB 2001. As a result, total net new dwelling units of 4,035 in the study area.

IV.C. CAPITAL REQUIREMENT

Per the IBTER requirements, the City may use the post HB 2001 net new dwelling unit estimates to determine impacts to the sewer system and corresponding levels of service. Based on the two main areas of concern, the City determined future infrastructure needs to support post HB 2001 development in the Westside Refinement Plan Area (including the subareas of David Hill and Purdin

Road) and the Other IBTER Area. Additional infrastructure improvements necessary to support sewer service levels in the Westside Refinement Plan Area are detailed in **Exhibit 20**.

Exhibit 21: Sewer Facility Cost Estimates

Sewer Facility Cost Estimates (adjusted to 2021 dollars)			
Description		Total Estimated Costs	Area of Benefit
Short Term Projects			
	Road 9 Sewer Line	\$ 302,605	David Hill UGB
	Road 10 Sewer Line (700 LF 12")	\$ 440,939	David Hill UGB
	Contingencies and Engineering	\$ 557,658	David Hill UGB
	<i>Short Term Subtotal</i>	\$ 1,301,201	
Long Term Projects			
	Road 1, 2, 3, Sewer Line	\$ 259,376	David Hill UGB
	Road 4 Sewer Line	\$ 345,834	David Hill UGB
	Road 5 Sewer Line	\$ 95,104	David Hill UGB
	Road 6 Sewer Line	\$ 190,209	David Hill UGB
	Road 7 Sewer Line (10")	\$ 466,876	Purdin Road UGB
	Road 8 Sewer Line (10")	\$ 259,376	Purdin Road UGB
	Contingencies and Engineering	\$ 1,238,490	David Hill / Purdin Rd
	<i>Long Term Subtotal</i>	\$ 2,855,265	
	Total	\$ 4,156,467	

Based on adopted capital facilities plans, including the Westside Refinement Plan, the City identified the planned capital projects that are required to serve the IBTER area. Total capital facilities costs are based on the City's adopted capital facilities plans and escalated to 2021 dollars using the Engineering New-Record Construction Cost Index 10-year average for Seattle (3.62%).

To upgrade the City's sewer system to meet required levels of service in the IBTER Area, the City will require a major investment of \$4.2 million. Sewer lines of 12 inches or lower are generally paid for by private developers as a condition of approval. This analysis assumes that the value of non-SDC creditable developer contributions to the sanitary sewer system improvements listed above equates to 70 percent of the Westside/IBTER Area project costs.

IV.D. FUNDING GAP ANALYSIS

In order to pay for the sewer capital facility needs stated above, the City will rely upon current charges associated with existing sanitary sewer system development charges as summarized below.

Exhibit 22: Current Charges on New Development, City of Forest Grove

Infrastructure Type	Single-Family Detached	Single-Family Attached	Multi-Family	Weighted Avg. for study area based on mix
Transportation (Washington Co TDT)	\$9,269	\$5,544	\$6,064	\$7,794
Water (City) - average charge	\$6,371	\$3,982	\$2,124	\$4,990
Sewer (CWS)*	\$5,800	\$3,625	\$1,933	\$4,543
Stormwater (CWS)**	\$560	\$560	\$560	\$560
Parks (City)	\$6,010	\$6,010	\$6,010	\$6,010

Sewer funding would be primarily derived from the current SDC rate which averages \$5,800 per single-family detached, \$3,625 for single-family attached, and \$1,933 for multi-family dwelling units. Based on current rates, the estimated TDT and SDC revenue for the IBTER Area is shown in **Exhibit 23**.

Exhibit 23: Total IBTER Area Estimated SDC Revenue

SDC Revenue by Subarea (Post HB-2001 Adjustment)				Westside		
Infrastructure Type	David Hill	Purdin Road	Total	Other IBT ER Area	Total	
Transportation (TDT)	\$ 7,546,382	\$ 7,851,449	\$ 15,397,831	\$ 7,851,449	\$ 23,249,280	
Water	4,831,347	5,026,657	9,858,004	5,026,657	\$ 14,884,661	
Sewer	4,398,338	4,576,144	8,974,482	4,576,144	\$ 13,550,626	
Storm	542,192	564,110	1,106,302	564,110	\$ 1,670,413	
Parks	5,818,882	6,054,113	11,872,995	6,054,113	\$ 17,927,109	
Total	\$ 23,137,142	\$ 24,072,473	\$ 47,209,616	\$ 24,072,473	\$ 71,282,089	

Projected Capital Cost Surplus / Deficit by Subarea (Post HB-2001 Adjustment)

Projected Capital Cost Surplus / Deficit by Subarea (Post HB 2001 Adjustment)						
Infrastructure Type	David Hill		Purdin Road	Westside Total	Other IBTER Area	Total
Transportation	\$ (15,956,435)	\$ 5,403,543	\$ (10,552,892)	\$ (7,576,649)	\$ (18,129,541)	
Water	\$ (1,624,809)	\$ 1,012,867	(611,942)	\$ 4,140,131	\$ 3,528,189	
Sewer	\$ 3,555,048	\$ 4,172,495	7,727,542	\$ 4,576,144	\$ 12,303,686	
Storm	\$ (210,286)	\$ 45,647	(164,638)	\$ 564,110	399,472	
Parks	\$ 5,498,841	\$ 2,168,810	7,667,651	\$ 6,054,113	\$ 13,721,764	
Total	\$ (8,737,641)	\$ 12,803,361	\$ 4,065,721	\$ 7,757,849	\$ 11,823,570	

As indicated in **Exhibit 23**, the current SDC rates, if applied to new development in the IBTER Area are not likely to result in a significant funding gaps for sewer improvements.

However, given current sewer infrastructure level of service deficiencies, the City may have to allow property owners to seek approval for on-site septic systems. In accordance with ORS 340.071.0160(4)(f)(A), sewerage infrastructure is considered physically available if the nearest connection point is within 300 feet of the property to be served. For single-family dwelling housing types more than 300 feet from sanitary sewer infrastructure, the City cannot compel property owners to connect to a public system that is not physically available. The David Hill Subarea, including the properties that may be allowed to seek approval for on-site septic systems, is represented in **Exhibit 24**.

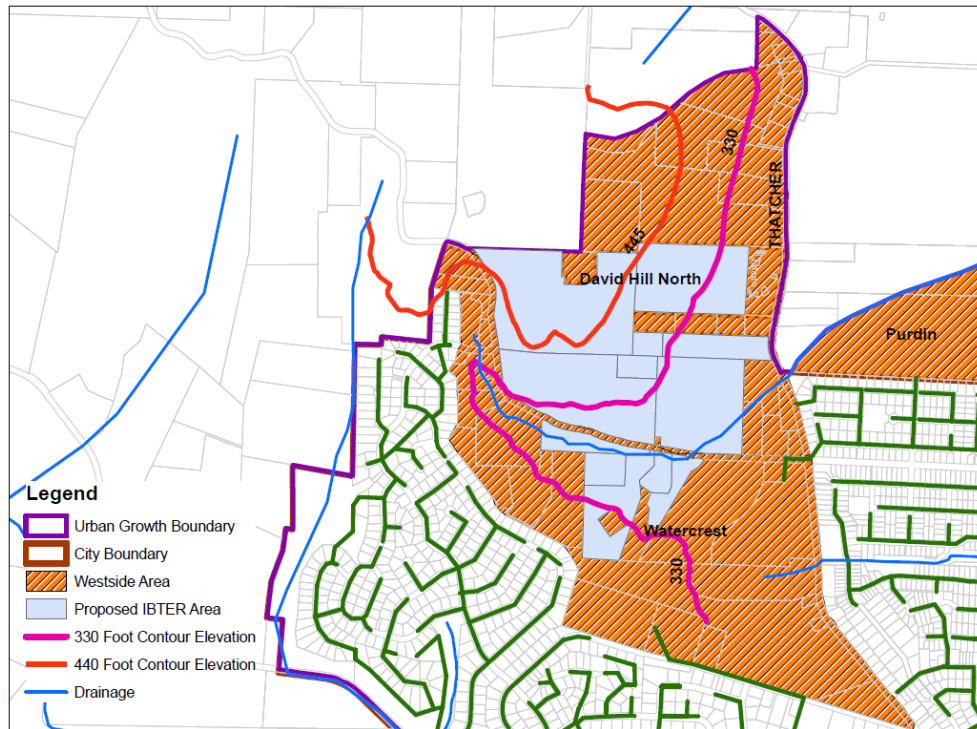
IV.E. LEVEL OF SERVICE DEFICIENCY

Large portions of the David Hill Road urban growth area cannot be served with sanitary sewer facilities. The City seeks a wastewater IBTER to allow for updating the City's 2007 Wastewater System Master Plan and to address constraints with cost-effectively providing sanitary sewer service to the urban growth area to accommodate single family detached and middle housing types. Absent this development, including middle housing types, could be approved with onsite wastewater treatment systems within the urban growth boundary and inside the city limits.

Topography and natural features along the David Hill Road corridor significantly constrain extension of sanitary sewer lines from the currently developed area south of the corridor. South of David Hill Road there is a stream corridor, Metro Title 3 water quality area, and a small ravine with steep slopes

separating existing sanitary sewer lines in the developed area to the south from the David Hill urban growth area.

Exhibit 24: David Hill Subarea



Due to the lack of wastewater infrastructure, a proposed seven lot subdivision, was withdrawn because sanitary sewer issues could not be resolved cost-effectively. The area has existing downstream trunk line capacity improvement needs.

As noted in the Infrastructure Overview report prepared for the Westside Planning Area by SCJ Alliance, additional sanitary sewer capacity may be needed depending on the nature of development and anticipated water service demand. Introducing middle housing types in this area may worsen this situation.

The image below (**Exhibit 25**) shows the current location of sanitary sewer infrastructure. There is an existing line serving Thatcher Park and a line serving the residential area along Forest Gale Drive.

Exhibit 25: Existing Sanitary Sewer Lines



Compounding the situation is Oregon Department of Quality administrative rules allow for onsite wastewater systems if existing sanitary sewer lines are distant from a development site and sewer lines are not legally or physically available (see OAR340-071-0160(4)(f)(A)). Under the administrative rules, a sewerage system is considered available if topographic or man-made features do not make connection physically impractical and one of the following applies:

- (i) For a single family dwelling or other establishment with a maximum projected daily sewage flow not exceeding 899 gallons, the nearest sewerage connection point from the property to be served is within 300 feet.
- (ii) For a proposed subdivision or group of two to five single family dwellings or other establishment with the projected daily sewage flow, the nearest sewerage connection point from the property to be served is not further than 200 feet multiplied by the dwellings or dwelling equivalents.
- (iii) For proposed subdivisions or other developments with more than five single family dwellings or equivalent flows, the agent will determine sewerage availability.

One project with nine single family detached dwellings in the David Hill urban growth area, adjacent to Thatcher Road, was permitted to install an onsite wastewater treatment system under these rules.

IV.F. CONCLUSIONS

The City's sewer infrastructure has been determined to have a localized significant deficiency that results in unacceptable service levels. The City will be requesting a time extension to comply with HB 2001.

Section V. STORMWATER DEFICIENCY

V.A. BASELINE EXISTING DWELLING UNITS

In accordance with the IBTER requirements, the City performed an analysis of areas likely to be impacted by middle housing development. The City identified two general areas denoted as the Westside Refinement Plan Area and Other IBTER Area. The Westside Refinement Plan Area contains two subareas, identified as the David Hill Area and the Purdin Road Area.

Per the IBTER requirements, the City prepared a baseline estimate of development that could potentially occur in these areas by December 31, 2023 based on historic building permits. The IBTER areas and a baseline estimate of dwelling units by housing type are shown in **Section II**.

The baseline dwelling unit forecast for the IBTER area assumes a total of 3,957 dwelling units, with 60.9 percent as single family detached and 39.1% middle housing types. These figures serve as the baseline estimate for the purposes of determining the impact to transportation system service levels due to middle housing development required by HB 2001.

V.B. POTENTIAL CHANGE IN DWELLING UNITS DUE TO MIDDLE HOUSING DEVELOPMENT

Per the IBTER requirements, Cities can plan for a one percent increase in the number of dwelling units produced due to middle housing for infill and redevelopment areas. Undeveloped and underdeveloped areas may assume a three percent increase in the number of dwelling units produced due to middle housing.

For the purposes of this analysis, the area identified as the Westside Refinement Plan Area (including the subareas of David Hill and Purdin Road) is assumed to be undeveloped or underdeveloped and is applied a three percent increase in dwelling units in baseline estimates. The area identified as Other IBTER Area is assumed to be an infill or redevelopment area and is applied a one percent increase in dwelling units to baseline estimates. Baseline housing unit growth estimates and additional middle housing development due to HB 2001 requirements are shown in **Section II**.

Based on the estimated growth allowable per the IBTER requirements, the City can assume an additional 78 dwelling units due to middle housing development required by HB 2001. As a result, total net new dwelling units of 4,035 in the study area.

V.C. CAPITAL REQUIREMENT

Per the IBTER requirements, the City may use the post HB 2001 net new dwelling unit estimates to determine impacts to the stormwater system and corresponding levels of service. The City determined future stormwater system infrastructure needs to support post HB 2001 development in the Westside Refinement Plan Area (including the subareas of David Hill and Purdin Road) and the Other IBTER Area. Additional infrastructure improvements necessary to support stormwater system service levels in Westside Refinement Plan Area are detailed in **Exhibit 26**.

Exhibit 26: Stormwater Facility Cost Estimates for Roadways

Description		Total Estimated Costs	Area of Benefit
	Road 1, 2, 3, Storm Pond	\$ 86,459	David Hill UGB
	Road 4 Storm Pond	\$ 86,459	David Hill UGB
	Road 5 and 9 Storm Pond	\$ 115,278	David Hill UGB
	Road 6 and 10 Storm Pond	\$ 172,917	David Hill UGB
	Road 7 Storm Pond	\$ 230,556	Purdin Road UGB
	Road 8 Storm Pond	\$ 57,639	Purdin Road UGB
	Road 1, 2, 3, Stormwater Treatment	\$ 40,347	Purdin Road UGB
	Road 4 Stormwater Treatment	\$ 40,347	David Hill UGB
	Road 5 and 9 Stormwater Treatment	\$ 80,695	David Hill UGB
	Road 6 and 10 Stormwater Treatment	\$ 80,695	David Hill UGB
	Road 7 Stormwater Treatment	\$ 23,056	David Hill UGB
	Road 8 Stormwater Treatment	\$ 23,056	Purdin Road UGB
	Contingencies and Engineering	\$ 778,127	Entire Area
	Total	\$ 1,815,630	

Based on adopted capital facilities plans, including the Westside Refinement Plan, the City determined which approved capital project costs apply to the IBTER Area. Total capital facilities costs are based on the City's adopted capital facilities plans and escalated to 2021 dollars using the Engineering New-Record Construction Cost Index 10-year average for Seattle (3.62%).

To upgrade the City's transportation system to meet required levels of service in the IBTER Area, the City will require a major stormwater investment of \$1.8 million. This amount does not include regional stormwater or other private storm drainage facilities which are unknown at this time and could potentially double the cost estimates included in Exhibit 5.1. This analysis assumes that the value of non-SDC creditable developer contributions to the stormwater system improvements listed above equates to 30 percent of the Westside/IBTER Area project costs.

V.D. FUNDING GAP ANALYSIS

In order to pay for the transportation capital facility needs stated above, the City will need to supplement current funding resources with new funding mechanisms. Current charges associated with existing stormwater system development charges per equivalent service unit (ESU) are summarized below.

CALCULATION – One ESU per 2,640 square feet of impervious surface of the property, as defined by District rule.

Stormwater funding would be derived from the current SDC rate of \$560 per ESU. Based on current rates, the estimated SDC revenue for the IBTER Area is shown in **Exhibit 27**.

