CITY OF ZILLAH CAPITAL FACILITIES PLAN



Prepared by:



PROJECT NO. 17064E

FINAL

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CITY OF ZILLAH

CAPITAL FACILITIES PLAN

BACKGROUND

A. Purpose

The City of Zillah updated the City's Comprehensive Plan with the Land Use Element finalized on October 23, 2017. The purposes for developing the Capital Facilities Plan between Comprehensive Plan updates is to consolidate summary information for the City's infrastructure systems as infrastructure planning documents were completed and add significant detail to create an easy-to-reference document. Although the 2017 Comprehensive Plan has a Capital Facilities Element, the previous stand-alone Capital Facilities Plan was completed in 2012.

The community owns and operates City buildings, roadways, parks and recreation facilities, a domestic water system, a sanitary sewer system, and a storm drainage system within its immediate service area. The City of Zillah purposefully plans for the upgrade and operation of each of these individual systems and strives to keep the planned improvements both feasible and coordinated. Zillah's planning efforts are designed to be coordinated and consistent with other City, Yakima County, Washington State, and federal plans.

If a reader were to compare the different levels of planning starting with federal and stepping through state, regional, county, and city, she or he would notice details in the different levels of comprehensive planning become more specific as the reader moves from federal to city.

B. Growth Management Act (GMA) Requirements

The requirements for a Capital Facilities Plan (CFP) Element, as outlined by the Growth Management Act of 1990 (GMA), specifically RCW 36.70A.070, have been used to guide the contents of this Plan.

Capital facilities plan requirements are:

- 1. An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities;
- 2. A forecast of the future needs for such capital facilities;
- The proposed locations and capacities of expanded or new capital facilities;
- 4. At least a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes;
- 5. A requirement to reassess the land use element if probable funding falls short of meeting existing needs;

- 6. Ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated; and consistent; and
- 7. Park and recreation facilities shall be included in the capital facilities plan element.

C. Relationship to Comprehensive Plan Elements and Land Use Development

Urban Growth Areas

Urban Growth Areas (UGAs) are those areas designated under the Growth Management Act where urban growth is encouraged and outside of which growth can occur only if it is not urban in nature. The City of Zillah's city limits boundary and UGA boundary are shown in Figure 2. Urban growth is encouraged where adequate public facilities and services exist or can be provided in an efficient manner.

Urban growth typically requires such urban governmental services as storm and sanitary sewer systems, domestic water systems, street cleaning services, fire and police protection services, public transit services, and other public utilities associated with urban areas. Typically, the UGA boundary is adjusted after every Census to accommodate the twenty (20) year population growth predicted for each city. For the City of Zillah, the twenty (20) year projected growth is calculated by the Yakima County planning department.

Compatible Land Uses

Urban governmental services are generally not feasible unless there is intensive use of land for the location of buildings, structures, and impermeable surfaces. Zillah's land uses are urban in nature and support the development of capital facilities. The City's update to the comprehensive plan assesses whether capital facilities are sufficient to meet community needs and are planned on land compatible to such uses without impacting other public systems.

Consistency with Land Use Element in the Comprehensive Plan

The location, type and intensity of various future land uses, in conjunction with level of service standards, determine the needs for future capital facilities.

D. Applicable County Wide Planning Policies (CWPP)

In addition to following State of Washington requirements, planning efforts in the City of Zillah require consistency with County Wide Planning Policies (CWPP). The CWPP recognize cities as the providers of urban governmental services as identified in the GMA and adopted urban growth management agreements. Please see Appendix A for a complete list of associated CWPP related to Zillah's Capital Facility Plan.

E. Major Capital Facilities Considerations

 The current Urban Growth Area is calculated to be sufficient to meet the predicted twenty-year demands within the City except for the category of Community Facilities. Does the city wish to protect its public open space from the encroachment of other public uses (e.g., fire station, police station, government offices, library, etc.)? Where should new facilities be located?

- Are best practices in place and optimal for interacting with other local governments in the Urbanized Cluster area? This new designation has altered the type of federal funding category the City can compete for at the regional level. Is increased coordination with others in the Urban cluster a way to optimize competitive strength in the region?
- Are best practices in place and optimal for interacting with the Confederated Tribes and Bands of the Yakama Nation? Can increased cooperation affect future shared services such as transit provided by Pahto Public Passage?
- What criteria should the City use in establishing priorities among competing capital needs? Can establishing levels of service standards for the City's capital facilities provide consistent evaluation among improvement selections?
- The City requires payment of impact fees to support parks, the wastewater system, and the water system. Do these fees in fact increase sprawl by forcing development into the areas outside the City limits, on large parcels that can be served with on-site systems?
- What will it cost in future dollars to construct and maintain the additional infrastructure required to serve developing areas? To what extent is cost a function of population dispersion?
- If the City desires to support existing and future industries, what should it provide and what should it require of those industries in terms of wastewater treatment?
- To what extent does the City's water supply (rights, permits, wells) limit growth potential?
- How will population growth affect the demand for each type of public service and the facilities required to meet that demand?

Figure 1 - Washington State Vicinity Map

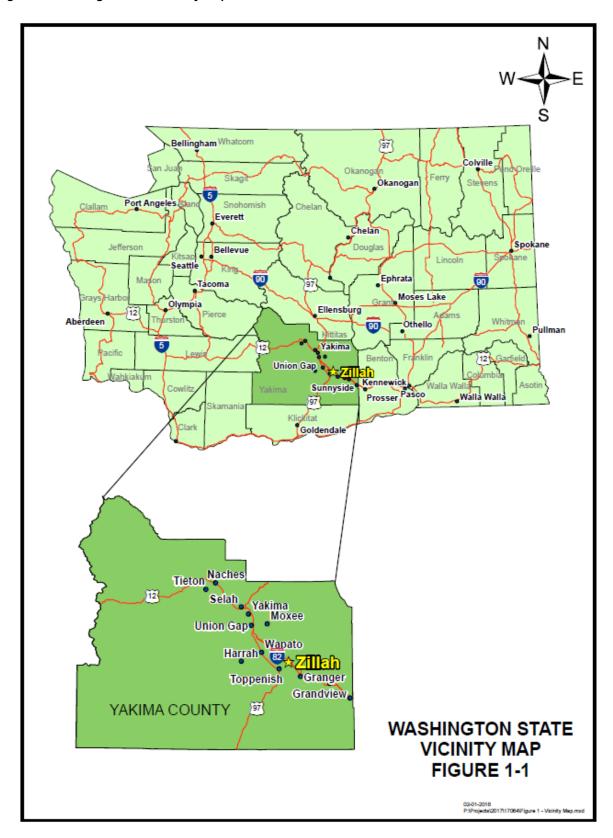
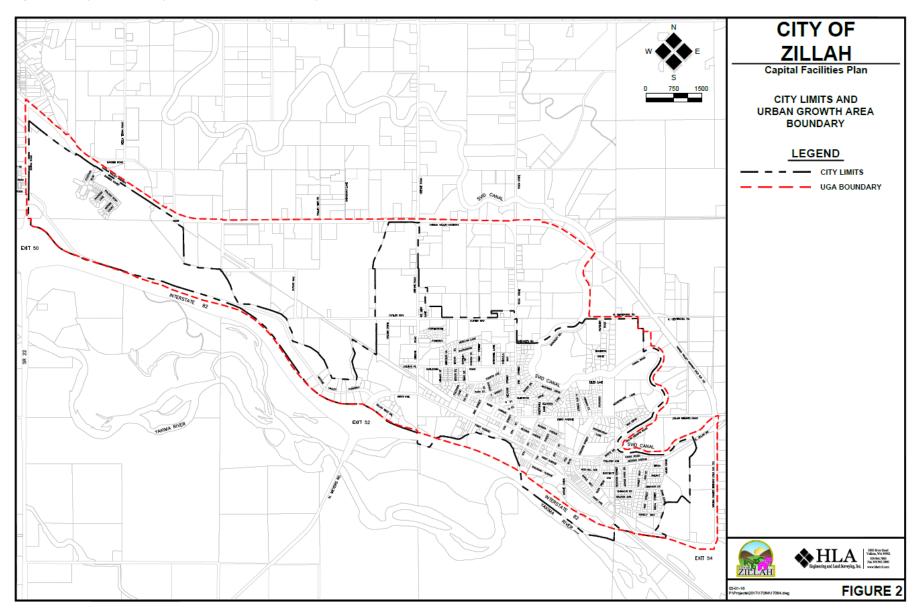


Figure 2 – City of Zillah City Limits and UGA Boundary



CAPITAL FACILITIES CHARACTERISTICS

A. Capital Facilities Definition

The term 'capital facilities' is not specifically defined under the Growth Management Act, but the term has been defined by the Washington State Department of Community Development as part of "procedural criteria" developed under the Growth Management Act. In WAC 365-195-210, a capital facility is defined as "a physical structure owned or operated by a government entity which provides or supports a public service." The section which follows lists a variety of public services, most of which have associated capital facilities within the Zillah area.

B. Types and Providers of Capital Facilities

Service providers for the City of Zillah and the unincorporated portion of its urban growth area are listed in Table 1. In some cases, the capital facilities supporting the services listed are located outside of the UGA.

TABLE 1. SERVICE PROVIDERS IN THE CITY OF ZILLAH'S CITY LIMITS AND URBAN GROWTH AREA (UGA)

Type of Service	City of Zillah	Remainder of UGA		
Protective Services				
Fire Protection	City of Zillah	Yakima County Fire District No.5, Station 10		
First Aid / Rescue	City of Zillah	Yakima County Fire District No.5, Station 10		
Ambulance	Advanced Life Systems	Advanced Life Systems		
Law Enforcement City of Zillah, Yakima County Sheriff, Washington State Patrol		Yakima County Sheriff, Washington State Patrol		
Correction Facilities City of Toppenish, City of Wapato, Yakima County		Yakima County		
Police Firing Range	City of Zillah	None		
General Government				
General Purpose Government	City of Zillah	Yakima County		
Cemetery	City of Zillah	None		
Municipal Court	City of Zillah	None		
Public Health				
Public Health	Yakima County Health District	Yakima County Health District		
Public Transportation	1			
Taxi	MedStar Cabulance (for disabled)	MedStar Cabulance (for disabled)		
Transit	People For People Community Connector and Dial-A-Ride	Limited routes and connections from People For People		
		cont.		

Type of Service City of Zillah		Remainder of UGA
Education		
Schools	Zillah School District No. 205 & Toppenish School District	Zillah School District No. 205 & Toppenish School District
Recreation		
Community Facilities	City of Zillah	None
Libraries	Yakima Valley Library Branch	Yakima Valley Library
Parks	City of Zillah	None
Recreational Facilities	City of Zillah; Zillah School District	None
Water and Waste Ser	rvices	
Potable (drinking) Water	City of Zillah	Yakima County, Sunnyside Valley Irrigation District
Irrigation	City of Zillah, Zillah Irrigation District, Sunnyside Valley Irrigation District	Sunnyside Valley Irrigation District
Stormwater Control	City of Zillah	Yakima County, Sunnyside Valley Irrigation District
Sewage Collection	City of Zillah	On-site disposal
Sewage Treatment and Wastewater Disposal	City of Zillah	On-site disposal
Septage Disposal	City of Zillah STP (RV Park septage only)	Private hauling to Yakima WWTP or Cheyne Landfill
Sludge Disposal	City of Zillah	Private hauling to Yakima WWTP or Cheyne Landfill
Residential and Commercial Solid Waste Collection	Yakima Waste Systems (contract)	Yakima Waste Systems (contract)
Solid Waste Disposal	Yakima County	Yakima County
Streets and Roadway	ys	
Interstate Highways and State Highways	Washington State Dept. of Transportation	Washington State Dept. of Transportation
Arterial Streets And Roads	City of Zillah	Yakima County
Local Streets	City of Zillah	Yakima County
Sidewalks	City of Zillah	None
Street Lighting	City of Zillah	None
Traffic Signals	City of Zillah	None

TRANSPORTATION SYSTEMS

A. Roadways, paths, and sidewalks

The Zillah area is served by a network of roadways and streets. A full discussion of the characteristics of Zillah's motorized and non-motorized transportation facilities and services is included in Chapter 5: Transportation Element of the Zillah Comprehensive Plan. The system assessment and forecast for future needs are included here by reference to Chapter 5: Transportation Element.

The information in the transportation section of the Capital Facilities Plan is meant to be consistent with all elements in the Comprehensive Plan and related planning documents. The transportation section of the Capital Facilities Plan was developed from Chapter 5 of the City's Comprehensive Plan as a base and is focused on the upcoming six-year timeframe. The Capital Facilities Plan is made more robust with detailed exhibits, maps, and relational discussion of all the capital infrastructure and systems in a smaller stand-alone document.

The City's roadways and streets, both within city limits and in the Urban Growth Area (UGA), are categorized under the Federal Functional Classification System (FFCS), see Figure 3. The FFC identifies standards by which a roadway or street is constructed. The FFC also aids in evaluating current or future capacity conditions versus observed or forecasted volume of traffic on a roadway or street. This analytical comparison allows Zillah to determine the levels of service (LOS) being provided or anticipated to be provided for certain publicly-owned streets. The LOS methodology is shared in detail in Appendix B.

Zillah adopts LOS "C" for roadways, but views LOS for roadways other than arterial streets as advisory within City limits. The Washington State Department of Transportation has adopted LOS "C" for rural highways. This standard is consistent with the LOS methodologies and thresholds established by Yakima Valley Conference of Governments (YVCOG), the Regional Transportation Planning Organization (RTPO) for the Yakima Valley region. RTPOs statewide are tasked with ensuring LOS methodologies are coordinated among surrounding jurisdictions, allowing for consistent regional evaluation of transportation facilities and corridors.

Per Zillah's Concurrency Review ordinance, ZMC Chapter 17.10, the City requires concurrency review for all projects or development activities generating more than ninety (90) trips per day. Zillah's Concurrency Review ordinance also sets criteria for evaluating mitigations that are proposed when evaluation predicts a project will not pass LOS standards.

In addition to the FFC, a street or roadway may be classified as Washington State's Freight and Goods Transportation System (FGTS). The classification is based on succinct ranges of tonnage carried by trucks on the network. In Zillah, Cheyne Road is classified as a T-3 FGTS freight route carrying between 300,000 – 4,000,000 tons of freight, see Figure 4. Maintenance and reconstruction of this road will need to accommodate the expected additional tonnage.

With an increase in sidewalk-only improvement funding opportunities, some sidewalk-only projects may be included in shorter-term (Six-year Transportation Improvement Program) or longer-term (Regional Transportation Plan) planning tools. The City of Zillah has included such sidewalk-only improvement projects in their Six-Year Transportation Improvement Program (Six-year TIP).

A standard national classification for bikeways includes categories ranging from: Class I, bike paths, which are separate trails for the principle use of bicycles; Class II, bike lanes, in which a

portion of the street is designated by sign and/or pavement markings for preferential bicycle use; Class III, bike routes, in which a street is designated with signs as a bicycle route and is shared with other transportation modes; and Class IV, shared street with no designation, in which a publicly maintained facility is not designated with signs and/or pavement markings as a bikeway, but is accessible to bicyclists. The *Yakima Valley Transportation Plan (YVTP 20/45)* identifies Class I, Class III, and Class IV bicycle routes in and near Zillah.

The City's storm drainage system is included in the roadway system. Sidewalk projects are customarily associated with street projects as well. When street improvements are made, the associated drainage facilities and pedestrian facilities are evaluated, and necessary improvements are incorporated into the street project.

B. <u>Transportation Facilities Inventory</u>

Zillah's street network with FFC designations of collector and above are included in Table 2 and presented on Figure 3. Additionally, the table contains the most recent traffic counts expressed in 2020 value, the idealized capacity of each street by type, calculated LOS, and whether the street has a freight designation. Not all streets are represented in Table 2.

If improvements, repairs, or expansions to facilities in the inventory table include funding from a source other than private or City origin, the action may trigger the need to add the project to Zillah's Six-year TIP.

Figure 3 – City of Zillah Streets Identified by Federal Functional Classification

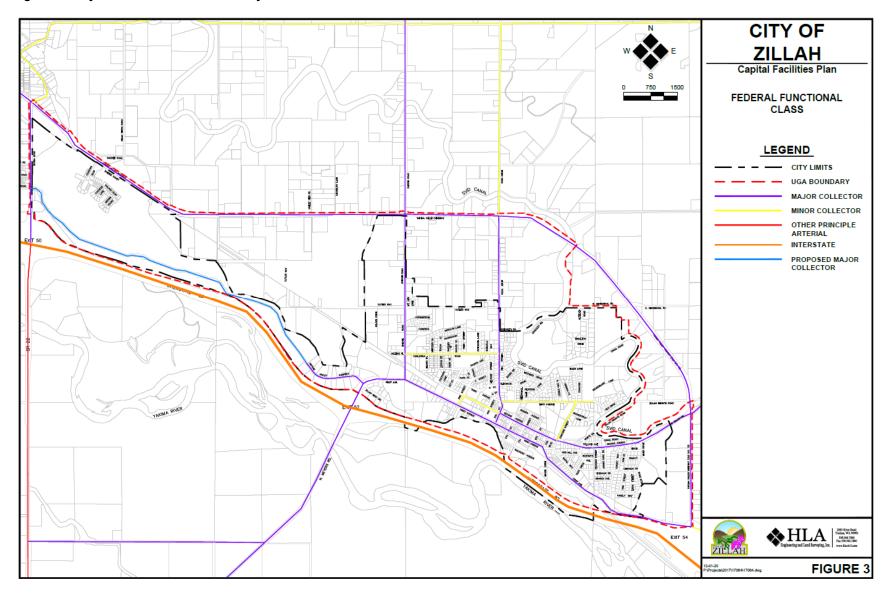


Figure 4 – City of Zillah Streets Identified by Freight and Goods Classification

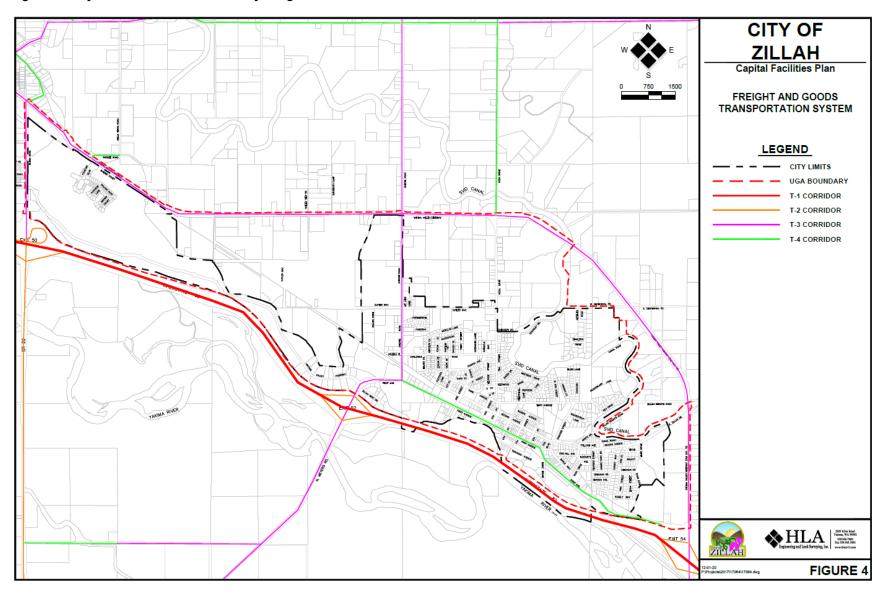


TABLE 2. TRAFFIC VOLUMES AND LEVELS OF SERVICE BY LOCATION IN AND NEAR THE CITY OF ZILLAH'S CITY LIMITS

Federal Functional Class	Roadway Name	Start Location	End Location	Number of Lanes	AADT per Lane	Peak Hour Volume per Lane	Idealized Roadway Ca- pacity Per Lane Per Hour	Peak Volume as a Ratio of Roadway Ca- pacity	Calculated Level of Service (LOS)	Freight and Goods Class
		Before MP 49.78 (\$	SR-22 Interchange)	4	7,000 (2018)	700	3,600	19.4%	Α	T-1
Interstate	I-82	Before MP 51.58 (E Zillah Road)	Exit 52 – Toppenish	4	6,250 (2018)	625	3,600	17.4%	Α	T-1
		Before MP 53.61 (ERoad)	Exit 54 – Division	4	6,250 (2018)	625	3,600	17.4%	Α	T-1
	Fifth Street	First Avenue	Carlsonia Avenue	2	1,151 (2020)	110	1,200	9.1%	Α	N/A
		Carlsonia Avenue	North City Limits	2	2,571 (2016)	257	1,200	11.0%	Α	N/A
	Toppenish Zillah Road	South City Limits	Cheyne Road	2	5,527 (2016)	553	1,200	46.1%	Α	T-3
	First Avenue	Cheyne Road	Fifth Street	2	3,086 (2020)	289	1,200	10.7%	Α	T-4
Major		Fifth Street	East City Limits	2	1,067 (2020)	126	1,200	3.7%	Α	T-4
Collector	Second Avenue	Fifth Street	Miles Drive	2	1,327 (2016)	133	1,200	11.1	Α	N/A
		Miles Drive	East City Limits	2	663 (2020)	73	1,200	6.1%	Α	N/A
	Vintage Valley Parkway	West End of Road	Toppenish Zillah Road	2	future	future	1,200	future	future	
	Cheyne Road	First Avenue	Cutler Way	2	1,178 (2020	117	1,200	9.8%	Α	T-3
	Cheyne Road	Cutler Way	North City Limits	2	899 (2020)	88	1,200	7.6%	Α	T-3
	Second Avenue	Second Street	Fifth Street	2	251 (2020)	27	1,000	1.05%	Α	N/A
Minor Collector	Second Street	First Avenue	Second Avenue	2	403 (2016)	43	1,000	4.3%	Α	N/A
	Third Avenue	Fifth Street	Meadowlark Lane	2	404 (2020)	45	1,000	4.4%	Α	N/A
										continued

Federal Functional Class	Roadway Name	Start Location	End Location	Number of Lanes	AADT per Lane	Peak Hour Volume per Lane	Idealized Roadway Ca- pacity Per Lane Per Hour	Peak Volume as a Ratio of Roadway Ca- pacity	Calculated Level of Service (LOS)	Freight and Goods Class
Minor Collector cont.	Concord Street	Second Avenue	Third Avenue	2	306 (2020)	36	1,000	3.6%	Α	N/A
	Carlsonia Avenue	Cheyne Road	Roza Drive	2	634 (2020)	61	1,000	6.1%	Α	N/A

¹YVCOG's 2016 count used in Zillah's Comp Plan. Growth rate not applied as 2020 counts were taken in a pandemic and are systematically lower than pervious counts at the same locations. Not applying a growth factor will keep older counts more in line with current situations for comparison purposes.

