

Happy Valley, Oregon



Rock Creek Employment Center  
Transportation and Infrastructure  
Funding Strategy

April 13, 2020

Prepared by:



# TABLE OF CONTENTS

---

SECTION I: INTRODUCTION .....	1
A. Purpose .....	1
B. Work Completed .....	1
C. Report Framework .....	1
SECTION II: FUNDING FRAMEWORK.....	2
A. Project Area Description .....	2
B. Transportation network .....	4
Prior Transportation System Development Charge Project Assumptions.....	4
RCEC Transportation and Infrastructure Requirements.....	4
Scenario A: Network without Sunrise Extension .....	6
Scenario B: Network with Sunrise Extension .....	6
C. Sanitary Sewer, Storm Water and Water System .....	7
FUNDING ANALYSIS .....	8
A. Funding and Financing options .....	8
Transportation System Development Charge (TSDC) .....	10
Local Improvement Districts (LIDs) .....	11
Latecomer Agreements or Reimbursement Districts .....	13
Urban Renewal District (URD) .....	13
Exactions and Dedications .....	13
Utility Rates and Surcharges .....	14
Intergovernmental Agreements .....	14
Developer Agreements.....	14
Debt Financing.....	15
B. Evaluation of Funding Techniques.....	15
Capital Funding Amount Raised.....	15
Ease of Implementation.....	15
Administration Costs .....	16
Risk to City .....	16
Citywide Equity.....	16
C. Preliminary Recommendations .....	16
SECTION IV: RECOMMENDATIONS .....	18
A. Conceptual Funding Strategies .....	18
B. Next Steps .....	18
APPENDIX A: PROPORTIONAL SHARE ANALYSIS.....	20

APPENDIX B: HAPPY VALLEY SDC RATES .....21

APPENDIX C: LID CASE STUDIES .....22

# SECTION I: INTRODUCTION

---

## A. PURPOSE

With over 200 acres, the Rock Creek Employment Center (RCEC) is one of the largest planned employment centers in the Metro region. In order to accommodate new development, significant investment in public facilities is required. This report identifies potential funding and financing options that may be used to fully fund the roadway network and the sanitary sewer, storm water and domestic water infrastructure required to meet growth requirements for the study area. This report is intended to supplement the reports by Harper Houf Peterson Rhigellis, Inc (HHPR) and DKS Associates as they relate to forecasted infrastructure needs and costs for the area.

## B. WORK COMPLETED

FCS GROUP assisted the project team comprised of City of Happy Valley Public Works and Economic and Community Development staff, HHPR, and DKS Associates with compiling and evaluating the following information:

- Current and future land use assumptions and forecasted employment and housing growth for the study area;
- Roadway and infrastructure capital costs; and
- Identification and evaluation of potential funding strategies.

## C. REPORT FRAMEWORK

This report documents findings and recommendations, which are presented in the following sections.

- ◆ **Funding Framework.** This section describes the study area and summarizes the required public facility requirements.
- ◆ **Funding Options.** This section includes a summary and preliminary analysis of potential funding techniques that are available to fund the local public share of major capital facilities.
- ◆ **Recommendations.** This section identifies near-term actions that the City of Happy Valley can take to implement the recommended funding strategy.

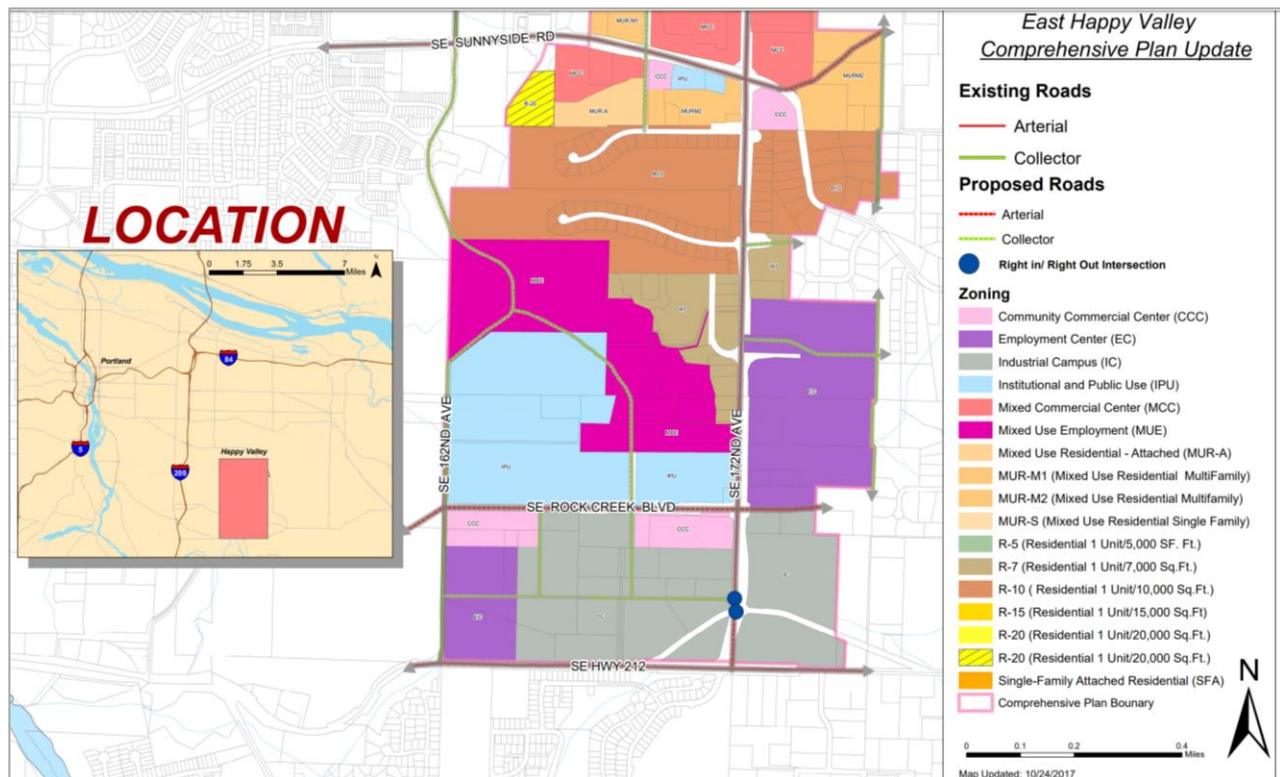
## SECTION II: FUNDING FRAMEWORK

This section describes the land use growth forecast assumptions and the transportation and infrastructure requirements for the RCEC study area.

### A. PROJECT AREA DESCRIPTION

Happy Valley and Clackamas County have conducted numerous planning, land use and transportation studies in advance of annexation and development of the RCEC over the past two decades. The RCEC is a subarea within the East Happy Valley Comprehensive Plan District (see **Exhibit 1**). Designated zone classifications include: Institutional and Public Use, Employment Center, Mixed Use Employment, Industrial Campus, and Community Commercial Center.

**Exhibit 1: East Happy Valley Land Use Zoning**



The RCEC includes some of the region's largest remaining vacant industrial and employment center sites. Current uses within the area include two North Clackamas School District No. 12 (NCSD#12) schools and sports fields: Adrienne C. Nelson High School (currently under construction) and Verne Duncan Elementary School. Adjacent land to the west has also been purchased for a future potential middle school site. Approximately half of the RCEC area is vacant or partially vacant at this time.

Existing and future development will benefit from the planned network of roads as well as sanitary sewer, storm water and domestic water infrastructure facilities. Roadway and infrastructure improvements will provide safe and efficient access for existing uses and enhance the marketability and development potential of the area.

To better understand the development potential of the RCEC and adjacent developable lands, FCS GROUP reviewed regional growth forecasts as represented by Metro traffic analysis zones (TAZs).