Exhibit 27: Total IBTER Area Estimated SDC Revenue

SDC Revenue by Subarea (Post HB-2001 Adjustment)		Westside			
Infrastructure Type	David Hill	Purdin Road	Total	Other IBTER Area	Total
Transportation (TDT)	\$ 7,546,382	\$ 7,851,449	\$ 15,397,831	\$ 7,851,449	\$ 23,249,280
Water	4,831,347	5,026,657	9,858,004	5,026,657	\$ 14,884,661
Sewer	4,398,338	4,576,144	8,974,482	4,576,144	\$ 13,550,626
Storm	542,192	564,110	1,106,302	564,110	\$ 1,670,413
Parks	5,818,882	6,054,113	11,872,995	6,054,113	\$ 17,927,109
Total	\$ 23,137,142	\$ 24,072,473	\$ 47,209,616	\$ 24,072,473	\$ 71,282,089

Projected Capital Cost Surplus / Deficit by Subarea (Post HB-2001 Adjustment)

			Westside		
Infrastructure Type	David Hill	Purdin Road	Total	Other IBTER Area	Total
Transportation	\$ (15,956,435)	\$ 5,403,543	\$ (10,552,892)	\$ (7,576,649)	\$ (18,129,541)
Water	\$ (1,624,809)	\$ 1,012,867	(611,942)	\$ 4,140,131	\$ 3,528,189
Sewer	\$ 3,555,048	\$ 4,172,495	7,727,542	\$ 4,576,144	\$ 12,303,686
Storm	\$ (210,286)	\$ 45,647	(164,638)	\$ 564,110	399,472
Parks	\$ 5,498,841	\$ 2,168,810	7,667,651	\$ 6,054,113	\$ 13,721,764
Total	\$ (8,737,641)	\$ 12,803,361	\$ 4,065,721	\$ 7,757,849	\$ 11,823,570

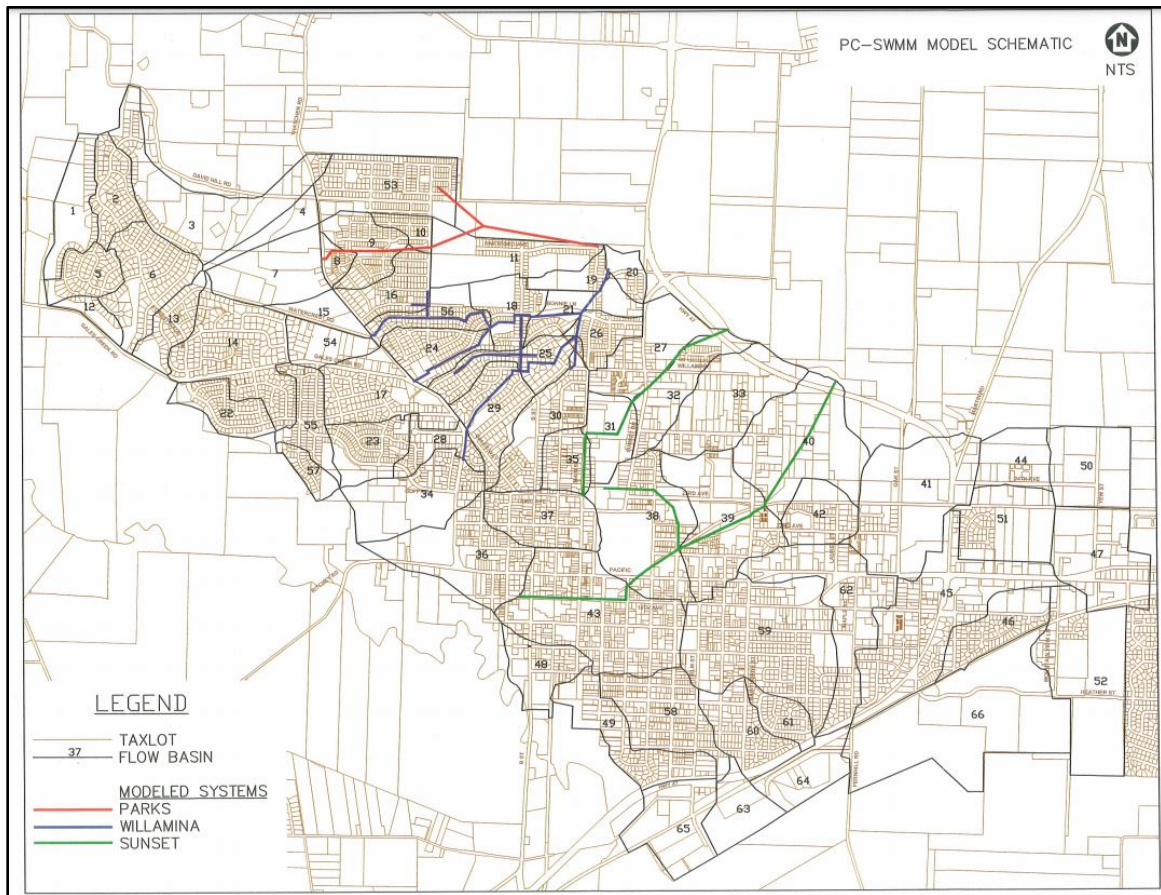
As indicated in **Exhibit 27**, the current SDC rates, if applied to new development in the IBTER Area would result in a significant funding gaps for stormwater improvements that would vary by subarea. The overall stormwater funding gap for the Westside Refinement Area is estimated at over \$210,000 for the David Hill Subarea. It should also be noted that these cost estimates and funding gaps are expected to be higher than the amounts shown given very recent CWS low impact development requirements.

V.E. LEVEL OF SERVICE DEFICIENCY

The David Hill area lacks improved stormwater facilities. The City seeks a Stormwater IBTER to allow for updating the City's 2007 Stormwater Drainage Master Plan (see stormwater basin map provided in **Exhibit 28**).

Due to the lack of infrastructure, a proposed seven lot subdivision intended for single family detached homes was withdrawn because storm drainage issues could not be resolved cost-effectively. The subdivision application did not show connection to the public storm drainage system. As described in the City Storm Master Plan in 1989 and carried through to the 2007 update, the area is to be served by a major storm sewer line extended from the present location on David Hill Road near Thatcher Road. This is a significant infrastructure deficiency constraining development.

Exhibit 28: Stormwater Basin Map



The City's stormwater infrastructure has been determined to have a localized significant deficiency that results in unacceptable service levels. The City will be requesting a time extension to comply with HB 2001.

EXHIBIT B

CITY OF FOREST GROVE INFRASTRUCTURE BASED TIME EXTENSION REQUEST (INTER) OREGON ADMINISTRATIVE RULES FINDINGS

OAR 660-046-0320(4) defines infrastructure to mean urban water, sanitary sewer, stormwater, and transportation systems. OAR 660-046-0320(6) defines significant infrastructure deficiency to mean a local government has met the burden of proof to demonstrate a situation or situations where the following exists:

- (a) A local government is unable to provide acceptable service levels within a developed, or developing, area zoned to allow detached single-family dwellings; or***
- (b) A local government or service provider anticipates that it will be unable to provide acceptable service levels by December 31, 2023, based on either extrapolated current development rates alone, or based on extrapolated current rates and additional anticipated middle housing development.***

The City of Forest Grove is unable to provide acceptable service levels within the David Hill urban growth area due to the extent of the required infrastructure, cost and available resources. The David Hill urban growth area requires significant improvements to the transportation, water, sanitary sewer, and stormwater systems as described elsewhere in this report. The current pay-as-you approach to funding infrastructure improvements through collection of system development charge revenues is inadequate. Based on the City's adopted Five-Year Capital Improvement Program there will be insufficient revenue to fund needed improvements. Therefore, the City anticipates that it will be unable to provide acceptable service levels by December 31, 2023, based on extrapolated current development rates and anticipated middle housing development as explained below.

As described in the City's 2019 Housing Needs Analysis update, from 2007 to 2017, the City issued an average of 100 single family permits annually. Over the past three years the City issued over 300 permits for multifamily units.

Based on current development activities, the City has 260 approved lots left for development including 131 units at the Farmstead Crossing subdivision located in the City's Purdin Road urban growth area. Farmstead Crossing includes 14 lots for single family attached homes in the City's Low Density Residential R-5 zoning district. The remaining approved development lots are scattered throughout the City including the Gales Creek Terrace subdivision.

No development activity has taken place within the City's David Hill Road urban reserve area, located west of Thatcher Road, due to significant infrastructure deficiencies. One subdivision application was withdrawn in 2019 due to sanitary sewer and storm drainage infrastructure deficiencies. Due to these deficiencies, and lack of development activity in the David Hill urban growth area, the City anticipates it will be unable to provide acceptable service levels by December 2023.

- (c) There is no single service level for demonstrating a significant infrastructure deficiency for transportation infrastructure.***

The identified significant infrastructure deficiency is described elsewhere in this report.

OAR 660-046-0350(3)(a)(A): A description of the infrastructure and the current system capacity. Relevant information from adopted utility master plans, special area utility

plans, capital improvement plans, or similar documents and studies. Also, an identification of the service level that will not be met, including identification of the adopted utility master plan or other authority which establishes the service level.

Transportation: The David Hill urban growth area, west of Thatcher Road, exhibits significant safety issues due to existing geometric deficiencies that will be compounded by potential middle housing development. (See the attached analysis for additional details). The City seeks a Transportation IBTER based on the David Hill Road deficiencies so that future both single family detached residential and middle housing types can be served with transportation facilities meeting adopted City standards.

Under OAR 660-046-0340(1), a local government may use the following circumstances to justify a transportation-based IBTER:

- (a) Areas where the supporting roadways, intersections, or both are operating or anticipated to operate over capacity, not meet currently acceptable service levels, or have existing geometric/safety limitations. Supporting information regarding the magnitude and severity of the deficiency must support a determination that the deficiency has a significant impact on transportation function or safety in the affected area. This type of transportation IBTER applies only to areas where mitigation is planned and is either within the jurisdiction and financial capacity of the local government, or is planned, financed, and scheduled in partnership with county, state, or other governmental partners, or private partners.***

As noted in OAR 660-046-0320(6)(c), there is no single service level for demonstrating a significant infrastructure deficiency for transportation infrastructure. Information regarding the magnitude and severity of the deficiency must support a determination that the deficiency has a significant impact on transportation function or safety in the affected area. Higher street classifications, traffic volumes, and impacts to the function of transportation corridors, rather than a single intersection, will help support the significance of the transportation deficiency. The severity of safety issues may be supported with information such as crash data, posted speed limits, sight distance at intersections, or similar information.

David Hill Urban Growth Area Transportation Deficiency

The David Hill urban growth area is located in the northwestern portion of the City of Forest Grove and has been included in the urban growth boundary since about 1980. The David Hill area is one of the City's prime growth areas and Metro projected that over 90% of the area would be projected to develop by 2025. This has not occurred largely due to lack of infrastructure, including significant transportation infrastructure deficiencies needed to serve development.

The David Hill urban growth area is served by two primary transportation facilities: David Hill Road and Thatcher Road. David Hill Road, west of Thatcher Road, shown below, is classified as a collector roadway on the Forest Grove Transportation System Plan Street Functional Classification System Map. The David Hill Road corridor provides access to the Summit Pointe neighborhood, Thatcher Park and Highway 47, a distance of about 5,100 feet.

David Hill Road Corridor



Currently, David Hill Road is a narrow, paved two-lane roadway with minimal shoulders, no sidewalks and no bike lanes. While the capacity of David Hill Road is not currently exceeded and intersections are expected to continue to operate at acceptable levels, existing geometric/safety limitations of the facility create significant safety conflicts between motorists, bicyclists and pedestrians.

Based on guidance from the Institute of Transportation Engineers (ITE), geometric design refers to the dimensions and arrangements of the visible features of a roadway. This includes pavement widths, horizontal and vertical alignment, slopes channelization, intersections and other features that can significantly affect the operations, safety and capacity of the roadway network.

The current design of David Hill Road is significantly substandard and inadequate in terms of serving incremental development including single family detached housing in subdivisions. Since improvement of David Hill Road is constrained by topography and an adjacent vegetated corridor and drainage way paralleling the facility the infrastructure deficiency cannot be resolved through frontage improvements alone and requires a comprehensive approach.

The images below show existing conditions typical of the David Hill Road corridor. The facility is narrow, winding and creates challenges for pedestrians.

David Hill Road Existing Conditions



David Hill Road Existing Conditions

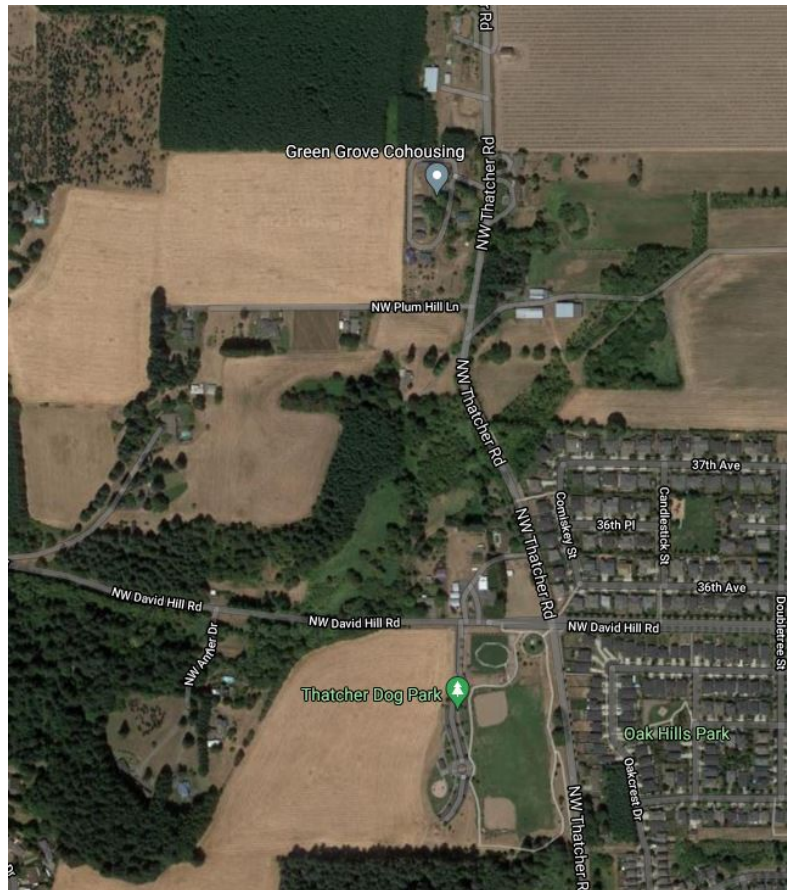




In conclusion, the City of Forest Grove is unable to provide acceptable service levels for transportation based on safety within the developing area along David Hill Road, west of Thatcher Road and east of Forest Gale Drive. Resolution of this significant infrastructure deficiency to provide acceptable service levels requires a comprehensive approach to ensure safety and improved mobility along the corridor for all facility users.

Thatcher Road is classified as an arterial roadway on the Forest Gove Transportation System Plan Street Functional Classification Map. Thatcher Road runs north-south along the eastern edge of the David Hill urban growth area for a distance of about 4,050 feet.

Thatcher Road Corridor

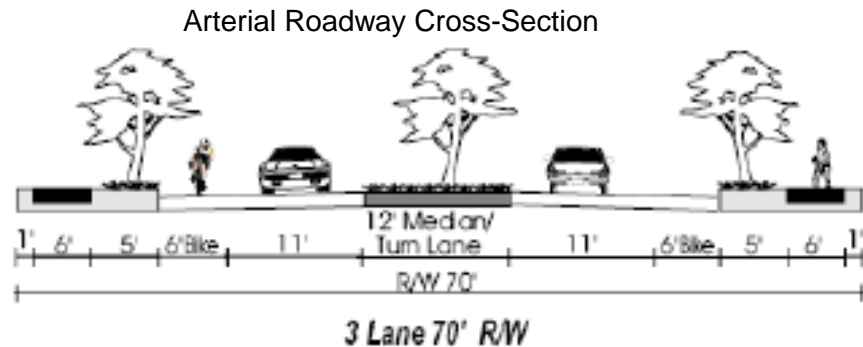


Similar to David Hill Road, Thatcher Road is a two-lane facility with soft shoulders and no turn lanes. Sight lanes are poor in some areas due to vertical and horizontal curves as shown below. Sight lines are especially poor near Coho Circle near the Green Grove cohousing project.



The area east of Thatcher Road and north of 37th Avenue, is designated as Rural Reserve by Washington County. This limits the opportunity for construction of a full arterial roadway cross-section along the David Hill urban growth area since urban development is not permitted in the Rural Reserve area and frontage improvements are unlikely and the City will not be able to provide a full arterial cross-section in this area. The lack of a complete arterial roadway cross-

section will have a significant impact on transportation function and safety along this portion of the Thatcher Road corridor.



Wastewater: Large portions of the David Hill Road urban growth area cannot be served with sanitary sewer facilities. The City seeks a wastewater IBTER to allow for updating the City's 2007 Wastewater System Master Plan and to address constraints with cost-effectively providing sanitary sewer service to the urban growth area to accommodate single family detached and middle housing types. Absent this development, including middle housing types, could be approved with onsite wastewater treatment systems within the urban growth boundary and inside the city limits.

Topography and natural features along the David Hill Road corridor significantly constrain extension of sanitary sewer lines from the currently developed area south of the corridor. South of David Hill Road there is a stream corridor, Metro Title 3 water quality area, and a small ravine with steep slopes separating existing sanitary sewer lines in the developed area to the south from the David Hill urban growth area.

Due to the lack of wastewater infrastructure, a proposed seven lot subdivision, was withdrawn because sanitary sewer issues could not be resolved cost-effectively. The area has existing downstream trunk line capacity improvement needs.

As noted in the Infrastructure Overview report prepared for the Westside Planning Area by SCJ Alliance, additional sanitary sewer capacity may be needed depending on the nature of development and anticipated water service demand. Introducing middle housing types in this area may worsen this situation.

The image below shows the current location of sanitary sewer infrastructure. There is an existing line serving Thatcher Park and a line serving the residential area along Forest Gale Drive.

Existing Sanitary Sewer Lines



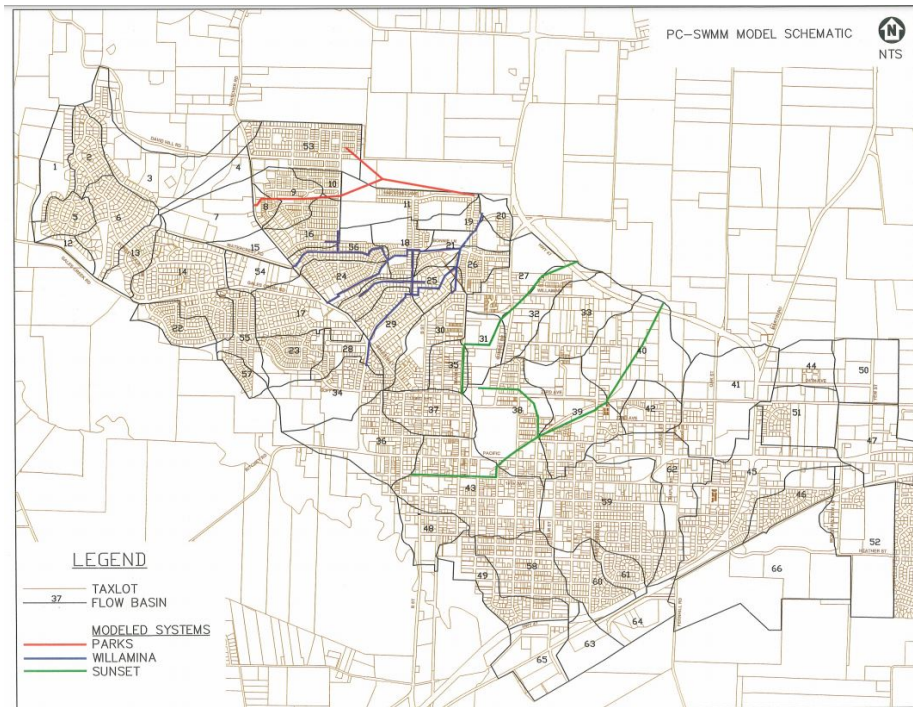
Compounding the situation is Oregon Department of Quality administrative rules allow for onsite wastewater systems if existing sanitary sewer lines are distant from a development site and sewer lines are not legally or physically available (see OAR340-071-0160(4)(f)(A)). Under the administrative rules, a sewerage system is considered available if topographic or man-made features do not make connection physically impractical and one of the following applies:

- (i) For a single family dwelling or other establishment with a maximum projected daily sewage flow not exceeding 899 gallons, the nearest sewerage connection point from the property to be served is within 300 feet.
- (ii) For a proposed subdivision or group of two to five single family dwellings or other establishment with the projected daily sewage flow, the nearest sewerage connection point from the property to be served is not further than 200 feet multiplied by the dwellings or dwelling equivalents.
- (iii) For proposed subdivisions or other developments with more than five single family dwellings or equivalent flows, the agent will determine sewerage availability.

