
CAPITAL IMPROVEMENT PLAN - EXECUTIVE SUMMARY

The Capital Improvement Plan (CIP) establishes Tigard's annual budget for improvements to city owned and operated public infrastructure and plans for a 6-year plan. The city allocates funding for construction activities in six defined capital improvement categories: General Capital Facilities, Streets, Water, Parks, Stormwater, and Sanitary Sewer.

A CIP project is any project that improves or adds value to the city's infrastructure, costs \$50,000 or more, and has a useful life or extends the useful life of infrastructure for 5 years or more. Adopted Master Plans, Area Plans, and the Strategic Plan along with established prioritization lists are matched to available funding to identify projects to be budgeted in the current and later years. In addition, staff capacity is considered when building the CIP.

Total cost for the FY 2017-22 CIP is estimated to be \$98 million over the next six years. Spending for the city's CIP in FY 2017 is \$25 million across all capital funds.

Below are key projects budgeted for FY 2016-17:

General Capital Facilities

- Development of a Civic Center Visioning Plan.

Parks

- Continued restoration of the Oak Savanna, and construction of an overlook and boardwalks at Dirksen Nature Park,
- Implementation of the intergovernmental agreement between the City of Tigard and Tigard-Tualatin School District to provide field improvements on school property,
- Design of trail segments of the Fanno Creek Trail Connection project that is funded by Regional Flexible Funds Active Transportation and Complete Streets grant (RFFA),
- Building demolition and site remediation at the Saxony property, pending grant acquisition,
- Continued purchase of open spaces using proceeds obtained from the city's \$17 million parks bond approved in FY 2010.
- Construction of trail connections at Bull Mountain Park.
- Design of Tigard Street Trail improvements if a Connect Oregon grant is received.

Sewer

- Replacement of the East Tigard Sanitary Sewer,
- Completion of a sanitary sewer line in conjunction with the street project on Walnut

Stormwater

- Development of a stormwater master plan,
- Design of a slope and stream restoration project on Derry Dell Creek between 118th Court and 115th Avenue,
- Construction to repair and upgrade the stormwater system on SW Canterbury Lane.

CAPITAL IMPROVEMENT PLAN - EXECUTIVE SUMMARY

Streets

- Continued street overlays and crack sealing via the Pavement Management Program,
- Completion of the Walnut Street improvements,
- A bridge assessment and maintenance needs master plan,
- Design for sidewalks on Commercial Street (Lincoln to 95th),
- Design and construction of the Wall Street project (Hunziker to Tech Center Drive), and
- Design initiation for phase 2 of the Main Street Green Street Retrofit

Water

- Completion of the projects associated with the Tigard/Lake Oswego Partnership
- Design of the Cach Reservoir and pump station,
- Red Rock Creek waterline relocation, and
- Rehabilitation of the Canterbury booster pump station.

Below is a table summarizing the FY 2016-17 Capital Improvement Program (CIP). The table breaks down the CIP by system. The second column provides the budget for that system. The third column includes the system infrastructure budget. The system infrastructure budget accounts for staff time related to unidentified capital projects. The fourth column shows the amount associated with the Saxony project in the Parks System, in the amount of \$505,000 that will be paid by Urban Renewal funds as part of the City Center Development Agency (CCDA). The last column is the total costs per system for the Capital Improvement Program.

System	Capital Improvement Budget	System Infrastructure	Other CIP related Costs	Total
General Capital Facilities	\$315,000	-	-	\$315,000
Parks	\$3,705,000	\$50,319	(\$505,000)	\$3,250,319
Streets	\$8,903,000	\$202,044	-	\$9,105,044
Water	\$10,383,000	\$49,158	-	\$10,432,158
Sanitary Sewer	\$1,114,000	\$46,111	-	\$1,160,111
Stormwater	\$954,500	\$96,111	-	\$1,050,611
Total	\$25,374,500	\$443,743	(\$505,000)	\$25,313,243

The following pages provide a discussion of the CIP on annual operating costs followed by detailed information on all projects by system. This includes a discussion of the steps used in the CIP prioritization process, followed by a complete list of all the projects considered in the FY 2017-22 capital improvement plan.