The Metro Regional Transportation Plan (RTP) and the current Happy Valley Transportation System Plan (TSP) assume that the study area (represented by traffic analysis zones 794, 798 and 799) will add approximately 915 households (dwellings) and 906 net new jobs over the 2015-2040 time frame (**Exhibit 2**).

### Exhibit 2 Projected Households and Employment in the RCEC Area

TAZ	Location	2015 HH	2040 HH	HH Change Proj.	2015 Employment	2040 Employment	Employment Change (Proj.)
794	RCEC	6	31	25	*	379	379
798	RCEC	12	216	204	115	465	350
799	North Carver	1,094	1,780	686	139	316	177
	<b>Total</b>	<b>1,112</b>	<b>2,027</b>	<b>915</b>	<b>254</b>	<b>1,160</b>	<b>906</b>

Notes:

\* Denotes data suppressed due to confidentiality restrictions.

TAZ = traffic analysis zone.

Source: Metro Scenario 1610, William 2 forecast, adopted by Metro Council in 2016.

Additional housing and jobs will eventually create more traffic. For this study, it is assumed that there will be 10 average daily vehicle trips (ADT) per new household (dwelling) and three ADT trips per employee. It is also assumed that 10% of the ADT will occur during the peak “rush hour”. As shown in **Exhibit 3**, based on these assumptions, at full buildout the study area would generate approximately 11,868 net new vehicle trips at buildout. By applying a peak-hour trip factor, these net new trips equate to 1,187 peak-hour vehicle trips (PHVT). It is anticipated that many of these net new trips will utilize the planned transportation and pathway network that has been identified as part of this study.

### Exhibit 3 Projected Net New Vehicle Trips in RCEC Benefit Area

TAZ	Location	Net new HH Trips	Net new Emp. Trips	Proj. Total Trips (ADT)*	Net New Peak-hour Trips**
794	RCEC	250	1,137	1,387	139
798	RCEC	2,040	1,050	3,090	309
799	North Carver	6,860	531	7,391	739
	<b>Total</b>	<b>9,150</b>	<b>2,718</b>	<b>11,868</b>	<b>1,187</b>

Notes:

\* Assumes average of 10 trips per household and 3 trips per job.

\*\* Assumes 10% peak-hour factor.

TAZ = traffic analysis zone. ADT = average daily vehicle trip.

## B. TRANSPORTATION NETWORK

### Prior Transportation System Development Charge Project Assumptions

The adopted Happy Valley Transportation System Development Charge (TSDC) Methodology Report (November 2017) assumes that traffic in the City will increase by 16,900 peak-hour trip-ends over a 20-year time frame.

As shown in **Exhibit 4**, the adopted TSDC capital project list currently includes medium and long term transportation projects within the RCEC study area. The largest planned project includes the 162<sup>nd</sup> Ave. extension (with a new bridge over Rock Creek) at an estimated cost of \$19.6 million.

### Exhibit 4: Existing RCEC Area TSDC Transportation Improvements

TSDC Project #	Description	Timing	TSDC Original Cost (2017 \$)	Auto Costs	Pedestrian Costs	Bike Costs	Growth Share	Growth Share Total	Total (\$)
I4	Add second EB turn lane at Rock Creek BLVD/172nd Ave	Medium	\$ 200,000	\$ 200,000	\$ -	\$ -	100%	\$ 200,000	
I7	Add traffic signal at Rock Creek Blvd/162nd Ave	Medium	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -	100%	1,000,000	
I7	Add traffic signal at Rock Creek Blvd/162nd Ave	Medium	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -	100%	1,000,000	
R16	Rock Creek Blvd. West Extension	Medium	\$ 2,600,000	\$ 1,318,841	\$ 828,986	\$ 452,173	100%	2,600,000	
R17	Rock Creek Blvd. East Extension	Medium	\$ 2,800,000	\$ 1,420,290	\$ 892,754	\$ 486,956	100%	2,800,000	
R4	SE 162 Ave Extension (OR-212 to Talaron/157 <sup>th</sup> Ave.)	Long	\$ 19,600,000	\$ 9,942,029	\$ 6,249,275	\$ 3,408,696	100%	\$ 19,600,000	
<b>Total</b>			<b>\$ 27,200,000</b>	<b>\$ 14,881,160</b>	<b>\$ 7,971,015</b>	<b>\$ 4,347,825</b>			<b>\$ 27,200,000</b>

Source: Happy Valley Transportation System Development Charge Methodology Report, Nov. 2017.

### RCEC Transportation and Infrastructure Requirements

Based on the projected amount of development, DKS Associates identified the collector and arterial roadway network that is required to handle future trip growth and mobility requirements. HHPR prepared cost estimates for the planned roadway network under two scenarios.

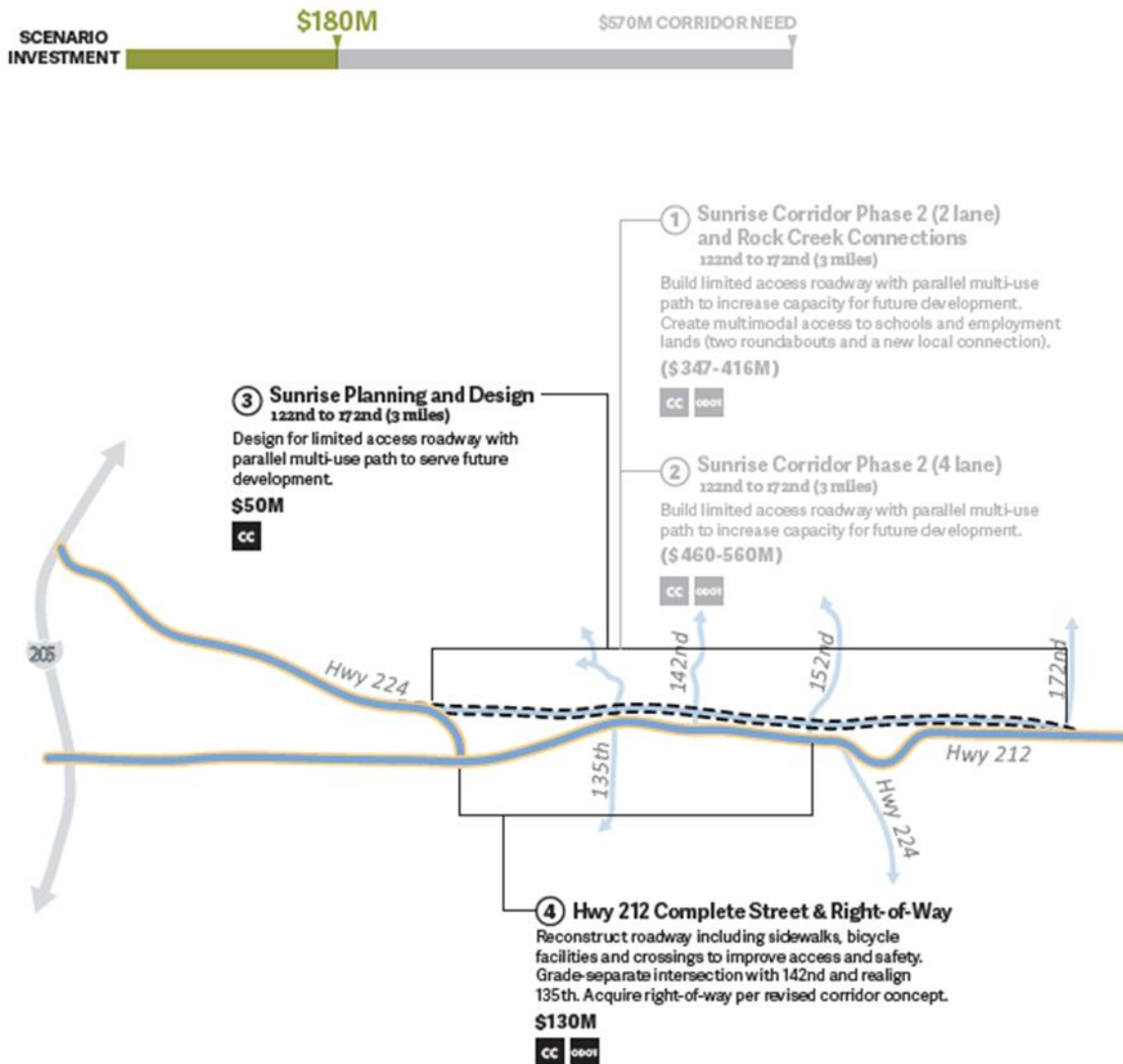
- Scenario A: Transportation Network without the Sunrise Corridor Extension
- Scenario B: Transportation Network with the Sunrise Corridor Extension

The Sunrise Corridor refers to the timing of a planned three-mile extension of the roadway between 122<sup>nd</sup> Avenue and 172<sup>nd</sup> Avenue. For additional supporting information, please refer to the following Metro 2020 Transportation Tier 1 Corridor Investment Task Force Summary; and the HHPR Transportation and Infrastructure Cost Memorandum dated March 27, 2020.