One project with nine single family detached dwellings in the David Hill urban growth area, adjacent to Thatcher Road, was permitted to install an onsite wastewater treatment system under these rules.

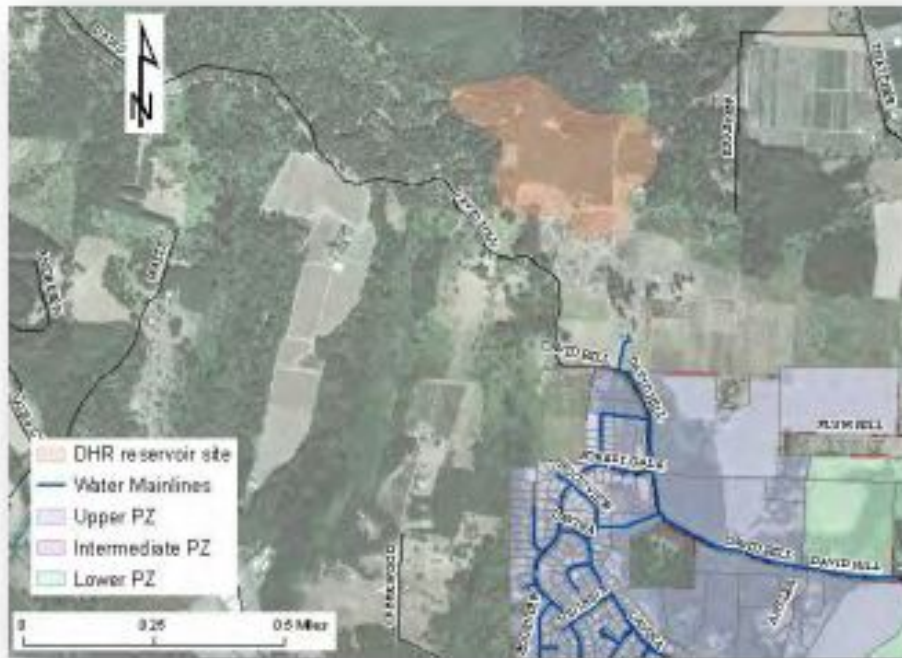
Stormwater: The David Hill area lacks improved stormwater facilities. The City seeks a Stormwater IBTER to allow for updating the City's 2007 Stormwater Drainage Master Plan.

Stormwater

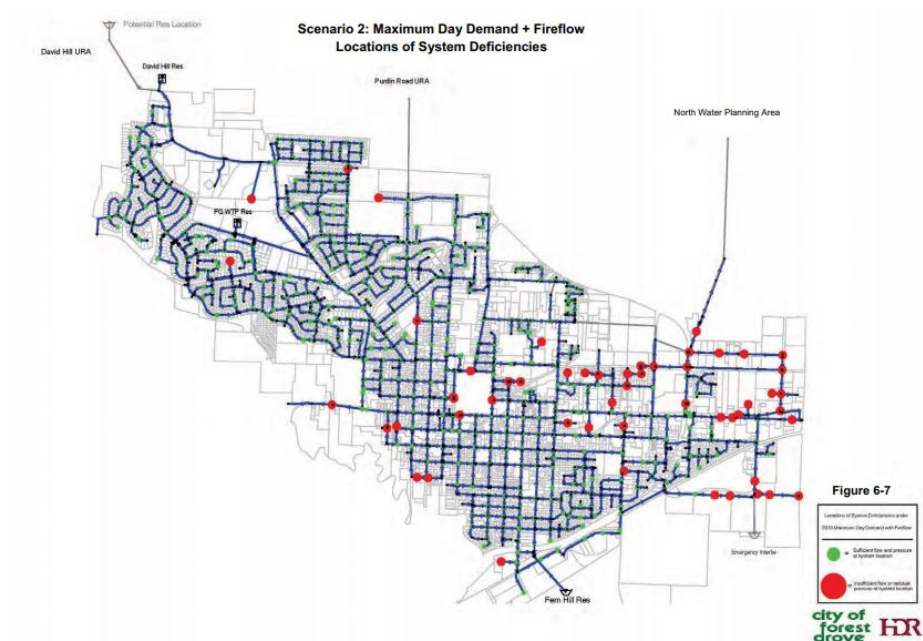


Due to the lack of infrastructure a proposed seven lot subdivision intended for single family detached homes was withdrawn because storm drainage issues could not be resolved cost-effectively. The subdivision application did not show connection to the public storm drainage system. As described in the City Storm Master Plan in 1989 and carried through to the 2007 update, the area is to be served by a major storm sewer line extended from the present location on David Hill Road near Thatcher Road. This is a significant infrastructure deficiency constraining development.

Water: Due to the elevation of the City's existing water reservoir the City cannot provide adequate water pressure in the intermediate-upper water pressure zone. The City requests a Water IBTER to allow for adoption of the City's Water Master Plan and resolution of approaches to provide adequate water pressure to serve development in this zone. Potential solutions include pump stations or construction of a new reservoir located at a higher elevation. The map below, in the area shaded with orange, shows the suitable area for locating a new reservoir. The areas shaded on light purple are parcels located within the City's upper water pressure zone.

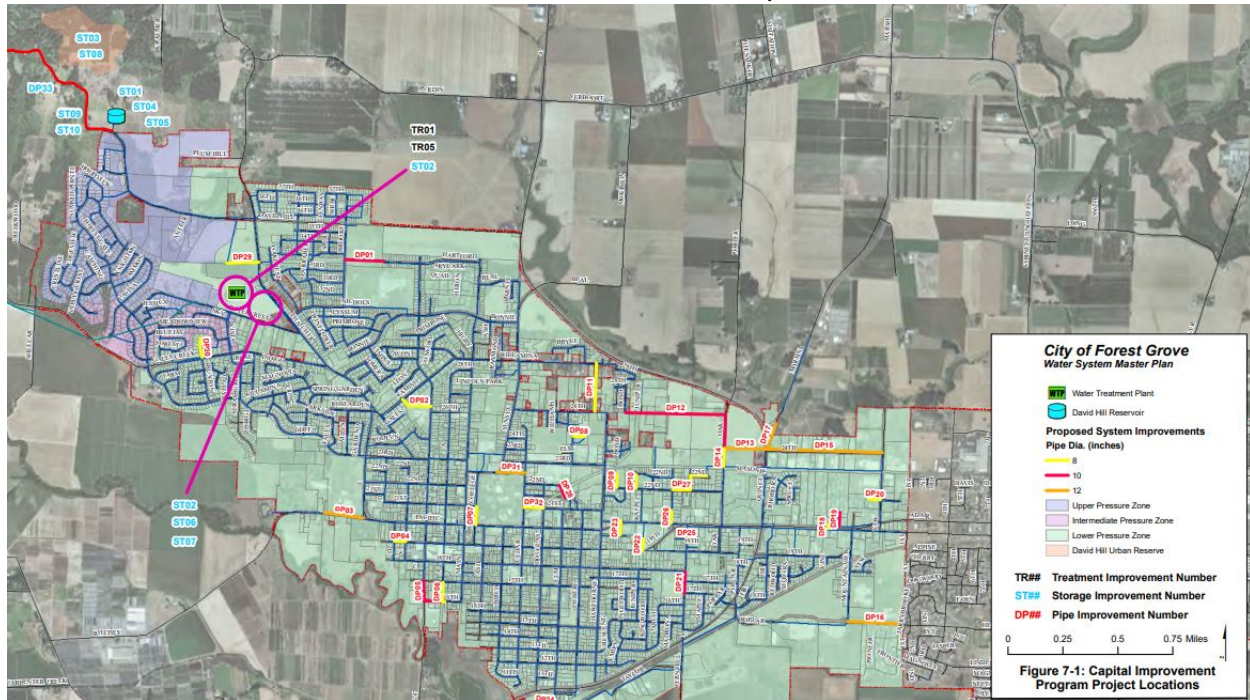


Note: Hydraulic model was used to determine location of reservoir to meet pressure requirements in David Hill URA. Refer to Section 6.4.2.



Water System Capital Improvement Projects

2010 Water Master Plan Update



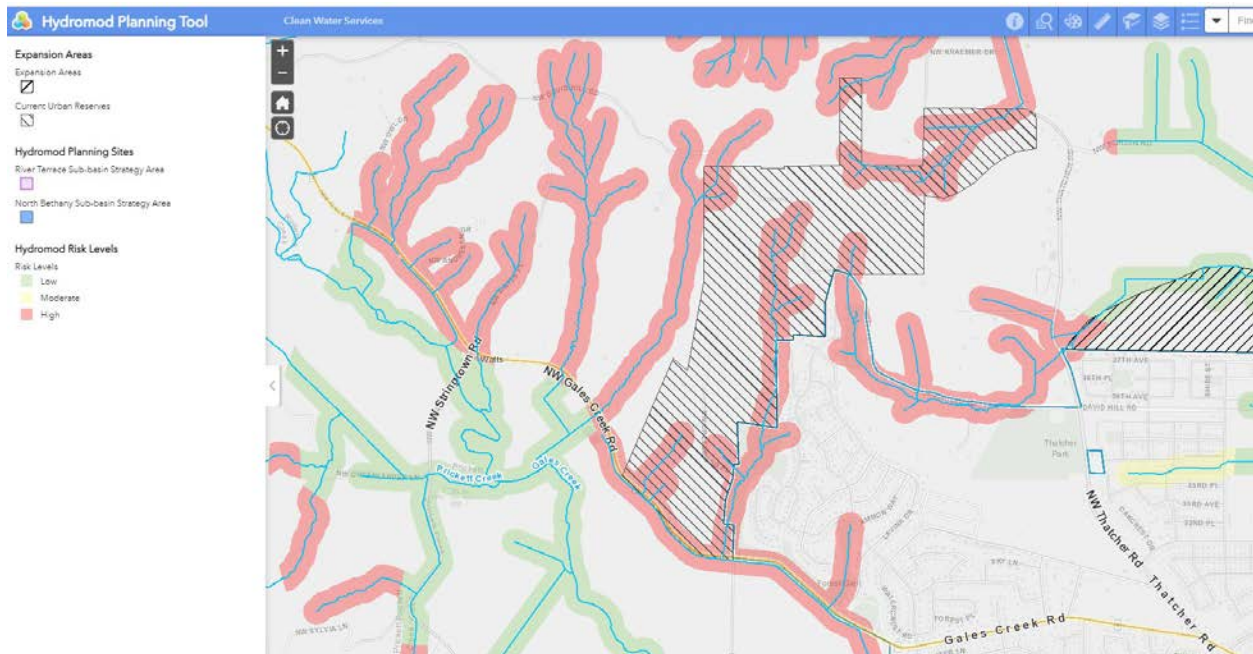
OAR 660-046-0350(a)(B): A description of the significant infrastructure deficiency. The application shall clarify if capacity is exceeded currently or is anticipated by December 31, 2023, based on current development trends, or if the infrastructure is only expected to exceed capacity based on additional impacts from middle housing development pursuant to OAR 660-046-0330(4).

Transportation: David Hill Road is not operating above capacity, however, David Hill Road exhibits safety deficiencies along the entire corridor. Identified safety deficiencies include narrow travel lanes, minimal or no shoulder, no sidewalks forcing pedestrians into travel lanes, no bike lanes, and no illumination. Adding additional trips from development based on current development trends and middle housing development to this substandard facility will exacerbate safety issues.

Wastewater: The wastewater significant infrastructure deficiency could result in approval of development using onsite wastewater systems as allowed by Oregon Department of Environmental Quality rules. Given the lack of wastewater infrastructure in the David Hill Urban Growth Area, and current zoning allowing residential development, the additional impacts from middle housing development pursuant to OAR 660-046-0330(4) is expected to exceed infrastructure capacity. The City seeks a Wastewater IBTER to allow for updating the City's 2007 Sanitary Sewer Master Plan and adoption of needed projects into the City's Five-Year Capital Improvement Program.

Stormwater: The David Hill urban growth area, west of Thatcher Road, lacks stormwater facilities. The area is devoid of trunk lines, pump stations, retention basins, and outfall locations. A sub-basin strategy for the David Hill Urban Growth Area has not been prepared. The City's most recent Storm Drainage Master completed in 2007 does not address the David Hill urban growth area as much of the area was annexed into the City after completion of the 2007 Master Plan. Due to the lack of stormwater infrastructure all development will exceed capacity of the current system. While individual developments would be required to provide on-

site stormwater facilities, a comprehensive approach intended to ensure efficient and cost-effective provision of facilities has not been completed for the urban growth area.



Water: The City is unable to provide adequate water pressure inside the city limits above the 440-foot elevation. Due to this limitation any development in the affected area will exceed capacity. In addition, fire flow criteria will not be met with the addition of middle housing types in the intermediate and upper water pressure zones.

OAR 660-046-0350(3)(a)(C): If the local government finds significant infrastructure deficiency would be caused only by additional middle housing development in the area and plans to continue issuing permits for other types of development within the area, a detailed analysis of how and why existing infrastructure can continue to meet the needs of other types of development.

The City does not intend to issue permits for partitions and subdivisions, including those for middle housing types, until the significant infrastructure deficiencies are resolved. Applications for partitions and subdivisions will be approved only if the applicant demonstrates that development will connect to public utilities including water, sanitary sewer, and storm drainage and the applicant received a certification letter from the City Engineer. The IBTER will preclude approval of middle housing types on land not proposed for partition or subdivision using onsite wastewater treatment systems and domestic water wells.

Oregon Department of Environmental Quality administrative rules allow use of onsite water treatment systems if a sewerage system is not both legally and physically available to serve the subject property. OAR 340-071-0160(f) does not allow onsite wastewater treatment systems if the sewerage system that can serve the proposed sewage flow is both legally and physically available. Under OAR 340-071-0160(f)(A), a sewerage system is considered available if topographic or man-made features do not make connection physically impractical and one of the following applies:

- (i) For a single family dwelling or other establishment with a maximum projected daily sewage flow not exceeding 899 gallons, the nearest sewerage connection point from the property to be served is within 300 feet.

- (ii) For a proposed subdivision or group of two to five single family dwellings or other establishment with the equivalent projected daily sewage flow, the nearest connection point to the property to be served is not further than 200 feet multiplied by the number of dwellings or dwelling equivalents.

OAR 340-071-0160(F)(B) states a sewerage system is deemed legally available if the system is not under a DEQ connection permit moratorium and the sewerage system owner is willing or obligated to provide sewer service.

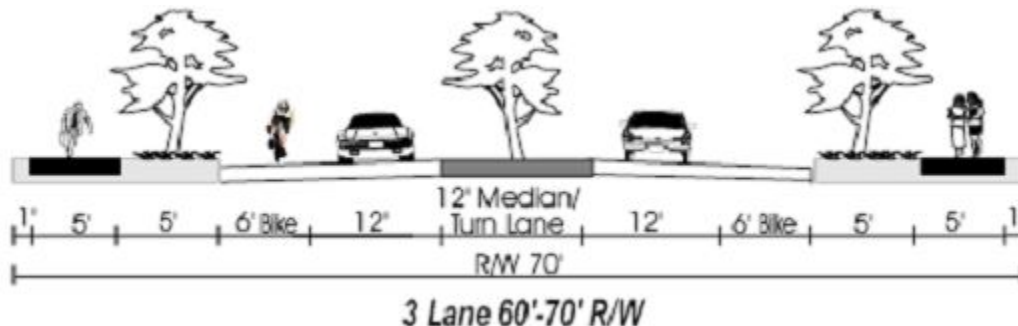
The map below shows the locations of the existing sanitary sewerage system. There is considerable area outside of the area where connection to the sewerage system would not be considered to be legally and physically available. The City would be placed in the difficult position of allowing development without urban services contrary to adopted policies and at densities above those contemplated in the City's acknowledged Comprehensive Plan.

Certain areas of the David Hill urban growth area exhibit steep slopes 25% or greater, sensitive natural areas, poor soils, and areas exhibiting slope instabilities compounding installation of onsite wastewater treatment systems (Westside Geotechnical Report).

OAR 660-046-0350(3)(a)(D): A description of assumptions used to calculate or estimate system capacity. This includes analysis of current impacts on the infrastructure system; impacts from additional development anticipated to occur based on current zoning; and impacts anticipated from the allowance for middle housing in the areas where it is not currently allowed, as more fully described in OAR 660-046-0330(4).

System capacity is derived from the City's facility master plans in effect including the 2007 Storm Drainage Master Plan, 2007 Wastewater System Master Plan, 2010 Water Master Plan Update and 2014 Transportation System Master Plan Update and 2019 Clean Water Services Design and Construction Standards.