²Zillah's 2020 traffic counts – lower than previous counts since much of the year was influenced by emergency declarations due to COVID-19.

³Zillah's 2018 traffic counts – Growth rate not applied as 2020 counts were taken in a pandemic and are systematically lower than pervious counts at the same locations. Not applying a growth factor will keep older counts more in line with current situations for comparison purposes.

C. <u>Transportation Element Certification</u>

The City of Zillah's Transportation Element must be consistent with the *Yakima Valley Transportation Plan 20/45* (YVTP 20/45) established by the Yakima Valley Conference of Governments (YVCOG), the Regional Transportation Planning Organization (RTPO) for Yakima County. The City of Zillah's Transportation Element is one of the mandatory elements of the City's Comprehensive Plan as described in RCW 36.70A.070 and must be certified. Because the City's Transportation Element was developed by staff and certified to be consistent with the 2016-2040 M/RTP during the City's Comprehensive Plan update:

- The Transportation Element was submitted for consideration on February 3, 2017 and reviewed by YVCOG Staff.
- The Transportation (MPO/RTPO) Technical Advisory Committee (TAC) reviewed the completed Transportation Element and the accompanying Review Checklist on March 9, 2017 and recommended approval to the Transportation Policy Board.
- The Transportation (MPO/RTPO) Policy Board considered the recommendation of the TAC on March 20, 2017 and approved the City of Zillah Transportation Element.
- A formal Transportation Element Consistency Certification Report was signed by YVCOG's Executive Director on March 20, 2017.

D. <u>Transportation Improvement Program (TIP)</u>

The City's Comprehensive Plan included the *2017-2022 Six-year TIP* adopted on June 20, 2016. The Six-year TIP is updated and adopted by the City on an annual basis. The program used for the Capital Facilities Plan was adopted on June 17, 2019 for the years of 2021 through 2026. Table 3 presents six (6) planned projects in Zillah's *2021-2026 Six-Year TIP*.

Table 3 shows some of the City's upcoming projects, though the City maintains twenty (20) prioritized planned (P) projects, as shown in the comprehensive TIP document in the appendices. In the TIP and in Table 3, projects are listed by year, in order of priority, and will be constructed as funding is available. Zillah's complete 2021-2026 TIP is located in Appendix C and the City has submitted its proposed 2022-2027 TIP to YVCOG for inclusion in the Regional TIP. The 2022-2027 TIP will become effective in early February 2022. The City anticipates annual updates between the adoption of the 2017 Comprehensive Plan and the next update due in March 2025. Please contact the City to access the most recent Six-year TIP.

Within the unincorporated portion of Zillah's UGA, Yakima County is responsible for the identification and scheduling of roadway improvements. Identified needs and improvements are reflected in *Yakima County's 2021 to 2026 TIP*. The types of improvements are expected to be similar to those identified in the City of Zillah. The County's 2021-2026 TIP is available at https://www.yakimacounty.us/1680/6-Year-Transportation-Improvement-Progra. To locate individual projects in Zillah or Yakima County that have complete federal or regional funding, please visit the Statewide Transportation Improvement Program (STIP) at https://www.wsdot.wa.gov/LocalPrograms/ProgramMgmt/STIP.htm.

The City also participates with Yakima Valley Conference of Governments (YVCOG), the lead for the metropolitan and regional transportation planning organization and contributes illustrative projects to be included in the long-range plan for the greater Yakima Region. The last effort for updating the long-range transportation plan culminated in the *March 20, 2020 revision of the Yakima Valley Transportation Plan (YVTP 20/45)*. The YVTP 20/45 can be accessed via YVCOG's website at www.yvcog.org. The projects shared with YVCOG are included in Appendix C.

E. Applicable County Wide Planning Policies (CWPP) - Transportation

In addition to following State of Washington requirements, transportation planning efforts in Zillah require consistency with County Wide Planning Policies (CWPP). The CWPP recognizes cities as the providers of urban governmental services as identified in the GMA and adopted urban growth management agreements. Please see Appendix A for a complete list of associated CWPP related to the transportation section of Zillah's Capital Facility Plan.

Table 3. Transportation Improvement Program, City of Zillah, 2021 to 2026

Priority Number	Project Title	Street	Func- tional Class	Length (miles)	Start Year	Improvements Needed	Estimated Cost	Funding Source
1	Fourth Street – Grind and Overlay	Fourth Street – Second Avenue to Fifth Street	Local	0.1	2025	Grind and overlay.	\$7,500 (2021 est)	TIB
2	Leland Street	Leland Street – Carlsonia Avenue to Dead End	Local	0.07	2026	Reconstruct the roadway, add drainage.	\$450,000 (2021 est)	Local TBD
3	Merclyn Lane Overlay	Merclyn Lane – Edi- son Street to End of Road	Local	0.14	2022	Roadway surfacing overlay.	\$65,000 (2021 est)	Local TBD
4	Third Avenue Resurfacing	Third Avenue – Reo Drive to Fourth Street	Local	0.55	2022	Resurfacing of approximately 2,950 linear ft of roadway, install ADA where needed.	\$703,125	TIB
5	Second Street Sidewalks	Second Street – First Avenue to Second Avenue	Minor Collector	0.05	2022	Construct six-foot sidewalks along west and east side of street.	\$40,000	TIB
12	Fifth Street Resurfacing	Fifth Street – Second Avenue to Carlsonia Avenue	Major Collector	0.16			\$1,300,000	TIB

^{*} These are customary State and Federal funding sources and are reasonably expected to be available – see Appendix C for BUILD, INFRA, TIB and STP definitions.

Figure 5 – Zillah's Fully-Funded Transportation Projects – 2021-2026

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There are no Secured Projects listed in the 2021-2026 TIP

F. Major Capital Facilities Considerations - Transportation

- In 2019, The City identified twenty planned projects in its 2021-2026 Six-Year Transportation Improvement Program (TIP). If these projects are not funded through state or federal programs, what other funding sources would be available?
- In 2009, the City formed a Transportation Benefit District (TBD) within its boundaries and collected \$20.00 per car license renewal to support transportation improvements. The attempted abolition of TBDs in Washington State was ruled unconstitutional in October 2020 and protected Zillah's ability to raise transportation funding through car tab license fees.
- What is the trend for delivering projects included in the TIP? What are some examples of financial and coordination effects to be mindful of when delaying or advancing projects once a timeline has been set in a Capital Improvement Plan?
- The urban growth area defines where the City is financially capable of providing urban services and the areas it may ultimately annex. If these areas request annexation, how will the City bring these areas up to its standards for streets, lighting, sidewalks, etc.?
- What improvements to the transportation network will support the City's goals in other areas, especially land use and economic development? Have past trends in the correlation between transportation improvements and economic development been recorded and used for anticipating future quantifiable benefits?
- What are the present and future mobility needs in Zillah, and how can they be met?
- Proximity to I-82 presents additional opportunities for traveler-oriented development.
 What improvements to the transportation network will help the City capitalize on those opportunities? If the City wishes to maintain the traditional central business district, how can the transportation system be used to further that goal?
- Are additional sidewalks or other pathways needed for public safety, now or in the future?
 Is a sidewalk improvement program needed? Will this be a first step in a Zillah Asset Management Plan development?

G. Recommendations - Transportation

The City of Zillah customarily seeks funding for transportation infrastructure through local, state, and regional funding sources such as those listed in Appendix C. An annual review of the Capital Facilities Plan as part of early budget preparation will help the City to align funding needs with upcoming funding opportunities for the following year.

Some state and federal funding cycles occur on a one- or two-year cycle. Zillah should track these cyclical funding opportunities and strategize the one or two priority projects on the list that are closely aligned with upcoming funding sources purposes, criterium, and funding schedules.

The City has opportunity to optimize local funding opportunities as well. The funds available through the Transportation Benefit District can be used separately or a part of a funding package to ensure local improvements are completed efficiently.

DOMESTIC WATER SYSTEM

A. Background

In 2014, the City of Zillah completed a comprehensive 2014 Water System Plan in accordance with Washington Administrative Code, WAC 246-290-100 and WAC 246-291-140. The complete Water System Plan (WSP) is available at Zillah City Hall. A full discussion of the characteristics of Zillah's domestic water facilities and services, the full assessment of the capacity of facilities, and the forecast needs based on projections for future growth are included here by reference to the 2014 Water System Plan.

The principal goal of water system planning is to make efficient use of available resources. This is accomplished by making decisions about water system capital improvements and operations which are in accordance with overall system policies and directions expressed in a utility's water system plan.

An equally important reason for developing a water system plan is to assure orderly growth of Zillah's system while maintaining reliable delivery of high-quality water. The plan is intended to guide water utility actions in a manner consistent with other activities taking place in the community.

The water system plan is intended to look ahead at least twenty years into the future. Development of a definite improvement schedule and financial program is required for the first six-year period, while the planning approach for the second period may be more conceptual. The Water System Plan is currently being updated and is anticipated to be completed by November 2021.

B. Water System Facilities Inventory

The system is a Class 1 public water system as defined by the state of Washington Department of Health. The system serves all residential, commercial and industrial customers within the corporate limits. Retail services will also be extended in the future to some retail customers outside of the corporate limits but within the Urban Growth Boundary (UGA).

The system in 2013 had a total of 1,077 connections. Of these connections 848 are single family residential, 114 are multi-family residential, ninety (90) are commercial, nine (9) are churches, and sixteen (16) are City. The City provides fourteen (14) services outside of the City Limits. All connections to the system intended for consumption are metered.

- Source Water is sourced from three (3) active wells located throughout the City. The
 wells have a combined pumping capacity of 1,600 gallons per minute. No wells are
 equipped with water treatment or disinfection at this time. Well pumps are powered from
 the electrical grid. Two (2) of the wells have connections that can be used with a mobile
 generator. Table 4 on page 21 shows details about each of the wells.
- 2. <u>Storage</u> The system has three active steel reservoirs with a total capacity of 1,471,000. These reservoirs maintain constant pressure throughout the system and provide operating and reserve capacity. All operating reservoirs are considered to be in good condition. A periodic maintenance schedule is included in the 2014 Water System Plan. Table 5 on the following page provides details about the City's reservoirs.

TABLE 4. ESSENTIAL FEATURES OF THE CITY OF ZILLAH'S WATER SOURCES

				Depth			
Facility	Year Drilled	Description	Location	in Feet	Capacity in GPM	Year Built	Condition
Rainier Well No. 1	1958	Well, Pumphouse	Northeast of the 6 th Street & Rainier Street Intersection	280	550	1958	Good, except for limited ventilation and heat.
3 rd Avenue Well No. 2	1940	Well, Pumphouse	North of 3 rd Avenue on Blossom Drive	950	400	1940	Used as back-up due to sulfur odor and elevated manganese presence. No generator connection. Not ventilated.
WIPPCO Well No. 3	1942	Well, Pumphouse	North of 1 st Street and south of Leland Street	260	650	1994	Good

TABLE 5. CAPACITIES OF THE CITY OF ZILLAH'S WATER RESERVOIRS

Facility	Description	Location	Total Capacity (gallons)	Year Built	Condition	Present Value
Reservoir No. 1	Elevated Steel Tank	North of 3 rd Ave- nue and west of Westwood Drive	75,000	1930	Good	\$520,200
Reservoir No. 2	Standpipe	Moritz Drive	783,000	1968	Good	\$1,218,900
Reservoir No. 3	Ground Level Standpipe	Cutler Way	613,000	2009	Good	-

3. <u>Distribution</u> - The distribution system consists of over 115,300 lineal feet of water pipe consisting of steel, asbestos cement, and PVC materials. The majority of the distribution system is construction of PVC materials. Pipe sizes range from 2 to 12-inches in diameter. The system also includes 178 hydrants for fire suppression. Table 6 below summarizes the City's distribution system.

TABLE 6. SUMMARY OF THE CITY OF ZILLAH'S WATER DISTRIBUTION SYSTEM – SIZES OF PIPES

Size of Pipe	Length (feet)	Percent
2-inch	790	0.69%
4-inch	1,868	1.62%
6-inch	47,341	41.06%
8-inch	41,899	36.34%
10-inch	8,335	7.23%
12-inch	15,072	13.07%
Total	115,305	100%

The majority of the system is looped although there are several dead-end mains located along the outer perimeter of the system.

4. <u>Telemetering and Control</u> - The water system is controlled by a telemetry system installed in December of 2002 and upgraded in 2010. The telemetry system exercises supervisory control, data collection, and monitoring of the water system operation from a computer located in City Hall. The system monitors the status and production rate of each well, reservoirs levels and water treatment functions. An abnormality in the function of any of these systems produces an alarm at City Hall and through the City's answering service.

C. Current and Future Demand

The 2014 Water Systems Plan forecasts the future growth and demand on the system. Factors influencing demand include population, type of residential development, per capita income, types of commercial and industrial enterprises, climate, use of water for irrigation and anticipated changes to the price structure.

The system serves a variety of customer types ranging from single family residential to industrial enterprises. Each type of customer puts a unique demand on the system. For planning purposes, each customer type is evaluated in terms of equivalent residential units (ERU). One ERU is the demand of an average single-family home in the system. Commercial uses are assumed to have an ERU of 4.4 per connection, while each City park is assumed to have an ERU of 46.3. This system facilitates the forecasting of future demands. Table 7 summarizes existing demand and demand forecasts for various years through 2037 as reported in the 2014 Water System Plan.

TABLE 7. SUMMARY OF THE CITY OF ZILLAH'S EXISTING AND FUTURE WATER DEMANDS

Year	No. of Services	ERUs	Average Daily Demand (gallons)
2013	1,077	1,873	320,258
2019	1,243	2,320	452,980
2023	1,382	2,570	501,663
2033	1,802	3,283	640,914

Based on these forecasts the number of services and ERUs is expected to steadily increase resulting in increased demands on the system. A more robust discussion about peak demand is included in the 2014 Water System Plan.

In 2003, the Washington State Legislature passed the Municipal Water Supply-Efficiency Requirements Act. The Act was a multi-year effort to reform the state's water laws. The Water Use Efficiency (WUE) Rule requires municipal water systems to report collect and consumption data, forecasts of future demands, evaluation of system leakage, evaluation of water rate structures, and implementation of measures. Chapter 4 in the 2014 Water System Plan satisfies the WUE requirements and adds planned actions by the City of Zillah in a variety of water shortage or water loss events.

D. Capital Improvement Program

Throughout the 2014 Water System Plan, generally summarized at the end of each chapter, are descriptions of deficiencies and concerns and recommendations to address them. The Capital Improvement Program is a listing of planned actions and projects identified by the potential year the project or action will be necessary and an estimate of the cost to accomplish the action or project.

The recommended improvements from the Water Systems Plan are divided into two categories: Table 8 Zillah's Schedule of Recommended Domestic Water Operations and Maintenance (O&M) Improvements (Years 2014-2033); and Table 9 Zillah's Schedule of Recommended Major Capital Improvements (Years 2014 through 2033). The prioritized improvements are shown on Figure 6.

In each improvement category table, the project name of the recommended improvement and estimated project costs were transferred from the 2014 Water System Plan. Greater detail and estimate assumptions can be found in Chapter 8 of the 2014 Water System Plan. Some projects with an initially planned implementation year prior to 2018 may be included in both project lists as securing funding may be an ongoing endeavor.

The O&M improvements shown in Table 8 below are necessary for system operation and maintenance of existing facilities, including well and reservoir rehabilitation, water use efficiency (WUE) measure implementation, and other miscellaneous improvements.

TABLE 8. ZILLAH'S SCHEDULE OF RECOMMENDED DOMESTIC WATER OPERATIONS AND MAINTENANCE IMPROVEMENTS (YEARS 2014-2033)

Priority Number	Improvement Description	Estimated Cost in 2014 Dollars	Completion Year	Funding Source
1	Source Well Protective Covenants	\$10,000	2015	City
2	Meter Replacement Project	\$10,000	2014	City
3	Meter Replacement Project	\$10,000	2015	City
4	Meter Replacement Project	\$10,000	2016	City
5	Meter Replacement Project	\$10,000	2017	City
6	Meter Replacement Project	\$10,000	2018	City
7	Meter Replacement Project	\$10,000	2019	City
8	Reservoir Inspection (Divers)	\$10,000	2017	City
9	Re-paint Existing Reservoirs	\$387,875	2018	City
10	Valve and Fire Hydrant Replacement	\$138,700	2019	City/Grant
11	Water System Plan Update	\$95,000	2020-2033	City

The recommended major capital improvements, shown in Table 9, are those necessary to improve a system deficiency such as fire flow, source and/or storage capacity, water quality, or replacement of aging and/or undersized system components.

Future planning improvements are also identified in Table 9 as necessary to accommodate system expansions serving future service areas. The future planning improvements are more expensive and will customarily require grants or loans to accomplish.