TASK FORCE RECOMMENDATION: TIER 1 CORRIDOR INVESTMENT PROFILE

## Hwy 212/Sunrise Corridor

**Highway 212 and the Sunrise Corridor** connect future residential and employment areas to existing job centers near I-205. The potential future connection is intended to provide access to jobs and affordable housing in Clackamas County and serve as an alternative connection from the future Clackamas-to-Columbia corridor to I-205. The corridor supports freight movement to US 26, provides connections to recreation areas, and is an important bicycle connector. There were 48 serious injuries and fatalities on this corridor between 2007-2017. 32% of this corridor is in an equity focus area.





## Scenario A: Network without Sunrise Extension

If the Sunrise Corridor is not extended to 172<sup>nd</sup> Avenue, the planned collector and arterial network to address future growth would require nine separate roadway improvements with an estimated capital cost of \$84.4 million (**Exhibit 5**).

DKS Associates performed supplemental traffic analysis to determine how the planned transportation improvements would address local (City/County) vs. Regional (Metro/State) capacity requirements. With Scenario A, the supplemental traffic analysis indicates that the three Highway 212 improvements would address regional capacity needs (58%) more than local requirements (42%) based on future trip shares (see **Appendix A**). If this proportional share is used as a proxy for allocating cost responsibilities, the total cost of constructing the transportation network would be approximately \$70.3 million for local agencies and \$14.1 million for regional agencies (**Exhibit 5**).

In addition to these roadway improvements, local sanitary sewer, waterline and recycled water (purple pipe) improvements are estimated to cost \$9.5 million. While the sanitary sewer and water improvements are expected to be 100 percent funded through SDCs, most roadway improvements do not have dedicated sources of funding.

### Exhibit 5

Potential TSDC Capital Project List: Scenario A without Sunrise Corridor

Roadway Network	Total Cost	Proportional Share %		Proportional Share \$	
		Local	Regional	Local	Regional
SE 162nd Ave. Extension (OR 212 to Taralon)	\$20,900,000	100%	0%	\$20,900,000	\$0
Hwy 212 Improvements (OR 212/224 Jct. to 162nd)	\$16,900,000	42%	58%	\$7,175,185	\$9,724,815
Hwy 212 Improvements (162nd to 172nd)	\$6,600,000	42%	58%	\$2,802,143	\$3,797,857
Hwy 212/ 162nd Roundabout	\$1,000,000	42%	58%	\$424,567	\$575,433
SE Rock Creek Blvd (162nd to 172nd)	\$7,500,000	100%	0%	\$7,500,000	\$0
SE Parklane Dr. (162nd to Collector 3)	\$10,100,000	100%	0%	\$10,100,000	\$0
Collector-1 (172nd to Collector-2)	\$9,400,000	100%	0%	\$9,400,000	\$0
Collector-2 (172nd to Collector-1)	\$3,300,000	100%	0%	\$3,300,000	\$0
Collector-3 (162nd to 172nd)	\$8,700,000	100%	0%	\$8,700,000	\$0
<b>Subtotal Roadway Network</b>	<b>\$84,400,000</b>			<b>\$70,301,895</b>	<b>\$14,098,105</b>
<b>Sanitary and Water Cost Estimate</b>					
Sanitary Sewer with RCEC	\$1,900,000	100%	0%	\$1,900,000	\$0
Waterline Improvements within RCEC	\$7,000,000	100%	0%	\$7,000,000	\$0
Purple Pipe (162nd) within RCEC	\$600,000	100%	0%	\$600,000	\$0
<b>Subtotal Sanitary and Water</b>	<b>\$9,500,000</b>			<b>\$9,500,000</b>	<b>\$0</b>
<b>Total</b>	<b>\$93,900,000</b>			<b>\$79,801,895</b>	<b>\$14,098,105</b>

Source: Cost estimates based on HHPR RCEC Memorandum, March 27, 2020;

Proportional share analysis by DKS Associates, based on Metro 2040 demand models developed for Sunrise Gateway project.

## Scenario B: Network with Sunrise Extension

With the Sunrise Corridor extension, the need for Highway 212 improvements would be alleviated. Under Scenario B, six separate local transportation elements would be required at a total cost of \$59.9 million. Since the Sunrise Corridor would address regional capacity requirements, the transportation projects required in this scenario would be needed to address local capacity only (**Exhibit 6**).

As with Scenario A, in addition to these roadway improvements, local sanitary sewer, waterline and recycled water (purple pipe) improvements are estimated to cost \$9.5 million.

## Exhibit 6

### Capital Cost Assumptions, Scenario B with Sunrise Corridor

Roadway Network	Total Cost	Proportional Share %		Proportional Share \$	
		Local	Regional	Local	Regional*
SE 162nd Ave. Extension (OR 212 to Taralon)	\$20,900,000	100%	0%	\$20,900,000	\$0
Hwy 212 Improvements (OR 212/224 Jct. to 162nd)	n/a				
Hwy 212 Improvements (162nd to 172nd)	n/a				
OR 212/ 162nd Roundabout	n/a				
SE Rock Creek Blvd (162nd to 172nd)	\$7,500,000	100%	0%	\$7,500,000	\$0
SE Parklane Dr. (162nd to Collector 3)	\$10,100,000	100%	0%	\$10,100,000	\$0
Collector-1 (172nd to Collector-2)	\$9,400,000	100%	0%	\$9,400,000	\$0
Collector-2 (172nd to Collector-1)	\$3,300,000	100%	0%	\$3,300,000	\$0
Collector-3 (162nd to 172nd)	\$8,700,000	100%	0%	\$8,700,000	\$0
<b>Subtotal Roadway Network</b>	<b>\$59,900,000</b>			<b>\$59,900,000</b>	<b>\$0</b>
<b>Sanitary and Water Cost Estimate</b>					
Sanitary Sewer with RCEC	\$1,900,000	100%	0%	\$1,900,000	\$0
Waterline Improvements within RCEC	\$7,000,000	100%	0%	\$7,000,000	\$0
Purple Pipe (162nd) within RCEC	\$600,000	100%	0%	\$600,000	\$0
<b>Subtotal Sanitary and Water</b>	<b>\$9,500,000</b>			<b>\$9,500,000</b>	<b>\$0</b>
<b>Total</b>	<b>\$69,400,000</b>			<b>\$69,400,000</b>	<b>\$0</b>

Source: Cost estimates based on HHPR RCEC Memorandum, March 27, 2020; \* excludes Sunrise Corridor.

proportional share analysis by DKS Associates, based on Metro 2040 demand models developed for Sunrise Gateway project.