Transportation: David Hill Road is currently a two-lane collector roadway. The typical collector roadway standard adopted into the Transportation System Plan is shown below. David Hill Road does not currently meet the minimum adopted standard.



The urban growth area is zoned low density residential and neighborhood mixed use. The low density residential zones applicable to urban growth area have a target density ranging from 1.0 to 4.35 units per net acre. The neighborhood mixed use zone has a target density of 12 units per net acre. The Westside Refinement Plan adopted in 2017 estimated housing capacity at approximately 780 units.

David Hill Road is identified for reconstruction from Thatcher Road west by 5,100 feet. A three lane section is proposed from Thatcher Road west by 850 feet. A two lane section is proposed from the Council Creek drainage way west for another 4,250 feet. These assumptions provide the basis used to calculate system capacity. When improved David Hill Road is expected to

have sufficient capacity to accommodate future development including the impacts anticipated from the allowance for middle housing in the areas within the David Hill urban growth area where middle housing is not currently allowed.

Thatcher Road at Watercrest has an ADT of 4,200. The intersection operates at a level of service of A/B. Year 2035 LOS is projected to be A/C. Middle housing development is not expected to degrade intersection LOS below acceptable standards.

Thatcher Road requires at least a half-street improvement from David Hill Road north to Purdin Road, a distance of approximately 4,050 feet. A section of the roadway must be raised to allow for a gravity sewer line to cross over the existing Council Creek drainage located approximately 900 feet north of David Hill Road. When improved Thatcher Road is expected to have sufficient capacity accommodate future development including impacts from the allowance for middle housing.

Storm Drainage: As development occurs the David Hill urban growth area will be subject to Clean Water Services design and construction standards. Development in the David Hill urban growth area will require additional capacity including construction of storm drainage facilities. The type of facility will be based on amount of impervious surface. Assumptions for calculating increased capacity for stormwater facilities based on existing zoning is based on the criteria adopted by Clean Water Services as summarized below:

- a. For new home construction on a single family or duplex lot of record, the stormwater management approach shall be sized based on 2,640 square feet of impervious surface per dwelling unit. The actual new and modified impervious surface may be utilized when the lot size is less than 3,000 square feet.

If the allowance allowed for middle housing types increases the amount of impervious surface there will be a need for additional capacity.

In addition to amount of impervious surface, stormwater quality approaches shall be designed for a dry weather storm event totaling 0.36 inches of precipitation falling in 4 hours with an average storm period of 96 hours. Peak flow hydrologic analysis is based on the factors below:

Time Period	Amount of Precipitation (24 hour Period)
2-year	2.50 inches
5-year	3.10 inches
10-year	3.45 inches
25-year	3.90 inches

Sanitary Sewer: Criteria for needed sanitary sewer capacity is based on the Clean Water Services Design and Construction Standards and the City's Wastewater System Master Plan. Future flows assumptions for the Wastewater Master Plan were modeled using HYDRA. The Master Plan model results are used to develop pipe design required to pass future basin flows. HYDRA also produces recommended pipe sizes based in the required flow area needed to transport the flow through the system.

The Wastewater Master Plan identifies the need for two major trunk lines to serve the development in the David Hill area. The first would be located on David Hill Road and the second would be located on Thatcher Road. According to the Master Plan, a 15-inch pipe will

be required between the existing collection system and the point of juncture of the two trunks with a required capacity of 1,100 gallons per minute.

Water: Assumptions for water capacity is contained in the City's 2010 Water Master Plan. The Master Plan indicates the City has sufficient water supply to accommodate development in the David Hill urban growth area. However, the City's existing water system can't supply water above an elevation of 400 feet level with adequate pressure. The Master Plan standard for water pressure is 40 psi.

Due to expected impacts from additional development anticipated to occur based in current zoning additional water system capacity is required. The Water Master Plan recommends building new storage at a higher elevation than the present water reservoir to serve the David Hill urban growth area. A reservoir at an elevation of about 690 feet above sea level is identified in the Master Plan. This will resolve the water pressure issues above the 440 foot elevation.

OAR 660-046-0350(3)(a)(E): Documentation of the significant infrastructure deficiency sufficient to allow the department to verify that the deficiency exists, including (but not necessarily limited to) items such as: maintenance and complaint records, photographs, modeling results (if available), crash data, a deficiency documented in an adopted utility master plan, or other evidence of deficiency.

Please see the narrative above documenting the significant infrastructure deficiencies affecting the David Hill urban growth area.

OAR 660-046-0350(3)(b): The name of the service provider if the infrastructure is owned or operated by another provider, along with a description of any agreements between the local government and service provider for infrastructure improvements.

Service providers for transportation, sanitary sewer, storm drainage and water are shown below:

Facility	Service Provider
Streets	City of Forest Grove (David Hill Road)
	Washington County (Thatcher Road)
Sanitary Sewer	City of Forest Grove (Lines under 24 inches and manholes)
	Clean Water Services (Regional facilities including large conveyance lines and wastewater treatment plants?)
Storm Drainage	Clean Water Services (Regional Surface Water Management System)
	City of Forest Grove (Catch basins, storm pipes, water quality facilities and manholes)
Water	City of Forest Grove

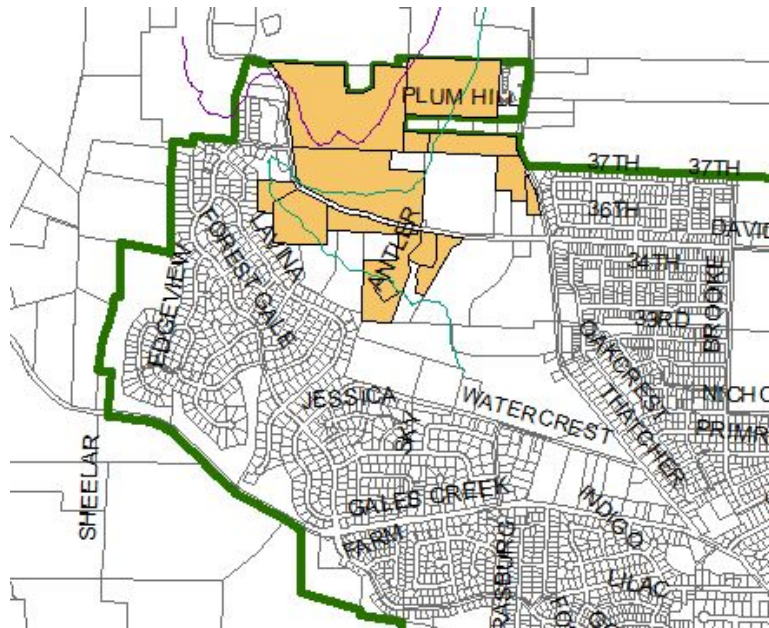
The City and Clean Water Services executed intergovernmental agreement (IGA) for sanitary sewer and storm drainage management. Under the terms of the IGA, Clean Water Services, a special district of Washington County, operates and maintains the regional sewer system, including large conveyance pipes and the wastewater treatment plants. The City operates a local sanitary sewer utility that feeds into the CWS regional system. The City performs utility

billing services and operates customer service related to billing. The City is also responsible for all collection lines smaller than 24 inches in diameter as well as all manholes.

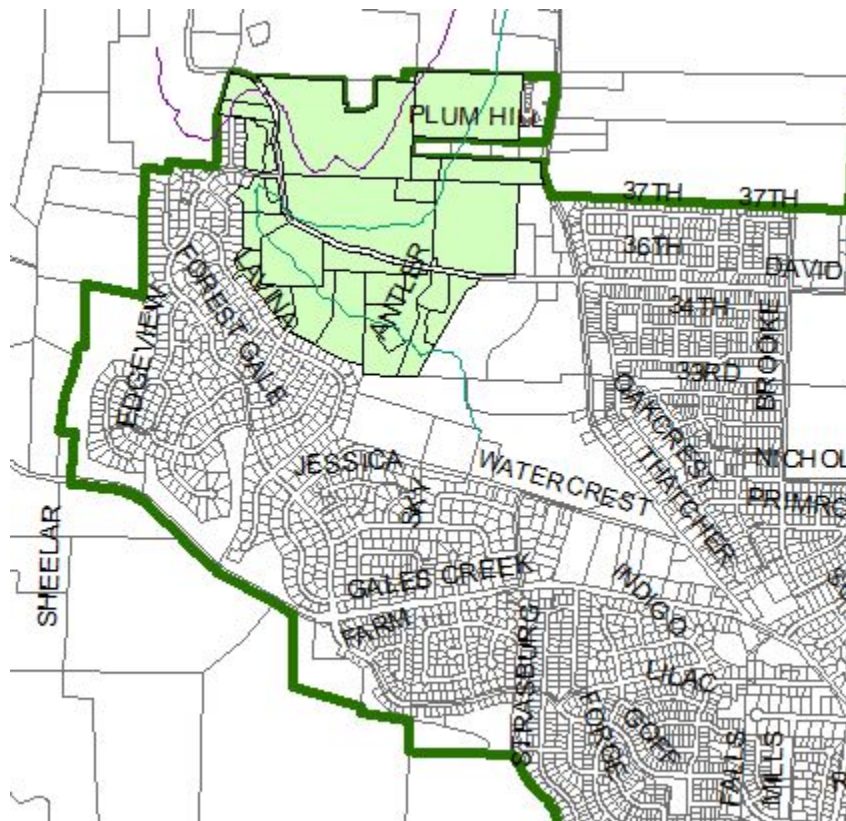
OAR 660-046-0350(3)(c): A vicinity map showing the boundary of the impacted area for which the IBTER is requested. If the local government identifies more than one significant infrastructure deficiency (sewer and transportation, for example), the map should show the boundary of each deficiency separately and any areas of overlap.

The vicinity maps showing the boundary of the impacted area for which the IBTER is requested are shown in the figures below.

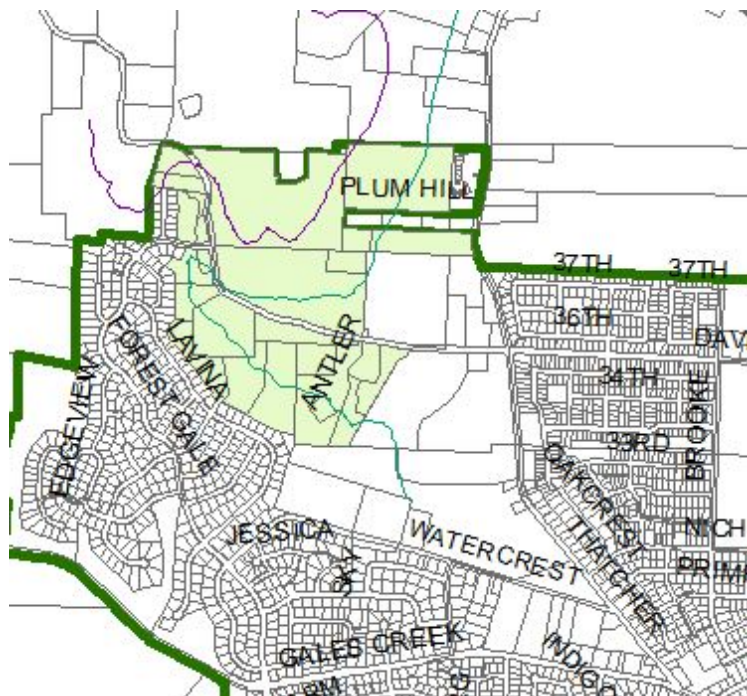
Transportation IBTER Parcels



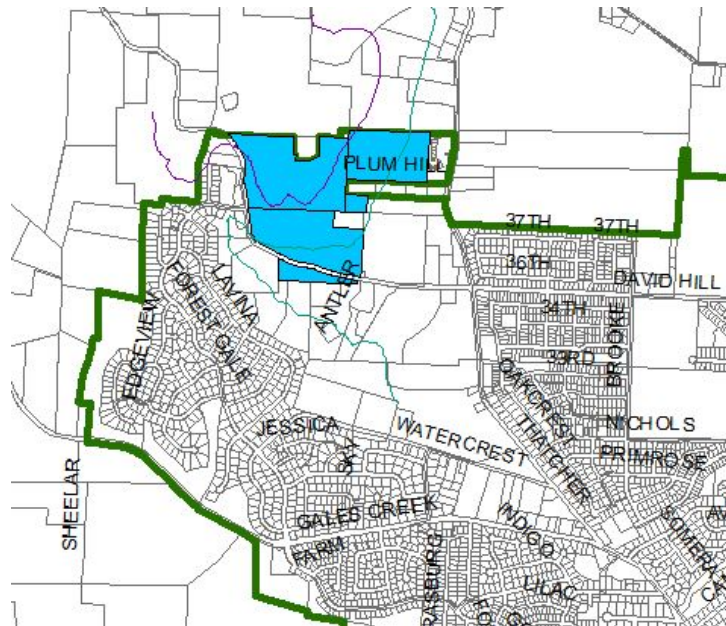
Sanitary Sewer IBTER Parcels



Storm Drainage IBTER Parcels



Water IBTER Parcels



OAR 660-046-0350(3)(d): A regional map, if applicable, showing the significant infrastructure deficiency that otherwise provides service to the area where an IBTER is being requested.

Not applicable

OAR 660-046-0350(3)(e): If the local government is subject to ORS 197.758(2), a description of the local government's plan for middle housing implementation in the impacted area, including identification of areas intended for duplex-only provisions, and as applicable, standards to be applied in goal-protected and constrained areas, and areas intended to accommodate triplexes, quadplexes, townhomes, and cottage cluster developments.

Forest Grove has a population of just over 25,000 persons. In addition, Forest Grove is located within the Portland Metro boundary is subject to ORS 197.758(2). The City intends to adopt code provisions needed to fully comply with HB 2001 (2019) by June 30, 2022. The City intends to apply these provisions to the impacted area when infrastructure deficiencies are resolved in the impacted area or upon approval of land use applications incorporating middle housing types demonstrate the provision of infrastructure facilities meeting adopted City Development Code standards and construction specifications. The City will allow middle housing types elsewhere in non-impacted areas as authorized by HB 2001.

OAR 660-046-0350(3)(f): A remediation plan that describes the proposed infrastructure improvement(s) intended to remedy the significant infrastructure deficiency so that the local government may implement middle housing provisions. For each infrastructure improvement project, the description should include, at a minimum:

(A) The proposed period of time needed to address the significant infrastructure deficiency, including phasing and contingencies, if applicable.

The deficiency for the area north of David Hill Road, west of Thatcher Road, will be addressed by December 2024 to coincide with anticipated timeline to complete updates of the City's infrastructure facility plans.

(B) A discussion of options initially considered for addressing the significant infrastructure deficiency, along with an explanation of how the proposed approach is the most expeditiously feasible approach available to address the deficiency.

(C) Explanation of how the improvement project will provide acceptable service levels to anticipated middle housing.

The Westside Refinement Plan identifies projects that will provide acceptable service levels. David Hill Road is recommended for improvement to address geometric design issues, add sidewalks and bike lanes. Construction of new water reservoir or installation of pump stations to provide adequate water pressure, and construction of needed stormwater facilities needed to serve development.

(D) Potential funding source(s), including funding commitments from other governmental agencies or private parties, and schedule for project completion.

Specific funding sources will be identified as facility master plans are updated. Funding sources could include system development charges, transportation development tax proceeds, local improvement district revenue, developer funding of frontage improvements, Metro Regional Flexible Funding for transportation projects, Metro Regional Transportation Options funding, and Washington County Major Street Transportation Improvement Program funds.

(E) Description of the area that will be remedied by the project.

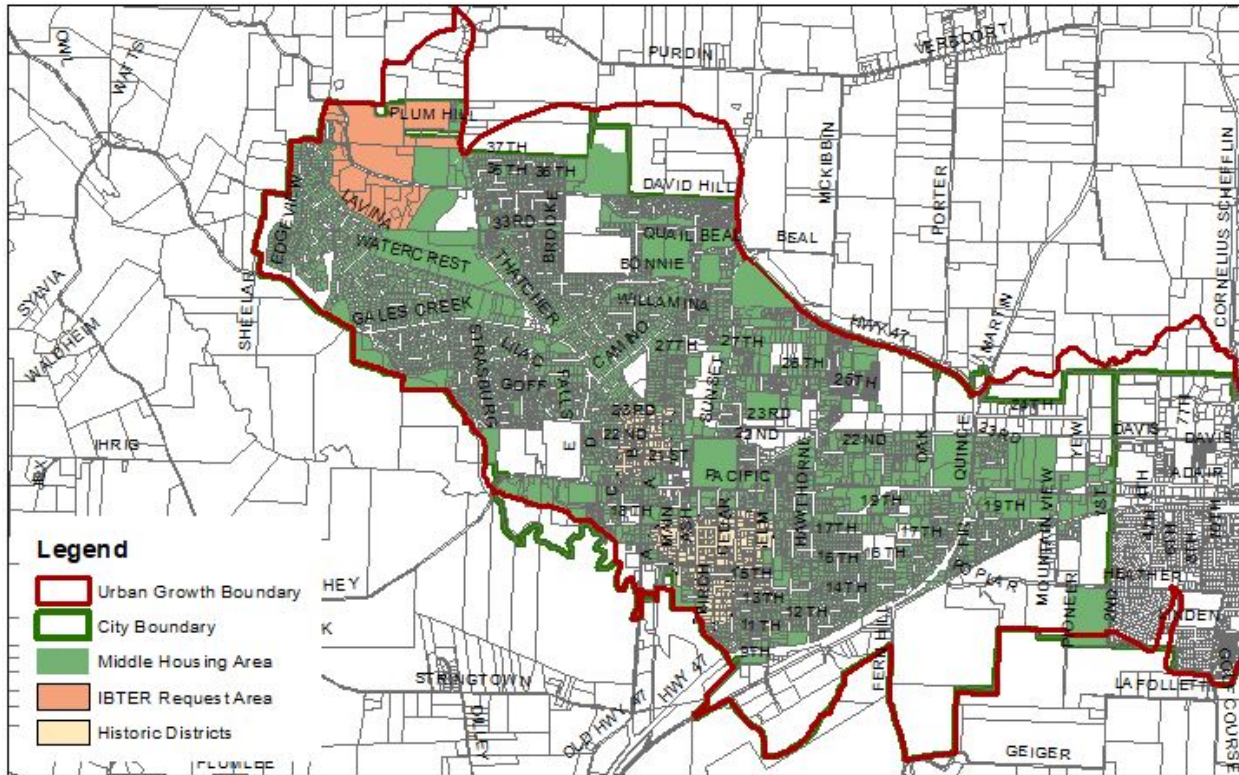
(F) Proposed timeline and associated mapping to demonstrate any phasing of the remediation plan where there are several improvement projects identified.