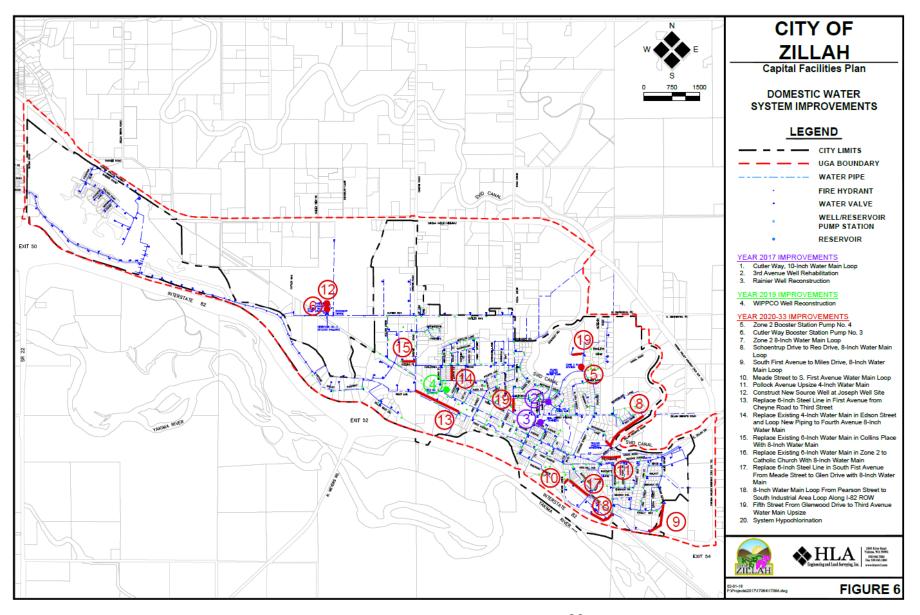
TABLE 9. ZILLAH'S SCHEDULE OF RECOMMENDED MAJOR CAPITAL IMPROVEMENTS (YEARS 2014 THROUGH 2033)

Priority Number	Improvement Description	Estimated Cost in 2014 Dollars	Completion Year	Estimated Cost in Year of Expenditure Dollars	Funding Source
1	Zone 2 Booster Station Pump No. 4	\$128,960	2020-2033	\$153,985	City
2	Cutler Way Booster Station Pump No. 3	\$128,960	2020-2033	\$153,985	City
3	Zone 2 8-inch Water Main Loop	\$164,813	2020-2033	\$196,795	Private
4	Schoentrup Drive to Reo Drive, 8-inch Water Main Loop	\$177,188	2020-2033	\$211,571	SRF Loan, City
5	South First Avenue to Miles Drive, 8-inch Water Main Loop	\$125,625	2020-2033	\$150,003	SRF Loan, City

Priority Number	Improvement Description	Estimated Cost in 2014 Dollars	Completion Year	Estimated Cost in Year of Expenditure Dollars	Funding Source
6	Meade Street to South First Avenue Water Main Loop	\$39,455	2020-2033	\$47,111	SRF Loan, City
7	Pollack Avenue Upsize 4-inch Water Main	\$141,063	2020-2033	\$168,436	SRF Loan, City
8	Construct New Source Well at Joseph Well Site	\$1,679,000	2020-2033	\$2,004,814	SRF Loan, City
9	Replace 6-inch Steel Line in First Avenue from Cheyne Road to Third Street	\$716,625	2020-2033	\$855,688	SRF Loan, City
10	Replace Existing 4-inch Water Main in Edison Street and Loop New Piping to Fourth Av- enue 8-inch Water Main	\$155,250	2020-2033	\$185,377	SRF Loan, City
11	Replace Existing 6-inch Water Main in Collins Place with 8- inch Water Main	\$106,563	2020-2033	\$127,241	SRF Loan, City
12	Replace Existing 6-inch Water Main in Zone 2 to Catholic Church with 8-inch Water Main	\$56,750	2020-2033	\$67,762	SRF Loan, City
13	Replace 6-inch Steel Line in First Avenue from Meade Street to Glen Drive with 8- inch Water Main	\$229,938	2020-2033	\$274,557	SRF Loan, City
14	8-inch Water Main Loop from Pearson Street to South Indus- trial Area Loop Along I-82 ROW	\$201,313	2020-2033	\$240,378	SRF Loan, City
15	Fifth Street from Glenwood Drive to Third Avenue Water Main Upsize	\$113,438	2020-2033	\$135,450	SRF Loan, City
16	System Hypo chlorination	\$310,205	2020-2033	\$370,455	SRF Loan, City
Note: Improvement costs for years following 2015 include 3% inflation per year.					

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Figure 6 – Zillah's Domestic Water System Projects – 2014-2033



E. Water System Funding

There are five (5) basic categories of potential financing for domestic water-related improvements:

- 1. Local Public Enterprise Funds
- 2. Use of Local Public Powers
- 3. State Assisted or Guaranteed Resources
- 4. Federally Assisted or Guaranteed Resources
- 5. Private Development

Because much of the funding opportunity information is common between domestic, stormwater, and sanitary sewer facilities, a common section for these categories is placed at the end of the Sanitary Sewer Section starting on Page 41 instead of repeated in three sections.

F. Major Capital Facilities Considerations – Domestic Water System

- Of the three well sites, only WIPPCO Well has a recorded protective covenant establishing
 the required 100-feet sanitary protective radius around the well. Protective covenants are
 required at the City's other two wells.
- The 3rd Avenue Well has aesthetic water quality issues related to the presence of sulfur and manganese leading to this well being used only as back-up.
- Rainier Well and WIPPCO Well require substantial building, mechanical, and electrical upgrades and repairs in addition to routine maintenance. Neither well is equipped with a dedicated and permanent emergency power generator or well level transducer.
- The City's peak hour demand is expected to exceed source capacity beyond 2019. Considerable effort has been made between the 2014 and 2021 WSP updates to analyze demands and this is being addressed during the current update efforts.
- The City's water system is not treated or disinfected at this time.
- The City's two elevated reservoirs were last painted in 1998 and have not been inspected since.
- Cutler Way Booster Station and Zone 2 Constant Pressure Booster Station were both constructed without the designed, spare pump due to budget constraints at the time of construction. When either station's primary pump is taken out of service for maintenance or repair, the respective station's capacity is impacted.
- A number of locations within the City were identified as having insufficient fire flow capacities.
- The 2007 Comprehensive Water Plan identified needed main line valve locations, new fire hydrant locations, and hydrant replacements. All but four (4) of the deficient hydrants

have been replaced, however none of the valves or new hydrants have been added to the water system as recommended.

• The City is required to manually read approximately 400 service meters.

G. Recommendations - Domestic Water System

- 1. Protective covenants create protective covenants and implement them for the 3rd Avenue Well and Rainier Well.
- 2. Investigate the water quality with analysis and a remediation strategy. Incorporate the strategy into the 3rd Avenue Well Rehabilitation project so that the well can be reinstated as a primary source well.
- 3. Both the Rainier Well and 3rd Avenue Well are best upgraded with a complete reconstruction because of the extents of necessary repairs to ensure safe and reliable water production.
- 4. The City will need to provide an additional source. The City purchased the Joseph Well property in anticipation of this requirement. The City will need to coordinate water rights and evaluate whether rehabilitating the well or drilling a new well will satisfy the need.
- 5. The City began investigating the types of treatment and treatment costs in the 2014 Water System Plan. The City will need to continue monitoring the growth of the system and determine when and how to incorporate chlorination into the City water system.
- 6. The internal conditions of Reservoir No.1 and Reservoir No. 2 will need to be inspected. Any structural or mechanical deficiencies found can be remedied while each reservoir is taken off-line for re-coating purposes.
- 7. The City will need to install the third booster pump at the Cutler Way Booster Station and the second booster pump at the Zone 2 Constant Pressure Booster Station.
- 8. The City will need to complete the following improvements to address fire flow deficiencies:
 - a. Install additional 8-inch water main loop in the Alteejen Road residential area of Zone 2.
 - b. Loop an 8-inch water main at the end of Schoentrup Lane to Reservoir No. 2.
 - c. Loop an 8-inch water main at the end of Reo Drive along the SVID canal and to Reservoir No. 2.
 - d. Loop an 8-inch water main from the south end of Miles Drive to First Avenue.
 - e. Loop an 8-inch water main from Meade Street to First Avenue.
 - f. Upsizing a portion of the water main in Moritz Street and Pollack Avenue to the existing hydrant.
- 9. The City needs to complete replacing the previously identified deficient hydrants and then implement the new hydrant and valve installations to improve system control and reliability.

 The City needs to replace about thirty (30) manually read service meters every year with new radio-read meters to improve service meter record accuracy and increase efficien use of staff time. 	1 t

STORM DRAIN SYSTEM

A. Background

The City of Zillah does not operate a separate storm drainage utility. Due to its population and location, the City of Zillah is exempt from National Pollutant Discharge Elimination System (NPDES) permit requirements for stormwater. Instead, the City's storm drain system is included as elements of the roadway system. When roadway improvements are planned, the associated drainage facilities are evaluated, and the necessary replacements or modifications are incorporated into the street project.

The City has approximately 1.5 miles of storm pipe within the system. A majority (approximately 70%) of the system consists of catch basins which discharge to dry wells or infiltration trenches. The remainder consists of catch basins and pipes conveying stormwater to the Yakima River sloughs at the foot of the bluffs.

The City follows a standard operating procedure when maintaining the storm drainage system to prevent or reduce stormwater impacts. On a monthly basis, streets are cleaned and swept. Drywells and catch basins are maintained semi-annually or more often as needed, based on visual inspection. System-wide inspections are scheduled for November 1 and February 1 or after the last anticipated significant snow and ice event, whichever comes later. Catch basin and storm drain cleaning checklist forms are completed during these inspection periods and reviewed by the Public Works Director for maintenance planning purposes.

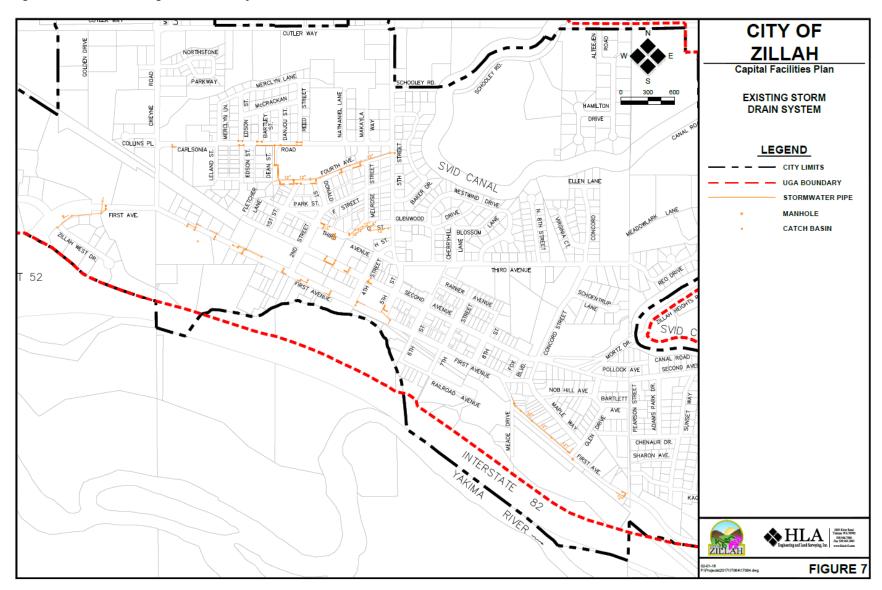
B. Overall Storm Drain System Performance

The City of Zillah has established thresholds for capacity flows and loadings based on the design of the Wastewater Treatment Plant (WWTP).

C. Existing Storm Drain System Inventory

Figure 7 presents the City of Zillah's Storm Drain System.

Figure 7 – Zillah's Existing Storm Drain System



SANITARY SEWER SYSTEM

A. Background

The City of Zillah has recently updated the General Sewer Plan. The 2021 General Sewer Plan describes the efforts taken to assess the existing condition of Zillah's sanitary sewer system and formulate a program of improvements.

Summarized sanitary sewer system information and resulting prioritized project lists will be shared in this section of the Capital Facilities Plan. A full discussion of the characteristics, capacity, and the forecast needs based on future growth of Zillah's sanitary sewer facilities and services are included here by reference to the *2021 General Sewer Plan*.

Along with increasing growth within the Yakima Valley, there has been an increase in population within the City of Zillah. A future service area for Zillah, known as the Urban Growth Area, has been established through the Growth Management Act planning process. The updated General Sewer Plan took the current UGA into account and includes future services within both the City and its Urban Growth Area (UGA).

By Washington State regulation, general sewer plans are required to contain maps showing sources of water supply, water storage reservoirs, water treatment plants, and water transmission lines. General sewer plans are required to satisfy the Washington Administrative Code, WAC 173-240-050. The following major components are included in the *2021 General Sewer Plan*:

- Definition of the planning area, determination of the areas in and around Zillah most likely to grow, and the projected population increases;
- Development of estimates for the current quantity of wastewater and the projected quantity to be generated within the planning area;
- Evaluation of the capacity and condition of the existing sewer system, including lift stations;
- Recommendations for extension of the existing sewer system, including lift stations;
- Development of design standards for extension of sewers and for lift stations;
- Development of policies for the extension of sewer service; and
- Review and evaluation of the existing treatment and disposal facilities.

This section of the Capital Facilities Plan is developed to be consistent with the General Sewer Plan and summarizes the existing conditions and the expansion of the City of Zillah's wastewater collection, treatment, and disposal facilities.

B. Overall Sanitary Sewer System Performance

The City of Zillah has established thresholds for capacity flows and loadings based on the design of the Wastewater Treatment Plant (WWTP) and is regulated under the National Pollutant Discharge Elimination System (NPDES) permit number WA-002016-8 issued by Washington State Department of Ecology (Ecology) on November 1, 2017.

TABLE 10. SUMMARY OF THE CITY OF ZILLAH'S EXISTING AND FUTURE WASTEWATER CONNECTION DEMANDS

Year	Population	WWTP Influent Flow Annual Average, MGD		
2024	3,540	0.266		
2029	3,874	0.291		
2034	4,228	0.318		
2039	4,603	0.346		

Information from Tables 2-1, 2-2, 2-4, 2-6, 2-8, 2-9, 2-10 and 6-4 in the 2021 General Sewer Plan is repeated in Table 11 below and shows the instantaneous peak flow design wastewater performance criteria has been exceeded and that the maximum month flow is projected to be exceeded in the 20-year planning period.

TABLE 11. ZILLAH'S CURRENT AND PROJECTED FLOWS AND LOADINGS

Parameter	Existing Design Criteria	Existing 2018	Projected 2039	Year Exceeded
Annual Average Flow (mgd)	N/A	0.252(3)	0.346(6)	N/A
Maximum Month Flow (mgd)	0.490 ⁽¹⁾	0.302(2)	0.410 ⁽⁶⁾	(0)
Maximum Daily Flow (mgd)	N/A	0.404(2)	0.599(6)	N/A
Peak Instantaneous Design Flow (PIDF)(mgd)	1.02 ⁽¹⁾	0.628	0.853	N/A
Maximum Month BOD (lbs/day)	1,064 lbs/day ⁽¹⁾	783 ⁽⁴⁾	1,018 ⁽⁷⁾	(0)
Maximum Month TSS (lbs/day)	1,107 lbs/day ⁽¹⁾	648(5)	687 ⁽¹⁰⁾	(0)

- (0) Not projected to exceed the parameter in the 20-year planning period.
- (1) From Table 2-1 in the 2021 General Sewer Plan.
- (6) From Table 2-8 in the 2021 General Sewer Plan.
- (2) From Table 2-2 in the 2021 General Sewer Plan.
- (7) From Table 2-9 in the 2021 General Sewer Plan.
- (3) From Table 2-3 in the 2021 General Sewer Plan.
- (8) From Table 2-10 in the 2021 General Sewer Plan.
- (4) From Table 2-4 in the 2021 General Sewer Plan.
- (5) From Table 2-6 in the 2021 General Sewer Plan.

Although the City's population has increased by 6.78% between 2010 and 2018, flows to the wastewater treatment facility have steadily grown at a much smaller rate. Additionally, the improvements to the facility in 2007 increased the capacity of the WWTP from 0.313 MGD to 0.490 MGD on a maximum monthly basis and was anticipated to serve the needs of the community through 2021.

Stadelman Fruit Company is the only significant industrial user in the City. The Company's fruit packing operations cover twenty-two (22) acres of light manufacturing and two (2) acres of commercially zoned land. Stadelman is authorized to discharge up to 11,000,000 gallons of wastewater per year, from three (3) packing facilities to the City of Zillah in accordance with their National Pollutant Discharge Elimination System (NPDES) permit. Procedures are being implemented to require Stadelman Fruit company to drain their cleaning tank over a longer period of time to prevent an exceedance of the peak instantaneous day design parameter of 708 gpm (1.02 mgd).

TABLE 12. PER CAPITA INFILTRATION AND INFLOW COMPARED TO EPA CRITERIA

Parameter	EPA Criteria for Excessive I/I (gpcd)	Seven-Year Averaged Zillah I/I Value (gpcd)
EPA Excessive Infiltration Criteria	120	78.3 ⁽¹⁾
EPA Excessive Inflow Criteria	275	103 ⁽²⁾

⁽¹⁾ See Table 3-6 in the *2021 General Sewer Plan* for calculation details. Averaged between 2011-2018. Highest average monthly per capita flow was 88.5 (2018).

The City realizes that infiltration is decreasing treatment efficiency and is committed to financing the capital improvements in the 2021 General Sewer Plan to reduce infiltration.

C. Sanitary Sewer System Facilities Inventory

The sanitary sewer system is made up of basins, piping of various size, lift stations, and the Wastewater Treatment Plant (WWTP).

- 1. Basins Connections to the system are identified by the basin in which the household, business, or industry is located. Zillah has divided the current overall system into six basins. Each of the basins are identified in Chapter 3 of the 2021 General Sewer Plan.
- 2. Collection System the grid of piping in and between basins allows the sewage to ultimately flow to the WWTP. The sizes of the pipes vary from two (2) inch forcemain to twelve (12) inch gravity sewer with the majority of the pipe measuring eight (8) inches in diameter.

The entire sewer system is approximately 98,950 linear feet of pipe. Table 3-1 in the General Sewer Plan displays the inventory of the collection system piping by size and type.

3. Lift Stations – because the slope of the piping is important and because there is a limit to the depth the system can feasibly be built, the system uses lift stations to return the sewage to a higher elevation at certain points so that pipes are kept at a manageable depth for installation, repair, and maintenance.

The City of Zillah owns and operates two (2) sewage lift stations. Each station is inspected and evaluated for electrical, mechanical, and structural condition. The capacity of the lift station is of key importance when determining whether demand can be accommodated adequately now and into the future. If the basin demand reaches limits that make an upgrade of the lift station pump necessary, it's important to know when the upgrade is needed. All lift stations were evaluated in detail in Chapter 3 of the 2021 General Sewer Plan.

Additionally, the Zillah Lakes planned development is served by a low-pressure sewer system, in which individual lift stations discharge to a network of forcemain piping and eventually connect to the Vintage Valley Lift Station. Each property owner is responsible

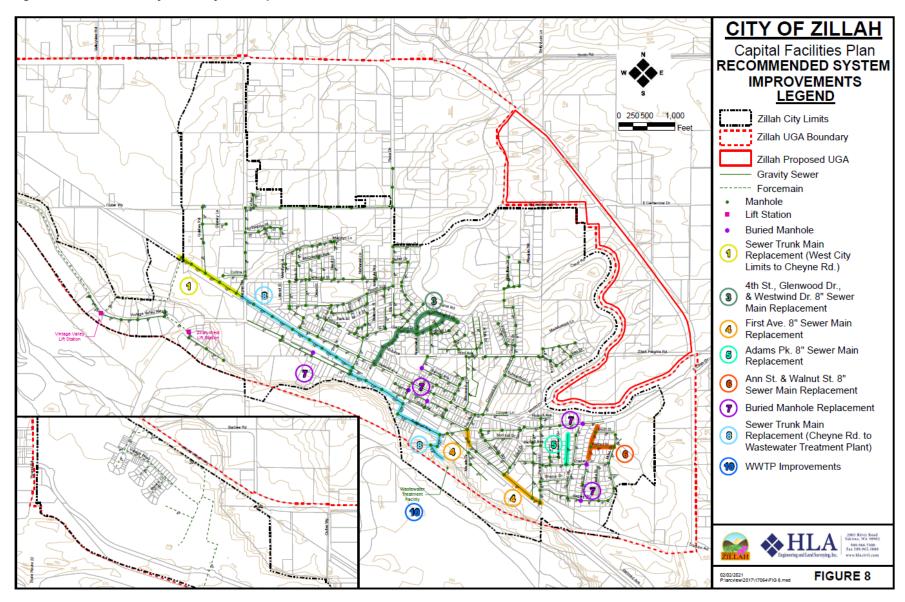
⁽²⁾ See Table 3-7 in the 2021 General Sewer Plan for calculation details. Averaged over eight events between 2010-2016. Highest event amount was 131 (5/14/2011).

for the installation and power costs associated with their individual lift station. Once installed, the City assumes responsibility for repair and maintenance of each individual lift station and forcemain piping network.

4. Wastewater Treatment Facility – the treatment process for wastewater is guided by NPDES permit No. WA-002016-8. The current facility details are included in Chapter 6 of the 2021 General Sewer Plan. The treatment facility includes equipment for screening, grit removal, clarifying, aeration, secondary clarifying, and UV treatment of liquid waste and digesters, thickeners, and drying beds for solid waste.

The conditions of the current collection system, lift stations, and Wastewater Treatment Facility are fully explored in the *2021 General Sewer Plan*. Summaries of the deficiencies and recommended improvements for the sanitary sewer system are shown in tables in the Capital Improvement Program section.

Figure 8 – Zillah's Sanitary Sewer System Improvements – 2022-2032



D. Computer Modeling of the Sanitary Sewer System

Because of the complexity of the system, to evaluate the current conditions and forecast the future needs, the City of Zillah accomplishes hydraulic analysis through a computer model. The existing system is simplified to a more skeletal representation and land uses are accounted for which aid in determining future demand from households, businesses, and industry. The model then loads in the flows of the system and indicates where the system is experiencing near capacity or over capacity situations.

The model can accommodate future years by adding planned improvements to the base system and increasing demand according to the growth that is estimated for the City. This method of forecasting is incrementally accomplished through all the required planning years. The results are evaluated and used for decision-making.

E. Capital Improvement Program

The model is one of many tools the City staff considers when planning the types of necessary maintenance, repair, and upgrades the system needs to adequately provide services for citizens both now and into the future. These planning efforts culminate in a Capital Improvement Program.

1. Collection system deficiencies

The hydraulic analysis model of the existing collection system did not identify current pipe capacity deficiencies.