## C. SANITARY SEWER, STORM WATER AND WATER SYSTEM

The planned sanitary sewer and water infrastructure improvements would be the same under both scenarios. Local sanitary sewer, waterline and recycled water (purple pipe) improvements are estimated to cost \$9.5 million. Please refer to the HHPR Memorandum dated March 27, 2020 for additional detail.

The Sunrise Water Authority (SWA) is the designated utility provider for water system improvements and has provided input that have been included with the HHPR estimates shown above. According to SWA, the costs for the water system for mainline and pump station improvements are to be recovered by system development charge and connection charge revenues. Water distribution lines (at or below 12-inch diameter) are expected to be installed as frontage improvements are established at the cost of the development.

Clackamas County Water Environmental Services (WES) is responsible for providing sanitary sewer disposal, treatment and operations, as well as managing watershed health and quality for its service areas. A portion of the Rock Creek sanitary sewer interceptor line is already in place and the current WES Capital Improvement Program anticipates extension of this interceptor northward by approximately 2,000 feet over the next 5 years. According to Clackamas WES, the current sanitary sewer SDCs and connection charges in Zone 2 are adequate for funding planned interceptor extensions. Developers are responsible for constructing connections (less than 12-inch diameter) to the interceptor system at their expense. Depending upon the distance required to connect, developers can potentially get partially reimbursed through formation of a local reimbursement district.

# FUNDING ANALYSIS

---

This section of the report identifies current and potential local funding techniques that are available to Happy Valley to fund planned transportation improvements.

## A. FUNDING AND FINANCING OPTIONS

Funding options used most frequently in Oregon include:

- ◆ Transportation System Development Charges
- ◆ Local Improvement District
- ◆ Latecomers District (aka. Reimbursement District)
- ◆ Urban Renewal District (tax increment revenues)
- ◆ Transportation Utility Charges
- ◆ Dedications and Exactions
- ◆ Developer Agreements
- ◆ Intergovernmental Agreements
- ◆ Local Fuel Taxes
- ◆ Grants (state or federal)

These funding resources are often combined to fund specific capital improvements (through pay-as-you-go funding) or to cover annual debt financing costs. As shown in **Exhibit 7**, there are limitations that determine how monies can be used, and there are advantages and disadvantages with each funding technique.

The City may desire to advance finance a transportation project using various means or intermediary resources. Most common forms of debt financing include:

- ◆ Private bank loans
- ◆ Limited General Obligation Bonds (non-voter-approved full faith and credit bonds)
- ◆ General Obligation Bonds (voter approved bonds, secured by property taxes)
- ◆ State loans (e.g., Oregon Special Public Works Fund)

The preferred mix of funding and financing requires careful consideration of the project phasing so that public facilities can be provided in a manner that is generally concurrent with development activity.

## Exhibit 7 Summary of Local Capital Project Funding and Financing Techniques

Technique	Considerations					
	Funding or Financing	Area of Benefit	Lead	Capital Funding Level	Advantages	Disadvantages
Transportation TSDCs (city-wide)	Funding	Citywide	City Council	\$\$\$	Existing citywide TSDC can be updated to include RCEC projects	RCEC projects may not have priority over other city projects. SDC revenue lags behind improvement needs.
Supplemental TSDCs (RCEC)	Funding	RCEC	City Council	\$\$	New District TSDC could dedicate funds to RCEC	SDC revenue lags behind improvement needs
Local Improvement Dist.	Funding	RCEC	City Council with consent from property owners	\$	Addresses specific capital improvements; stable income streams; equitable allocation results in support by affected prop. owners; low risk from city perspective	Liens on property may encumber land transactions; LIDs still require advance financing from city or developer
Reimbursement District	Funding	RCEC	City Council with consent from property owners	\$	Like LID but no stable income stream. No liens on properties garners support from land owners	Requires advance financing to pay for capital facilities without stable revenue stream
Urban Renewal District (URD)	May be Both	RCEC	URA, City Council	\$\$	New URD can generate funds as development occurs; can be used as a funding match	Tax increment revenues lag behind development
Property Easement Dedications	In kind	Project Specific	City Council & Developer	\$	Developer provides easements for future projects as a condition of approval; can be SDC eligible	City must construct capital improvements
Dedications and Exactions	In kind	Project Specific	City Council & Developer	\$	Developer constructs roads to city standard as a condition of approval; may include dedications or exactions; or provisions where investment is 100% credit eligible	Usually limited to subdivisions or major developments
Development Agreement (with special assessment)	Funding	Project and Area Specific	City Council & Developer	\$\$	Developer or City provides advance financing for specific improvements not on TSDC project list, which may be 100% credit eligible	Risk of non performance by developers
Intergovernmental Cost Sharing Agreements	Funding	Project Specific	City, County, Metro & ODOT	\$\$	Project-specific non-local funding source	High legal costs (documents) and multi-agency political complications
Local Fuel Taxes	Funding	Citywide	City Council & Voters	\$	Flexible funding source for capital or maintenance	Usually requires public vote. Very limited capital funding potential
Grants	Funding	Project Specific	City Council & Affected Agencies	\$	Project-specific non-local funding source	Grants are usually very competitive with limited funding availability
General Obligation Bonds (voter approved)	Financing	Project Specific	City Voters	\$\$\$	Project-specific funding source with dedicated source of stable revenue (property tax). Limited risk to City	Public voter referendum has admin cost to City with no guaranteed approval
Full Faith & Credit Bonds (councilmatic)	Financing	Project Specific	City Council	\$\$	Project-specific funding source if dedicated revenues are committed.	Encumbers City debt capacity
Bank Loans	Financing	Project Specific	City Council	\$\$	Project-specific funding source	Interest rates are higher than Bond issues
State Bank Loans	Financing	Project Specific	City Council and State	\$\$	Project-specific funding source of up to \$10M	Interest rates are higher than private bank loans.

Relative Funding Potential: \$ low; \$\$ Medium; \$\$\$ High.

## Transportation System Development Charge (TSDC)

Oregon Revised Statutes (ORS) 223.297 to 223.314 authorize local governments to establish system development charges (SDCs) as one-time fees on new development usually paid at the time of building permit issuance. SDCs are intended to recover a fair share of the capital improvements, including the cost of existing and planned facilities that provide capacity to serve future growth. Public facilities are required to be a “qualified public improvement” per ORS 223.309, and governments must have an ordinance or resolution that establishes or modifies an improvement fee and provides credit against such fee for the construction of a qualified public improvement.

The City of Happy Valley current TSDC for FY 2019/20 is \$9,610 per PHVT (per single family detached home). As indicate in Appendix B, SDCs vary by development type.

As indicated in **Exhibit 8**, based on the current TSDC, future development within the study area is expected to generate approximately \$11.4 million (at buildout) before credits or discounts are applied. In light of the COVID-19 global pandemic, a lower growth rate that results in 50% buildout over 20 years would result in approximately \$5.7 million in TSDC revenues. The City can dedicate these revenues to any eligible qualified public improvement.

### Exhibit 8: Potential TSDC Revenues, RCEC Benefit Area (TAZs 794, 798 and 799)

TAZ	Location	Net new HH Trips	Net new Emp. Trips	Proj. Total Trips (ADT)*	Net New Peak-hour Trips**	Gross TSDC Revenues at full bulidout***	Gross TSDC Revenues at 50% bulidout
794	RCEC	250	1,137	1,387	139	\$1,332,907	\$666,454
798	RCEC	2,040	1,050	3,090	309	\$2,969,490	\$1,484,745
799	North Carver	6,860	531	7,391	739	\$7,102,438	\$3,551,219
	<b>Total</b>	<b>9,150</b>	<b>2,718</b>	<b>11,868</b>	<b>1,187</b>	<b>\$11,404,835</b>	<b>\$5,702,418</b>

Notes:

\* Assumes average of 10 trips per household and 3 trips per job.

\*\* Assumes 10% peak-hour factor.

\*\*\* Based on \$9,610 TSDC per peak hour trip; amounts shown are before credits or discounts.