(G) A map of all other areas within the local government where middle housing will be implemented during the extension period.

The areas shaded in green on the below indicates where middle housing will be implemented during the IBTER extension period. The green areas include land outside of the IBTER request area and designated historic districts zoned for residential and mixed use development that already allow middle housing types are allowed by HB 2001. This includes land with the following zoning designations:

- Residential Single Family (R-10)
- Residential Single Family (R-7)
- Residential Single Family (R-5)
- Neighborhood Mixed Use (NMU)
- Community Commercial (CC)

The areas inside the City boundary are zoned Institutional, Light Industrial and General Industrial.

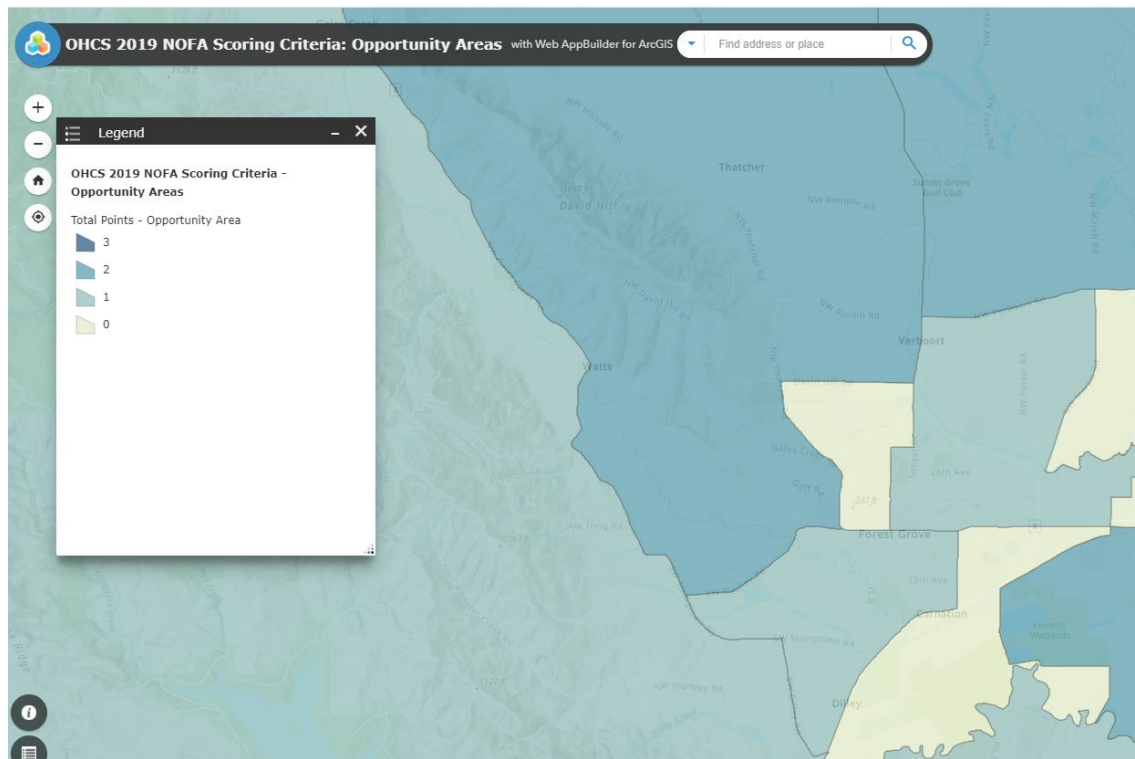


(H) If a local government proposes a bond measure or similar financial mechanism that requires voter approval as a means to fund an infrastructure improvement project, a local government may also propose a contingency plan for funding the infrastructure improvement.

OAR 660-046-0350(3)(g): A narrative detailing how the application is in compliance with the Review Criteria in OAR 660-046-0360(5). In response to criterion in OAR 660-046-0360(5)(d), the local government shall provide a map of the local government's jurisdictional area, depicting US Census tract scores based on the Oregon Housing and Community Services Department's Notice of Funding Availability Scoring Criteria. The map identifies census tracts within communities that score low, medium, or high in relation to access to opportunity. Those tracts identified as high opportunity areas have relatively low poverty rate, high labor market engagement index, and low unemployment rate. Low opportunity areas have a relatively high poverty rate, low labor market engagement index, and a high unemployment rate. The narrative addressing criterion in OAR 660-046-0360(5)(d) must refer to the mapped areas in relation to the review criterion.

This map illustrates the Forest Grove vicinity, highlighting city limits and school districts. The city limits are outlined in green, encompassing areas like Plum Hill, Skyway, and parts of the surrounding region. School districts are delineated by orange lines, with specific areas labeled with red numbers: 333.02, 333.01, 331.01, and 331.02. Major roads and highways are shown, including HWY 47 and various local streets like 37th, 35th, 27th, 25th, 23rd, 21st, 19th, 17th, 16th, 15th, 14th, 13th, 12th, 11th, 10th, 9th, 8th, 7th, 6th, 5th, 4th, 3rd, 2nd, 1st, and 0th. Other labeled areas include Oppenlander, Waldheim, Easterday, Ritchey, Stringtown, Plumlee, Dilley, Hatt, Anderson, Geiger, LaFollett, and various creeks like Gales Creek, Bear Creek, and Puma Creek.

OHCS Opportunity Scores



Census Tract	OHCS Score	Poverty Rate	Unemployment Rate	Labor Market Engagement
329.02	2	6.7%	5.8	22
331.01	1	7.9%	11.5	36
331.02	0	14.0%	12.0	53
332	1	23.4%	3.2	18
333.01	0	15.5%	6.4	55
333.02	2	5.0%	8.2	67

Census Tract	Median Income	Not Hispanic	Hispanic
329.02	\$63,821	3,936	3,831
331.01	\$60,654	2,592	379
331.02	\$57,418	2,324	1,720
332	\$41,863	4,871	2,151
333.01	\$68,766	4,850	1,169
333.02	\$115,833	5,588	495

OAR 660-046-0360(5) Review Criteria: The department shall consider the following criteria in the review of IBTERs:

- (a) Whether the identified deficiency is a significant infrastructure deficiency, consistent with the parameters and infrastructure-specific thresholds established in OAR 660-046-0330 and OAR 660-046-0340.***

This report documents infrastructure level of service criteria and thresholds for service delivery. In specific cases the City cannot currently provide adequate levels of service especially water pressure of 40 psi above the 440 contour elevation.

The identified infrastructure deficiencies present a significant barrier to development within the City's David Hill Road urban growth area. The lack of development and a withdrawn subdivision application supports this determination.

(b) Whether the IBTER has adequately described and documented the identified significant infrastructure deficiency and has established a boundary for the requested extension area(s), as required by OAR 660-046-0350. The boundary for the requested time extension is a specific area where there is an identified significant infrastructure deficiency.

The IBTER describes identified significant infrastructure deficiencies and proposes boundaries for the requested extension area, as required by OAR 660-046-0350, based on specific parcels impacted. The boundary for the requested time extension is a specific area of the City where the City has identified significant infrastructure deficiencies.

(c) Whether the proposed remediation plan is likely to be effective and presents the most expeditiously feasible course of action to enable implementation of middle housing provisions.

The remediation plan identifies specific projects intended to resolve the most significant infrastructure deficiencies impacting the urban growth area. The remediation plan is the first step toward prioritizing needed infrastructure and funding options. Adding projects to the City's Five-Year Capital Improvement Program and updating the City's Water, Wastewater, and Storm Drainage Master Plans present the most expeditiously feasible course of action to resolve infrastructure deficiencies to enable implementation of middle housing provisions. The City will also continue to work with property owners and developers on ways to resolve infrastructure issues through the subdivision approval process.

(d) Whether, in relation to the opportunity area map provided per OAR 660-046-0350(3)(g) and any other available data sources regarding income, race, or ethnicity within the jurisdiction, the local government has demonstrated that correction of the significant infrastructure deficiency will either help to overcome patterns of segregation by income, race or ethnicity, and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics, or at a minimum, will not serve to perpetuate these inequalities. To assist with this evaluation, local governments may demonstrate that the IBTER is consistent with a plan of actions over time by the local government and community partners that will reduce barriers to opportunity for all community residents, in all areas within the local government's jurisdiction.

Resolving the significant infrastructure deficiency will help overcome patterns of income and ethnicity segregation and will foster an inclusive community by increasing opportunity for homeownership in a high opportunity census tract.

The IBTER is consistent with the City's plan of action to reduce barriers for all community residents. In 2017 the City adopted the first affordable housing needs assessment and action strategy. As a result of this initiative, the City adopted the Non-Profit Corporation Tax Exemption Program for Low Income Housing, system development charge deferral and density bonuses for affordable housing in the City's Town Center and mixed-use Community

Commercial zone along the City's transit corridor. In addition, the City amended the planned development ordinance in 2019 to require a variety of housing types for planned development approval. The City also adopted the Vertical Housing Tax Exemption Program to incentive mixed-use development with ownership or rental housing options.

The City Council's goals and objectives include developing a Diversity, Equity and Inclusion plan aimed at equitable delivery of City services. Another stated goal is supporting housing stability and mitigation of homelessness. An objective of this goal is implementing HB 2001 and evaluating recommendations from the Housing Needs Analysis update to incentivize affordable housing and middle housing to focus on accessory dwelling units and system development charges.

The table below shows income and ethnicity distribution for census tracts comprising Forest Grove. The IBTER area is within census tract 333.02. This tract has the highest median income and lowest number Hispanic residents compared to the others. The City has identified infrastructure deficiencies to address to allow middle housing types within census tract 333.02. The remediation plan and timeline have been prepared to correct these deficiencies and help overcome patterns of segregation by income and ethnicity and foster an inclusive community free from barriers that restrict access to opportunity.

Census Tract	Median Income	Not Hispanic	Hispanic
329.02	\$63,821	3,936	3,831
331.01	\$60,654	2,592	379
331.02	\$57,418	2,324	1,720
332	\$41,863	4,871	2,151
333.01	\$68,766	4,850	1,169
333.02	\$115,833	5,588	495

(e) Whether the time period proposed for the IBTER is the minimum necessary to remedy the significant deficiency.

Proposed infrastructure projects will be added to the City's Capital Improvement Program, Transportation Development Tax project list, and Metro RTP project list as applicable. Project refinement will occur as facility Master Plans are updated over the course of the next three years.

(1) As provided in OAR 660-046-0350(3)(f)(a), the IBTER must specify when the local government intends to correct the significant infrastructure deficiency. The IBTER must provide a detailed timeline to complete the plan of action that will remedy the significant infrastructure deficiency, which may include phased infrastructure improvements and contingent actions and timelines based in circumstances outside the control of the local government.

Please see the remediation plan.

(2) Upon the expiration date of a time extension, the local government must either enact development code regulations implementing middle housing or apply the model code, as applicable, per OAR 660-046-0100 or OAR 660-046-0200.

The City is in the process of preparing development code regulations implementing middle housing based on the model code. Upon expiration of the time extension, the City of Forest Grove will apply the development code regulations to the IBTER area.



To: Dan Riordan, City of Forest Grove

Date: May 14, 2021

Revised: June 29, 2021

From: Todd Chase and Sam Ault, FCS GROUP

CC: project file #3315

RE: Westside Area Infrastructure Remediation Strategy

I. INTRODUCTION

This memorandum provides an infrastructure funding remediation strategy for addressing major public facilities required to serve the Westside Planning Area. Findings and recommendations are intended to assist city of Forest Grove staff, public officials, and private property owners/investors/developers with understanding the level of public and private investment necessary to facilitate development in this area.

To undertake this work effort, FCS GROUP performed the following tasks:

1. Facilitated several meetings with city staff, DLCD staff and other interested parties to discuss plans and key assumptions identified in this document;
2. Reviewed the city of Forest Grove's public facility master plans for providing local water, wastewater and transportation improvements; and other background planning documents pertaining to the Westside Planning Area.
3. Worked with city staff to identify required public facility investments needed to serve future development in the study area;
4. Evaluated alternative funding and financing sources that can be used to pay for major public facility investments; and
5. Summarized results and preliminary recommendations that could serve as a framework for adoption of new funding techniques and future development agreement(s).

CONTENTS

I. Introduction

II. Future Development Assumptions

III. Public Facility Requirements and Costs

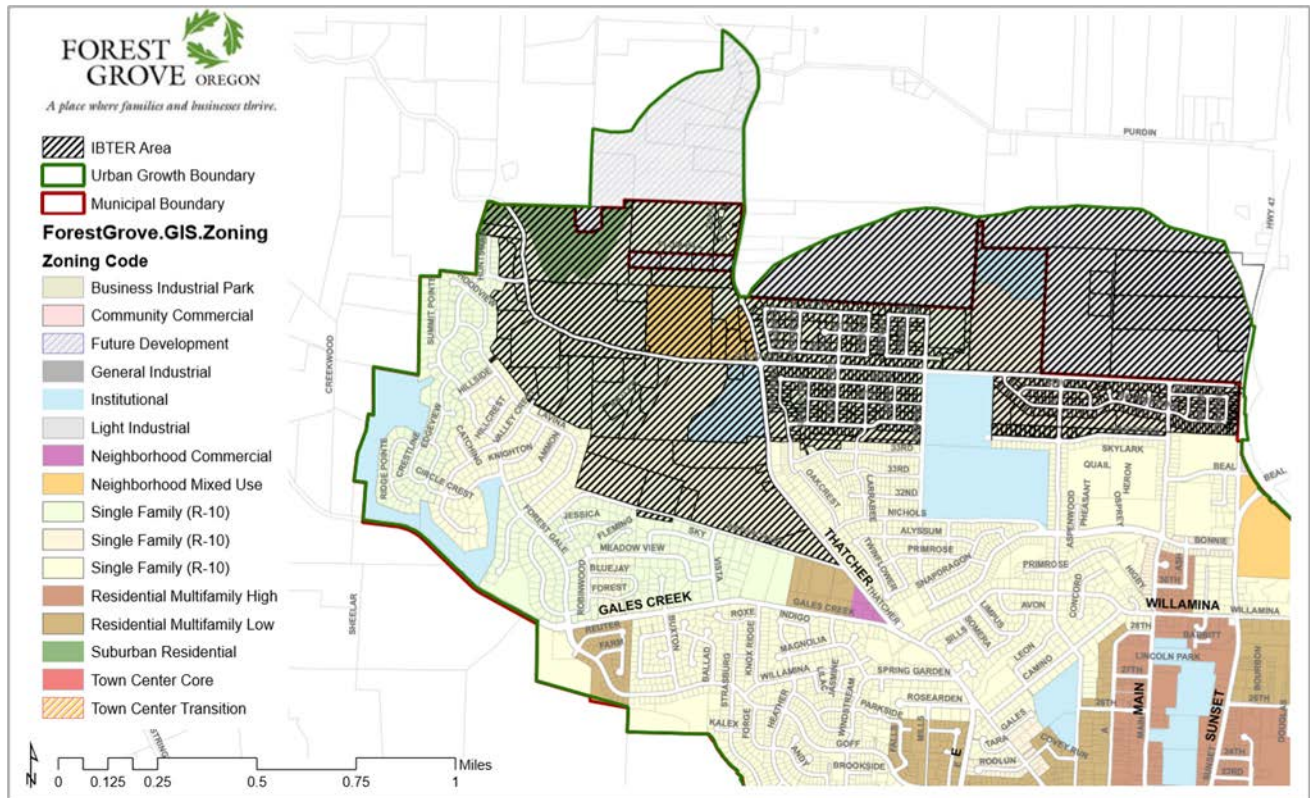
IV. Funding Alternatives

V. Next Steps

II. FUTURE DEVELOPMENT ASSUMPTIONS

The Westside Area includes portions of land that has been annexed into the city as well as tracts of land that are inside the Forest Grove Urban Growth Boundary (UGB). The study area is comprised of the Westside Refinement Plan Area and the Other IBTER Area. IBTER refers to Infrastructure Based Time Extension Request. As indicated in **Exhibit 1**, the area is primarily planned for single family (R-10) housing, Suburban Residential, Neighborhood/Mixed Use and Institutional uses (such as parks and a new elementary school).

Exhibit 1: Study Area Zoning Map



An IBTER application is being submitted to the Oregon Department of Land Conservation and Development (DLCD) by the City in May to allow additional time for the city to comply with HB 2001 middle housing requirements (please refer to separate IBTER report on file).

Housing unit growth estimates with an additional allowance for middle housing development due to HB 2001 requirements are shown in **Exhibit 2**. This analysis assumes 78 additional dwelling units due to middle housing allowed by HB 2001. With the additional level of middle housing allowed under HB 2001, the Westside/IBTER study area could accommodate 4,035 net new dwelling units, including 1,007 dwellings in the Purdin Road subarea, 968 dwellings in the David Hill subarea, and 2,059 in the remaining portion of the IBTER study area.