Improvements are needed, however for high maintenance areas and are included in Table 7.1 of the 2021 General Sewer Plan, and in Table 13 below. Maintenance improvements include replacement of eight (8) inch sewer main pipe at several locations.

TABLE 13. MAINTENANCE IMPROVEMENTS FOR EXISTING COLLECTION SYSTEM

Maintenance Improvement (Pipe Replacements)	Location
Adams Park 8-inch Sewer Main	Between Adams Park Drive and Sunset Way
4 th Street 8-inch Sewer Main	4 th Street, Glenwood Drive, and Westwind Drive
Sewer Trunk Main	West City Limits to Cheyne Road
First Avenue 8-inch Sewer Main	Maple Way to Meade Drive and Maple Way to Pearson Street
Ann Street 8-inch Sewer Main	Ann Street and Walnut Street
Buried Manhole Replacement	Throughout

In other locations, also shown on Figure 3-3 in the *2021 General Sewer Plan*, manholes are buried beneath the roadway surface. The City has scheduled remedial actions to raise the manholes, thereby providing appropriate access to the sewer system beneath them.

By the forecast year, 2039, the model showed that the capacity in the sewer trunk main that follows an old railroad alignment for the west City Limits to the WWTP was insufficient to contain the peak flows in the full build-out scenario. Additionally, at full build-out the wastewater treatment facility will exceed its capacity rating.

Currently, odor complaints are common at, and downstream of the Vintage Valley Lift Station. The *2021 General Sewer Plan* identifies that a treatment system will likely be installed to fully address the odor complaints associated with the Zillah Lakes development.

2. Lift station deficiencies – Analysis of the lift stations at theoretically diminished operating capacities (the current capacity minus the capacity of the largest pump at each station) indicated that neither lift station is deficient in capacity. Although both stations have adequate capacity for current and future flows, both lift stations require installation of some sort of back-up power to improve reliability; and installation of alarm and monitoring equipment to improve control, monitoring, and failure response time.

Recommendations in the 2021 General Sewer Plan include: rebuilding the Zillah West lift station within three (3) years because it is reaching the end of its service life. The pumps show wear due to extensive corrosion.

3. Prioritized phasing of needed sanitary sewer improvements – City staff has prioritized improvement projects based on the modeled hydraulic capacity deficiencies, age and condition of system elements, known maintenance and operations issues, and in coordination with work being done on other related, public-owned facilities and systems.

TABLE 14. SIX-YEAR SCHEDULE OF RECOMMENDED IMPROVEMENTS 2022-2027

Location	Completion Year	Estimated Cost in 2020 Dollars	Estimated Cost*	Funding Source
WWTP projects	2022	\$1,078,272	\$1,144,000	City
Adams Park 8-inch Sewer Main Replacement	2024	\$250,530	\$282,000	City
4 th Street, Glenwood Drive, and Westwind Drive 8-inch Sewer Main Replacement	2026	\$881,909	\$1,053,000	City
Ann Street & Walnut Street 8-inch Sewer Main Replacement	2027	\$248,676	\$306,000	City
First Avenue 8-inch Sewer Main Replacement	2029	\$392,895	\$513,000	City
Sewer Trunk Main Replacement (Cheyne Road to WWTP)	2030	\$1,468,472	\$1,974,000	City
Buried Manhole Replacement	2031	\$218,182	\$302,000	City
Sewer Trunk Main Replacement (West City Limits to Cheyne Road)	2032	\$440,996	\$629,000	City
Six-Year Recommended Improvements Total		\$2,459,387	\$2,785,000	
2029-2032 Identified	d Projects Total	\$2,520,545	\$3,418,000	

^{*}Estimated future improvement costs beyond year 2020 include 3% inflation per year.

Entries in Table 14 are summarized from Table 7-1 of the 2021 General Sewer Plan, which has a planning period through 2039. The priority of improvements may need to change from that shown in Table 14 depending on availability of funds and future capacity and maintenance needs. For example, although the table above displays planned 2022-2032 improvements, if a road systems project was funded and the associated sewer system project was further down on the 2021 General Sewer Plan Capital Improvement Plan list, the City might choose to rearrange the order of the projects to complete them in the most efficient manner.

5. Identification of needed wastewater treatment facility improvements – City staff has identified maintenance and equipment needs based on age and condition of equipment. The needs are grouped by process in the facility. Table 14 WWTP project entry includes clarifier, headworks, and biosolids maintenance as described in Table 15.

TABLE 15. IDENTIFIED MAINTENANCE OR EQUIPMENT NEEDS FOR THE ZILLAH WASTEWATER TREATMENT FACILITY IDENTIFIED AS ONE PROJECT

Process	Maintenance/Equipment Needs	Estimated Cost in 2018 Dollars	Year Needed
Headworks	Replace Influent Screen, improve equipment foundations, and sewer connections	\$245,000	2022
Clarifier	Replace Clarifier Inlet Valves	\$ 60,000	2022
Biosolids System	Improve Thickener, Sludge Dewatering, and Polymer Systems	\$240,000	2022
Project Estimate Also Includes	Mobilization, Taxes, Design and Construction Engineering, and Contingency	\$533,272	2022

F. Sanitary Sewer System Funding

The 2021 General Sewer Plan identified possible funding sources for future improvements. In the event a major project is necessary, Zillah has identified potential financing from several sources. The sources are similar to those listed in the Domestic Water and Stormwater System sections of this document.

Current availability of funding is limited with a number of the sources within these categories. Many sources restrict the use of funds to certain projects and others limit their monetary participation to a percentage of the total cost.

A combined funding opportunity section is placed after this section on page 41 because many of the funding opportunities are common between domestic, wastewater, and stormwater facilities and related activities.

Other organizations provide financing for domestic water, sanitary sewer, and stormwater facilities assistance as well. Some of the organizations are listed in the illustrative list below:

- National Rural Water Association can assist with loans to pay for pre-development cost for proposed water and wastewater projects.
- Rural Community Assistance Corporation can assist with loans to pay for feasibility and pre-development costs for proposed solid waste, domestic water, stormwater, and wastewater projects.
- Department of Commerce offers a Bond Cap Allocation Program with limited state allocation, and Community Development Block Grants for general purposes including construction, acquisition, and planning-only.
- The Public Works Grants and Loans Program funded by the Economic Development Administration (EDA) is used to encourage long-range development gains in jurisdictions where economic growth is lagging or where the economic base is shifting. The program provides public works and development facilities needed to attract new industry and provide business expansion. Financial aid may be used to acquire and develop land and improvements for public works and to acquire, construct, rehabilitate, alter, expand, or improve such facilities, including related machinery and equipment.

When completed, such projects are expected to bring additional private investment to the area.

G. Domestic, Sanitary Sewer, and Stormwater System Funding

The 2021 General Sewer Plan identified possible funding sources for future improvements. The planned buffered amount of surplus in any of the water-related budgets is insufficient if either the drinking or sewer systems fail or if unanticipated expansion becomes necessary. In the event a major project is necessary, the City has identified potential financing from several sources.

The sources of potential funding listed here are common for domestic water, stormwater, and sanitary sewer system projects, programs, and planning in each water-related section of this document:

- 1. Local Public Enterprise Funds;
- 2. Use of Local Public Powers;
- 3. State Assisted or Guaranteed Resources;
- 4. Federally Assisted or Guaranteed Resources; and
- 5. Private Development.

This combined funding opportunity section describes the details of five (5) of the more common financing opportunities available for domestic water, sanitary sewer, and stormwater facilities. Links have been provided in each of the funding summaries because although eligible projects may change with legislative action, the websites accessed by the links provide the most up to date information available.

1. Local Public Enterprise Funds

Reserves in the Enterprise Fund are accumulated from revenues from domestic water, sanitary sewer, and stormwater user fees. The amount of the reserves will depend on the balance of operation and maintenance costs of each of the systems versus total revenues generated by the associated fees. These reserves may be used to finance any respective domestic water, sanitary sewer, or stormwater system related project approved by the City Council. Funds for a future project may be generated by increases in any system's user fees, thus building the reserves in the Enterprise Fund. With this method of financing, often called the "pay-as-you-go" approach, the City is collecting interest on the reserves as opposed to paying interest on a loan balance. One method used by some communities to accumulate reserves is through the development of a capital recovery charge system. This approach is similar to assessing connection fees, except the amount is based on the capital costs of constructing system infrastructure, and the collected funds are usually set aside as capital reserves for future projects.

2. Use of Local Public Powers

The use of local public powers consists of three (3) primary bonding techniques including general obligation bonds, special assessment bonds, and revenue bonds. There are advantages and disadvantages to each. The type of bond issue to finance a community improvement depends in part on custom and in part on the circumstances of a particular offering. General information about the three principal types of municipal bonds follows:

General Obligation Bonds pledge the unlimited taxing power and the full faith and credit of the issuing government to meet the required principal and interest payments.

Special Assessment Bonds (LID Bonds) are used to finance improvements where the property specially benefitted can be identified. Special assessment bonds are frequently used to make capital improvements in a particular neighborhood. Principal and interest payments for these bonds are made by the special assessment on the property benefitting from the improvement. Before special assessment bonds are issued, estimated costs are mailed to property owners, and a public hearing is held to allow the affected property owners to say whether or not they want the improvements. During a subsequent 30-day protest period, property owners may protest the improvements prior to City Council action formally establishing the project. Debt financed by special assessment bonds is not subject to debt limitations. As a sanitary sewer example, this type of financing is typically not suited for construction of trunk sewers within a collection system. However, it is often used as a means to finance extension of sewers into a new service area.

Revenue Bonds are frequently used to finance City-owned utilities, industrial parks, and other municipal public facilities. The bonds pledge the revenue from a particular revenue source to meet the principal and interest payments. Revenue bonds are appropriate debt instruments when the enterprise fund can be expected to generate sufficient revenue to meet both operating and debt service cost. Revenue bonds generally do not become a general obligation of the government issuing them. Communities may have to pay higher rates of interest on these bonds than on general obligation bonds, because revenue bonds are considered less secure. However, revenue bonds also have an important advantage over general obligation bonds. The amount of the revenue bonds is not included in the amount of indebtedness subject to state debt limitations. The legal requirements for issuing revenue bonds are more complex than those for issuing general obligation bonds. For example, when revenue bonds are issued, a special authority (Sewer Fund) operates the facility and a special revenue fund receives and disburses all funds. A trust agreement to provide for the monthly reimbursement of revenues and containing provisions to protect the bond holders must be formulated.

3. State and Federal Assisted or Guaranteed Resources

Water Quality Combined Financial Assistance Program

State administered funding sources are now integrated into a single process for the Centennial Clean Water Fund State Grant Program, the Clean Water Act Section 319 Federal Grant Program, the Drinking Water State Revolving Fund Loan Program, and the Storm Water Financial Assistance Program. Through the Water Quality Combined Financial Assistance Program, an applicant submits one application and is considered for all of the potential funding opportunities. Applications are accepted once a year and funding details can be found at: http://www.ecy.wa.gov/programs/wg/funding/Opp/Opportunities.html.

A. Centennial Clean Water Fund State Grant Program

The Centennial Clean Water Fund State Grant Program is state-funded through the Washington State General Fund, primarily through the State Building Construction Account. The Centennial program provides grants for water quality infrastructure and nonpoint source pollution projects to improve and protect water quality.

Eligible infrastructure projects are limited to wastewater treatment construction projects for financially distressed communities. Eligible nonpoint source pollution projects include: on-site septic repair and replacement, agricultural best management practices, education and outreach, water quality monitoring, lake water quality planning, riparian and wetlands habitat restoration and enhancement, stream restoration, TMDL plan development and implementation, and wellhead protection. A 25% match is required for nonpoint source pollution projects. More information can be accessed here: http://www.ecy.wa.gov/programs/wq/funding/fundprgms/Cent/oppCent.html.

B. Clean Water Act Section 319 Federal Grant Program

The Clean Water Act Section 319 Grant Program is federally-funded through the Environmental Protection Agency's granting of funds to Washington State Department of Ecology. The Section 319 program provides grants to eligible nonpoint source pollution projects to improve and protect water quality. The eligible projects are similar to those in the state Centennial program. A 25% match is required for projects. For more information visit:

http://www.ecy.wa.gov/programs/wq/funding/FundPrgms/Sec319/oppSec319.html.

C. Drinking Water State Revolving Fund

The Drinking Water State Revolving Fund (DWSRF OR SRF) provides low-interest loans to local governments for projects which improve and protect the state's water quality. Up to 100% of eligible project costs are fundable through this program. SRF loans can be used to match Centennial Clean Water Fund Grant Program and Clean Water Act Section 319 Federal Grant Program grants.

Eligible infrastructure projects include wastewater treatment construction projects, eligible nonpoint pollution control projects, and eligible Green projects. SRF loans can be used to match Centennial Clean Water Fund Grant Program and Clean Water Act Section 319 Federal Grant Program grants. For a list of eligible project types please visit: http://www.ecy.wa.gov/programs/wg/funding/fundprgms/CWSRF/oppSRF.html.

D. Stormwater Financial Assistance Program and SFAP Pre-Construction

The Stormwater Financial Assistance Program (SFAP) Pre-construction allows for grants to develop construction plans for stormwater capital projects to Phase I and Phase II National Pollutant Discharge Elimination System (NPDES) municipal permitees. Stormwater Financial Assistance Program provides cities, counties, and ports grants for projects that address existing pollution problems and provide a high level of water quality benefit.

E. Stormwater Capacity Grants

Stormwater Capacity Grants are awarded to holders of Phase I and Phase II NPDES municipal permits for activities and equipment necessary for permit implementation.

F. Grants of Regional or Statewide Significance

Grants of Regional or Statewide Significance are grants that are available to Phase I and Phase II NPDES municipal permittees for projects that provide benefits for more than one permittee.

In addition to these more customary funding opportunities, Department of Ecology and Department of Health have some smaller planning grants and loans to assist entities in preparation of applying for a Drinking Water State Revolving Fund Construction Loan, assist entities plan for Source Water Protection, and assist communities experiencing the loss of critical drinking water services or facilities due to an emergency.

Other organizations provide financing for domestic water, sanitary sewer, and stormwater facilities assistance as well. Some of the organizations are listed in the illustrative list below:

- National Rural Water Association can assist with loans to pay for pre-development cost for proposed water and wastewater projects.
- Rural Community Assistance Corporation can assist with loans to pay for feasibility and pre-development costs for proposed solid waste, domestic water, stormwater, and wastewater projects.
- Department of Commerce offers a Bond Cap Allocation Program with limited state allocation, and Community Development Block Grants for general purposes including construction, acquisition, and planning-only.
- The Public Works Grants and Loans Program funded by the Economic Development Administration (EDA) is used to encourage long-range development gains in jurisdictions where economic growth is lagging or where the economic base is shifting. The program provides public works and development facilities needed to attract new industry and provide business expansion. Financial aid may be used to acquire and develop land and improvements for public works and to acquire, construct, rehabilitate, alter, expand, or improve such facilities, including related machinery and equipment. When completed, such projects are expected to bring additional private investment to the area.

SOLID WASTE SYSTEM

A. Background

In 2002, the City of Zillah executed an interlocal agreement with Yakima County for solid waste planning in accordance with Chapters 70.95 and 70.105 of the Revised Code of Washington (RCW). All incorporated communities that entered into the interlocal agreement allowed Yakima County to write a common Solid Waste and Moderate Risk Waste Management Plan while maintaining responsibility and participation in the Yakima County Solid Waste Advisory Committee (SWAC). The SWAC was the way by which the County gathered public input to the planning process. The most recent Yakima County Solid Waste and Moderate Risk Waste Management Plan (Yakima County Solid Waste Plan) was adopted by the City of Zillah on March 20, 2017 and the Plan was finalized in June 2017.

Summarized solid waste system information and resulting prioritized project lists will be shared in this section of the Capital Facilities Plan. A full discussion of the characteristics of Zillah's collection and disposal of solid waste, the handling of special wastes and disaster debris management, strategies, and details of the 20-year implementation program are included here by reference to the 2017 Yakima County Solid Waste and Moderate Risk Waste Management Plan.

The collected solid waste is transported to the Cheyne Landfill located about six (6) miles north of Zillah. Residential accounts are serviced once a week and commercial accounts are serviced several times a week. The waste generation measured in pounds per person per year and in pounds per person per day are shown in Table 16.

TABLE 16. PER CAPITA WASTE GENERATION RATES (2014)

·	• • •					
		Estimated Zillah Waste Generation (in lb/Zillah Population)				
Parameter	Per Person	2015 population (3,140) ⁽¹⁾	2020 population (3,383) ⁽¹⁾	2035 population (3,852) (1)		
Waste Generation Rate, lb/person/yr	4,407 ⁽²⁾	13,837,980	14,908,881	16,975,764		
Waste Generation Rate, lb/person/day	12.1 ⁽²⁾	37,994	40,934	46,609		

(1),(2) See Tables 2.1 and 2.2 in the Yakima County Solid Waste and Moderate Risk Waste Management Plan for calculation details

The City of Zillah embraces the goals and objectives in the Yakima County Solid Waste Plan for promotion and education programs related to solid waste management:

- Promote the use of innovative and economical waste handling methods;
- Emphasize waste reduction as a fundamental management strategy;
- Support public/private partnerships for waste reduction and recycling programs;
- Encourage the recovery of marketable resources from the waste stream; and,
- Reduce the occurrence and environmental impacts associated with illegal dumping.

The City supports a curbside yard debris program which is an element of the diverted materials program and recycling program. The recycling program collects materials such as aluminum,

paper and paper products, fluorescent light bulbs, and glass to name a few. The diverted materials program collects materials such as asphalt/concrete, tires, wood, and other organic materials.

B. Overall Solid Waste Collection System Performance

The recycle rate in the Yakima County Solid Waste Plan shows that approximately 28% of the municipal solid waste is recycled and approximately 34% of the municipal solid waste is diverted from the landfill.

1. Capacity consideration

The City of Zillah utilizes the Cheyne Landfill. Cheyne Landfill is one of two County landfills in Yakima County. The Yakima County Solid Waste Plan estimates that Cheyne receives 30% of the county's municipal solid waste (MSW) disposal. Though the Terrace Heights Landfill is expected to reach capacity and no longer receive materials for direct disposal by 2027, the Cheyne Landfill is not expected to reach capacity in the planned foreseeable future (2053).

2. Level of Service

As part of the agreement Zillah has with the County, the responsibility to monitor the level of service lies with the County. The County determines when it is necessary to make changes to the collection services such as when it is necessary to add an additional driver or replace a current truck with the same or larger truck.

C. Solid Waste Capital Improvement Program

Because of the comprehensive nature of the agreement, the City does not need to maintain equipment or provide storage of vehicles and therefore does not have a customary Capital improvement Program for the Solid Waste System.

PUBLIC EDUCATION SYSTEM

A. Background

Zillah School District No. 205 (School District) provided educational services for just over 1,300 students in the City of Zillah in Spring 2017. The School District boundaries are contained within Zillah's City limits, is one of the smallest districts in Yakima County (estimated 44 square miles), and includes four schools.

1. Hilton Elementary (K-3rd grade)

In May 2017, the number of elementary classroom teachers was 26 and the student enrollment was 372 students. Approximately 61% of elementary school students qualified for free or reduced lunch. A gender and demographic breakdown of the students was: 50.7% male, 49.3% female; 36.5% white, 56.0% Hispanic/Latino, 2.4% American Indian, and 0.3% Asian races.

2. Zillah Intermediate School (4th – 6th grade)

In May 2017, the number of intermediate school classroom teachers was 19 and the student enrollment was 293 students. Approximately 60.8% of intermediate school students qualified for free or reduced lunch. A gender and demographic breakdown of the students was: 57.1% male, 42.9% female; 37.1% white, 54.1% Hispanic/Latino, 4.4% American Indian, and 0.3% each of Asian and African American races.

3. Zillah Middle School (7th-8th grade)

In May 2017, the number of middle school classroom teachers was 15 and the student enrollment was 236 students. Approximately 56.4% of middle school students qualified for free or reduced lunch. A gender and demographic breakdown of the students was: 58.6% male, 41.4% female; 39.7% white, 50.6% Hispanic/Latino, 5.9% American Indian, and 0.4% Asian races.

4. Zillah High School (9th-12th grade)

In May 2017, the number of high school classroom teachers was 25 and the student enrollment was 428 students. Approximately 48.6% of high school students qualified for free or reduced lunch. A gender and demographic breakdown of the students was: 53.1% male, 46.9% female; 47.8% white, 45.5% Hispanic/Latino, 3.7% American Indian, and 0.2% each of Asian, African American, and Native Hawaiian/Pacific Islander races.