TAZ = traffic analysis zone. ADT = average daily vehicle trip.

**Since this study includes planned transportation collector facility improvements that have not yet been formally adopted as part of the TSDC Methodology Report, it is recommended that the City update its TSDC capital project list and methodology report to reflect these study findings.**

The City has the four main TSDC options to consider.

- **Option 1 Amend TSDC Project List:** requires adoption of a resolution with amendment to the TSDC Capital Project List to reflect additional RCEC projects listed in **Exhibit 9**.
- **Option 2 Revise/Adopt new Citywide TSDC Methodology:** by adding the local share of capital projects which have not yet been included in the City’s existing TSDC Capital Projects List, this option could result in a TSDC Eligible Cost Basis increase of at least \$49.4 million. If the citywide projected “growth trip ends” remains at the level assumed by the 2017 TSDC Methodology Report (16,900 PHVT), this option would result in an increase in the citywide TSDC by approximately \$2,923 per peak-hour vehicle trip (PHVT). Since current TSDC rates are \$9,610 per PHVT, TSDCs would increase to approximately \$12,533 per PHVT.

- **Option 3 Create a RCEC TSDC Overlay District:** this option could result in a TSDC Eligible Cost Basis increase of at least \$49.4 million. If the growth in RCEC District projected “growth trip ends” is as estimated in the current TSDC Methodology Report (1,187 PHVT at buildout), this option would result in a new District TSDC of \$41,617 per PHVT. Since current TSDC rates are \$9,610 per PHVT, future development in the RCEC would be charged over \$51,000 per PHVT. This policy is not recommended as it would result in the highest TSDC in Oregon and would inadvertently cause a moratorium on future development.
- **Option 4, Hybrid Methodology with New Overlay District:** by adding selected projects on the Citywide TSDC Project List and placing other on a RCEC District TSDC Project List, the City could increase the citywide TSDC by an established rate (e.g., \$2,000 per PHVT within the City) and create a special RCEC TSDC overlay rate (e.g., supplemental \$3,000 per PHVT within the District) which would generate revenues for specific projects within the RCEC. This policy is not recommended as it would still result in a very high TSDC within the RCEC of approximately \$14,610 per PHVT which could inadvertently preempt development feasibility.

**It is recommended that the City pursue Option 2, which would increase the citywide TSDC by up to approximately \$12,533 per PHVT.** This would put Happy Valley’s TSDCs slightly higher than Sherwood (\$11,144) but below Wilsonville (\$13,357) and Lake Oswego (\$15,460).

#### Local Improvement Districts (LIDs)

Cities in Oregon have the statutory authority to establish local improvement districts (LIDs) and levy special assessments on the benefited property to pay for improvements. These assessments are payable in annual installments for up to 30 years. LIDs are used for capital improvement projects that benefit numerous large tenants and/or private property owners. Please refer to Chapter 3.12 of the Happy Valley Code for additional information pertaining to LID Assessments.

The primary advantage of LIDs from the City’s perspective is the ability to obtain a consistent level of revenue early in the development process. A LID charge, if transferable, can also provide property owners with a certain degree of financial flexibility compared to SDCs. Financial intermediaries such as banks now view LIDs as a more reliable funding source than others (such as SDCs) and are more apt to provide loans based on future LID revenue streams.

Happy Valley has successfully implemented LIDs in the past, as shown in the following case study. A 2019 study by FCS GROUP for the City of Happy Valley determined that for every \$1M in LID assessments, affected property owners in RCEC Zone A (**Exhibit 9**), would be assessed approximately \$5,000 per acre (one time charge). If paid monthly over 15 years, this \$1M LID assessment would equate to approximately \$43 per acre for each property within Zone A.



**City of Happy Valley  
162nd Ave Extension  
Benefit Zone**

Legend:

- 162nd Avenue Extension
- Title 3 Lands
- Slope Greater Than 25 Percent
- Benefit Zone

Scale: 0 to 1000 Feet

Map Labels:

- SE Honey Suckle Way
- SE Finch Ln
- SE Starling Ct
- SE Kingbird Dr
- SE Chickadee Ct
- SE Fox Glen Ct
- SE Stoneybrook
- SE Rock Creek Ct
- SE Kingsbury Way
- Taron Dr
- SE 155th Dr
- SE 154th Dr
- SE 153rd Dr
- SE 152nd Dr
- SE 151st Dr
- SE 150th Dr
- SE 149th Dr
- SE 148th Dr
- SE 147th Dr
- SE 146th Dr
- SE 145th Dr
- SE 144th Dr
- SE 143rd Dr
- SE 142nd Dr
- SE 141st Dr
- SE 140th Dr
- SE 139th Dr
- SE 138th Dr
- SE 137th Dr
- SE 136th Dr
- SE 135th Dr
- SE 134th Dr
- SE 133rd Dr
- SE 132nd Dr
- SE 131st Dr
- SE 130th Dr
- SE 129th Dr
- SE 128th Dr
- SE 127th Dr
- SE 126th Dr
- SE 125th Dr
- SE 124th Dr
- SE 123rd Dr
- SE 122nd Dr
- SE 121st Dr
- SE 120th Dr
- SE 119th Dr
- SE 118th Dr
- SE 117th Dr
- SE 116th Dr
- SE 115th Dr
- SE 114th Dr
- SE 113th Dr
- SE 112th Dr
- SE 111th Dr
- SE 110th Dr
- SE 109th Dr
- SE 108th Dr
- SE 107th Dr
- SE 106th Dr
- SE 105th Dr
- SE 104th Dr
- SE 103rd Dr
- SE 102nd Dr
- SE 101st Dr
- SE 100th Dr
- SE 99th Dr
- SE 98th Dr
- SE 97th Dr
- SE 96th Dr
- SE 95th Dr
- SE 94th Dr
- SE 93rd Dr
- SE 92nd Dr
- SE 91st Dr
- SE 90th Dr
- SE 89th Dr
- SE 88th Dr
- SE 87th Dr
- SE 86th Dr
- SE 85th Dr
- SE 84th Dr
- SE 83rd Dr
- SE 82nd Dr
- SE 81st Dr
- SE 80th Dr
- SE 79th Dr
- SE 78th Dr
- SE 77th Dr
- SE 76th Dr
- SE 75th Dr
- SE 74th Dr
- SE 73rd Dr
- SE 72nd Dr
- SE 71st Dr
- SE 70th Dr
- SE 69th Dr
- SE 68th Dr
- SE 67th Dr
- SE 66th Dr
- SE 65th Dr
- SE 64th Dr
- SE 63rd Dr
- SE 62nd Dr
- SE 61st Dr
- SE 60th Dr
- SE 59th Dr
- SE 58th Dr
- SE 57th Dr
- SE 56th Dr
- SE 55th Dr
- SE 54th Dr
- SE 53rd Dr
- SE 52nd Dr
- SE 51st Dr
- SE 50th Dr
- SE 49th Dr
- SE 48th Dr
- SE 47th Dr
- SE 46th Dr
- SE 45th Dr
- SE 44th Dr
- SE 43rd Dr
- SE 42nd Dr
- SE 41st Dr
- SE 40th Dr
- SE 39th Dr
- SE 38th Dr
- SE 37th Dr
- SE 36th Dr
- SE 35th Dr
- SE 34th Dr
- SE 33rd Dr
- SE 32nd Dr
- SE 31st Dr
- SE 30th Dr
- SE 29th Dr
- SE 28th Dr
- SE 27th Dr
- SE 26th Dr
- SE 25th Dr
- SE 24th Dr
- SE 23rd Dr
- SE 22nd Dr
- SE 21st Dr
- SE 20th Dr
- SE 19th Dr
- SE 18th Dr
- SE 17th Dr
- SE 16th Dr
- SE 15th Dr
- SE 14th Dr
- SE 13th Dr
- SE 12th Dr
- SE 11th Dr
- SE 10th Dr
- SE 9th Dr
- SE 8th Dr
- SE 7th Dr
- SE 6th Dr
- SE 5th Dr
- SE 4th Dr
- SE 3rd Dr
- SE 2nd Dr
- SE 1st Dr