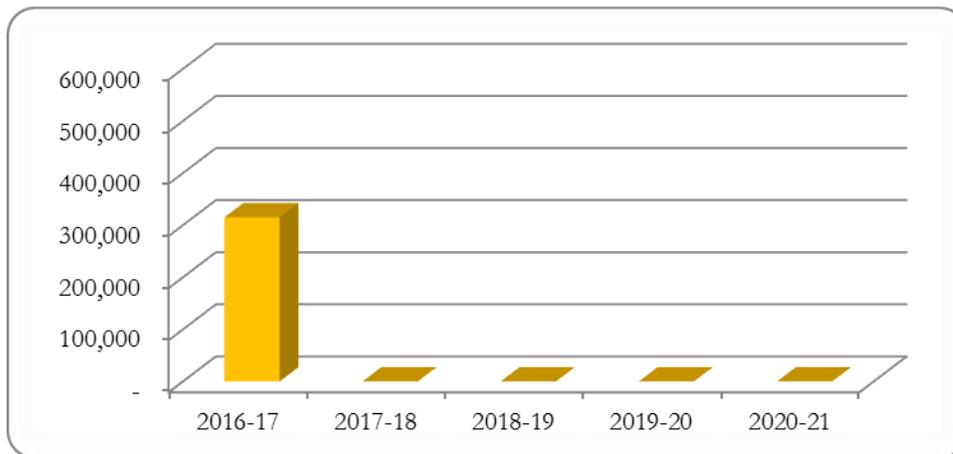
IMPACT OF CAPITAL IMPROVEMENT PLAN ON OPERATING COSTS

Capital projects can impact the future operating and maintenance costs of the city. In some instances, such as the construction of a new facility, operating costs will increase. In other instances, such as replacement of old and defective water meters, operating costs may decrease. As the city makes decisions about which capital projects to implement, it must also evaluate the impact these projects will have on future operating costs and determine if the city will be able to afford those costs in future years. By approving the Capital Improvement Program (CIP) projects, the city is making a commitment to adequately fund those future operating costs.

The following discussion summarizes the anticipated major operating cost within each capital improvement system:

General Facilities Capital Projects System Program

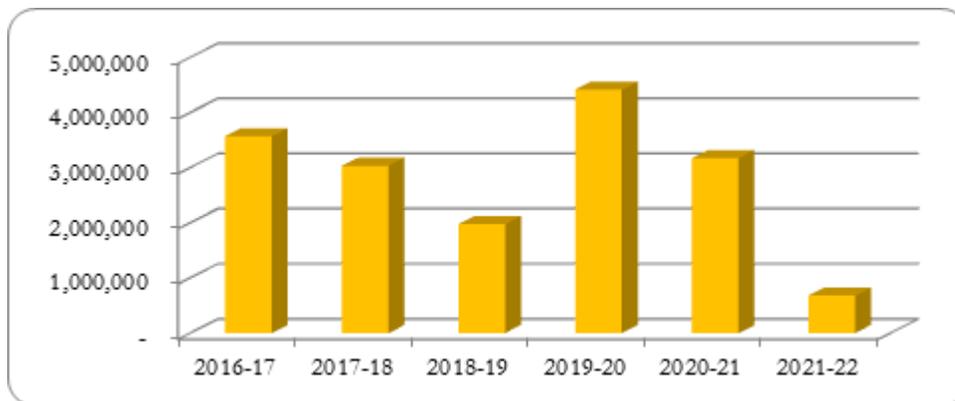
The General Facilities Capital Projects System Program's FY 2016-17 CIP includes the development of a Civic Center Visioning Plan that will take a holistic look at the operational needs and placement of facilities within a 20 year timeframe. This project will have little to no impact on future operating costs as it will not require additional staffing or materials.