B. Public Education Facilities Inventory

TABLE 17. CITY OF ZILLAH SCHOOL FACILITIES

Name of School	Address	Grades	2017 Enrollment
Hilton Elementary	505 Madison Avenue	K-3	372
Zillah Intermediate School	303 Second Avenue	4-6	293
Zillah Middle School	1301 Cutler Way	7-8	236
Zillah High School	1602 Second Avenue	9-12	428
Business Office	213 Fourth Avenue	N/A	N/A

The more than twenty-six (26) acres of recreational facilities associated with Zillah School District No. 205 schools are listed on Table 20 in the **Parks and Recreation** Section beginning on page 50.

C. Current and Future Demand

Yakima County forecasted a 2040 population of 5,016 people for the City of Zillah during the review of the City of Zillah's urban growth area (*Staff Report August 26, 2016*). The forecast population equates to a 59% increase from the 2015 population of 3,140.

The School District forecasts the future enrollment and demand by grade level. In order to compare the 2017 actual enrollment to the City's projection of enrollment for 2027 and 2037, the City has combined the K-6 students for School District No. 205 listed in Table 16 into one category, and students in grades 7-12 in a second category, and upon consultation with the school district, used a growth rate of 1.5% per year. The 2017 student enrollment is compared to projected student enrollment for future years in Table 18.

TABLE 18. ZILLAH SCHOOL DISTRICT NO. 205, 2016 VERSUS FUTURE ENROLLMENT PROJECTIONS

Grade Category	2017 Enrollment	2027 Projected Enrollment	2037 Projected Enrollment
K-6	665	771	895
7-12	664	770	894

D. Capital Improvement Program

The School District receives support for operations and maintenance through an Educational Programs and Operations Levy. This levy is voted on every two years, is a special property tax allowing citizens a way to fund school programs not covered by state or federal dollars, and allows the district to continue to maintain and operate educational programs. A Capital Levy is similar, but funds raised must be spent on capital needs. Recently, the Zillah school district had a capital levy that supported technology and safety, however there is no current capital levy. Zillah's High School Bond Project (\$14,000,000 bond) is scheduled to finish in the summer of 2020.

Though the City doesn't manage any of the School District facilities, there are opportunities for the School District and City to seek formal partnerships and coordinate efforts together such as infrastructure grant writing. Two (2) such grant opportunities are associated with Washington State Department of Transportation (WSDOT) programs titled "Safe Routes to School (SRTS)" and the "Pedestrian and Bicycle Program." The details of the SRTS Program can be found on the WSDOT website at: https://www.wsdot.wa.gov/LocalPrograms/SafeRoutes/default.htm and the Pedestrian and Bicycle Program can be accessed at: https://www.wsdot.wa.gov/LocalPrograms/ATP/funding.htm.

PARKS AND RECREATION

A. Background

In 2017, the City of Zillah authored their Comprehensive Plan Parks and Recreation Element. In 2018, the City adopted the same document as their *Parks and Recreation Plan*, submitted the Plan to Washington State Recreation and Conservation Office (RCO), and received approval to pursue RCO funding. The Plan explored the inventory of parks and open spaces maintained by the City, determined the satisfaction with City-owned parks and open spaces by conducting and analyzing public surveys, developed goals and objectives to preserve and improve the recreational areas, and identified a capital improvement program to estimate time and budget needs for those improvements.

The 2017 Comprehensive Plan's element dedicated to Parks and Recreation includes projects for the 2018-2023 six-year time frame. Although recreational inventories in the 2017 Comprehensive Plan include parks and recreational opportunities owned and operated by the City and others such as the School District only those facilities owned by the City are included in budget tables in the Comprehensive Plan and this Capital Facilities Plan.

The Capital Facilities Plan's focus is the immediate six (6) years of the City's capital improvement program and action plan from the *Comprehensive Plan*.

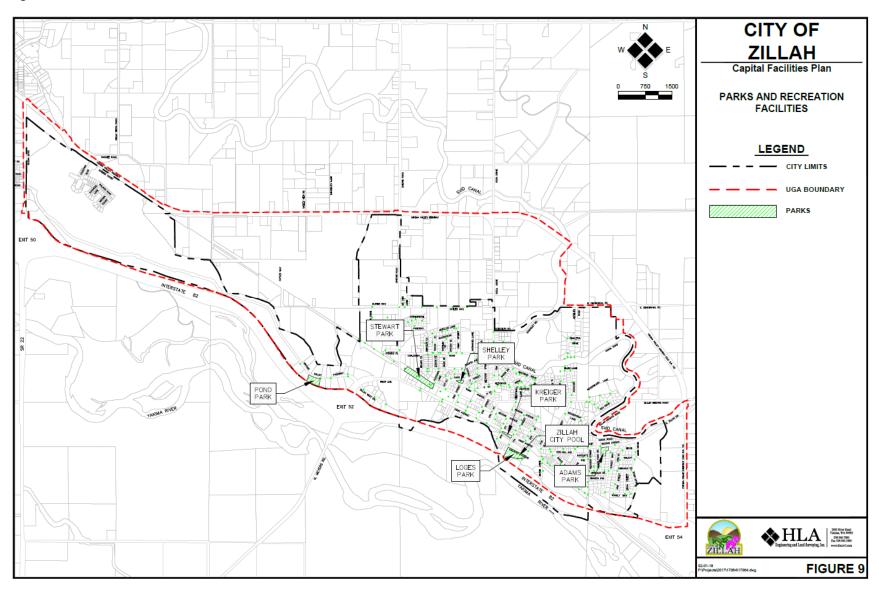
The Capital Facilities Plan is being developed to complement the Comprehensive Plan's capital facilities element and to be a stand-alone document outside of the context of the Comprehensive Plan. Therefore, although the parks and recreation areas inventory, current and future parks and recreation demand, parks and recreation capital improvement program, and potential funding sources for improving parks and recreation will be captured in both documents.

B. Parks and Recreation Inventory

The City owns eight (8) parks totaling approximately eleven (11) acres used for public recreation. Table 20 presents the current parks and the presence or lack of recreational equipment or infrastructure at each place.

Currently, the Parks and Recreation Department offers a variety of recreational activities as shown in Table 21. The City and the Zillah School District No. 205 have entered into an agreement to provide shared use of facilities on an as-needed and as-approved basis. Although the City is not responsible for the preservation or improvements to the School District properties, a similar school district recreational equipment and infrastructure inventory is included in the Capital Facilities Plan because of the funding nexus between school districts and cities. Table 22 presents School District No. 205's recreation facility inventory.

Figure 9 - Zillah's Parks and Recreation Facilities



C. Demands and Needs Analysis

The City analyzed the current system of parks, trails, sidewalks, and open space as the Parks and Recreation Plan was developed. Demand and needs were based on two (2) sources: 1) level of service, and 2) existing sources of statewide and regional population / demographic trends and recreation participation estimates and demand.

Table 19 below shows the level of service standards adopted by the City of Zillah.

TABLE 19. SUMMARY OF THE CITY OF ZILLAH'S PARK TYPE AND LOS STANDARD

Type of Park	Distance
Pocket	1/4 mile (5-minute walk) to a pocket park
Neighborhood	1/3 mile (10-minute walk) to a neighborhood park
Community	3/4 mile (5-minute bike ride) to a community park
Regional	No recommended LOS radii (City is not expected to provide regional parks)
Non-motorized Trails	Continuous network of sidewalks and trails throughout the City

Demand for public recreational activities is increasing due to:

- A relatively young population.
- A vibrant history of community recreational activity.
- There is a demand for exercise programs and facilities, including walking paths and indoor recreational facilities.
- There is little demand for new parks or ball fields.
- Support for smoke-free parks is strong.
- Further investigation into increasing public funding for parks and recreation is warranted.
- Recreational opportunities for adults and seniors could be improved.

D. Capital Improvement Program

Capital Improvements were identified and adopted through the development of the *Parks and Recreation Plan*. Of the twenty (20) improvement projects identified in the Plan, one (1) has been completed. Table 23 on page 55 presents an updated listing of parks and recreation improvements, the estimated cost for each project, a planned year or range of years to begin the project, and potential funding sources to pursue for each project.

TABLE 20. THE CITY OF ZILLAH'S EXISTING PARKS AND RECREATION FACILITIES

Amenities	Loges Park	Adams Park	Shelley Park	Stewart Park	Pond Park	Teapot Dome Gas Station	Cal Ripken Fields	Kreiger Park
Total Site Acreage	3.0 acres	0.9 acres	0.3 acres	2.4 acres	1.5 acres	0.5 acres	3.0 acres	0.9 acres
Baseball / Softball / Football / Soccer fields	No	No	No	Yes	No	No	No	No
Open Play Fields	Yes	Yes	No	Yes	No	No	Yes	No
Tennis / Basketball / Other	2, tennis with lights	No	No	No	No	No	No	No
Picnic Tables	Yes	No	Yes	Yes	Yes	No	No	Yes
Picnic Shelters	Yes	Yes	Yes	Yes	Yes	No	No	No
Wetland / Marsh	Yes, plus pond	No	No	No	No	No	No	No
Playground Equipment	Yes	Yes	Yes	No	No	No	No	No
Interpretive Facility / Kiosk	No	No	No	No	No	Yes	No	Yes, Notice Board
Nature or Fitness Trails	No	No	No	No	No	No	No	No
Restrooms	Yes, plus bathhouse	No	No	Yes	No	Yes	No	No
Handicapped Accessible Facilities	Yes	No	No	No	No	Yes	No	No
Automatic Irrigation	Yes	No	No	No	No	Yes	No	No
Water Fountain	No	No	No	Yes	No	Yes	No	Yes
Parking	Yes	Yes	No	Yes	Yes	Yes	No	Yes
Other Facilities	Outdoor swimming pool, wading pool, Lion's Cook Shack, BBQ	BBQ	None	Near relocated Teapot dome, cook shack	Fountain, large water feature, BBQ	Historic Teapot Dome Gas Station	None	Stage

TABLE 21. ZILLAH RECREATION PROGRAMS

Parks and Recreation Department Programs	2014	2015	2016	2017 Estimated
T-ball	Х	X	X	X
T-ball for tots	Х	×	Х	×
Coach Pitch Baseball	х	Х	×	×
Softball	х	Х	Х	
Soccer				×
Program Cost	\$2,134.17	\$2,764.88	\$3,580.04	\$7,240

TABLE 22. ZILLAH SCHOOL DISTRICT NO. 205'S RECREATION FACILITIES

Amenities	Zillah High School	Zillah Middle School	Hilton Elementary	Zillah Public Works / Cemetery
Total Site Acreage	5 acres	12 acres	4 acres	5.5 acres
Baseball and/or Softball Fields	No	1 varsity baseball field, 1 middle school baseball field, 1 high school soft- ball field, and 1 middle school softball field.		Yes, lighted
Football and/or Soccer Fields	1	1	No	
Track and Field Accommodations	Yes	No	No	
Hard or Sport Court	No	Outside basketball courts	Outside basketball courts	
Swimming Pool	No	No	No	
Tennis Courts	No	Yes, 4 courts	No	
Playground Equipment	No	No	Yes	
Gymnasium	Yes	Yes	Yes	
Other Facilities	open free play area	open free play area	open free play area	open free play area

Table 23. ZILLAH PARKS AND RECREATION SIX-YEAR CAPITAL IMPROVEMENT PROGRAM

Priority	Project	Estimated Cost in 2017 Dollars	Completion Year	Funding Source
1	Create a Bike and Pedestrian Trails Plan	\$24,000	2018	TIB[5], City Funds, Private Funds
2	Park Redevelopment Plan - Park/Streetlights	\$ 24,000	2018	RCO[1], CDBG[2], TIB[5], City Funds, Pri- vate Funds
3	Wine Barrel Trash Cans	\$750	2018	RCO[1], City Funds, Private Funds
4	Wayfinding signs	\$3,500	2018	RCO[1], CDBG[2], TIB[5], WSDOT[6], City Funds, Private Funds
5	Tree plantings	\$2,000	2018	RCO[1], CDBG[2], TIB[5], STBG, City Funds, Private Funds
6	Install ADA-accessible drinking fountains	\$22,000	2018	RCO[1], City Funds, Private Funds
7	Develop 1-2 miles of trail (bike / hike)	\$20,000	2019-2025	RCO[1], TIB[5], WSDOT[6],City Funds, Private Funds
8	Expand recreational opportunities (programs and activities)	\$20,000	2019-2025	RCO[1], City Funds, Private Funds
9	Tree plantings	\$2,000	2019-2025	RCO[1], CDBG[2], TIB[5], STBG, City Funds, Private Funds
10	Develop pro-active park mainte- nance program	\$7,400	2019-2025	RCO[1], City Funds, Private Funds
11	Construct restrooms / develop picnic area / develop rest areas	\$45,000	2019-2025	RCO[1], City Funds, Private Funds
12	Develop BMX / skateboard / rol- lerblade / dog park	\$40,000	2019-2025	RCO[1], City Funds, Private Funds
13	Develop splash park (1,000 – 3,000 sq ft)	\$330,000	2018-2025	RCO[1], City Funds, Private Funds
14	Acquire 15 to 20 acres of land for a community park in the NE area	\$150,000	2018-2025	RCO[1], City Funds, Private Funds
15	Renovate basketball and tennis courts	\$10,000 per court	2019-2025	RCO[1], City Funds, Private Funds

^[1] RCO - Washington State Recreation and Conservation Office

F. Parks and Recreation Facilities and Program Funding

^[2] CDBG – United States Department of Housing and Urban Development – Community Development Block Grant

^[3] USDA-RD – Unites States Department of Agriculture – Rural Development

^[4] STBG – United States Department of Transportation – Surface Transportation Block Grant and STBG Setaside

^[5] TIB – Transportation Improvement Board: Complete Streets, Small City Arterial Program, Small City Sidewalk Program, and Small City Preservation Program

^[6] WSDOT – Washington State Department of Transportation; City Safety Program, Safe Routes to School Program, Bike and Pedestrian Program

^[7] SIED – Yakima County – Supporting Investments in Economic Development

The Capital Improvement Plan in the previous section identified possible funding sources for future improvements. Seven acronyms were used to indicate federal, state, and Yakima County funding in Table 23 and are defined in the footnotes below the table.

Table 24 below identifies website locations to explore the funding sources mentioned for parks and recreation projects. Though comprehensive, the table does not list every opportunity.

For some of the grant or funding opportunities, park projects or recreation programs may be included as the primary project or alternatively, park and recreation elements may be incorporated into a larger project. For example, although the WSDOT Safe Routes to School Grants focus on providing funding for routes used by school-aged children and have coverage restrictions on how far a sidewalk is located from a school, part of an identified trail may qualify and be included in an urban sidewalk or pathway element of a transportation project.

Some of the funding sources listed would require the City of Zillah to contribute matching funds to leverage the grants. The links listed in the table are current as of January 17, 2021.

Table 24. POTENTIAL GRANT OR FUNDING SOURCES FOR PARKS AND RECREATION CAPITAL IMPROVEMENTS

Funding Grant or Source	link
Washington Wildlife and Recreation Program	https://rco.wa.gov/grant/washington-wildlife-and-recreation-program-recreation/
Non-highway and Off-road Vehicle Programs	https://rco.wa.gov/grant/nonhighway-and-off- road-vehicle-activities-program-trails/
Youth Athletic Facilities	https://rco.wa.gov/grant/youth-athletic-facilities/
Recreational Trails Program	https://rco.wa.gov/grant/recreational-trails-program/
Surface Transportation Block Grants	https://www.yvcog.org/
State of Washington Transportation Improvement Board	http://www.tib.wa.gov/
Department of Commerce – Youth Recreation Facilities	http://www.commerce.wa.gov/building-infrastruc- ture/capital-facilities/youth-recreational-facilities/
Community Development Block Grant	http://www.commerce.wa.gov/serving-communi- ties/current-opportunities/community-develop- ment-block-grants/

PROTECTIVE SERVICES

A. Background

The City contracts with larger jurisdictions and with Yakima County to provide many public protective services to maximize cost effectiveness. Locations and general information are provided for facilities where protective services are held, even if the City does not own or operate the building or property. More details are provided for the existing municipal buildings and properties owned and operated by the City of Zillah in the **Government Facilities and Properties** section.

Table 25. PROTECTIVE SERVICES PROVIDED BY OR CONTRACTED BY THE CITY OF ZILLAH

WITHIN CITY LIMITS OR URBAN GROWTH AREA (UGA)

I Y LIMITS OR URBAN GROWTH AREA (UGA)							
Protective Service	Address	Jurisdiction with Primary Responsibility					
Law Enforcement – Inside City Limits	111 Seventh Street	City of Zillah					
Law Enforcement – Outside City Limits,	715 Fountain BLVD, Zillah	Yakima County Sheriff					
Inside Zillah's UGA	2715 Rudkin Road, Union Gap	Washington State Patrol					
Police Firing Range		City of Zillah					
Fire Protection – Inside City Limits	717 First Avenue	City of Zillah					
Fire Protection – Outside City Limits, Inside Zillah's UGA	717 First Avenue, Zillah	Yakima County Fire District No. 5, Station 10					
Ambulance	12980 Yakima Valley Hwy, Zillah	Medstar Cabulance					
Correctional Facilities –	1 West First Street, Toppenish	City of Toppenish or Yakima County					
Inside City Limits	111 North Front Street, Yakima						
Correctional Facilities – Outside City Limits, Inside Zillah's UGA	111 North Front Street, Yakima	Yakima County					

B. Inventory of City Facilities and Properties

- Law Enforcement Inventory
 - Zillah's Police Station was constructed in 1910. The current facility can accommodate up to 20 police staff. Assessments done during the 2017 Comprehensive Plan update, estimated the capacity is adequate for five to ten years. Storage at the current site is limited and additional storage is located off-site. As the City continues to develop, the facility will require renovation and expansion, or police services may need to relocate.
 - The most current vehicle inventory lists ten vehicles ranging from a 1996 Dodge Ram to a 2020 Ford Explorer. In addition to police cars, the department has two trailers, a Polaris 4 wheeler and a drone. Other equipment for lighting, safety, radio communication, and other police equipment are listed with associated vehicles.

At this time, police can respond to anywhere within the City Limits within 3 minutes of receiving a call

Fire Protection Inventory

Zillah's Station 10 was constructed in 1966. The three-story building does not meet requirements. The Zillah Fire Department has 32 volunteer firefighters and a part-time paid Fire Chief. Station 10 houses three structure fire engines, two grass fire engines, two passenger vehicles, one water tender, and one rescue vehicle.

The Washington State Surveying and Rating Bureau evaluates fire departments across the state using four main criteria: fire department (apparatus, response, and training); water supply for fire suppression; emergency communication systems; and fire prevention activities. Zillah's Station 10 has a Community Grade of six with the Washington State Surveying and Rating Bureau.

C. Needs and Assessment

- Law Enforcement Needs and Assessment
- Fire Protection Needs and Assessment
- Ambulatory Needs and Assessment
- Correctional Facilities Needs and Assessment

D. Capital Improvement Program

Table 26. CITY OF ZILLAH PROTECTIVE SERVICES CAPITAL IMPROVEMENT PROGRAM

Priority	Project	Estimated Cost in 2021 Dollars	Completion Year	Funding Source				
Law Enforcement								
1	In-car and Personal Camera System	\$Quote	2021	18-16-16-16				
2	Two vehicles to replace the Sargent's vehicles	\$114,000	2022	General Fund				
3	Smart television in training room	\$1,500	2022	General Fund				
4	Camera System for BAC/Holding Cell/Interview Area	\$2,000	2022	General Fund				
5	Server	\$3,000	2022	General Fund				
6	Six replacement vehicles	\$57,000 (x6) = \$342,000	2023 and 2028	"Local" loans apply in 2022 for 2023 for 3 vehicles; apply in 2027 for 2028 for 3 vehicles.				
Fire Prote	Fire Protection							
1	MSA Airpack	\$5,000	2022	General Fund				
2	MSA Airpack	\$5,000	2023	General Fund				
3	New Fire Station (co-locate)	TBD\$	2023	Development Fees, General Fund				

Priority	Project	Estimated Cost in 2021 Dollars	Completion Year	Funding Source		
Fire Protection cont.						
4	MSA Airpack	\$5,000	2024	General Fund		
5	YCFD#5 Fire Truck (50/50 split with City; 25-yr lifespan)	\$150,000	2025	Development Fees, Loan		
6	Replace Z-11 Fire Truck (25-yr lifespan)	\$300,000	2027	Loan		

GOVERNMENT FACILITIES AND PROPERTIES

A. Background

The policy of the City Council is to provide essential public services in a manner that is cost effective and based on need. Many general governmental services and associated buildings are provided through contractual agreements to take advantage of the efficiencies and economies of scale achieved. The municipal buildings included in this section are those for which the City has primary responsibility, even if the building is leased or rented out to another party. The existing municipal buildings and properties owned and operated by the City of Zillah are described in Table 29.