Parcel Labels:

- EMMERSON JULIAN P 22E12A 00100
- NORTH CLACKAMA S SCHOOL DISTRICT 22E12A 00200
- PROVIDENCE HEALTH & SERVICES 22E12A 01000
- PEDERSEN JANET M 22E12D 00200
- WEAVER RUSSELL J & KATHLEEN D 23E06C 08001
- N CLACKAMA S SCH DIST #12 23E06C 08000
- N CLACKAMA S SCH DIST #12 23E07B 00501
- N CLACKAMA S SCH DIST #12 23E07B 00500
- NORTH CLACKAMA S SD #12 23E07B 00800
- HANNA ANTHONY E & JANELA 23E07B 00900
- ROBBINS EDY THE F TRUSTEE 23E07B 01000
- ROBBINS EDY THE F TRUSTEE 23E07B 01200
- EMMERT TEXAS PROPERTIES LLC 23E07B 01001

## Latecomer Agreements or Reimbursement Districts

Similar to LIDs, cities or developers can negotiate arrangements to get reimbursed for providing upfront capital improvements. The party that advances the financing is then partially reimbursed as new land use development approvals are granted within the district over a period that usually extends up to 10 years. With reimbursement districts, there is no lien on property and no guarantee that future revenues will be as steady and reliable as in the case with a LID or property tax assessments.

## Urban Renewal District (URD)

The City of Happy Valley recently adopted an urban renewal district (URD) within East Happy Valley. The URD project list has several transportation projects as part of its capital improvement program, including the 162<sup>nd</sup> Avenue South (extension) project at a cost of \$18.64 million.<sup>1</sup> The URD plan assumes that \$3.0 million of that project would be funded using TSDCs and the remainder through a mix of URD and other revenue sources.

In many cases, URD funds are combined with other local funding sources to leverage non-local grants or loans to pay for needed infrastructure improvements. This could include capital facilities, land/right-of-way acquisition, and loans or grants.

## Exactions and Dedications

An exaction is a requirement that an owner give up a property right, such as 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 powers they possess. An exaction is constitutional if it complies with the “rough proportionality” and “nexus” measures, which were established in landmark cases (*Dolan v. City of Tigard*, *Nollan v. California Coastal Commission*) which requires:

- The exaction must advance a legitimate state (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 dedicate additional right of way and construct a public sidewalk along a roadway fronting their property when “major” improvements to the property are made.

The laws are always evolving, so 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.

Exactions and dedications are typically applied to “local neighborhood facilities” such as minor streets and sidewalks that are directly related to a property being developed or improved. As such,

---

<sup>1</sup> The cost estimate for 162<sup>nd</sup> Ave. that was included in the URD Plan was a planning level estimate that is now being refined.



major public facilities, such as collector roads and water/sewer mains and pump stations are better addressed (and funded) using one or more of the other funding techniques described herein.

### Utility Rates and Surcharges

Utility rates are a common way to raise local revenues for required infrastructure facilities and operations. They require approval and adoption by the service district and must meet state and local regulations. Utility rates are paid for by customers within the service area and typically are included in monthly or bi-monthly utility bills for other services. In addition to a “base rate”, the utility may also assess a local rate surcharge for water and sanitary sewer services.

Currently, the City of Happy Valley does not charge a transportation utility and the Sunrise Water Authority and Clackamas WES do not typically have a surcharge on water or sewer bills. However, should the City proceed with the adoption of a transportation utility fee, that revenue could generate additional roadway maintenance funds that in-turn “free up” other funding that could be pledged towards future capital projects.

### Intergovernmental Agreements

Just as cities have urban growth management agreements between cities, counties and utility providers to guide how potential annexation areas are to be served, governments can also adopt cost-sharing or “full funding” agreements for specific projects. In such instances, multiple government entities may agree to coordinate project delivery through an agreement and commit to funding and maintaining identified project elements.

As noted in the analysis of Scenario A, in light of the expected regional (Metro and ODOT) capacity benefits that would result once improvements are made to Highway 212/224, there is an opportunity to explore an intergovernmental agreement that would orchestrate design and also allocate costs for construction. Each entity would be responsible for contributing their portion of the project cost through whichever means they determine to be the most feasible and prudent.

### Developer Agreements

A development agreement is a contract between a local jurisdiction and a person who owns or controls property within the jurisdiction, detailing the obligations of both parties and specifying the standards and conditions that will govern development of the property.

A Development Agreement typically 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 ROW and/or public facilities in exchange for development entitlements
- Private construction of street (to public standards) and limited operation and maintenance (O&M) for a defined period of time.
- Non-remonstrance towards adoption of existing or future fees and charges

- Developer may agree to provide advance financing for a portion of the project and request formation of a LID or Latecomers charge for a share of costs they incur
- Vested rights (time of performance)
- Security bond
- Flexibility (minor and major amendments to the agreement)

Various forms of annexation and development agreements have been utilized by Oregon cities, including Hillsboro and Wilsonville for urbanizing areas (South Hillsboro and Frog Pond West). In these cases, local ordinances were adopted to clearly identify the benefit district; public facility improvements; capital costs; and funding techniques that will be applied to those locations, such as SDC overlays, LIDs and special assessments.

The City already requires non-remonstrance agreements (waiving rights to oppose a future formation of a Reimbursement District or Local Improvement District) from property owners that desire to be annexed into the City.

### Debt Financing

The City of Happy Valley may incur debt to pay for capital facilities, such as streets and other “public” projects deemed to have a community benefit. The most typical forms of financing public infrastructure are through bonds or bank loans. Bonds are a common means of financing projects whose benefits are not confined to a single local district.

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.

## B. 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 impact fees and Road Improvement Districts, 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., citywide 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 SDCs 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 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 Happy Valley 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 citywide 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, 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/fee 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).

## C. PRELIMINARY RECOMMENDATIONS

A total score was computed for each funding technique based on the number of “\$’s” assigned to each criteria. The total score was then used to rank each funding scenario. Based on the results shown in **Exhibit 10**, the funding techniques with the highest scores are recommended for additional consideration:

- Right-of-way dedications
- Intergovernmental cost sharing agreement for Highway 212 improvements (e.g., City/ODOT)
- Transportation System Development Charge (citywide)
- Supplemental Transportation System Development Charge (District)
- Urban Renewal District, Tax Increment Financing (for 162<sup>nd</sup> Ave., bridge)
- Developer/Annexation Agreement with Special Assessment (for 162<sup>nd</sup> Ave. bridge)
- Transportation Utility Fee (citywide)

## Exhibit 10 Evaluation of Selected Funding Techniques

Funding Tool	Facilities Targeted	Evaluation Considerations							
		Area of Benefit	Approval Body	Capital Funding Raised	Ease of Implementation	Low Admin. Costs	Low Risk to City	Positive Citywide Equity	Total Score
ROW Dedications	Transportation, Water, Storm, Sewer	Project Specific	City Council & Prop. Owners	\$	++++	++++	++++	++++	23
Intergovernmental Agreement with cost sharing (City/ODOT)	Transportation	Project Specific	City Council & ODOT	\$\$\$	\$	\$\$\$	++++	++++	17
Sytem Development Charge (city wide)	Transportation	Citywide	City Council	\$\$\$	++++	++++	\$\$\$	\$\$\$	17
Sytem Development Charge (district)	Transportation	District	City Council	\$	++++	++++	\$\$\$	++++	16
Urban Renewal District (tax increment financing)	Transportation	District	Urban Renewal Authority	\$\$	\$\$\$	\$\$\$	\$	++++	15
Utility Fee	Transportation, Stormwater	Citywide	City Council	\$	\$	\$	++++	++++	15
Developer Agreements with special assessment	Transportation	Project or Area Specific	City Council & property owners/developers	\$	\$\$\$	\$\$\$	\$	++++	14
Local Improvement District	Transportation	District	City Council & Prop. Owners	\$	\$	\$	\$\$\$	++++	13
Reimbursement Districts or Late Comers Charge	Transportation, Sewer, Stormwater	District	City Council & Prop. Owners	\$	\$\$\$	\$	\$	++++	11
Local Fuel Tax	Transportation	Citywide	City Council	\$	\$	\$\$\$	\$	\$	10

**Legend:**

+ least positive

++++ most positive

## SECTION IV: RECOMMENDATIONS

---

### A. CONCEPTUAL FUNDING STRATEGIES

The recommended funding strategy varies by improvement scenario. The funding strategy for Scenario A, without the Sunrise Corridor recommends a mix of regional/state cost sharing and local TSDC increases to fully fund the recommended transportation improvements. Scenario B, with the Sunrise Corridor assumes 100% local funding through a mix of TSDC, URD and other special assessments (**Exhibit 11**).