IMPACT OF CAPITAL IMPROVEMENT PLAN ON OPERATING COSTS

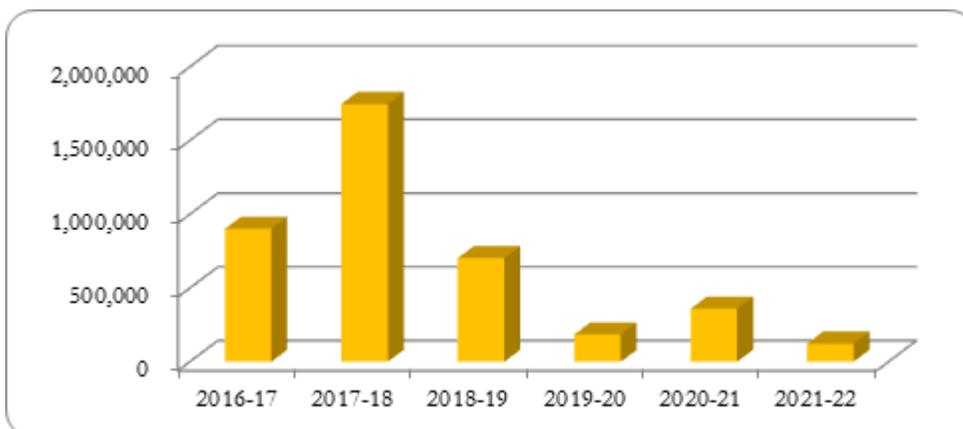
Parks System Program

The FY 2016-17 Parks System CIP includes projects that will have a direct impact on the city's operating costs. The very nature of a park system requires ongoing maintenance costs both for new additions to the system as well as maturing parks or trails. Significant projects listed include land acquisitions and development resulting from the \$17 million dollar parks bond that was approved by voters in November 2010. A total of \$1.3 million dollars has been programmed for both downtown land acquisition as recommended by the city's Parks & Recreation Advisory Board (PRAB). As a result of the bond, over 500 acres of land has been preserved and is expected to require maintenance in the coming years. In FY 2015-16, the city addressed the issue of parks and trail maintenance with the creation of a Parks Utility Fund. In order to fund the Parks Utility Fund, a \$3.75 per residential home was implemented. This action will generate \$1.0 million per year in revenues that will be used for operations and maintenance in the Parks system.



Sanitary Sewer Program

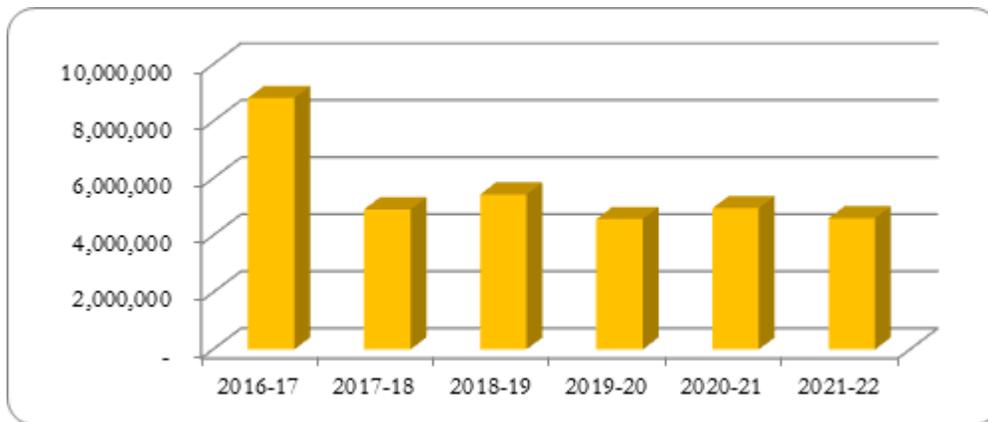
Many of the projects in the Sanitary Sewer Program, such as the Major Maintenance and line replacement programs such as East Tigard Sewer, address existing and potential maintenance problems and thereby serve to reduce and prevent future operating cost impacts. Although additional sewer lines increase operating costs somewhat, these costs are offset by the additional revenues received by new sewer customers. No new positions related to the Sanitary Sewer program are anticipated in the coming years.