Table 29. CITY OF ZILLAH GOVERNMENT FACILITIES AND PROPERTIES

Table 29. CITY OF ZILLAH GOVERNMENT FACILITIES AND PROPERTIES							
Facility or			Year				
Property	Address	Condition	Built	2020 Value	Notes		
City Hall	503 First Avenue		1986	\$326,280	1,620 square feet		
Police Department	111 7 th Street	Fair	1910	\$650,250	6,804 square feet		
Civic Center	119 First Avenue	Good	1995	\$416,160	4,860 square feet		
Cemetery Shop	100 First Avenue	Fair	1977	\$120,000	1,176 square feet		
Public Works Shop	132 First Avenue	Fair	1945	\$200,000	2,000 square feet		
Pump House	100 First Avenue	Poor	1967	\$7,803	256 square feet		
Cemetery	Cemetery	-	-	-	Approx. 25 acres		
Cemetery House	120 First Avenue	Fair	1920	\$86,700	700 square feet		
Associated Clubs Building	302 Second Avenue	Good	1985	\$130,050	2,134 square feet		
City Wells	-	-	-	-	-		
City Reservoirs	1101 Cooper Lane 605 Blossom Lane	Fair	1968 1930	\$1,218,900 \$520,200	750,000 Gallon Tank - Gallon Tank		
Wastewater Treatment Facility	740 Railroad Avenue	Good	1977	\$6,797,076	73,500 square feet		
Teapot Building	117 First Avenue	Good	1922 - 2012	\$80,000	260 square feet		
Teapot Restrooms, Pergola, and Interactive Kiosks	117 First Avenue	Good	2012	\$70,000	170 square feet		
Bailey Road Property	251 Bailey Road	Good	-	\$500,000	216 acres Property 108 acres Water Rights (Park)		

B. Inventory of City Facilities and Properties

The City will begin taking inventories for its facilities and properties listed in Table 29. This effort initiates the development of an Asset Management Program. Sample inventories and training are available on Department of Health and Department of Ecology websites. Through management

of the City's buildings and properties in the same manner as currently practiced with infrastructure systems, the City can address the total cost of owning, operating, upgrading, and replacing City facilities.

Asset management programs can be started simply with currently owned software such as Microsoft Word and Excel. As a start, the City can create inventories for:

- City Hall
- Public Works
- · Cemetery, and
- Other City buildings.

Inventories should include major assets of the building itself and the equipment in the buildings separately. Minimal information contained in a simple inventory records: age, expected life, condition, criticality, cost, and budget impact, or if in an infrastructure system the impact to rates.

C. Needs and Assessments

Once the inventory of the building is complete, the functionality of the building should be assessed. Good starting questions for assessment include:

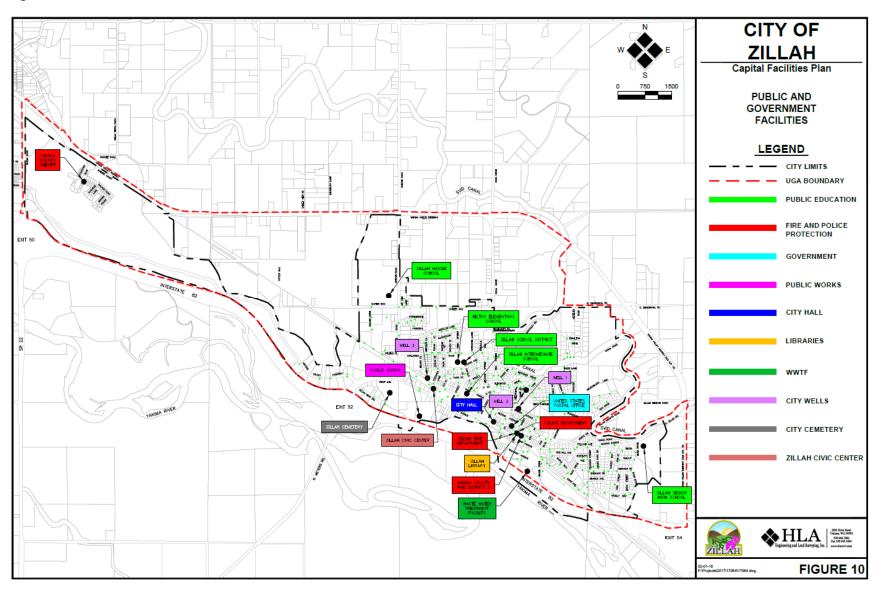
- Does the building accommodate staff well?
- Is there room for additional staff?
- Does the building meet all current building codes?

D. Government Facilities and Properties Funding

Table 30. POTENTIAL GRANT OR FUNDING SOURCES FOR GOVERNMENT FACILITIES AND VEHICLE CAPITAL IMPROVEMENTS

Funding Grant or Source	Link		
United States Department of Agriculture – Rural Development	https://www.rd.usda.gov/wa		
Community Development Block Grant	http://www.commerce.wa.gov/serving- communities/current-opportunities/community- development-block-grants/		
LOCAL Program	https://www.tre.wa.gov/local-program/		

Figure 10 - Zillah's Public and Government Facilities



Appendix A:
Applicable County Wide Planning Policies (CWPP)

CWPP Applicable to Capital Facilities in General

In addition to following State of Washington requirements, planning efforts in Zillah require consistency with County Wide Planning Policies (CWPP). The CWPP recognizes cities as the providers of urban governmental services as identified in the GMA and adopted urban growth management agreements. The following CWPP points apply to discussion on the Capital Facilities Element of the Comprehensive Plan and the Capital Facilities Plan:

- 1. Areas designated for urban growth should be determined by preferred development patterns, residential densities, and the capacity and willingness of the community to provide urban governmental services. (A.3.1.)
- 2. Prior to amending an UGA the County and the respective City will determine the capital improvement requirements of the amendment to ascertain that urban governmental services will be present within the forecast period. (A.3.11.)
- 3. Urban growth should be located first in areas already characterized by urban growth that have existing public facilities and service capabilities to serve such development, and second in areas already characterized by urban growth that will be served by a combination of both existing public facilities and services and any additional needed public facilities and services that are provided by either public or private sources. Further, it is appropriate that urban government services be provided by cities, and urban government services should not be provided in rural areas. (B.3.1., also RCW 36.70A.110(3))
- 4. Urban growth management interlocal agreements will identify services to be provided in an UGA, the responsible service purveyors and the terms under which the services are to be provided. (B.3.2.)
- 5. Infill development, higher density zoning and small lot sizes should be encouraged where services have already been provided and sufficient capacity exists and in areas planned for urban services within the next 20 years. (B.3.3.)
- 6. The capital facilities, utilities and transportation elements of each local government's comprehensive plan will specify the general location and phasing of major infrastructure improvements and anticipated revenue sources (RCW 36.70A.070(3)(c)(d)). These plan elements will be developed in consultation with special purpose districts and other utility providers. (B.3.4.)
- 7. New urban development should utilize available/planned urban services. (B.3.5., Also RCW 36.70A.110(3))
- 8. Formation of new special purpose districts should be discouraged within designated UGAs. (B.3.6.)
- 9. The County and the cities will inventory existing capital facilities and identify needed facility expansion and construction. (C.3.1., also RCW 36.70A.070(3)(a)(b))
- 10. From local inventory, analysis and collaboration with state agencies and utility providers, a list of Countywide and statewide public capital facilities needed to serve the Yakima County re-

gion will be developed. These include, but are not limited to, solid and hazardous waste handling facilities and disposal sites, major utility generation and transmission facilities, regional education institutions, airports, correctional facilities, in-patient facilities including hospitals and those for substance abuse and mental health, group homes and regional park and recreation facilities. (C.3.2.)

- 11. When a public facility of a countywide or statewide nature is proposed in the Yakima County region a Facility Analysis and Site Evaluation Advisory Committee including citizen members will be formed to evaluate the proposed public facility siting. At a minimum this evaluation shall consider:
 - a. The potential impacts (positive or negative) of the proposed project on the economy, the environment and community character;
 - b. The development of specific siting criteria for the proposed project;
 - c. The identification, analysis and ranking of potential project sites;
 - d. Measures to first minimize and second mitigate potential physical impacts including, but not limited to, those relating to land use, transportation, utilities, noise, odor and public safety; and
 - e. Measures to first minimize and second mitigate potential fiscal impacts. (C.3.3.)
- 12. Major public capital facilities that generate substantial travel demand should be located along or near major transportation corridors and public transportation routes. (C.3.4.)
- 13. Some public facilities may be more appropriately located outside of UGAs due to exceptional bulk or potentially dangerous or objectionable characteristics. Public facilities located beyond UGAs should be self-contained or be served by urban governmental services in a manner that will not promote sprawl. Utility and service considerations must be incorporated into site planning and development. (C.3.5.)
- 14. The multiple use of corridors for major utilities, trails and transportation right-of-way is encouraged. (C.3.6.)
- 15. The County and cities will work with special purpose districts and other agencies to establish a process for mutual consultation on proposed comprehensive land use plan policies for lands within UGAs. Actions of special purpose districts and other public service providers shall be consistent with comprehensive plans of the County and the cities. (F.3.1., also RCW 56.08.020, RCW 57.16.010)
- 16. The use of interlocal agreements is encouraged as a means to formalize cooperative efforts to plan for and provide urban governmental services. (F.3.2.)
- 17. Joint financing ventures should be identified to provide services and facilities that will serve the population within the UGAs. (F.3.3.)
- 18. Each interlocal agreement will require that common and consistent development and construction standards be applied throughout that UGA. These may include, but are not limited to standards for streets and roads, utilities and other infrastructure components. (F.3.5.)

- 19. Encourage economic growth within the capabilities of the region's natural resources, public services and public facilities.
 - Identify current and potential physical and fiscal capacities for municipal and private water systems, wastewater treatment plants, roadways and other infrastructure systems.
 - b. Identify economic opportunities that strengthen and diversify the county's economy while maintaining the integrity of our natural environment. (G.3.1.)
- 20. Local economic development plans should be consistent with the comprehensive land use and capital facilities plans and should:
 - a. Evaluate existing and potential industrial and commercial land sites to determine short and long-term potential for accommodating new and existing businesses;
 - Identify and target prime sites, determine costs and benefits of specific land development options and develop specific capital improvement strategies for the desired option;
 - c. Implement zoning and land use policies based upon infrastructure and financial capacities of each jurisdiction;
 - d. Identify changes in UGAs as necessary to accommodate the infrastructure needs of business and industry;
 - e. Support housing strategies and choices required for economic development. (G.3.2.)
- 21. Each local government will prepare a capital facilities plan consisting of:
 - a. An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities;
 - b. A forecast of the future needs for such capital facilities;
 - c. The proposed locations, capacities and costs of expanded or new capital facilities;
 - d. At least a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes; and
 - e. A requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, the capital facilities plan element and financing plan within the capital facilities plan element are coordinated and consistent. (H.3.1.)
- 22. As part of the planning process, the County and the cities should coordinate with capital facilities providers and other interested parties to ensure that consideration is given to all capital service requirements and the means of financing capital improvements. (H.3.2.)
- 23. The County and the cities should consider an impact fee process, as provided for in RCW 82.02.050-090, to ensure that new development pays its fair share of the cost of improvements necessitated by growth and contributes to the overall financing of capital improvements. (H.3.3.)
- 24. To minimize the potential economic impacts of annexation activities on the County and cities, consideration will be given to negotiating agreements for appropriate allocation of financial burdens resulting from the transition of land from county to city jurisdiction. (H.3.4.)

CWPP Applicable to Transportation Systems

Countywide planning policies must be considered and incorporated into the Transportation Element for the plan to achieve "interjurisdictional consistency." The following Countywide Planning Policies apply to discussion of the Transportation Element:

- 1. The capital facilities, utilities, and transportation elements of each local government's comprehensive plan will specify the general location and phasing of major infrastructure improvements and anticipated revenue sources. [RCW 36.70A.070(3)(c)(d)] (Countywide Planning Policy: B.3.4.)
- 2. Major public capital facilities that generate substantial travel demand should be located along or near major transportation corridors and public transportation routes. (C.3.4.)
- 3. The multiple uses of corridors for major utilities, trails, and transportation rights-of-way is encouraged. (C.3.6.)
- 4. The transportation element for each jurisdiction will be consistent with and support the land use element of its comprehensive plan. [RCW 36.70A.070(6)] (D.3.1.)
- 5. Transportation improvements or strategies to accommodate the impacts resulting from new development will be implemented concurrent with new development. "Concurrent with new development" means that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years. [RCW 36.70A.070(6)(e)]
- 6. Local jurisdictions will coordinate transportation planning efforts through YVCOG, which is designated as the RTPO. This regional coordination will assure that an assessment of the impacts of each transportation plan and land use assumptions on the transportation systems of adjacent jurisdictions is conducted and conflicts prevented. (D.3.5.)
- 7. Each interlocal agreement will require that common and consistent development and construction standards be applied throughout the UGA. These may include, but not be limited to, standards for streets and roads, utilities, and other infrastructure components. (F.3.5.)

CWPP Applicable to the Water System

The Countywide Planning Policies Applicable to Capital Facilities in General sufficiently covers the applicable CWPP for Zillah's water system.

CWPP Applicable to Parks and Recreation

Countywide planning policies require the identification and protection of local open space in comprehensive plans.

- 1. When determining land requirements for urban growth areas, allowance will be made for greenbelt and open space areas and for protection of wildlife habitat and other environmentally sensitive areas. [RCW 36.70A.110(2)] (Countywide Planning Policy: A.3.7.)
- 2. From local inventory, analysis and collaboration with state agencies and utility providers, a list

of Countywide and statewide public capital facilities needed to serve the Yakima County region will be developed. These include, but are not limited to, solid and hazardous waste handling facilities and disposal sites; major utility generation and transmission facilities; regional education institutions; airports; correctional facilities; in-patient facilities including hospitals and those for substance abuse, mental health, group homes and secure community transition facilities; and regional park and recreation facilities. (C.3.2.)

3. The multiple uses of corridors for major utilities, trails, and transportation rights-of-way is encouraged. (C.3.6.)

Appendix B:
Level of Service (LOS) Methodology Used in the City of Zillah's LOS Calculations

Transportation Level of Service

The ease of traffic movement along a roadway is a function of the roadway's vehicular capacity, the number of vehicles actually using the roadway, the number of stops along the roadway, and the time spent waiting at each stop. To characterize the ease of movement of traffic, transportation engineers have developed the concept of "level of service" (LOS). Levels of service have been categorized in a range from "A" to "F" and the descriptions in Table B-1 are summarized from the Highway Capacity Manual 2010.

Because travel time has not been customarily measured in the greater Yakima Valley region, instead of travel speeds and travel delay, a simpler method of observed or forecasted volume versus the idealized capacity is used and the resulting ratio Volume/Capacity is expressed in Table B-1.

LOS can be calculated in several ways for each mode of transportation such as vehicles, freight, transit, bicycle, or pedestrian. Other, more complex measures include interruptions to traffic flow such as signals, stop signs, and turning traffic. Because each project may vary in complexity, a project level LOS study is performed during the Preliminary Engineering of any new construction or reconstruction project which follows the methodologies outlined in the Highway Capacity Manual 2010.

For screening purposes associated with planning and to be consistent with the standards set by the Regional Transportation Planning Organization, Zillah reports LOS in the following Volume/Capacity manner.

Roadway capacity refers to the maximum amount of traffic that can be accommodated by a given roadway facility. Roadway capacity is based on an analysis of roadway conditions, including the number and width of lanes, pavement and shoulder types, the presence of controls at an intersection, and whether the roadway is in an urban or rural area. Because the considerations vary, the City includes the idealized volume it expects on each FFC roadway in the same table as their traffic count history or forecasted traffic volume. In this way, the reader can evaluate the screening LOS easily.

Level of service "A" allows the maximum amount of freedom to select desired speeds and to maneuver within the traffic stream. Level of service "B" describes stable flow, but the selection of speed is now affected by the presence of others. In LOS, "C" there is stable flow, but speed and maneuverability within the traffic stream are reduced somewhat and require vigilance on the part of the driver. In LOS "D," stable flow may be affected by operating conditions, and maneuverability may be restricted. LOS "E" represents operating conditions at or near the capacity of the highway and is characterized by low speeds and serious difficulty maneuvering within the traffic stream. Any incident can be expected to produce extensive delays and lines of vehicles. Level of service "F" describes operations characterized by stop-and-go traffic. Vehicles may progress at reasonable speeds for several hundred feet or more, and must stop and start again, in a cyclical fashion.

Table B-1. Level of Service Categories

Level of Service	Description	Volume/Capacity Ratio	
Α	Free flow. Low volumes and no delays.	Less than 0 .60	
В	Stable flow. Speeds restricted by travel conditions, minor delays. Presence of other users in the traffic stream.	0.61 to 0.70	
С	Stable flow. Speeds and maneuverability reduced somewhat by higher volumes.	0.71 to 0.80	
D	Stable flow. Speeds considerably affected by change in operating conditions. High density traffic restricts maneuverability.	0.81 to 0.90	
E	Unstable flow. Low speeds, considerable delay, volume at or near capacity. Freedom to maneuver is extremely difficult.	0.91 to 1.00	
F	Forced flow. Very low speeds, volumes exceed capacity, long delays and queues with stop-and-go traffic.	Over 1.00	

Zillah adopts LOS C for roadways, but views LOS for roadways other than arterial streets as advisory within City Limits. The Washington State Department of Transportation has adopted level of service "C" for rural highways. This standard is consistent with the LOS methodologies and thresholds established by YVCOG, the RTPO for the Yakima Valley region. Regional transportation planning organizations statewide are tasked with ensuring LOS methodologies are coordinated with surrounding jurisdictions to ensure a consistent regional evaluation of transportation facilities and corridors.

Per the Zillah's Concurrency Review ordinance, ZMC Chapter 17.10, the City requires concurrency review for all projects or development activities generating more than 90 trips per day. Zillah's Concurrency Review ordinance also sets criteria for evaluating mitigations that are proposed when it is determined that a proposed project will not pass level of service standards.

Table B-2. Traffic Volumes and Levels of Service Within and Near the City of Zillah's City Limits

Functional Class	Roadway	Start	End	Number of Lanes	AADT per lane	Estimated Peak Hour Volume per lane	Idealized Roadway Capacity per Lane per Hour (vplph)	Peak Volume as a Ratio of Roadway Capacity	Calculated Level of- Service (LOS)
		Before MP 49.78 (SR-22 Interchange)		4	7,000 (2018)	700	3,600	19.4%	А
Interstate	I-82	Before MP 51.58 (Ex Zillah Road)	it 52 – Toppenish	4	6,250 (2018)	625	3,600	17.4%	Α
		Before MP 53.61 (Ex Road)	it 54 – Division	4	6,250 (2018)	625	3,600	17.4%	А
	Fifth Street	First Avenue	Carlsonia Avenue	2	1,151 (2020)	110	1,200	9.1%	А
	Thui Oucci	Carlsonia Avenue	North City Limits	2	2,571 (2016)	257	1,200	11.0%	Α
	Toppenish-Zillah Road	South City Limits	Cheyne Road	2	5,527 (2016)	553	1,200	46.1%	Α
	First Avenue	Cheyne Road	Fifth Street	2	3,086 (2020)	289	1,200	10.7%	Α
Major		Fifth Street	East City Limits	2	1,067 (2020)	126	1,200	3.7%	Α
Collector	Second Avenue	Fifth Street	Miles Drive	2	1,327 (2016)	133	1,200	11.1	Α
		Miles Drive	East City Limits	2	663 (2020)	73	1,200	6.1%	Α
	Vintage Valley Parkway	West End Road	Toppenish Zillah Road	2	future	future	1,200	future	future
	Cheyne Road	First Avenue	Cutler Way	2	1,178 (2020	117	1,200	9.8%	Α
		Cutler Way	North City Limits	2	899 (2020)	88	1,200	7.6%	Α
Minor Collector	Second Avenue	Second Street	Fifth Street	2	251 (2020)	27	1,000	1.05%	Α
	Second Street	First Avenue	Second Avenue	2	403 (2016)	43	1,000	4.3%	Α
	Third Avenue	5th Street	Meadowlark Lane	2	404 (2020)	45	1,000	4.4%	А
									continued

Functional Class	Roadway	Start	End	Number of Lanes	AADT per lane	Estimated Peak Hour Volume per lane	Idealized Roadway Capacity per Lane per Hour (vplph)	Peak Volume as a Ratio of Roadway Capacity	Calculated Level of- Service (LOS)
Minor Collector	Concord Street	Second Avenue	Third Avenue	2	306 (2020)	36	1,000	3.6%	А
cont.	Carlsonia Avenue	Cheyne Road	Roza Drive	2	634 (2020)	61	1,000	6.1%	А

Table copied from CFP Transportation Section Table 2.