In addition, the area is also planned for a new primary school, neighborhood park, fire station and two neighborhood commercial mixed-use centers.

Exhibit 2: Study Area Housing Growth Forecast

Westside Planning Area Housing Distribution (Post HB-2001 Adjustment)					
Housing Type	David Hill	Purdin Road	Westside Total	Other IBTER Area	Total
SFD	581	604	1,185	1,223	2,409
SFA	240	250	490	387	877
Multifamily	147	153	300	449	749
Total	968	1,007	1,976	2,059	4,035

III. PUBLIC FACILITY REQUIREMENTS

The Westside Planning Area will require significant public facility investment in roads, water, sewer, storm and parks systems. As shown in **Exhibit 3**, based on current facility plans that have been adopted by the city, overall capital cost requirements are expected to exceed \$702 million in order to accommodate planned buildout of the area.

Exhibit 3: Study Infrastructure Capital Costs

Costs by Subarea (adjusted 2021 dollars)			Westside		Total
Infrastructure Type	David Hill	Purdin Road	Total	Other IBTER Area	
Transportation*	\$ 26,114,241	\$ 2,719,896	\$ 28,834,137	\$ 17,142,332	\$ 45,976,469
Water	8,070,196	5,017,237	13,087,433	1,108,158	\$ 14,195,591
Sewer	2,810,970	1,345,497	4,156,467	-	\$ 4,156,467
Storm	1,074,968	740,662	1,815,630	-	\$ 1,815,630
Parks	320,041	3,885,304	4,205,344	-	\$ 4,205,344
Total	\$ 38,390,415	\$ 13,708,596	\$ 52,099,011	\$ 18,250,489	\$ 70,349,500

*Assumes TSP cost estimates where projects appear on both the TSP and TDT lists.

FCS evaluated the potential revenue that the city would expect after applying its current system development charges (SDCs) and transportation development tax (TDT) to future development. The current charges on new development are shown in **Exhibit 4**.

Exhibit 4: Current Charges on New Development, City of Forest Grove

Forest Grove Base TDT and SDCs Rates (per Dwelling Unit)

Infrastructure Type	Single-Family Detached	Single-Family Attached	Multi-Family	Avg. for study area based on mix
Transportation (Washington Co)	\$9,269	\$5,544	\$6,064	\$7,794
Water (City) - 3/4" meter	\$6,371	\$3,982	\$2,124	\$4,990
Sewer (CWS)*	\$5,800	\$3,625	\$1,933	\$4,543
Stormwater (CWS)**	\$560	\$560	\$560	\$560
Parks (City)	\$6,010	\$6,010	\$6,010	\$6,010

Source: Clean Water Services, Washington County, and City of Forest Grove, compiled by FCS GROUP.

*City receives 20% share of CWS Sewer SDC rate.

**Multi-Family rate per 2,640 sq. ft. of impervious surface area.

Based on current charges and the forecasted level of future development, the estimated TDT and SDC revenue for the study area is shown in **Exhibit 5**. The results of this analysis indicate that without supplemental charges, the development of the Westside Area is projected to generate funding gaps for transportation, water, sewer and storm systems.

This analysis assumes that the non-creditable value of developer dedications for right-of-way and improvements ranges from: 10% for transportation facility costs; 20% for water system costs; 70% for sanitary sewer system costs; 30% for stormwater system costs; and zero for parks system costs.

Exhibit 5: Projected Public Facility Revenues and Funding Gaps

Est. Revenue/Value of SDC, TDT and Developer Dedications (Post HB-2001 Adjustment)				Westside	Other IBTER Area	Total
Infrastructure Type	David Hill	Purdin Road	Total	Total		
Transportation (collectors)	\$ 10,157,807	\$ 8,123,439	\$ 18,281,245	\$ 9,565,682	\$ 27,846,927	
Water	\$ 6,445,386	\$ 6,030,105	\$ 12,475,491	\$ 5,248,289	\$ 17,723,780	
Sewer	\$ 6,366,017	\$ 5,517,991	\$ 11,884,009	\$ 4,576,144	\$ 16,460,152	
Storm	\$ 864,682	\$ 786,309	\$ 1,650,991	\$ 564,110	\$ 2,215,102	
Parks	\$ 5,818,882	\$ 6,054,113	\$ 11,872,995	\$ 6,054,113	\$ 17,927,109	
Total	\$ 29,652,775	\$ 26,511,957	\$ 56,164,731	\$ 26,008,338	\$ 82,173,070	

Projected Capital Cost Surplus / Deficit by Subarea (Post HB-2001 Adjustment)

Projected Capital Cost Surplus / Deficit by Subarea (Post HB-2001 Adjustment)				Westside	Other IBTER Area	Total
Infrastructure Type	David Hill	Purdin Road	Total	Total		
Transportation	\$ (15,956,435)	\$ 5,403,543	\$ (10,552,892)	\$ (7,576,649)	\$ (18,129,541)	
Water	\$ (1,624,809)	\$ 1,012,867	\$ (611,942)	\$ 4,140,131	\$ 3,528,189	
Sewer	\$ 3,555,048	\$ 4,172,495	\$ 7,727,542	\$ 4,576,144	\$ 12,303,686	
Storm	\$ (210,286)	\$ 45,647	\$ (164,638)	\$ 564,110	\$ 399,472	
Parks	\$ 5,498,841	\$ 2,168,810	\$ 7,667,651	\$ 6,054,113	\$ 13,721,764	
Total	\$ (8,737,641)	\$ 12,803,361	\$ 4,065,721	\$ 7,757,849	\$ 11,823,570	

IV. POTENTIAL FUNDING SOURCES

In addition to the existing funding sources, there are several potential funding sources that could be considered to address potential funding gaps. Based on experience in other Oregon cities, the most commonly used infrastructure funding techniques include:

- Supplemental SDCs
- Supplemental Utility Rates
- Local Improvement Districts
- Reimbursement Districts
- Development Agreements with Special Assessments
- Exactions and Dedications
- Debt Financing (public)

Supplemental SDCs

In comparison with other areas in the region, Forest Grove's current SDCs/TDT rates are relatively low (**Exhibit 6**).

Exhibit 6: Current SDC/TDT Charges by Location (FY 2021-22)

Jurisdiction	Unit	TSDC/ TDT Fee	Other SDCs	Total SDC/TDT Fees	Median Home Sale Price	Fees / Home Price (%)
Salem	Dwelling Unit	\$4,045	\$15,069	\$18,557	\$320,555	5.8%
Forest Grove*	Dwelling Unit	\$9,547	\$18,998	\$27,714	\$417,283	6.6%
Portland - Central City	Dwelling Unit	\$5,710	\$24,691	\$29,516	\$497,589	5.9%
Sherwood*	Dwelling Unit	\$11,406	\$20,018	\$30,509	\$496,400	6.1%
Tigard	Dwelling Unit	\$16,391	\$30,296	\$36,059	\$490,838	7.3%
Happy Valley	Dwelling Unit	\$9,997	\$27,397	\$36,520	\$572,759	6.4%
Oregon City	Dwelling Unit	\$12,149	\$25,637	\$36,685	\$468,271	7.8%
Beaverton*	Dwelling Unit	\$9,547	\$28,793	\$37,223	\$439,170	8.5%
Hillsboro (other areas)*	Dwelling Unit	\$9,547	\$29,639	\$38,045	\$425,270	8.9%
Lake Oswego	Dwelling Unit	\$15,720	\$26,057	\$40,560	\$707,852	5.7%
Wilsonville	Dwelling Unit	\$13,758	\$29,060	\$41,571	\$499,888	8.3%
Beaverton - South Cooper Mountain*	Dwelling Unit	\$18,342	\$30,863	\$47,772	\$735,000	6.5%
Tigard - River Terrace*	Dwelling Unit	\$20,543	\$30,854	\$48,942	\$497,191	9.8%
North Bethany*	Dwelling Unit	\$16,741	\$35,843	\$51,052	\$631,184	8.1%
Hillsboro - South Hillsboro (Area 2) Proposed*	Dwelling Unit	\$20,582	\$32,622	\$53,204	\$570,000	9.3%
Hillsboro - South Hillsboro (Area 1) Proposed*	Dwelling Unit	\$23,090	\$32,622	\$55,712	\$570,000	9.8%
Wilsonville - Frog Pond**	Dwelling Unit	\$13,758	\$48,697	\$60,636	\$730,000	8.3%
Average		\$13,581	\$28,656	\$40,605	\$533,485	7.6%

Source: Zillow.com.

*Includes TDT rates, but excludes County Service District and Metro construction excise tax charges (if applicable).

South Hillsboro Area 1 transportation fees exclude Local Improvement District charge.

** SDCs also include special assessment charge for Frog Pond West.

In addition to the citywide SDC and TDT charges, a special district or overlay charge may also be considered. These supplemental SDCs on new development will help the City generate additional revenue to address the cost of new infrastructure investments that are required to maintain current levels of service. For example, a \$5,000 per dwelling supplemental water SDC in the study area (with 2,000 net new dwelling units expected over the next 20 years) could generate \$10 million in revenue to be used for SDC-eligible water capital projects.

FCS evaluated the level of supplemental SDCs required for the city to “break even” with respect to infrastructure requirements. The results indicate that \$6,142 in supplemental transportation SDCs, water SDCs and stormwater SDCs may be justified in the Westside Planning Area (**Exhibit 7**). Exhibit 7 also reflects how the city could potentially vary these charge by subarea.

The potential supplemental charges (if implemented) would be in addition to the existing base SDC/TDT charges that the City assessed for new development, which equates to approximately \$28,000 per single family detached home. Based on the mix of future housing development in the combined Westside/IBTER area, the current *average* base SDC/TDT charge per dwelling unit is forecast to be nearly \$18,000 per dwelling unit. This infrastructure remediation analysis raises the following policy considerations regarding each potential subdistrict:

- **Option 1, David Hill Subdistrict:** if the City creates a subdistrict focused on the David Hill Area, it may justify approximately \$21,251 in supplemental SDCs (per average dwelling unit). This would bring the SDC per detached home to over \$49,251, which is on par with Tigard River Terrace and below that charged in North Bethany, South Hillsboro and

Wilsonville (Frog Pond West). Under this scenario, there would be no SDC surcharge for the Purdin Road subarea.

- **Option 2, David Hill/Purdin Road (Westside) Subdistrict:** If the City combines David Hill with the Purdin Road subarea, the average SDC surcharge for the David Hill Area would be lower than Option 1; but there would be an SDC surcharge for future development in the Purdin Road subarea. The overall SDC surcharge would be approximately \$6,142 per average dwelling unit in the combined Westside Subdistrict. This would bring the SDC per detached home to over \$34,142, which is still at the lower end of the range within the Portland Metropolitan Region.
- **Option 3. Separate Westside and IBTER Subdistricts:** This option assumes that the City creates a separate subdistrict for the Westside Area and the remaining IBTER Area. This approach would result in an SDC surcharge of approximately \$6,141 for the Westside Area and \$3,929 for the remaining portion of the IBTER study area.

Additional hybrid options are available.

Exhibit 7: Potential Supplemental SDCs Required by Subarea

Potential Average Supplemental SDCs per Dwelling Unit by Subarea (Post HB-2001 Adjustment)						Current Forest Grove Base SDC/TDT (average)
Infrastructure Type	David Hill Supplemental Charge	Purdin Road	Westside Area (combined)	Other IBTER Area Supplemental Charge	Westside and IBTER Area Supplemental Charge (combined)	
Transportation	\$19,059	note 1	\$5,721	\$3,929	\$4,805	\$7,794
Water	\$1,941	note 1	\$332	note 1	note 1	\$4,990
Sewer	note 1	note 1	note 1	note 1	note 1	\$4,543
Storm	\$251	note 1	\$89	note 1	note 1	\$560
Parks	note 1	note 1	note 1	note 1	note 1	\$6,010
Total	\$21,251		\$6,142	\$3,929	\$4,805	\$17,887

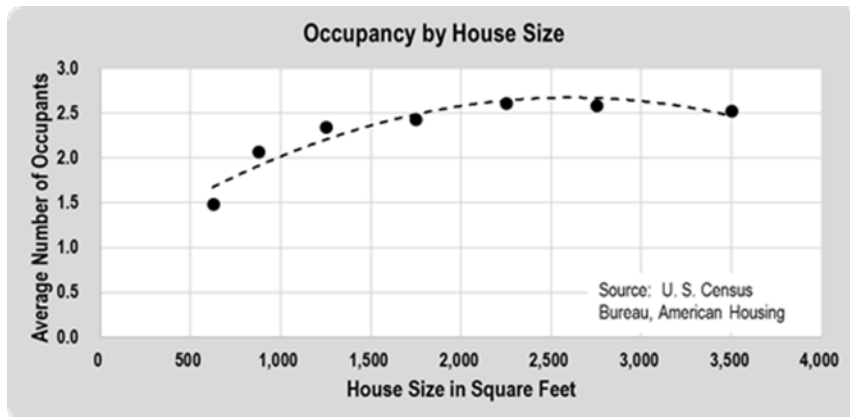
Note (1). current citywide charges would apply; no supplemental charge required.

Other SDC Considerations

Oregon law requires that the city provide an SDC credit to developers who construct a qualified public facility improvement that has been adopted on the SDC project list. The amount of credit that is provided and the terms of how the credit is issued (cash or voucher) varies depending upon the facility type, location and level of private investment.

One transportation-related remediation strategy that Forest Grove may want to consider includes adoption of a “High Priority Collector” street designation for Purdin Road. This would allow a developer to receive the highest possible TDT credit (equates to 75% of project costs) allowed, which might encourage private construction and private financing of roadway capacity improvements. Otherwise, a standard collector street improvement by a developer would be eligible for a 50% credit reimbursement.

It is recommended that the City also consider new ways to scale the SDCs by home size. The general relationship between home occupants and home size in the Portland Region is depicted in the following chart.



By considering the number of occupants per dwelling unit, the City could revise its parks SDC from a current “fixed” rate of \$6,010 per dwelling unit to a scaled rate that ranges from \$4,132 per multifamily unit, \$5,692 per townhome/plex, and \$6,541 to single family detached unit (**Exhibit 8**).

Exhibit 8

Forest Grove Parks SDCs based on People per Dwelling Unit

	Persons Per Dwelling	Deviation from Average	Potential Revised Parks SDC
Housing Type			
Single family detached*	3.00	1.1	\$6,541
Townhomes/plexes**	2.61	0.9	\$5,692
Multifamily/Accessory Dwellings/Other	1.89	0.7	\$4,132
Average	2.75		\$6,010

* also includes mobile homes.

** includes attached dwellings with 2 to 4 units per structure.

Source: US Census Bureau Tables B25032 and B25033 (2019 5- year ACS data) for City of Forest Grove.

Supplemental Utility Rate Charge

Supplemental water or sewer utility rates can also be implemented as a rate surcharge to fund designated facilities or operations in a special district. For example, a water rate or stormwater rate surcharge of \$10/month on 2,000 dwellings would be expected to generate approximately \$240,000 per year at buildout, which if fully capitalized could fund approximately \$1 million in capital investments (such as stormwater detention ponds or treatment facilities) in the Westside Planning area every 10 years.

Local Improvement District or Reimbursement District

LIDs or reimbursement districts can be used to generate revenue similar to the methods shown above, and must be used for very specific capital improvements, such as new roadway intersections (traffic signals), water pumping stations or subregional stormwater detention ponds. Project costs are apportioned in accordance with project benefits so that each property receives a benefit that exceeds their respective cost. While LIDs and Reimbursement Districts can be formed by the city council vote, they can sometimes be overturned if the majority of impacted properties (owners) petition against the LID apportionment.

Successful LIDs and Reimbursement Districts require advance financing by a public agency or developer, who in turn gets paid back over time based on assessment revenues. As such, LIDs and reimbursement districts are not without risk to the party that advances the financing.

Development Agreements

The city of may use “Development Agreements” where a developer would agree to construct public facilities to local design standards as a condition of development. Development Agreements can provide the legal basis for significant public or private investments in infrastructure, and can include special assessments (in lieu fees) in the event specified improvements are not constructed by the developer.

The Development Agreement also provides assurances to the city and to the developer that the land use regulations that apply will not change during the term of the agreement. Agreements usually identify provisions for reservation or dedication of land for public purposes; responsibilities for providing infrastructure and services; and construction expenditure provisions for public facility investments.

Key provisions of development agreements typically include:

- » Voluntary Agreements between private and public entities
- » Usually entails private dedication of land, easements, and/or public facilities in exchange for development entitlements
- » Private construction of street and limited O&M (1-3 years) to city standards
- » Non-remonstrance towards current and future fees and charges
- » Developer may agree to provide advance financing for a portion of the project and request formation of a LID or Reimbursement charge for a share of costs they incur
- » Vested rights (time of performance)
- » Security bond
- » Flexibility (minor and major amendments to the agreement)

Forest Grove could consider a development agreement with a special assessment like the one recently enacted in Wilsonville for the Frog Pond West Planning Area. The Wilsonville City Council enacted a Development Agreement with a special assessment (\$19,000 per dwelling unit) in the Frog Pond planning area. The special assessment is for road, sewer and parks improvements that are not part of the local SDC fee. This special assessment approach is similar to the reimbursement district concept discussed above; whereas a developer that advances the financing for an eligible public facility could receive up to 100% reimbursement for their investment based on special assessment revenues that are generated over time. This approach tends to shift much of the infrastructure cost burden (and risk) onto the developer, yet allows the developer to potentially recoup their costs more fully than a typical SDC.

Exactions and Dedications

An exaction is a requirement that an owner give up a property right, such as an extra right-of-way, as a condition of approval of a land use decision. Local governments have the power to impose exactions based on zoning and regulatory power they possess. An exaction is constitutional if it complies with the test established in the landmark *Dolan v. City of Tigard*, 512 US 374, 114 Ct 2309, 129 L Ed 2d 304 (1994), which requires:

- » The exaction must advance a legitimate public interest;
- » The exaction must have an “essential nexus” to the state interest; and
- » The exaction is “roughly proportional” to the impacts of the development being considered.