IMPACT OF CAPITAL IMPROVEMENT PLAN ON OPERATING COSTS

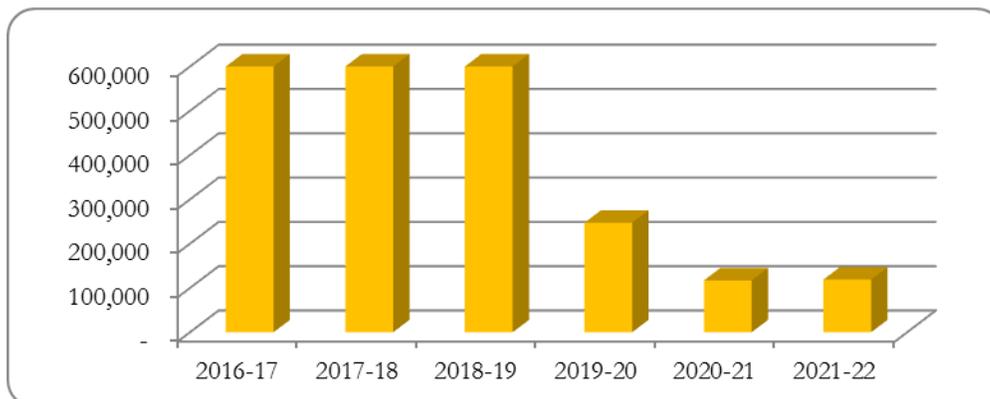
Street System Program

The operating cost impact of the Streets Program is minimal and no new positions are forecast in future years. The Pavement Management Program (PMP) provides corrective and preventative maintenance on city streets including right-of-way maintenance. The program restores the wearing course of the streets and thereby improves the pavement's integrity, improves ride ability, and enhances traffic safety. By performing these upgrades and improvements to the city's streets on a regular schedule, the city is able to reduce future operating costs.



Storm Water Program

The projects within the Storm Water Program are designed to address erosion and storm drainage problems and to return wetland areas to a more natural, native state. Typically, these projects have a tendency to show a positive impact on future operating costs with improved standards addressing storm drainage issues. However, in this budget, no new positions are forecasted in the coming years related to this program.