Table B-3. Forecasted AADT Volumes and Levels of Service Within and Near Zillah's City Limits

Functional Class	Roadway	Start	End	AADT (2020)	AADT (2025)	AADT (2030)	AADT (2035)	AADT (2040)
		Before MP 49.78 (SR-	-22 Interchange)	7,000	7,729	8,533	9,421	10,402
Interstate	I-82	Before MP 51.58 (Exit Road)	52 – Toppenish Zillah	6,250	6,901	7,619	8,412	9,287
		Before MP 53.61 (Exit 54 – Division Road)		6,250	6,901	7,619	8,412	9,287
	Fifth Street	First Avenue	Carlsonia Avenue	1,151	1,271	1,403	1,549	1,710
	Thur Sueet	Carlsonia Avenue	North City Limits	2,571	2,839	3,134	3,460	3,820
	Toppenish-Zillah Road	South City Limits	Cheyne Road	5,527	6,102	6,737	7,439	8,213
	First Avenue	Cheyne Road	Fifth Street	3,086	3,407	3,762	4,153	4,586
Major		Fifth Street	East City Limits	1,067	1,178	1,301	1,436	1,586
Collector	0	Fifth Street	Miles Drive	1,327	1,465	1,618	1,786	1,972
	Second Avenue	Miles Drive	East City Limits	663	732	808	892	985
	Vintage Valley Parkway	West End Road	Toppenish Zillah Road	future	future	future	future	future
	Chayna Daad	First Avenue	Cutler Way	1,178	1,301	1,436	1,586	1,750
	Cheyne Road	Cutler Way	North City Limits	899	993	1,096	1,210	1,336
	Second Avenue	Second Street	Fifth Street	251	277	306	338	373
	Second Street	First Avenue	Second Avenue	403	445	491	542	599
Minor Collector	Third Avenue	5th Street	Meadowlark Lane	404	446	492	544	600
2 3 3	Concord Street	First Avenue	Carlsonia Avenue	306	338	373	412	455
	Carlsonia Avenue	Carlsonia Avenue	North City Limits	634	700	773	853	942

No color in the cell = estimated to be LOS A
Yellow colored cell = estimated to be LOS B
Orange colored cell = estimated to be LOS C
Pink colored cell = estimated to be LOS D
Red colored cell = estimated to be LOS E
Black colored cell = estimated to be LOS F

All calculations above are done simply by percentages and do not take into account other LOS contributing factors such as operation of intersections and land use changes. The 2% flat rate growth was applied in Zillah's 2017 Comprehensive Plan Transportation and Capital Facilities Elements and is used in the forecast calculations in Table B.3. for consistency. For the simplest evaluation, an assumption that Peak Hour volume per lane = 10% of AADT per lane. The same idealized capacity per lane is used from Table B.2. Volume/capacity calculations are per lane per hour and the Volume/Capacity ratio is used in Table B.1. for color coding Table B.3.

The order of evaluation should be: these simplified calculations until a facility moves to LOS B. If the facility indicates a LOS other than A, the Regional Travel Demand Model should be used for a land-use oriented, better approximation of travel patterns and flow.

If forecast volumes are sought from YVCOG, this Capital Facilities Plan should be amended as well as both the Capital Facilities and Transportation Elements in the 2017 Comprehensive Plan for consistency.

Because of the significant changes anticipated in land use when Vintage Valley Parkway is complete, these numbers should be checked against the forecast results of the Regional Travel Demand Model for the 2025 through 2040 years. As of the writing of this Capital Facilities Plan, the calibrated and validated regional travel demand model set is not available for the City to use for data confirmation.

Appendix C:
The City of Zillah's 2021-2026 Transportation
Improvement Program (TIP)

RESOLUTION 2020-23

A RESOLUTION ADOPTING THE REVISED SIX YEAR TRANSPORTATION PROGRAM FOR THE SIX CALENDAR YEARS FROM 2021- 2026

WHEREAS, R.C.W.35.77.010 sets forth that each city in the State of Washington shall each year prepare and adopt a Six (6) Year Transportation Improvement Program (TIP); and

WHEREAS, in compliance with said law, the City Council of the City of Zillah, Washington, did review and revise the TIP; and

WHEREAS, in compliance with said law, the City Council held a Public Hearing at 7:00 p.m. on Monday July 6, 2020 after due notice of the time and place being given publication and posting; and

WHEREAS, at the time and place fixed, the public were given the opportunity to appear and be heard on the proposed amended TIP for the six calendar years from 2021 – 2026 as it was explained and discussed;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ZILLAH, WASHINGTON, DOES HEREBY APPROVE AS FOLLOWS:

Section 1. Six Year TIP 2021-2026. The City Council for Zillah adopts the Revised Six (6) Year Transportation Improvement Program for the six calendar years from 2021-2026, herein attached as Exhibit A.

PASSED AND APPROVED by the City Council for the City of Zillah on the 6th day of July, 2020.

Dr. Scott Carmack, Mayor

ATTEST:

Sharon Bounds, City Administrator

APPROVED AS TO FORM:

Jame Carmody, City Attorney

Date passed by Council's



Agency: Zillah County: Yakima

MPO/RTPO: YVCOG N Inside Y Outside

Functional Class	y Numb	A. PIN/Project No. B. STIP ID C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
09	1	ZIL2019-02	06/17/19	06/17/19		2019-12	05		0.100	CE	No
		4th Street- Grid and overlay									1
		4th Street									1
		Second Ave to 5th Street									
		Grid and overlay									

Funding	Funding												
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds					
P	CN	2025		0	TIB	67,500	7,500	75,000					
			Totals	0		67,500	7,500	75,000					

Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th						
CN	0	0	0	0	75,000						
Totals	0	0	0	0	75,000						



Agency: Zillah County: Yakima

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Functional Class	y Numb	A. PIN/Project No. B. STIP ID C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Tota I Length	Environmental Type	RW Required
07	2	ZIL2020-01	07/06/20	07/06/20		2020-	04	SW		CE	No
		Leland Street									.
		Leland									.
		Carlsonia to Dead End									.
		Reconstruction of the roadway, add drainage									

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
Р	PE	2026		0		0	30,000	30,000
P	CN	2026		0		0	420,000	420,000
			Totals	0		0	450,000	450,000

Expenditure Schedule	•											
Phase	1st	2nd	3rd	4th	5th & 6th							
PE	0	0	0	0	30,000							
CN	0	0	0	0	420,000							
Totals	0	0	0	0	450,000							



Agency: Zillah County: Yakima

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Functional Class	y Numb	A. PIN/Project No. B. STIP C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	3	ZIL2013-	5 06/18/18	06/18/18		2018-25	05		0.140	CE	No
		Merolyn Lane Overlay									
		Merolyn Lane									.
		Edson to EOR									
		Roadway surfacing overlay									

Funding	Funding											
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds				
Р	CN	2022		0		0	65,000	65,000				
	Totals					0	65,000	65,000				

Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th						
CN	0	65,000	0	0	0						
Totals	0	65,000	0	0	0						



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Functional Class	y Numb	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G.	B. STIP ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
17	4		ZIL2012-05	07/06/20	06/17/19		2020-	05	CGPST W	0.550	CE	No
		Third Avenue Resurfacing										
		Third Avenue										1
		Reo Drive to 4th Street										
		Resurfacing of approx. 2,950 LF of roadway, install ADA where needed										

Funding	unding												
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds					
P	PE	2022		0	TIB	132,312	22,376	154,688					
P	CN	2022		0	TIB	469,968	78,469	548,437					
	Tota					602,280	100,845	703,125					

Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th						
PE	0	154,688	0	0	0						
CN	0	548,437	0	0	0						
Totals	0	703,125	0	0	0						



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Functional Class	y Numb	A. PIN/Project No. B. STIP C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
17	5	ZIL2013	02 06/18/18	06/18/18		2018-25	28		0.050	CE	No
		Second Street Sidewalks									i
		Second Street									1
		First Avenue to Second Avenue									1
		Construct 6 foot sidewalks along west and east side of street.									

Funding	Funding												
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds					
P	CN	2022		0	TIB	37,000	3,000	40,000					
	Totals					37,000	3,000	40,000					

Expenditure Schedule										
Phase 1st 2nd 3rd 4th 5th & 6th										
	0	0	0	0	0					
Totals	0	0	0	0	0					



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Functional Class	y Numb	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
17	6		ZIL2012-02	06/18/18	06/18/18		2018-25	04	CGOPS TW	0.300	CE	No
		First Avenue Resurfacing Improvements										
		First Avenue										
		Pearson Street to East City Limits										
		Resurfacing of approx. 1,600 LF of roadway, install barrier curb and gutter, and storm drainage improvements										

Funding	unding												
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds					
P	PE	2022		0	TIB	33,750	4,000	37,750					
P	CN	2022		0	TIB	734,250	3,000	737,250					
Totals			0		768,000	7,000	775,000						

Expenditure Schedule											
Phase 1st 2nd 3rd 4th 5th & 6th											
PE	0	37,750	0	0	0						
CN	0	737,250	0	0	0						
Totals	0	775,000	0	0	0						



Agency: Zillah County: Yakima

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Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	7		ZIL2012-15	06/18/18	06/18/18		2018-25	28	CGPST	0.150	CE	No
		Schoentrup Lane Drainage Control Schoentrup Lane Concord Street to End road							v			
		The construction of 1,800 LF of sidewalk or barrier curb along Schoentrup Lane.										

Funding												
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds				
P	CN	2023		0	TIB	36,000	4,000	40,000				
	Totals					36,000	4,000	40,000				

Expenditure Schedule										
Phase	1st	2nd	3rd	4th	5th & 6th					
CN	0	0	40,000	0	0					
Totals	0	0	40,000	0	0					



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Functional Class	y Numb	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	8		ZIL2012-04	06/18/18	06/18/18		2018-25	01	CGOPS TW	0.510	CE	Yes
		Cutler Way Construction Cutler Way Cheyne Road to Fifth Street Construction of 2,700 LF of roadway, install utilities, sidewalk with ADA ramps (where needed), install barrier curb and gutter, Streetlighting, and storm drainage										

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2024		0	TIB	134,375	28,125	162,500
P	RW	2024		0		0	25,000	25,000
P	CN	2024		0	TIB	746,875	3,125	750,000
			Totals	0		881,250	56,250	937,500

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	0	0	162,500	0
RW	0	0	0	25,000	0
CN	0	0	0	750,000	0
Totals	0	0	0	937,500	0



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Functional Class	y Numb	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	9		ZIL2012-08	06/18/18	06/18/18		2018-25	05	CGOPS TW	0.300	CE	No
		Dean Street Resurfacing and Improvements										
		Dean Street										
		Carlsonia Avenue to Fourth Avenue										
		Resurfacing of approx. 500 LF of roadway, sidewalks on westside of roadway										

Funding	unding											
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds				
P	PE	2024		0	TIB	55,100	2,900	58,000				
P	CN	2024		0	TIB	220,400	11,600	232,000				
			Totals	0		275,500	14,500	290,000				

Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th						
PE	0	0	0	58,000	0						
CN	0	0	0	232,000	0						
Totals	0	0	0	290,000	0						



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Functional Class	y Numb	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	10		ZIL2012-10	06/18/18	06/18/18		2018-25	05		0.150	CE	No
		Eighth Street Resurfacing										i I
		Eighth Street										ı I
		First Avenue to Second Avenue										ı I
		Resurfacing of 1,000 LF of roadway, stormwater improvements, and sidewalks										<u>. </u>

Funding	unding												
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds					
P	PE	2022		0	TIB	24,000	2,000	26,000					
Р	CN	2022		0	TIB	99,500	4,500	104,000					
	Totals					123,500	6,500	130,000					

Expenditure Schedule	Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th							
PE	0	26,000	0	0	0							
CN	0	104,000	0	0	0							
Totals	0	130,000	0	0	0							



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Functional Class	y Numb	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	11		ZIL2012-18	06/18/18	06/18/18		2018-25	04	CGPST W	0.250	CE	Yes
		Pearson Street Reconstruction Pearson First Avenue to Second Avenue Reconstruction of approx. 1,300 linear feet, barrier curb and gutter, storm drainage improvements, sidewalks with ADA ramps (where needed), and street lighting							•			

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2023		0	TIB	183,750	26,250	210,000
P	CN	2023		0	TIB	696,000	44,000	740,000
	•	•	Totals	0		879,750	70,250	950,000

Expenditure Schedule	Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th							
PE	0	0	210,000	0	0							
CN	0	0	740,000	0	0							
Totals	0	0	950,000	0	0							



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Functional Class	y Numb	A. PIN/Project No. B. STIP IC C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure IC	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
17	12	ZIL2012-00	06/18/18	06/18/18		2018-25	03	CGPST W	0.160	CE	No
		Fifth Street Resurfacing									
		Fifth Street									
		Second Avenue to Carlsonia Ave									
		Reconstruction, street lighting, storm drainage									

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2022		0	TIB	134,981	14,909	149,890
P	CN	2022		0	TIB	1,040,305	109,805	1,150,110
Totals			0		1,175,286	124,714	1,300,000	

Expenditure Schedule	Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th							
PE	0	149,890	0	0	0							
CN	0	1,150,110	0	0	0							
Totals	0	1,300,000	0	0	0							



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Functional Class	y Numb	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID G. Structure ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	13		ZIL2012-12	06/18/18	06/18/18		2018-25	04	CGSW	0.100	CE	No
		Edson Street Reconstruction										
		Edson Street (North)										
		Carlsonia Avenue to End road										
		Reconstruction of 1,000 LF of roadway and storm drainage improvements										

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
Р	PE	2022		0	TIB	55,000	15,000	70,000
P	CN	2022		0	TIB	333,000	37,000	370,000
	Totals					388,000	52,000	440,000

Expenditure Schedule					
Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	70,000	0	0	0
CN	0	370,000	0	0	0
Totals	0	440,000	0	0	0



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Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
17	14		ZIL2013-04	07/06/20	07/06/20		2020-	03	CGPST W	0.300	CE	Yes
		Cheyne Road Improvements										
		Cheyne Road										
		Cutler Way to Yakima Valley Hwy										
		Reconstruct and widen approx. 1600 LF of roadway. Add storm drainage, street light, bike lanes, and sidewalks.										

Funding					Funding												
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds									
P	PE	2022		0	TIB	191,250	21,250	212,500									
P	CN	2022		0	TIB	573,750	63,750	637,500									
			Totals	0		765,000	85,000	850,000									

Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th						
PE	0	212,500	0	0	0						
CN	0	637,500	0	0	0						
Totals	0	850,000	0	0	0						



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Functional Class	y Numb	A. PIN/Project No. B. STIP ID C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	15	ZIL2012-09	06/17/19	06/17/19		2019-12	05	CGPST W	0.500	CE	No
		Chenaur Drive Resurfacing									
		Chenaur Drive									
		Glen Street to Sunset Way									
		Resurfacing of approx. 2,500 LF of roadway									

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2021		0	TIB	10,000	1,500	11,500
P	CN	2021		0	TIB	67,000	6,500	73,500
Totals			0		77,000	8,000	85,000	

Expenditure Schedule	Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th							
PE	11,500	0	0	0	0							
CN	73,500	0	0	0	0							
Totals	85,000	0	0	0	0							



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19	16		ZIL2012-14	06/18/18	06/18/18		2018-25	04	CGPST W	0.150	CE	No
		Second Avenue Reconstruction Second Avenue Begin street to Second Street Reconstruction of approx. 1,000 LF of existing 2 lane roadway, barrier curb and gutter, sidewalk with ADA ramps (where needed), storm drainage improvements							*			

Funding	Funding											
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds				
Р	PE	2021		0	TIB	80,750	25,500	106,250				
Р	CN	2021		0	TIB	443,750	25,500	469,250				
	•		Totals	0		524,500	51,000	575,500				

Expenditure Schedule	Expenditure Schedule										
Phase	1st	2nd	3rd	4th	5th & 6th						
PE	106,250	0	0	0	0						
CN	469,250	0	0	0	0						
Totals	575,500	0	0	0	0						



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17	17		ZIL2012-13	06/18/18	06/18/18		2018-25	04	CGPST W	0.20	CE	No
		Second Street Reconstruction										
		Second Street										
		First Avenue to Second Avene										
		Resurfacing of approx. 1,200 LF of roadway, barrier curb and gutter, sidewalks with ADA, Storm drainage improvements										

Funding	Funding												
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds					
P	PE	2021	STP	48,108		0	30,780	78,888					
P	CN	2021	STP	346,332		0	30,780	377,112					
Totals				394,440		0	61,560	456,000					

Expenditure Schedule	Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th							
PE	78,888	0	0	0	0							
CN	377,112	0	0	0	0							
Totals	456,000	0	0	0	0							



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Functional Class	y Numb	A. PIN/Project No. B. STIP II C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure II	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	18	ZIL2013-0	07/06/20	07/06/20		2020-	28		0.160	CE	No
		Zillah West Road Sidewalks									ı I
		Zillah West Road									ı I
		W. First Avenue to EOR									i
		Install sidewalks on north and south side of road									

Funding	Funding											
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds				
P	CN	2023		0	TIB	63,000	7,000	70,000				
Totals			0		63,000	7,000	70,000					

Expenditure Schedule	Expenditure Schedule										
Phase	1st	2nd	3rd	4th	5th & 6th						
CN	0	0	70,000	0	0						
Totals	0	0	70,000	0	0						



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Functional Class	Priority Number	A. PIN/Project No. B. STIP C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	19	ZIL2015	07/08/20	07/06/20		2020-	05		0.160	CE	No
		Zillah West Resurfacing									.
		Zillah West									.
		W. First Avenue to EOR									.
		Resurface approx. 900 LF of roadway									

Funding	runding												
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds					
Р	PE	2023		0	TIB	162,000	18,000	180,000					
P	CN	2023		0	TIB	378,000	42,000	420,000					
	Totals					540,000	60,000	600,000					

Expenditure Schedule					Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th											
PE	0	0	180,000	0	0											
CN	0	0	420,000	0	0											
Totals	0	0	600,000	0	0											



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00	20	ZIL2015-0	07/06/20	07/08/20		2020-	28		5.000	CE	No
		City-Wide Sidewalk Improvements									
		Various									i
		N/A to N/A									
		Reconstruct sidewalk, curb and gutter, vegetation removal/replace									

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
Р	CN	2021		0	TIB	450,000	50,000	500,000
P	CN	2022		0	TIB	450,000	50,000	500,000
P	CN	2023		0	TIB	450,000	50,000	500,000
Р	CN	2024		0	TIB	450,000	50,000	500,000
P	CN	2025		0	TIB	450,000	50,000	500,000
P	CN	2026		0	TIB	450,000	50,000	500,000
	Tota					2,700,000	300,000	3,000,000

Expenditure Schedule										
Phase	1st	2nd	3rd	4th	5th & 6th					
CN	500,000	500,000	500,000	500,000	1,000,000					
Totals	500,000	500,000	500,000	500,000	1,000,000					



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Functional Class	y Numb	A. PIN/Project No. B. STIP ID C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	21	ZIL2015-04	07/06/20	07/06/20		2020-	05		14.000	CE	No
		City-Wide Pavement Rehabilitation									
		Various									
		N/A to N/A									
		Resurfacing, grind, and overlay									

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
Р	CN	2021		0	TIB	450,000	50,000	500,000
P	CN	2022		0	TIB	450,000	50,000	500,000
Р	CN	2023		0	TIB	450,000	50,000	500,000
Р	CN	2024		0	TIB	450,000	50,000	500,000
P	CN	2025		0	TIB	450,000	50,000	500,000
P	CN	2026		0	TIB	450,000	50,000	500,000
	Total			0		2,700,000	300,000	3,000,000

Expenditure Schedule										
Phase	1st	2nd	3rd	4th	5th & 6th					
CN	500,000	500,000	500,000	500,000	1,000,000					
Totals	500,000	500,000	500,000	500,000	1,000,000					



Agency: Zillah County: Yakima

MPO/RTPO: YVCOG N Inside Y Outside

Functional Class	N N	A. PIN/Project No. B. STIP ID C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	22	ZIL2015-05	07/06/20	07/06/20		2020-	05		6.000	CE	No
		City-Wide Surfacing Improvements									
		Various									
		N/A to N/A									
		Seal Coat, fog seal									

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	CN	2021		0	TIB	90,000	10,000	100,000
P	CN	2022		0	TIB	90,000	10,000	100,000
P	CN	2023		0	TIB	90,000	10,000	100,000
P	CN	2024		0	TIB	90,000	10,000	100,000
P	CN	2025		0	TIB	90,000	10,000	100,000
P	CN	2026		0	TIB	90,000	10,000	100,000
			Totals	0		540,000	60,000	600,000

Expenditure Schedule										
Phase	1st	2nd	3rd	4th	5th & 6th					
CN	100,000	100,000	100,000	100,000	200,000					
Totals	100,000	100,000	100,000	100,000	200,000					