Dedications pertain to capital facility improvements that developers are required to construct and in-turn dedicate to the public for its use and/or ownership. On occasion, exactions and dedications can be used in combination, such as the requirement that a developer construct a public sidewalk along a roadway fronting their property when “major” improvements to the property are made.

Local governments must carefully implement exactions and dedications to avoid legal pitfalls. First, exactions should be founded on the same general police power that underlies all zoning: the authority to protect the health, safety or welfare of the public. Second, is the need for clarity and reasonableness. As such, local governments may not establish conditions that it knows are impossible to meet or that have no rational basis in fact.

As such, exactions and dedications are typically applied to “local facilities” such as streets and sidewalks that are directly related to a property being developed or improved. Other types of major public facilities, such as collector roads and water/sewer trunk lines and pump stations are better addressed (and funded) using one or more of the other funding techniques described herein.

Debt Financing

The city or any of its enterprise utilities may incur debt to pay for capital facilities, such as water or sewer facilities and other “public” projects deemed to have a community benefit. The most typical forms of financing public infrastructure are through intergovernmental loans, bonds or bank loans. Bonds are a common means of financing projects whose benefits are not confined to a single local district.

Revenue bonds, for facilities such as water improvements, require an ongoing source of revenue that can be pledged to payment of debt service. A utility fee or local option levy combined with a Local Improvement District could generate payments for this purpose. A reserve requirement on revenue bonds would commit the City to maintain a bond reserve, which could be used to meet payments in the event pledged revenues fall short. This reserve is often set at the least of (a) 10 percent of the issue price of all new and outstanding parity bonds, (b) maximum annual debt service on all new and outstanding parity bonds, and (c) 1.25 times average annual debt service on all new and outstanding parity bonds. The reserve requirement is dictated by the terms of the bond resolution.

Limited General Obligation Bonds or Full faith and credit bonds do not require voter approval and they are not subject to debt service coverage requirements. However, like revenue bonds, an ongoing source of revenue would need to be pledged to protect the City’s general fund from added risk.

Evaluation of Funding Techniques

An evaluation of funding options was conducted to ascertain the relative merits of the potential funding measures identified above. The primary evaluation criteria used for this study are described below.

Capital Funding Amount Raised

Each funding technique has the potential of increasing revenue to the city that can be used to fund or finance construction of public facilities. In some cases, such as with the use of SDCs and LIDs, the

funds generated can only be used for eligible capital projects. In other cases, such as with utility rates, the funds can be used for operations or capital improvements. In general, the broader the assessment area (e.g., countywide assessment vs. special district), the greater the potential revenue. A score of 1 (low) to 5 (high) was assigned to each funding technique based on the anticipated level of funds it would generate.

Ease of Implementation

Ease of Implementation refers to the process and administrative cost required to implement the funding technique identified. Some funding sources, such as utility rates and impact fees do not require public votes to enact and therefore are relatively easier to implement than funding sources that require a public vote or legal formation steps (such as a new limited general obligation (G.O.) Bond or LIDs). A score of 1 (low) to 5 (high) was assigned to each funding scenario, based on the relative ease of implementation to enact the relevant funding options.

Administration Costs

The cost to the city of Hermiston (staff time) of implementing and administering a new funding technique is an important consideration, which can result in short-term and long-term cost considerations. In general, augmenting an existing funding technique, such as a utility surcharge increase, is typically less costly than creating and maintaining a new funding technique, such as a new countywide impact fee or transportation benefit district. A score of 1 (low) to 5 (high) was assigned based on the anticipated level of administrative costs and staff time that would be required.

Risk to City

The level of risk associated with any funding technique is another important criterion. While each type of revenue technique being discussed will have some level of risk, the ability to allocate revenues to capital needs can provide the city with flexibility to address important needs as they arise. For example, utility fees are far more flexible than impact fees in how they can be used to address capital needs in a timely and consistent manner. Risk levels tend to increase if the reliability of funds diminishes during an economic downturn. Funding sources, such as SDCs and Urban Renewal Districts, do not generate revenue in a predictable manner and have major restrictions on how those funds can be used. In comparison, utility rate revenues, LIDs and Limited G.O. Bonds tend to be far more reliable and can be targeted to locally defined projects or programs. A score of 1 (low) to 5 (high) was assigned to each funding technique based on how reliable (predictable) revenue should be in the future.

Citywide Equity

Equity is defined herein as the equitable distribution between the cost to rate/tax payers and where the funds are to be spent. A score was assigned to each funding scenario ranging from low cost/risk (1) to high cost/risk (5).

Impact on Cost of Housing

Consideration is given to how each funding technique would impact the cost of new housing. A score was assigned to each funding scenario ranging from least favorable impact or higher relative cost (1) to most favorable impact with lower relative cost (5). Funding techniques that tend to be passed directly on to homebuilders or homebuyers (such as SDCs and LIDs) generally have a more direct

impact on housing prices then other techniques such as utility rate surcharges or citywide bond issues.

Funding Evaluation Summary

A total score was computed for each funding technique based on the number of “\$’s” awarded to each criterion. The total score was then used to rank each funding scenario. Based on the results shown in **Exhibit 9**, the local funding techniques with the highest scores are recommended for additional consideration over the next 1-2 years:

- » System Development Charge Overlay (focused on transportation, water and stormwater systems required in the Westside Planning Area)
- » Developer Dedications and Exactions (based on the nexus between proposed improvements and infrastructure system impacts)
- » City-wide Transportation SDC
- » Development Agreement (with special assessment charge similar to a reimbursement district)
- » Stormwater Utility Fee Surcharge (within Westside Planning Area)
- » Local Improvement Districts (with advance financing provided by developers)

Exhibit 9: Preliminary Evaluation of Local Funding Sources

Local Funding Options

	Evaluation Considerations							
	Funding Raised	Ease of Implementation	Admin. Costs	Flex Funding	Risk to City	Citywide Equity	Direct Housing Cost Impact	Total Score
System Development Charge Overlay (SDCs)	\$\$\$	\$\$\$\$	\$\$\$	\$\$	\$\$\$\$\$	\$\$\$\$\$	\$\$	24
Developer Exactions & Dedications	\$	\$\$\$\$\$	\$\$	\$	\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$	23
System Development Charge Citywide (SDCs)	\$\$\$\$	\$\$\$\$	\$\$	\$\$\$	\$\$\$\$\$	\$\$	\$\$\$	22
Developer Agreements (Special Assessments)	\$\$\$	\$\$\$	\$\$	\$\$	\$\$\$	\$\$\$\$\$	\$\$	20
Utility Fee Surcharge (for stormwater)	\$	\$\$	\$\$\$	\$\$	\$	\$\$\$\$\$	\$\$\$\$\$	19
Local Improvement District*	\$\$	\$	\$	\$	\$\$\$\$\$	\$\$\$\$\$	\$\$	17
City Bond or Debt Issue (non-voter approved)	\$\$\$	\$	\$	\$	\$	\$	\$\$\$\$\$	13

Legend:

+ least positive

+++++ most positive

* LID assumes advance financing by developer not city.

V. RECOMMENDED TIMELINE

As provided in OAR 660-046-0350(3)(f)(a), the IBTER must specify when the local government intends to correct the significant infrastructure deficiencies. The IBTER must provide a detailed timeline to complete the plan of action that will remedy the significant infrastructure deficiency, which may include phased infrastructure improvements and contingent actions and timelines based in circumstances outside the control of the local government.

The City anticipates it may take up to five years to correct the significant infrastructure deficiencies as identified in the IBTER application. This timeline could be accelerated if a private developer agrees to advance fund and construct needed infrastructure improvements.

Fiscal Year 2021-2022

- Submit a formal request to the Washington County Department of Land Use and Transportation to approve David Hill Road west of Thatcher Road as a high priority collector road to allow funding of needed improvement using Transportation Development Tax at the arterial rate.
- Work with property owners to evaluate the feasibility of establishing a local improvement district for needed infrastructure improvements.

Fiscal Year 2022-2023

- Add short-term improvement projects to the City's adopted Five Year Capital Improvement Program. Short-term projects include:
 - Construction of water pressure pump stations to provide adequate water pressure above the 440 foot contour elevation.
 - Construction of sanitary sewer line along David Hill Road west of Thatcher Road.
 - Construction of stormwater improvements along David Hill Road west of Thatcher Road.
- Complete the City's Stormwater Master Plan Update to include the David Hill urban growth area north of David Hill Road and west of Thatcher Road.
- Add the David Hill Road improvement project to the City's adopted Five Year Capital Improvement Program to fund design and preliminary engineering using system development charges.

- Add Thatcher Road improvement project to the City's adopted Five Year Capital Improvement Program to fund design and preliminary engineering using system development charges for the roadway north of David Hill Road.

Fiscal Year 2023-2024

- Complete a regional stormwater strategy for the David Hill urban growth area north of David Hill Road and west of Thatcher Road.

Fiscal Year 2024-2025

- Complete the City's Sanitary Sewer Master Plan Update to include the David Hill urban growth area.

VI. NEXT STEPS

In summary this analysis has determined that:

- Forest Grove is growing and the Westside/IBTER Planning Area is expected to accommodate the vast majority of the new housing in the City.
- Major capital investments are required to maintain current levels of service and to address future public facility requirements, particularly for transportation, water systems, stormwater runoff and parks.
- New funding techniques should be considered and implemented over the next year, along with SDC methodologies that help to ensure that middle housing can be developed at a reasonable cost.

During the next several months, the city should continue to work with property owners, regional developers, and other stakeholders to refine infrastructure funding mitigation strategies; and to provide opportunities for community input as new funding techniques are implemented.



July 30, 2021



Dan Riordan, Senior Planner
City of Forest Grove
1924 Council Street
PO Box 326
Forest Grove, OR 97116

Sent via e-mail

RE: Middle Housing Infrastructure-Based Time Extension Request Notice of Incompleteness

Dear Mr. Riordan,

The Department of Land Conservation and Development (DLCD or Department) received a submittal from the City of Forest Grove regarding an Infrastructure-Based Time Extension Request (IBTER), which proposes to delay the enactment of local provisions allowing middle housing in accordance with HB 2001 (2019) and Oregon Administrative Rule (OAR) Chapter 660, Division 46. The City's application identified an area or areas where existing and future infrastructure systems are insufficient to accommodate anticipated growth in dwelling units as a result of middle housing allowances.

DLCD received the City's application on June 30, 2021 prior to the statutory submittal deadline. Pursuant to OAR 660-046-0350(2), DLCD is required to review the application for completeness within 30 days of receipt of an IBTER application. DLCD has reviewed the City of Forest Grove's IBTER application in accordance with OAR 660-046-0350(3) *Required Materials*. After review, DLCD finds that the City of Forest Grove's application is **incomplete**.

Additional Information Requested

DLCD requests the City of Forest Grove provide clarification on three aspects of the IBTER application.

1. The City's application has conflicting graphics and explanations delineating the IBTER area. Exhibit 2 of the City's application includes an "IBTER Area" boundary that is discrete from the West Side Area Boundary. However, Exhibit 3 identifies the entirety of the West Side Area Boundary as the "IBTER Area". Further, the narrative included in I.B of the application discusses two additional subareas within the West Side Area Boundary as part of the "IBTER Area". DLCD requests further clarification of the specific area (or

areas) the City of Forest Grove intends to delay the enactment of middle housing provisions through the IBTER process. DLCD requests that the City provide this clarification in both narrative and graphic forms.

2. Per OAR 660-046-0360(5)(c) and (e), DLCD will review an IBTER application's remediation plan for both feasibility and expeditiousness. DLCD appreciates the City's detailed analysis of the possible funding opportunities and mechanisms for infrastructure improvements. However, the City's remediation plan for all infrastructure systems considered in the application only includes timelines for Capital Improvement and Master Planning actions. DLCD requests that the City provide more detailed information about the expected timeframe for the completion of each specific infrastructure improvement. The City should provide, at a minimum, the approximate fiscal year in which the infrastructure improvement is estimated to be completed.
3. An IBTER is intended to grant a City an extension of time to apply middle housing allowances in an infrastructure deficient area due to the increased demand that would result from permitting new middle housing in that localized area. An IBTER would not be the appropriate mechanism to limit middle housing development in an area that is experiencing existing infrastructure deficiencies such that the city is not permitting any new development. After a conversation with the City on July 29, DLCD better understands the City's concerns about the complex and overlapping policies and regulations that exist in Oregon Revised Statutes and Oregon Administrative Rules resulting in unintended water and wastewater management outcomes. However, DLCD encourages the City to expand on the concerns and issues regarding wastewater management and water infrastructure in any further application materials submitted to the department.

Action Required

Pursuant to OAR 660-046-0350(2), the City of Forest Grove has one week to inform DLCD of the City's intentions to provide all, some, or none of the additional information requested as outlined in the section above.

If the City intends to provide all or some of the requested information, the City must submit all requested materials within 60 calendar days of this incompleteness determination.

If the City intends not to provide additional information, the application will be deemed complete and DLCD will initiate the application review process as outlined in OAR 660-046-0360 including posting the application materials online for a 21-day public comment period.

The Department will make a decision to deny, approve, or approve with conditions the City's IBTER application within 120 days of the date the application was deemed complete.

Please feel free to contact Ethan Stuckmayer at 503-302-0937 or at ethan.stuckmayer@state.or.us if you have any questions or need further assistance.

Sincerely,



Gordon Howard
Community Services Division Manager, Department of Land Conservation and Development

cc: Jim Rue, DLCD
Kevin Young, DLCD
Anne Debbaut, DLCD
Ethan Stuckmayer, DLCD
Robert Mansolillo, DLCD
Angela Williamson, DLCD
Bryan Pohl, City of Forest Grove



A place where families and businesses thrive.

September 28, 2021

Ethan Stuckmayer, Senior Planner of Housing Program
Oregon Department of Land Conservation and Development
635 Capitol Street NE
Suite 150
Salem, OR 97301-2540

SENT VIA EMAIL

Subject: Middle Housing Infrastructure-Based Time Extension Request Notice of Incompleteness

Dear Mr. Stuckmayer,

Thank you for reviewing the City's Infrastructure-Based Time Extension Request application submitted to DLCD on June 30, 2021. This letter is in response to DLCD's notice of incompleteness dated June 30, 2021. The letter identifies three areas requiring clarification pertaining to aspects of the IBTER application. The attached information responds to each of the three areas in turn.

Please don't hesitate to contact me with any questions you have by email at driordan@forestgrove-or.gov or telephone at (503) 992-3226.

Sincerely,

Daniel Riordan
Senior Planner

cc: Project File

City of Forest Grove
Infrastructure Based Time Extension Request
Response to DLCD Incompleteness Letter, July 30, 2021

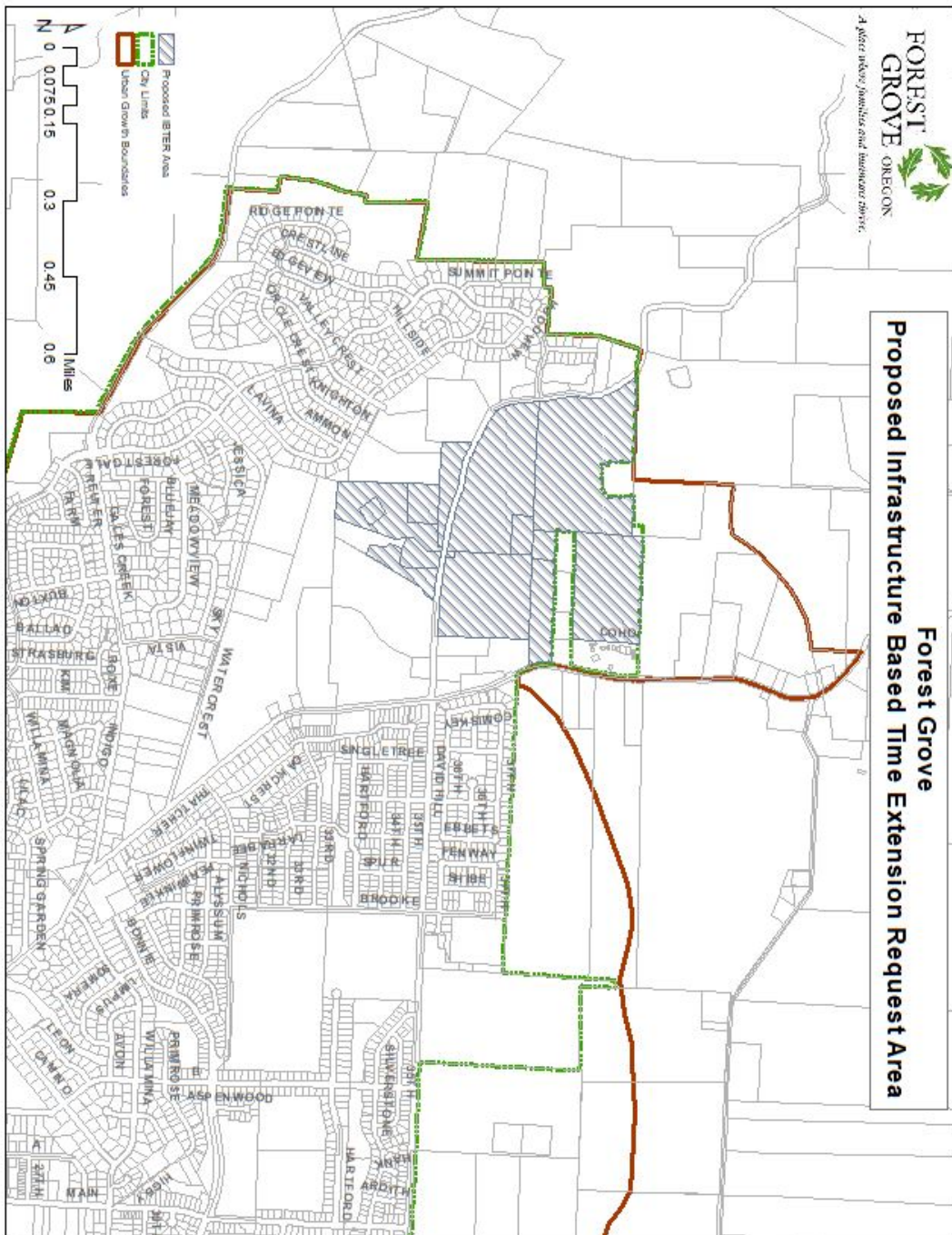
- 1. The City's application has conflicting graphics and explanations delineating the IBTER area. Exhibit 2 of the City's application includes an "IBTER Area" boundary that is discrete from the West Side Area Boundary. However, Exhibit 3 identifies the entirety of the West Side Area Boundary as the "IBTER Area". Further, the narrative included in I.B of the application discusses two additional subareas within the West Side Area Boundary as part of the "IBTER Area". DLCD requests further clarification of the specific area (or areas) the City of Forest Grove intends to delay the enactment of middle housing provisions through the IBTER process. DLCD requests that the City provide this clarification in both narrative and graphic forms.**

The area shown in Exhibit 3 (Westside Area Boundary) in the City's application was the initial study area for evaluation based on the Infrastructure-Specific Application Thresholds in OAR 660-046-0340. Based on the evaluation this Westside Area was reduced to the final proposed IBTER area as shown in Exhibit 2 in the original application and below.