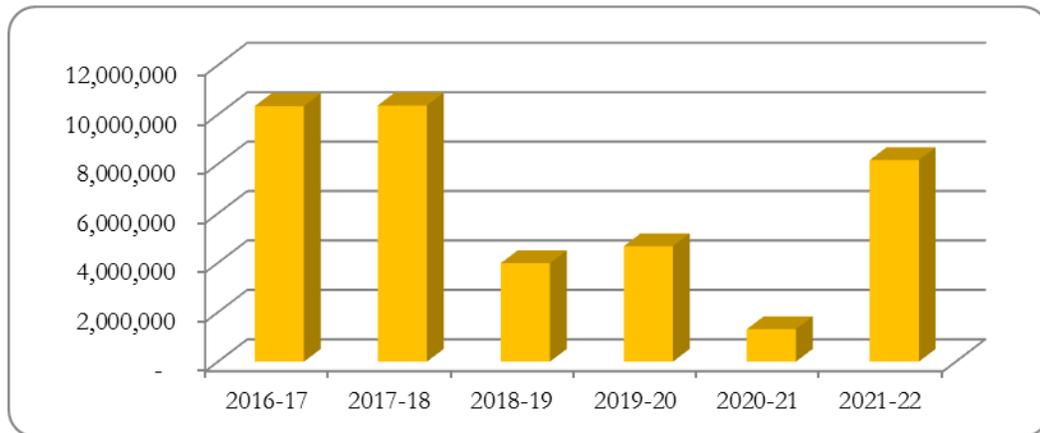


IMPACT OF CAPITAL IMPROVEMENT PLAN ON OPERATING COSTS

Water System Program

A variety of projects are planned for the Water System program in FY 2016-17. A number of these projects, including the Water Main Line Oversizing Program consist of the maintenance or replacement of existing infrastructure. By maintaining the existing system, the city avoids higher future costs than if the system were allowed to deteriorate. While difficult to calculate, it is safe to say that these projects create savings in future operating costs. The FY 2016-17 CIP shows the city's continued commitment to infrastructure needs resulting from the annexation of River Terrace. These projects include the design of the Cach Reservoir and Pump Station along with the Red Rock Creek Waterline Relocation project.

The FY 2016-17 CIP also sees the continuation and completion of the Lake Oswego Partnership. This project will provide Tigard with a long term water supply with delivery scheduled for 2016. The project will include a raw water intake facility on the Clackamas River, increased piping size, increased water treatment plant capacity, and other capacity increases. In prior years, the city paid approximately \$3.1 million for the purchase of water from Portland. Beginning in FY 2017, the full impact of this project on future operating cost for the City of Tigard is expected to be \$2 million annually. As a result, the city will realize a savings of over a \$1 million per year with the establishment of its own water source.



PRIORITIZATION AND DEVELOPMENT OF THE CIP

Prioritization and Development of the CIP

Development of the Capital Improvement Plan (CIP) started almost as soon as the prior CIP was adopted. The sources for potential projects include lists of funded and unfunded projects in the prior CIP, master plans, staff-identified needs, citizen and City Council suggestions, and other sources.

Projects in the prior CIP that are currently underway but not yet complete, are assumed to continue to move forward and do not need to be prioritized.

Potential projects are identified and vetted through staff meetings, key existing citizen advisory committees, City Council and the Budget Committee. Citizen input is also taken at Budget Committee hearings prior to the committee making its recommendations to City Council for final budget adoption. Priority projects are those that best match Strategic Plan goal(s), create needed infrastructure to serve new or existing customer demand, and provide durable, sustainable systems. All projects shown in the 6-year CIP plan represent high priorities; an expectation that funding is or likely will be available; and staff project management and delivery capability. Funding sources include city fees, taxes and charges as well as grants and other partner organization contributions. Funding availability assumptions are based on projected revenues, and the known or projected likelihood of acquiring outside grants and contributions. Projects listed for FY 2016-17 have the most secured funds, with outer years having a somewhat lesser level of surety.

Grants and partnership efforts are important. When combining the available resources of Tigard and our partners, the city is able to address high priority infrastructure needs that it cannot fund on its own. The City maintains lists of unfunded projects that can be pulled from as opportunities arise for new types or new rounds of grants in the future.

The following paragraphs describe, by project category, the project identification and prioritization process used to develop this CIP.

General Capital Facilities Projects: The list of facilities projects is short, although the outcome from the Facilities Strategic Plan currently underway will likely produce substantial recommendations for future consideration.

Transportation and Parks Projects: Transportation and most trails projects represent a prioritized subset of projects from the Transportation System Plan (TSP) of potential projects maintained by city staff. A “qualified list” of such projects was first filtered out of the TSP using city Strategic Vision goals, likelihood of funding availability and safety issues as filtering criteria. Safety projects were automatically given a high priority, as were projects and programs already underway. The Tigard Transportation Advisory Committee (TTAC) was then asked to provide input on remaining filtered projects. The Parks and Recreation Advisory Board (PRAB) also provided input on a smaller subset of potential trails projects. This stakeholder input, together with staff priorities, was the basis for the transportation and trails projects listed under the transportation and parks project type categories. Non-trail parks projects listed represent ongoing parks projects and additional new recommendations from staff.