Agency: Zillah County: Yakima

MPO/RTPO: YVCOG N Inside Y Outside

Functional Class	y Numb	A. PIN/Project No. B. STIP ID C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	23	ZIL2015-06	07/06/20	07/06/20		2020-	28		3.000	CE	No
		City-Wide ADA Improvements									
		Various									
		N/A to N/A									
		ADA upgrades									

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	CN	2021		0	TIB	150,000	25,500	175,500
P	CN	2022		0	TIB	150,000	25,500	175,500
P	CN	2023		0	TIB	150,000	15,000	165,000
P	CN	2024		0	TIB	120,000	12,000	132,000
P	CN	2025		0	TIB	160,000	16,000	176,000
P	CN	2026		0	TIB	160,000	16,000	176,000
	Tota					890,000	110,000	1,000,000

Expenditure Schedule										
Phase	1st	2nd	3rd	4th	5th & 6th					
CN	175,500	175,500	165,000	132,000	320,000					
Totals	175,500	175,500	165,000	132,000	320,000					



Agency: Zillah County: Yakima

MPO/RTPO: YVCOG N Inside Y Outside

Functional Class	y Numb	A. PIN/Project No. B. STIP ID C. Project Title D. Road Name or Number E. Begin & End Temini F. Project Description G. Structure ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
00	24	ZIL2015-07	07/06/20	07/06/20		2020-	21		3.00	CE	No
		City-Wide Illumination Improvements									1
		Various									1
		N/A to N/A									1
		Illumination upgrades/ installation									

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Code Federal Funds State Fund Code State Funds Local Funds		Total Funds		
P	CN	2021		0	TIB	112,500	12,500	125,000
P	CN	2022		0	TIB	112,500	12,500	125,000
Р	CN	2023		0	TIB	112,500	12,500	125,000
P	CN	2024		0	TIB	112,500	12,500	125,000
P	CN	2025		0	TIB	112,500	12,500	125,000
P	CN	2026		0	TIB	112,500	12,500	125,000
			Totals	0		675,000	75,000	750,000

Expenditure Schedule										
Phase	1st	2nd	3rd	4th	5th & 6th					
CN	125,000	125,000	125,000	125,000	250,000					
Totals	125,000	125,000	125,000	125,000	250,000					



Agency: Zillah County: Yakima

MPO/RTPO: YVCOG N Inside Y Outside

Functional Class	y Numb	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	25		ZIL2015-09	07/06/20	07/06/20		2020-	21		6.000	CE	No
		City-Wide Safety Improvements										.
		Various										.
		N/A to N/A										.
		Safety upgrades to roadway and sidewalk network, including traffic calming										

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
Р	CN	2021		0	TIB	450,000	50,000	500,000
P	CN	2022		0	TIB	450,000	50,000	500,000
P	CN	2023		0	TIB	450,000	50,000	500,000
Р	CN	2024		0	TIB	480,000	20,000	500,000
P	CN	2025		0	TIB	450,000	50,000	500,000
P	CN	2026		0	TIB	450,000	50,000	500,000
	•		Totals	0		2,730,000	270,000	3,000,000

Expenditure Schedule	Expenditure Schedule											
Phase	1st	2nd	3rd	4th	5th & 6th							
CN	500,000	500,000	500,000	500,000	1,000,000							
Totals	500,000	500,000	500,000	500,000	1,000,000							



Agency: Zillah County: Yakima

MPO/RTPO: YVCOG N Inside Y Outside

Functional Class	y Numb	A. PIN/Project No. B. STIP ID C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
00	26	ZIL2015-10	06/18/18	06/18/18		2018-25	28		3.000	CE	No
		City-Wide Transportation Alternatives									i l
		Various									
		N/A to N/A									
		Transportation alternatives upgrades including trails									

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	CN	2021	TAP(UL)	250,000		0	0	250,000
P	CN	2022	TAP(UL)	250,000		0	0	250,000
P	CN	2023	TAP(UL)	250,000		0	0	250,000
			Totals	750,000		0	0	750,000

Expenditure Schedule										
Phase	1st	2nd	3rd	4th	5th & 6th					
CN	250,000	250,000	250,000	0	0					
Totals	250,000	250,000	250,000	0	0					



Agency: Zillah County: Yakima

MPO/RTPO: YVCOG N Inside Y Outside

Functional Class	y Nu	A. PIN/Project No. B. STIP ID C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure ID		Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	27	ZIL2015-11	07/06/20	07/06/20		2020-	03		5.00	CE	No
		City-Wide Stormwater Improvements									1
		Various									1
		N/A to N/A									
		Stormwater upgrades									

Funding								
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	CN	2021		0	TIB	450,000	50,000	500,000
P	CN	2022		0	TIB	450,000	50,000	500,000
P	CN	2023		0	TIB	450,000	50,000	500,000
P	CN	2024		0	TIB	450,000	50,000	500,000
P	CN	2025		0	TIB	450,000	50,000	500,000
P	CN	2026		0	TIB	450,000	50,000	500,000
	Tot			0		2,700,000	300,000	3,000,000

Expenditure Schedule										
Phase	1st	2nd	3rd	4th	5th & 6th					
CN	500,000	500,000	500,000	500,000	1,000,000					
Totals	500,000	500,000	500,000	500,000	1,000,000					



Agency: Zillah County: Yakima

MPO/RTPO: YVCOG N Inside Y Outside

Functional Class	y Numb	A. PIN/Project No. B. STIP ID C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
00	28	ZIL2015-12	07/06/20	07/06/20		2020-	44		0.00	CE	No
		City Equipment Acquisition									1 1
		N/A									1 1
		N/A to N/A									
		Equipment acquisition									Ш

Funding	nding											
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds				
Р	CN	2021		0	OTHER	67,500	7,500	75,000				
P	CN	2022		0	OTHER	80,000	4,000	84,000				
P	CN	2023		0	OTHER	81,000	3,000	84,000				
P	CN	2024		0	OTHER	80,000	2,000	82,000				
P	CN	2025		0	OTHER	75,000	25,000	100,000				
P	CN	2026		0	OTHER	67,500	7,500	75,000				
	Totals			0		451,000	49,000	500,000				

Expenditure Schedule	Expenditure Schedule									
Phase	1st	2nd	3rd	4th	5th & 6th					
CN	75,000	84,000	84,000	82,000	175,000					
Totals	75,000	84,000	84,000	82,000	175,000					



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Functional Class	y Numb	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description	B. STIP ID	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	29		ZIL2018-02	06/18/18	06/18/18		2018-25	04	CGPST	0.150	CE	No
		Rainier Ave. Reconstruction Rainier Ave 8th Street to 8th Street Reconstruction of approx. 800 linear feet, barrier curb and gutter, storm drainage improvements, sidewalks with ADA ramps (where needed), and street lighting							vv			

Funding	ading										
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds			
P	PE	2024		0	TIB	77,625	8,625	86,250			
P	CN	2024		0	TIB	439,875	48,875	488,750			
Totals			0		517,500	57,500	575,000				

Expenditure Schedule									
Phase	1st	2nd	3rd	4th	5th & 6th				
PE	0	0	0	86,250	0				
CN	0	0	0	488,750	0				
Totals	0	0	0	575,000	0				



Agency: Zillah County: Yakima

MPO/RTPO: YVCOG N Inside Y Outside

Functional Class	y Numt	A. PIN/Project No. B. STIP I C. Project Title D. Road Name or Number E. Begin & End Termini F. Project Description G. Structure II	Heari	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
19	30	ZIL2018-0	06/17/19	06/17/19		2019-	05	GPSTW	0.120	CE	No
		Melrose Street Reconstruction									. 1
		Melrose									
		F Street to Fourth Avenue									
		Roadway surfacing overlay									

Funding	inding										
Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds			
P	CN	2021		0		0	125,000	125,000			
Totals				0		0	125,000	125,000			

Expenditure Schedule									
Phase 1st 2nd 3rd				4th	5th & 6th				
CN	125,000	0	0	0	0				
Totals	125,000	0	0	0	0				

	Federal Funds	State Funds	Local Funds	Total Funds
Grand Totals for Zillah	1,144,440	21,107,066	2,880,619	25,132,125

Appendix D:
Funding Sources by Facilities Type

Roadway System Funding

Transportation is typically funded by some type of "user fees." Initially, that funding came from a dedicated portion of the property tax, because property owners were the prime beneficiaries of the transportation system. The major state tax sources to fund transportation improvements are the gas tax and vehicle registration fees. The gas tax is imposed at the federal and state level and is devoted primarily to highway purposes. The Washington State gas tax rate is \$0.494 cents per gallon (2016). The collected tax is distributed in accordance with *RCW 46.68.090*.

For larger projects, the City may seek funding assistance from the Washington State Transportation Improvement Board (TIB), as well as some other sources. Other Washington State grant opportunities the City may include in its funding strategy are traditional infrastructure-oriented and service-oriented transportation programs through Washington State Department of Transportation (WSDOT) and include but are not limited to the Safe Routes to School Program, the City Safety Program, the Consolidated Grant Program, the Regional Mobility Grant Program, and the Bicycle and Pedestrian Program.

There are federal grant programs that the City can pursue through the authorization of FAST Act, the federal transportation legislation. YVCOG, facilitates Surface Transportation Block Grant (STBG – formerly STP), STBG Set-aside (formerly TAP) funding for the metropolitan and regional areas inside Yakima County, ensures a prioritizations process is accomplished, and allocates federal funding awards to member jurisdictions and agencies on a competitive basis.

The FAST Act has created other new federal grant opportunities that require applicants to compete at the national level. Recent federal opportunities offered for transportation improvements were the INFRA grant program and the BUILD Transportation Discretionary grant program. The current list of national grant opportunities can be accessed through the Grants.Gov website located at https://www.grants.gov/.

The roadway system budget should be reviewed annually, and adjustments made to optimize the use of the available funds in the operating street fund.

Property owners in a particular area in need of infrastructure upgrades can also create a Local Improvement District (LID). A LID is a financial instrument that allows the property owners to share the costs of infrastructure improvements, including improving streets and constructing sidewalks.

In 1987, the Legislature created Transportation Benefit Districts (TBD) as an option for local governments to fund transportation improvements. Since 2005, the Legislature has amended the TBD statute to expand its uses and revenue authority. Most recently in 2015, the Legislature amended the TBD statute to authorize TBDs to impose vehicle license fees of up to \$50 without a public vote, and also made it possible for cities to absorb the TBD in cases where the TBD has the same boundaries as the city.

A TBD is a quasi-municipal corporation and independent taxing district created for the sole purpose of constructing, improving and funding transportation improvements within the district. The legislative authority of a county or city may create a TBD by ordinance following the procedures set forth in RCW 36.73. The county or city proposing to create the TBD may include other counties, cities, or transit districts through interlocal agreements.

A TBD can fund any transportation improvement contained in any existing state or regional transportation plan that is necessitated by existing or reasonably foreseeable congestion levels. TBD funds can be used for maintenance, preservation and reconstruction improvements to city streets and county roads. Funds can also be used for public transportation and transportation demand management strategies. TBDs have several revenue options that are subject to voter approval, and other revenue options that can be imposed without voter approval. However, to impose fees that are not subject to voter approval, the TBD boundaries must be countywide or citywide, or if applicable, unincorporated countywide.

In 2009, the City of Zillah formed a Transportation Benefit District within the city limits and has collected \$20.00 per car license renewal

Domestic Water System Funding

There are five basic categories of potential financing for domestic water-related improvements:

- 1. Local Public Enterprise Funds
- 2. Use of Local Public Powers
- State Assisted or Guaranteed Resources
- 4. Federally Assisted or Guaranteed Resources
- 5. Private Development

A combined funding opportunity section is here in Appendix C. Because much of the funding opportunity information is common between domestic, wastewater, and stormwater facilities a common table for these categories is placed here instead of separate tables for funding opportunities.

Current availability of funding is limited with a number of the sources within these categories. Many sources restrict the use of funds to certain projects and others limit their monetary participation to a percentage of the total cost.

A detailed financial program was developed for the City's 2014 Water Systems Plan and is provided in Table 9-3 in CHAPTER 9. The proposed financial program incorporates projected operations, maintenance, and capital improvement costs for a six-year period of 2014-2019. Projected revenues and expenditures of the water system include growth factors and inflation rates, in addition to the recommended rate increases, to account for estimated growth within the City, as discussed in CHAPTER 9 of the 2014 Water Systems Plan.

The City of Zillah will continue annual reviews of the water system's financial program during their budget preparation process. The financial program will also be reviewed and revised as needed during the next update of the Water System Plan in 2021. This continued review will allow for modifications to the proposed rate and revenue increases, should financial conditions change. The following is a more general discussion of funding sources and is included here to make the Capital Facilities Plan comprehensive reference document.

4. Local Public Enterprise Funds

Reserves in the Enterprise Fund are accumulated from revenues from domestic water, sanitary sewer, and stormwater user fees. The amount of the reserves will depend on the balance

of operation and maintenance costs of each of the systems versus total revenues generated by the associated fees. These reserves may be used to finance any respective domestic water, sanitary sewer, or stormwater system related project approved by the City Council. Funds for a future project may be generated by increases in any system's user fees, thus building the reserves in the Enterprise Fund. With this method of financing, often called the "pay-as-you-go" approach, the City is collecting interest on the reserves as opposed to paying interest on a loan balance. One method used by some communities to accumulate reserves is through the development of a capital recovery charge system. This approach is similar to assessing connection fees, except the amount is based on the capital costs of constructing system infrastructure, and the collected funds are usually set aside as capital reserves for future projects.

5. Use of Local Public Powers

The use of local public powers consists of three primary bonding techniques including general obligation bonds, special assessment bonds, and revenue bonds. There are advantages and disadvantages to each. The type of bond issue to finance a community improvement depends in part on custom and in part on the circumstances of a particular offering. General information about the three principal types of municipal bonds follows:

General Obligation Bonds pledge the unlimited taxing power and the full faith and credit of the issuing government to meet the required principal and interest payments.

Special Assessment Bonds (LID Bonds) are used to finance improvements where the property specially benefitted can be identified. Special assessment bonds are frequently used to make capital improvements in a particular neighborhood. Principal and interest payments for these bonds are made by the special assessment on the property benefitting from the improvement. Before special assessment bonds are issued, estimated costs are mailed to property owners, and a public hearing is held to allow the affected property owners to say whether or not they want the improvements. During a subsequent 30-day protest period, property owners may protest the improvements prior to City Council action formally establishing the project. Debt financed by special assessment bonds is not subject to debt limitations. As a sanitary sewer example, this type of financing is typically not suited for construction of trunk sewers within a collection system. However, it is often used as a means to finance extension of sewers into a new service area.

Revenue Bonds are frequently used to finance City-owned utilities, industrial parks, and other municipal public facilities. The bonds pledge the revenue from a particular revenue source to meet the principal and interest payments. Revenue bonds are appropriate debt instruments when the enterprise fund can be expected to generate sufficient revenue to meet both operating and debt service cost. Revenue bonds generally do not become a general obligation of the government issuing them. Communities may have to pay higher rates of interest on these bonds than on general obligation bonds, because revenue bonds are considered less secure. However, revenue bonds also have an important advantage over general obligation bonds. The amount of the revenue bonds is not included in the amount of indebtedness subject to state debt limitations. The legal requirements for issuing revenue bonds are more complex than those for issuing general obligation bonds. For example, when revenue bonds are issued, a special authority (Sewer Fund) operates the facility and a special revenue fund receives and disburses all funds. A trust agreement to provide for the monthly reimbursement of revenues and containing provisions to protect the bond holders must be formulated.

6. State and Federal Assisted or Guaranteed Resources

United States Department of Agriculture (USDA)

G. Rural Utilities Program

The USDA Rural Utilities Program provides project financing and technical assistance to help communities provide the infrastructure needed by rural businesses, community facilities, and households. Please visit USDA's website at: https://www.rd.usda.gov/about-rd/agencies/rural-utilities-service

H. Water & Environmental Programs

The USDA Water & Environmental Program provides loans, grants, and loan guarantees for drinking water, sanitary sewer, solid waste, and storm drainage facilities in rural areas and cities and towns of 10,000 or less. to help communities provide the infrastructure needed by rural businesses, community facilities, and households.

Water Quality Combined Financial Assistance Program

State administered funding sources are now integrated into a single process for the Centennial Clean Water Fund State Grant Program, the Clean Water Act Section 319 Federal Grant Program, the Drinking Water State Revolving Fund Loan Program, and the Storm Water Financial Assistance Program. Through the Water Quality Combined Financial Assistance Program, an applicant submits one application and is considered for all of the potential funding opportunities. Applications are accepted once a year and funding details can be found at: https://ecology.wa.gov/About-us/How-we-operate/Grants-loans/Find-a-grant-or-loan/Water-Quality-Combined-Funding-Program.

I. Centennial Clean Water Fund State Grant Program

The Centennial Clean Water Fund State Grant Program is state-funded through the Washington State General Fund, primarily through the State Building Construction Account. The Centennial program provides grants for water quality infrastructure and nonpoint source pollution projects to improve and protect water quality.

Eligible infrastructure projects are limited to wastewater treatment construction projects for financially distressed communities. Eligible nonpoint source pollution projects include: on-site septic repair and replacement, agricultural best management practices, education and outreach, water quality monitoring, lake water quality planning, riparian and wetlands habitat restoration and enhancement, stream restoration, TMDL plan development and implementation, and wellhead protection.

A 25% match is required for nonpoint source pollution projects.

J. Clean Water Act Section 319 Federal Grant Program

The Clean Water Act Section 319 Grant Program is federally-funded through the Environmental Protection Agency's granting of funds to Washington State Department of

Ecology. The Section 319 program provides grants to eligible nonpoint source pollution projects to improve and protect water quality. The eligible projects are similar to those in the state Centennial program. A 25% match is required for projects. For more information visit:

http://www.federalgrants.com/Clean-Water-Act-Section-319-Grant-Program-5088.html

K. Drinking Water State Revolving Fund

The Drinking Water State Revolving Fund (DWSRF OR SRF) provides low-interest loans to local governments for projects which improve and protect the state's water quality. Up to 100% of eligible project costs are fundable through this program. SRF loans can be used to match Centennial Clean Water Fund Grant Program and Clean Water Act Section 319 Federal Grant Program grants.

Eligible infrastructure projects include wastewater treatment construction projects, eligible nonpoint pollution control projects, and eligible Green projects. SRF loans can be used to match Centennial Clean Water Fund Grant Program and Clean Water Act Section 319 Federal Grant Program grants. For a list of eligible project types please visit: https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/WaterSystemAssistance/DrinkingWaterStateRevolvingFundDWSRF

L. Stormwater Financial Assistance Program and SFAP Pre-Construction

The Stormwater Financial Assistance Program (SFAP) Pre-construction allows for grants to develop construction plans for stormwater capital projects to Phase I and Phase II National Pollutant Discharge Elimination System (NPDES) municipal permitees. Stormwater Financial Assistance Program provides cities, counties, and ports grants for projects that address existing pollution problems and provide a high level of water quality benefit.

M. Stormwater Capacity Grants

Stormwater Capacity Grants are awarded to holders of Phase I and Phase II NPDES municipal permits for activities and equipment necessary for permit implementation.

N. Grants of Regional or Statewide Significance

Grants of Regional or Statewide Significance are grants that are available to Phase I and Phase II NPDES municipal permittees for projects that provide benefits for more than one permittee.

In addition to these more customary funding opportunities, Department of Ecology and Department of Health have some smaller planning grants and loans to assist entities in preparation of applying for a Drinking Water State Revolving Fund Construction Loan, assist entities plan for Source Water Protection, and assist communities experiencing the loss of critical drinking water services or facilities due to an emergency.

Other organizations provide financing for domestic water, sanitary sewer, and stormwater facilities assistance as well. Some of the organizations are listed in the illustrative list below:

- National Rural Water Association can assist with loans to pay for pre-development cost for proposed water and wastewater projects. Please visit NRWA's website at: https://nrwa.org/
- Rural Community Assistance Corporation can assist with loans to pay for feasibility and pre-development costs for proposed solid waste, domestic water, stormwater, and wastewater projects. Please visit RCAC's website at: http://www.rcac.org/
- Department of Commerce offers a Bond Cap Allocation Program with limited state allocation, and Community Development Block Grants for general purposes including construction, acquisition, and planning-only. Please visit DOC's website at: http://www.commerce.wa.gov/about-us/research-services/bond-cap-allocation-program/
- The Public Works Grants and Loans Program funded by the Economic Development Administration (EDA) is used to encourage long-range development gains in jurisdictions where economic growth is lagging or where the economic base is shifting. The program provides public works and development facilities needed to attract new industry and provide business expansion. Financial aid may be used to acquire and develop land and improvements for public works and to acquire, construct, rehabilitate, alter, expand, or improve such facilities, including related machinery and equipment. When completed, such projects are expected to bring additional private investment to the area. Please visit DOC's website at: http://www.commerce.wa.gov/building-infrastructure/pwb-home-page/