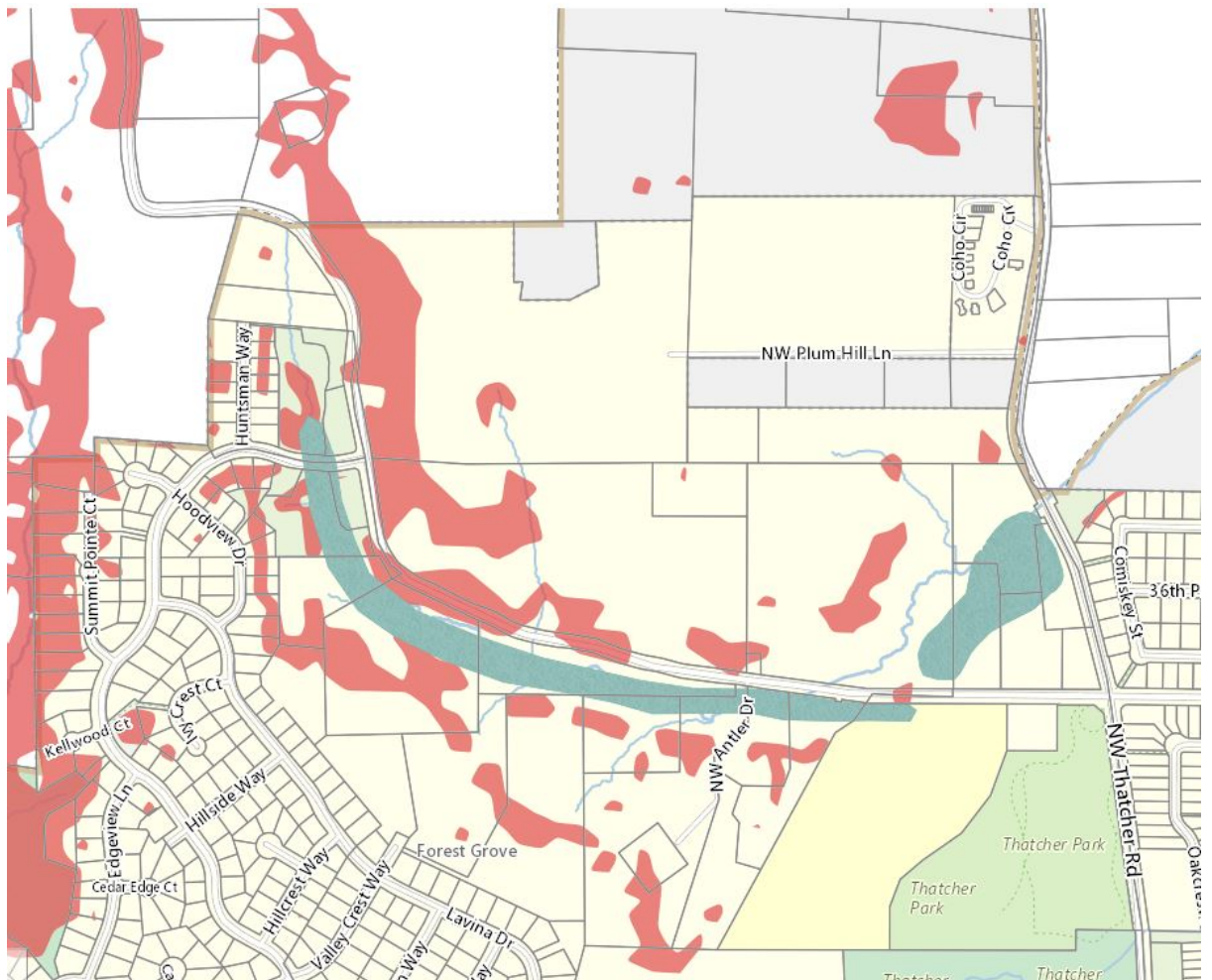
The City's proposed IBTER area includes land in northwest Forest Grove generally adjacent to David Hill Road and west of Thatcher Road. This area is characterized by steep terrain and natural features including Council Creek as shown on the maps below. This area has been in the urban growth boundary since at least 1985 and was annexed into the City in 2009.

The City's evaluation, leading to the proposed IBTER area shown below, was based on the specific infrastructure deficiencies present in the area and identifies the specific area impacted. The City believes this area below best meets the criteria in OAR Chapter 660, Division 46 for an IBTER due to the identified significant infrastructure deficiencies. This includes lack of sanitary sewer and storm drainage capacity. In addition, the far western portion of the proposed IBTER area lacks municipal water system infrastructure needed to provide adequate water pressure in the highest pressure zone. Furthermore, David Hill Road which is the primary roadway serving the area is substandard. The IBTER application addresses these deficiencies in detail and are not repeated here.

**Forest Grove
Proposed Infrastructure Based Time Extension Request Area**



David Hill Area Natural Features



- ▼ ☒ Slopes > 25%
- ▶ ☐ >25 percent slope
- ▶ ☐ Contours
- ▶ ☐ FEMA 100-year floodplains
- ▼ ☒ Wetlands

2. **Per OAR 660-046-0360(5)(c) and (e), DLCD will review an IBTER application's remediation plan for both feasibility and expeditiousness. DLCD appreciates the City's detailed analysis of the possible funding opportunities and mechanisms for infrastructure improvements. However, the City's remediation plan for all infrastructure systems considered in the application only includes timelines for Capital Improvement and Master Planning actions. DLCD requests that the City provide more detailed information about the expected timeframe for the completion of each specific infrastructure improvement. The City should provide, at a minimum, the approximate fiscal year in which the infrastructure improvement is estimated to be completed.**

HB 2001 states in Section 4 (1), that the Department of Land Conservation and Development may grant to a local government an extension of time allowed to adopt land use regulations or amend its comprehensive plan under section 3 of the act. Section 4(2) of HB 2001 goes on to state: "An extension under this section may be applied only to specific areas where the local government has identified water, sewer, storm drainage, or transportation services that are either significantly deficient or are expected to be significantly deficient before December 31, 2023, and for which the local government has established a plan of action that will remedy the deficiency in those services that is approved by the department." Consistent with the wording in HB 2001 the City desires to prepare amendments to the Comprehensive Plan including Transportation System Plan and Storm Drainage Master Plan to guide development and address specific infrastructure deficiencies in the proposed IBTER area. The City accepts that this approach may not fully align with the more detailed requirements contained in the administrative rules implementing HB 2001.

The City understands that the administrative rules implementing HB 2001 requires a remediation plan that describes the proposed infrastructure improvements intended to remedy significant infrastructure deficiencies so that the local government may implement middle housing provisions. The City further understands the administrative rules state that a remediation plan must describe infrastructure improvement(s) intended to remedy significant infrastructure deficiencies so that a local government may implement middle housing allowances. In addition, the rules require that a remediation must, in part, include a proposed timeline and potential funding sources and scheduled for project completion.

The City has identified significant infrastructure deficiencies in the proposed IBTER area as described in the City's application. The City proposes a plan of action, including a proposed timeline and identification of funding sources, to remedy significant infrastructure deficiencies. The City believes the proposed plan of action described below meets the intent of HB 2001 related to land use regulations and comprehensive plan amendments and a plan of action to resolve significant infrastructure deficiencies in the IBTER area. The City also believes the proposed plan of action makes a good faith effort to meet the requirements adopted in the administrative rules pertaining to infrastructure remediation plans. To this end, the proposed plan of action includes the following:

1. **Complete a context sensitive design for the David Hill Road improvement cross-section** taking into account topography and natural constraints including the presence of Council Creek paralleling the roadway alignment. The design will address straightening curves to improve sight lines. The purpose of this project is to adopt a roadway cross-section to serve as the policy basis for frontage improvements as development occurs. This project serves expanding capacity as a result of growth. The identified funding source for this project is transportation development tax (TDT) funds. The project is included on the Washington County TDT Project List (Project 7506). **The anticipated timeline is project initiation during the second half of Fiscal Year 2021-22 and completion before the end of Fiscal Year 2022-2023.**
2. **Complete a stormwater implementation plan for the IBTER area.** The City's current Storm Drainage Master Plan, adopted in 2007 does not address infrastructure needs in the City's urban growth area north of David Hill Road. It is believed this is largely due to the area not being within the city limits in at the time the Storm Drainage Master Plan was completed.

Subsequent to adoption of the 2007 Storm Drainage Master Plan the IBTER area north of David Hill Road was annexed into the City in 2009. The proposed stormwater implementation plan for the IBTER area is intended to proactively identify locations for sub-basin facilities for water quality and quantity where not current policy exists. This is especially important to ensure local compliance with recent changes to Clean Water Services hyrdomodification standards, the Clean Water Services National Pollutant Discharge Elimination System (NPDES) and Municipal Separate Storm Sewer System (MS4) permits. These requirements are intended to mitigate impacts to the Tualatin River Watershed. The storm drainage runoff treatment and control standards apply to all development projects within the Clean Water Services District.

While individual development applications could be reviewed in isolation for potential storm drainage impacts, the City desires to assess needs within the sub-basin to preserve opportunities for sub-basin storm drainage approaches including regional water quality facilities for multiple developments rather than individual facilities. This is the approach taken for the North Bethany area of Washington County ahead of development within that urban growth area.

If the IBTER is approved, the City expects to initiate stormwater implementation plan for the IBTER area concurrent with the update to the City's 2007 Storm Drainage Master Plan. **The City anticipates beginning these projects during the second half of Fiscal Year 2021-22. Completion is expected in Fiscal Year 2023-2024.** This project is expected to be funded with stormwater system development charge revenue.

The City believes the proposed remediation plan is consistent with HB 2001 as written and the administrative rules for the following reason: The administrative rules define an IBTER to mean an infrastructure based time extension request submitted by a local government for an extension of time to adopt land use regulations or amend a comprehensive plan as provided for under Oregon Laws 2019, chapter 639, section 4. Consistent with the IBTER definition, both projects identified above will be amended into the Forest Grove Comprehensive Plan through a Transportation System Plan amendment for the David Hill Road cross-section and adoption of the Storm Drainage Master Plan update as a facility plan supporting the Forest Grove Comprehensive Plan.

The administrative rules provides guidance on IBTER application review and states applications be reviewed in terms of whether the proposed remediation plan is likely to be effective and presents the most expeditiously feasible course of action to enable implementation of middle housing provisions. The City believes completion of the two projects identified above is the most expeditious course of action to proactively address infrastructure deficiencies and enable middle housing provisions in the IBTER area. Furthermore, the City believes, the time period for the proposed IBTER is the minimum necessary to remedy significant infrastructure deficiencies since the City only desires to provide an adequate policy basis for conditioning development applications. This is to ensure significant infrastructure deficiencies resulting from middle housing provisions are addressed at time of development.

OAR 660-046-0350(3)(f) goes on to state a remediation plan must describe the proposed improvement(s) intended to remedy the significant infrastructure deficiency so that the local government may implement middle housing provisions. The remediation plan addresses needed transportation system and storm drainage improvements specifically. As proposed the specific storm drainage improvements will be refined through the remediation plan. The City believes this is consistent with the IBTER administrative rules since an IBTER is intended to provide a process to resolve significant deficiencies and does not appear to require initiating and completing a construction program. If a construction program is required as part of a remediation plan there appears to be a conflict with how an IBTER is defined in the administrative rules. This conclusion is supported by the premise that the IBTER definition in the administrative rules refers only to land use regulations and comprehensive plan amendments and does not refer to construction of needed infrastructure improvements as a condition for IBTER approval.

3. **An IBTER is intended to grant a City an extension of time to apply middle housing allowances in an infrastructure deficient area due to the increased demand that would result from permitting new middle housing in that localized area. An IBTER would not be the appropriate mechanism to limit middle housing development in an area that is experiencing existing infrastructure deficiencies such that the city is not permitting any new development. After a conversation with the City on July 29, DLCD better understands the City's concerns about the complex and overlapping policies and regulations that exist in Oregon Revised Statutes and Oregon Administrative Rules resulting in unintended water and wastewater management outcomes. However, DLCD encourages the City to expand on the concerns and issues regarding wastewater management and water infrastructure in any further application materials submitted to the department.**

As stated above, the City proposes a remediation plan, that the City believes is reasonable and can be completed expeditiously. The City requests the IBTER to allow time to complete two priority projects needed to guide future development in the IBTER area. The City's primary desire is to provide a "roadmap" for development so that needed infrastructure is provided by responsible parties in a timely, orderly and efficient manner consistent with Statewide Land Use Planning Goal 11 (Public Facilities and Services). The intent is to avoid ad hoc private infrastructure investment decisions without regard to broader community impacts. In addition, the City wishes to avoid private improvements for storm drainage that could conflict with and undermine future provision of public storm drainage improvements. The City believes such actions would be in direct conflict with Goal 11 as well as Goal 2 which requires a land use policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions. Dismissing this seems to be contrary to OAR Chapter 660, Division which specifically recognizes the need to apply protective measure required by statewide land use planning goals to middle housing types (OAR 6670-046-0010(3)).

In addition to the above, OAR Chapter 660, Division 46 provides authority to a Large City, such as Forest Grove, to regulate middle housing to comply with protective measures pursuant to statewide land use planning goals. The City seeks approval of the IBTER to ensure that middle housing complies with protective measures consistent with statewide land use planning Goals 6 (Air, Water and Land Resource Quality) and Goal 7 (Areas Subject to Natural and Hazards as described more fully below).

Goal 6: OAR Chapter 660, Division 46 states a Large City may limit development within an urban growth boundary to support attainment of federal and state air, water and land quality requirements pursuant to OAR 660-015-0000(6). In part, this is what the City attempts to achieve through the IBTER. The City proposes to temporarily limit development within the proposed IBTER area to develop protective measures intended to ensure development complies with federal and state water quality requirements including the National Pollutant Discharge Elimination System (NPDES) program and the terms, conditions and requirements of the Clean Water Services Municipal Separate Storm Sewer System (MS4) permit.

Goal 7: OAR Chapter 660, Division 46 states a Large City must adopt inventories, policies, and protective measures to reduce risk to people and property from natural hazards. The IBTER area is characterized by steep slopes and includes an area mapped by the Oregon Department of Geology and Mineral Industries as an historic landslide area. This is documented in the Geological and Geotechnical Assessment Report prepared by PBS Engineering +Environmental in 2015 for the Westside planning project. Consistent with OAR 660-046-010(3)(c) development of middle housing in the IBTER presents greater risk to life and property compared with the development of detached single family dwellings by increasing the number of people exposed to identified hazard areas. Altering the natural landscape, hydraulics or hydrology compounds potential risk. The City seeks approval of the IBTER, in part, to prepare a comprehensive stormwater implementation approach to proactively address hydraulics and hydrology in the IBTER area ahead of allowing middle housing to minimize risk to persons and property. Since the 2007 Storm Drainage Master Plan does not address the IBTER area it is necessary to put protective measures in place to guide development.

The City believes the IBTER is consistent with OAR 660-046-0010(3) which provides authority cities to regulate middle housing to comply with protective measures (including plans, policies, and regulations) pursuant to statewide land use planning goals. A stormwater implementation plan will provide clear direction for storm drainage projects needed to support development. In addition, this work will also ensure compliance with OAR 660-046-0010(3)(e) which states “the Large City shall work to ensure that infrastructure serving housing is allowed is appropriately designed and sized to serve middle housing.” Without the IBTER and completion of the stormwater implementation plan compliance with OAR 660-046-0010(3)(e) is not assured.

Finally, DLCD points out that an IBTER is not the appropriate mechanism to limit middle housing development in area that is experiencing existing infrastructure deficiencies such that a city is not permitting any new development. The City agrees. As stated in OAR 660-046-0330(2) if a local government is currently unable to issue any permits for residential development due to a jurisdiction-wide significant infrastructure deficiency, the local government must address that situation through the moratorium process provided in ORS 197.505 through ORS 197.540.

The identified infrastructure deficiencies present in the proposed IBTER area do not create a situation where the City is unable to permit any new development. The City intends to continue to permit development consistent with existing zoning and applicable development standards. This includes construction of a single-family detached homes on a lot or parcel. The City’s concern is allowing development at densities higher than currently allowed by existing zoning by right in the IBTER area in the absence of clear policy direction for storm drainage improvements.