PRIORITIZATION AND DEVELOPMENT OF THE CIP

Sanitary Sewer Projects: The previous CIP has minimal projects listed due to concerns about funding availability. However, this does not eliminate the need for capital projects. Public Works staff is maintaining and updating a list of needed system repair projects based on ongoing system condition reviews and maintenance records. Priorities for budgeted projects were based upon staff recommendations as well as those from the Sanitary Sewer Master Plan.

Stormwater Projects: The funded list represents current ongoing projects and a few staff identified high priorities for projects that respond to known problems with high risks for damage to infrastructure, creeks and adjacent properties if left unaddressed. It is anticipated that more projects (and funding needs) will come out of the Stormwater Master Plan effort that is underway and to be completed in FY 2016-17. The city has not prepared a master plan in over 30 years. While staff has compiled lists of potential projects, including many listed in prior CIP's and not funded, they lacked a technically sound and policy-driven methodology for prioritization. The Master Plan is intended to provide the policy guidance, prioritized projects list, and costs.

Water Projects: The funded projects represent staff and master plan priorities. Most projects are those already listed in the previous CIP (with the addition of a master plan study). However, staff is recommending changing the implementation order of some of the capital projects based on new information and the fast pace of development in River Terrace.

The steps used in the CIP development and prioritization process are as follows:

- Step 1** Staff conducts a capital needs assessment across all systems from master plans, area plans, and the strategic plan.
- Step 2** Staff prioritized new projects and compiled cost estimates.
- Step 3** Project list review/suggestion period by citizen boards and committees.
- Step 4** City Council review of CIP list with citizen comments.
- Step 5** Cost estimates and staff resource loading needs are refined.
- Step 6** CIP is submitted to City Manager as part of the proposed budget.
- Step 7** Proposed CIP is considered by the Budget Committee in public meetings.
- Step 8** First Council Meeting in June—City Council adoption of Capital Improvement Plan.