These conceptual funding scenarios assume the local citywide TSDCs increase from their current level of \$9,610 per PHVT by approximately \$2,923 with Scenario A and by \$3,189 with Scenario B. This would result in citywide TSDCs ranging from \$10,802 to \$11,068. This would put Happy Valley's TSDCs slightly below Sherwood (\$11,144), and well below Wilsonville (\$13,357) and Lake Oswego (\$15,460).

Under Scenario B without the Sunrise Corridor extension, the addition of the 162<sup>nd</sup> Avenue bridge and extension would increase the local transportation costs by approximately \$10.5 million relative to Scenario A. To help keep TSDCs in line with other jurisdictions, additional local funding resources are recommended, including use of urban renewals funds as well as special assessments within the RCEC. These special assessments could be in the form of a supplemental TSDCs, LID or special assessment (through a districtwide development agreement).

The result of this funding scenario would be a citywide TSDC of approximately \$11,068 and a supplemental assessment within the RCEC special district (includes TAZs 794, 7987, 799) that equates to approximately \$1,685 per PHVT. For comparison purposes, the special assessments included within the South Hillsboro and Frog Pond West Wilsonville subdistricts range from \$12,000 to \$14,000 per PHVT.

### B. NEXT STEPS

The findings and recommendations provided in this report are for informational and discussion purposes only. As findings are shared with city officials, property owners, and other interested stakeholders, Happy Valley staff can make informed decisions about the likelihood and timing of any potential funding technique.

It is recommended that city staff consider the following actions to further refine this funding strategy:

1. Obtain input from Metro, Clackamas County and ODOT representatives regarding the potential for regional cost sharing for Highway 212/224 improvements;
2. Involve city officials and property owners to ascertain local funding preferences;
3. Implement a citywide TSDC methodology update and amendments to the capital project list of eligible improvements;
4. Continue to pursue other local funding sources, such as transportation utility fees and urban renewal funding to be used as a match for leveraging non-local grants.
5. Coordination with Sunrise Water Authority and Clackamas WES regarding the timing of sanitary sewer and water improvements.

## Exhibit 12: Conceptual Funding Strategy

### Scenario A, without Sunrise Corridor (TSDC update with regional cost sharing)

Transportation Funding Assumptions, Scenario A without Sunrise Corridor						
Roadway Network	Potential Funding Source					
	Regional Cost Share	Current Citywide TSDC eligible cost*	New Citywide TSDC eligible cost	District TSDC or Special Assessment	URD & Other Funds	Total
SE 162nd Ave. Extension (OR 212 to Taralon)		\$20,900,000		\$0	\$0	\$20,900,000
Hwy 212 Improvements (OR 212/224 Jct. to 162nd)	\$9,724,815		\$7,175,185	\$0	\$0	\$16,900,000
Hwy 212 Improvements (162nd to 172nd)	\$3,797,857		\$2,802,143	\$0	\$0	\$6,600,000
Hwy 212/ 162nd Roundabout	\$575,433		\$424,567	\$0	\$0	\$1,000,000
SE Rock Creek Blvd (162nd to 172nd)			\$7,500,000	\$0	\$0	\$7,500,000
SE Parklane Dr. (162nd to Collector 3)			\$10,100,000	\$0	\$0	\$10,100,000
Collector-1 (172nd to Collector-2)			\$9,400,000	\$0	\$0	\$9,400,000
Collector-2 (172nd to Collector-1)			\$3,300,000	\$0	\$0	\$3,300,000
Collector-3 (162nd to 172nd)			\$8,700,000	\$0	\$0	\$8,700,000
<b>Total Roadway Network</b>	<b>\$14,098,105</b>	<b>\$20,900,000</b>	<b>\$49,401,895</b>	<b>\$0</b>	<b>\$0</b>	<b>\$84,400,000</b>
			\$2,923	Potential TSDC increase		
			\$9,610	Existing TSDC per PHVT		
			<b>\$12,533</b>	<b>Total citywide TSDC after increase (PHVT)</b>		

\*reflects current Happy Valley TSDC methodology, capital costs adjusted to 2020 dollars.

### Scenario B, with Sunrise Corridor (TSDC update with LID and URD funding)

Transportation Funding Assumptions, Scenario B with Sunrise Corridor						
Roadway Network	Potential Funding Source					
	Current Citywide TSDC eligible cost*	New Citywide TSDC eligible cost	Change in TSDC cost basis	District TSDC or Special Assessment	URD & Other Funds	Total Project Cost
SE 162nd Ave. Extension (OR 212 to Taralon)	\$20,900,000	\$14,900,000	(\$6,000,000)	\$2,000,000	\$4,000,000	\$20,900,000
Hwy 212 Improvements (OR 212/224 Jct. to 162nd)		\$0	\$0	\$0	\$0	\$0
Hwy 212 Improvements (162nd to 172nd)		\$0	\$0	\$0	\$0	\$0
Hwy 212/ 162nd Roundabout		\$0	\$0	\$0	\$0	\$0
SE Rock Creek Blvd (162nd to 172nd)		\$7,500,000	\$7,500,000	\$0	\$0	\$7,500,000
SE Parklane Dr. (162nd to Collector 3)		\$10,100,000	\$10,100,000	\$0	\$0	\$10,100,000
Collector-1 (172nd to Collector-2)		\$9,400,000	\$9,400,000	\$0	\$0	\$9,400,000
Collector-2 (172nd to Collector-1)		\$3,300,000	\$3,300,000	\$0	\$0	\$3,300,000
Collector-3 (162nd to 172nd)		\$8,700,000	\$8,700,000	\$0	\$0	\$8,700,000
<b>Total Roadway Network</b>		<b>\$53,900,000</b>	<b>\$33,000,000</b>	<b>\$2,000,000</b>	<b>\$4,000,000</b>	<b>\$59,900,000</b>
			\$1,953	Potential TSDC increase		
			\$9,610	Existing TSDC per PHVT		
			<b>\$11,563</b>	<b>Total Citywide TSDC after increase</b>		
			\$1,685	Supplemental Assessment		
			<b>\$13,248</b>	<b>Total RCEC Assessment per PHVT</b>		