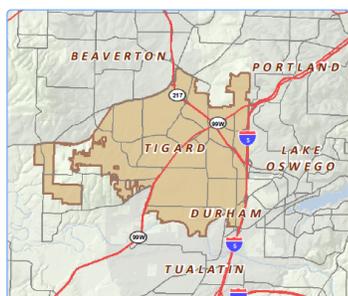
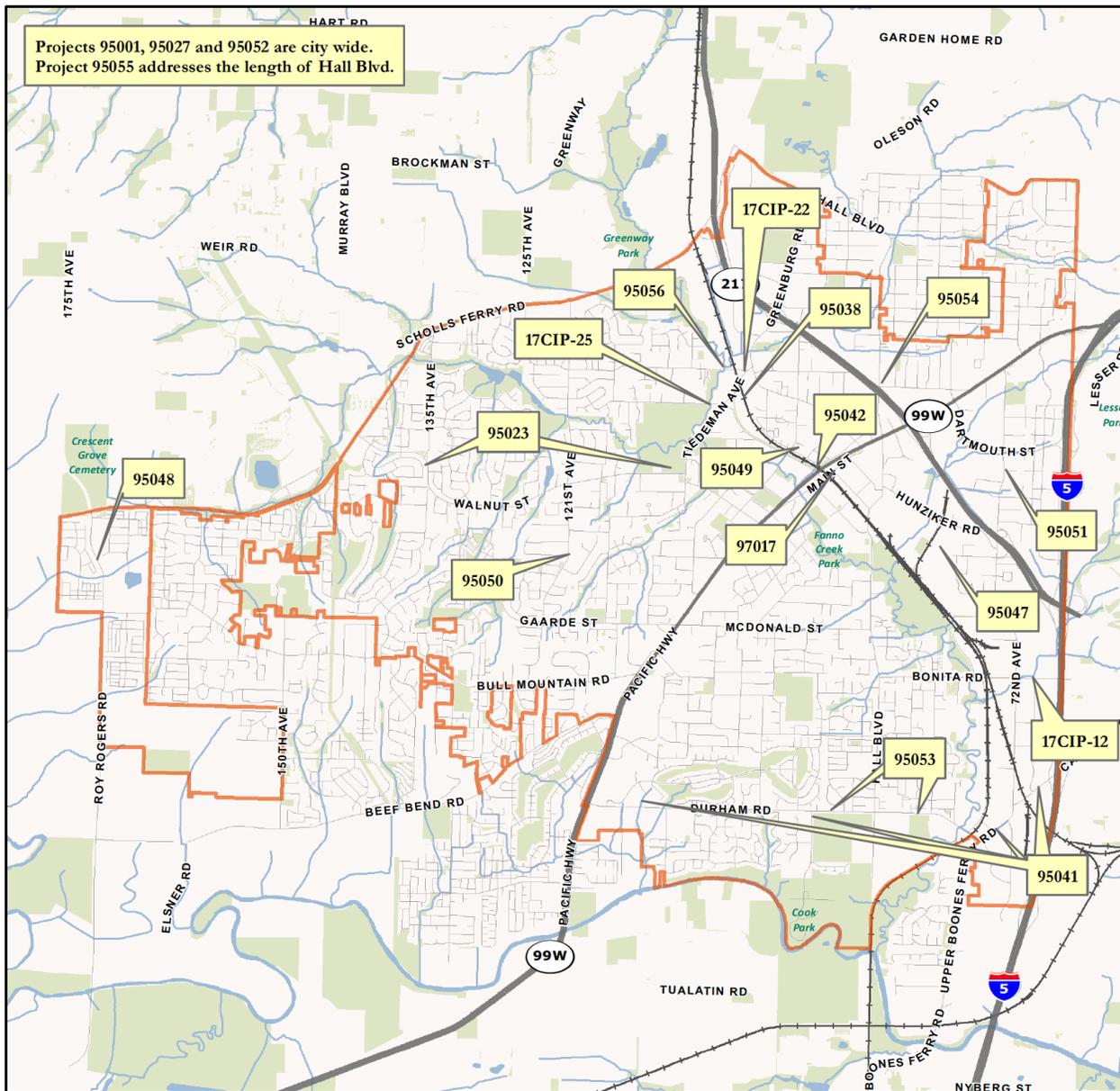
PRIORITIZATION AND DEVELOPMENT OF THE CIP