# APPENDIX A: PROPORTIONAL SHARE ANALYSIS

## Proportionate Share Analysis

Segment	Direction	Scenario A, w/o Sunrise Corridor			Scenario B, with Sunrise Corridor	
		% HV Trips	% Regional Trips		% HV Trips	% Regional Trips
OR-212 (east of OR-224)	EB	41%	59%		100%	0%
OR-212 (east of OR-224)	WB	44%	56%		100%	0%
<b>Average</b>		<b>42%</b>	<b>58%</b>		<b>100%</b>	<b>0%</b>
OR-212 (west of OR-224)	EB	52%	48%		57%	43%
OR-212 (west of OR-224)	WB	52%	48%		56%	44%
<b>Average</b>		<b>52%</b>	<b>48%</b>		<b>57%</b>	<b>43%</b>
162nd (Rock Creek and OR-212)	NB	100%	0%		100%	0%
162nd (Rock Creek and OR-212)	SB	100%	0%		100%	0%
<b>Average</b>		<b>100%</b>	<b>0%</b>		<b>100%</b>	<b>0%</b>
162nd (north of Rock Creek)	NB	100%	0%		100%	0%
162nd (north of Rock Creek)	SB	100%	0%		100%	0%
<b>Average</b>		<b>100%</b>	<b>0%</b>		<b>100%</b>	<b>0%</b>
Rock Creek Blvd. (162nd and 172nd)	EB	100%	0%		100%	0%
Rock Creek Blvd. (162nd and 172nd)	WB	100%	0%		100%	0%
<b>Average</b>		<b>100%</b>	<b>0%</b>		<b>100%</b>	<b>0%</b>
172nd (Rock Creek and OR-212)	NB	62%	38%		52%	48%
172nd (Rock Creek and OR-212)	SB	68%	32%		58%	42%
<b>Average</b>		<b>65%</b>	<b>35%</b>		<b>55%</b>	<b>45%</b>
172nd (north of Rock Creek)	NB	67%	33%		53%	47%
172nd (north of Rock Creek)	SB	69%	31%		56%	44%
<b>Average</b>		<b>68%</b>	<b>32%</b>		<b>55%</b>	<b>45%</b>

Source: DKS Associates.

Analysis based on Metro 2040 demand models developed for Sunrise Gateway project

## APPENDIX B: HAPPY VALLEY SDC RATES

Happy Valley TSDC Fee Schedule			
Fiscal Year (July 1st - June 30th)			2019-20
CCI = Construction Cost Index for Seattle by ENR each month & year			5.20%
Land Use Category	Units	ITE Codes	2019-20
Transit Parking	Parking Space	90, 93	\$5,959
Industrial/Manufacturing/Warehouse	1,000 Gross Sq. Ft.	110,120,130,140,150,151,170	\$5,478
Single-Family Detached Housing	Dwelling Unit	210	\$9,610
Apartment	Dwelling Unit	220	\$5,959
Residential Condo/Townhouse	Dwelling Unit	230	\$4,997
Mobile Home in Park	Space	240	\$5,670
Assisted Living	Beds	254,620	\$2,113
Senior Housing	Dwelling Unit	251,253,255	\$2,067
Hotel/Motel	Room	310,320	\$5,766
Parks	Acre	411,412	\$865
Campground/RV Park	Site	416	\$2,594
Marina	Berths	420	\$1,826
Golf Course	Holes	430	\$28,061
Golf Driving Range	Tee/Drive Position	432	\$12,013
Recreation Community Center	1,000 Gross Sq. Ft.	435,495	\$26,331
Bowling Alley	Bowling Lanes	437	\$14,510
Movie Theater	Movie Screens	443,444,445	\$131,081
Casino/Video Lottery Establishment	1,000 Gross Sq. Ft.	473	\$129,063
Soccer Complex	Field	488	\$170,097
Racquet/Tennis Club	Court	491	\$32,193
Health/Fitness Club	1,000 Gross Sq. Ft.	492	\$33,924
Military Base	Employees	501	\$3,748
Education	Student	520,522,530,536,540,550	\$1,402
Church	1,000 Gross Sq. Ft.	560	\$5,286
Day Care	Student	565	\$3,425
Library	1,000 Gross Sq. Ft.	590	\$70,154
Hospital	Beds	610	\$13,647
Medical-Dental	1,000 Gross Sq. Ft.	720,630	\$34,307
Office	1,000 Gross Sq. Ft.	710,714,715,730,750,760,770	\$13,534
State Motor Vehicles Department	1,000 Gross Sq. Ft.	731	\$164,234
Post Office	1,000 Gross Sq. Ft.	732	\$89,494
Building & Hardware	1,000 Gross Sq. Ft.	812,816	\$28,428
Free-Standing Discount Store	1,000 Gross Sq. Ft.	813,815	\$19,428
Nursery	1,000 Gross Sq. Ft.	817,818	\$42,628
Factory Outlet Center	1,000 Gross Sq. Ft.	823	\$14,524
Automobile Sales	1,000 Gross Sq. Ft.	841	\$16,617
Automobile Parts Sales	1,000 Gross Sq. Ft.	843	\$32,756
Tire Stores	1,000 Gross Sq. Ft.	848,849	\$21,658
Supermarket	1,000 Gross Sq. Ft.	850,854	\$23,687
Convenience Market	1,000 Gross Sq. Ft.	851,852	\$158,816
Shopping/Retail	1,000 GSF Lease Area	820,826,862,863,867	\$15,725
Pharmacy	1,000 Gross Sq. Ft.	880,881	\$31,415
Furniture Store	1,000 Gross Sq. Ft.	890	\$2,032
Bank	1,000 Gross Sq. Ft.	911,912	\$91,075
Restaurants	1,000 Gross Sq. Ft.	925,931,932	\$25,108
Fast Food	1,000 Gross Sq. Ft.	933,934	\$105,184
Coffee/Donut Shop	1,000 Gross Sq. Ft.	936,937	\$45,244
Quick Lubrication Veh. Shop	Service Positions	941	\$28,928
Automobile Care Center	1,000 Gross Sq. Ft.	942	\$17,335
Service Stations	Fueling positions	853,944,945,946	\$22,060
(1) Based on PM Peak Hour Trips			
(2) Includes compliance cost			
TSDC Rate for Self storage calculate at \$1450 per 1,000 Gross Square Feet (Per MDW)			



## APPENDIX C: LID CASE STUDIES

### HAPPY VALLEY 152<sup>ND</sup> MISTY DRIVE LID

In 2003, as Happy Valley emerged as the second fastest growing city in Oregon, the Rock Creek urban reserve was slated to absorb significant residential growth in the City. The owners of the land, along with officials from Happy Valley and Clackamas County, identified the need for a new major street to serve the influx of new homes and residents. Most of the project's cost was paid with system development charges; however, the anticipated \$8 million road had a \$1.44 million funding gap. After analyzing the project, consultants, property owners and city officials agreed that a local improvement district (LID) would be the best solution.

The project paved a three-lane road complete with landscaped medians, pedestrian crossings, sidewalks, and bike lanes



Figure 1 –Pedestrian Improvements on SE 152<sup>nd</sup> Ave.

those properties within the benefit district and adjacent to Zone A/B properties. 75% of total LID cost (\$1,083,000) was assessed to zones A & B while the remaining 25% (\$361,000) was assessed to zone C properties. Those totals were dispersed among the properties in the zones based upon their share of their zone's anticipated future AV.



Figure 2 – LID Project Area

#### Finance Facts

- ◆ Total Project Cost: **\$8,000,000**
  - LID assessment: **\$1.444 million**
  - Happy Valley and Clackamas County Joint Transportation System Development Charge: **\$4.7 million**
  - Clackamas County Countywide Transportation System Development Charge: **\$1.3 million**
  - City of Happy Valley: **\$500,000**
- ◆ LID boundary included 272 buildable acres and 27 affected properties
- ◆ Cost to properties: **\$3,460 to \$318,607**

	2003	2015
Total Assessed Value in Benefit Area (2015 \$)	\$88 million	\$345 million

#### PROPERTY ASSESSMENT FORMULA

Engineers organized properties into zones based upon adjacency to improvements. **Zones A and B** were those properties that shared frontage with the new roadway. **Zone C** were

## An aerial photograph showing a golf course with a clubhouse under construction. The clubhouse is a large, multi-story building with a light-colored roof and walls, situated on a cleared area. A paved road curves around the construction site. In the background, there are green golf courses, trees, and a small pond.