Status	Project #	Project Name	Funding Status	Funding Source	Total
Street Projects					
Current	95001	Pavement Management Program (PMP)	In Progress	Street Maintenance Fee	\$ 15,425,000
Current	95023	Walnut Street Improvements	In Progress-awarded \$7 million grant thru WaCo	Gas Tax, Water, Underground Utility, Sanitary Sewer, & Stormwater	\$ 790,000
Current	95027	Pedestrian and Cyclist Connections Program	Gas Tax	Gas Tax	\$ 1,800,000
Current	95038	Tiedeman Avenue Sidewalk (Tigard Street to Greenburg Road)	Requested MSTIP funding	City Gas Tax	\$ 971,000
Current	95041	Upper Boones Ferry Road / Durham Road Adaptive Signal Coordination	In Progress-awarded \$1 M Federal Surface Transportation program grant	Transportation Dev Tax	\$ 27,500
Current	95042	Commercial Street Sidewalk and Storm Detention Facility (Main to Lincoln)	In Progress-awarded \$1.3M STIP grant	City Gas Tax, Stormwater	\$ 610,000
Current	95047	Hunziker Industrial Core/Wall Street	In Progress-awarded \$1.5M State Grant & \$2.8M Federal Grant; Developer contribution \$1.5M	City Gas Tax	\$ 5,876,000
Current	95048	Roy Rogers Road	City funding \$9M w/ Washington County funding \$18M	Transportation Dev Tax	\$ 4,505,000
Current	97017	Main Street Green Street Retrofit (Phase 2)	Awarded \$1.2M MTIP grant	Gas Tax, City Gas Tax	\$ 1,886,000
New	95049	Commercial Street Sidewalk (Lincoln Avenue to 95th Avenue)	Fully Funded-awarded \$170,000 CDBG	Gas Tax	\$ 200,000
New	95050	121st Avenue (Whistlers Lane to Tippitt) Sidewalks and Bike Lanes	Fully Funded-Requested MSTIP grant funding	Transportation Dev Tax & Transportation SDC	\$ 260,000
New	95051	72nd Avenue / Tigard Triangle Transportation Study	Fully Funded	Gas Tax	\$ 250,000
New	95052	Bridge Assessment and Master Plan	Fully Funded	Gas Tax	\$ 45,000
New	95053	Durham Road School 20 When Flashing	Fully Funded	Gas Tax	\$ 150,000
New	95054	Hall Boulevard / Pfaffle Street New Traffic Signal	Fully Funded	Transportation SDC	\$ 600,000
New	95055	Hall Boulevard Study	Fully Funded	Gas Tax	\$ 75,000
New	95056	North Dakota Street (Fanno Creek) Bridge Replacement	Fully Funded-awarded \$2.9M of STIP funding	City Gas Tax	\$ 752,000
New	17CIP-12	Bonita / Sequoia Intersection - Traffic Signal	Fully Funded	Gas Tax	\$ 600,000
New	17CIP-22	North Dakota Street (Fanno to Tiedeman) Sidewalk and Bike Lane	Fully Funded	City Gas Tax	\$ 1,000,000
New	17CIP-25	Tigard Street (Fanno Creek) Bridge Replacement	Fully Funded-Will request STIP funding	Gas Tax	\$ 329,000
New	17CIP-19	Hall Blvd. Improvements	Unfunded-ODOT grant will be requested	Unknown	\$ 500,000
Staff	n/a	72nd Avenue Improvements	Unfunded	Unknown	\$ -
Staff	n/a	Hunziker St. (72nd to 77th) Sidewalk	Unfunded	Unknown	\$ -
Staff	n/a	Tigard St. (Gallo Ave. to Fanno Creek)	Unfunded	Unknown	\$ -
Staff	n/a	116th Ave. (Tigard St. to Katherine St.) Trail	Unfunded	Unknown	\$ -
Staff	n/a	Barrows Rd. (Springwood to Anna) Sidewalk on Southeast side	Unfunded	Unknown	\$ -
Staff	n/a	Scoffins St. (Hall Blvd. to Ash Ave.) Sidewalks	Unfunded	Unknown	\$ -
Water					
Current	96003	Water Meter Replacement Program	In Progress	Water	\$ 1,400,000
Current	96008	Water Main Line Oversizing Program	In Progress	Water	\$ 1,050,000
Current	96010	Aquifer Storage & Recovery Well # 3	In Progress	Water	\$ 4,103,000
Current	96018	Lake Oswego/Tigard Water Partnership	In Progress	Water, Water SDC, Water CIP	\$ 41,120,323
Current	96024	Waterline Replacement Program	In Progress	Water	\$ 982,000
Current	96028	Fire Hydrant Replacement Program	In Progress	Water	\$ 700,000
Current	96030	Bull Mountain Road Water Pipeline	In Progress	Water, Water SDC	\$ 8,106,000
Current	96031	Fire Flow Improvement Program	In Progress	Water	\$ 630,000
Current	96033	Well Abandonment (Tigard High School)	In Progress	Water	\$ 185,000
Current	96034	New Water Source Systemwide Improvements Program	In Progress	Water CIP	\$ 635,000
Current	96040	Cach Reservoir and Pump Station Design	In Progress	Water, Water SDC	\$ 13,108,500
Current	96044	Aquifer Storage & Recovery Well #2 Electrical Rehabilitation	In Progress	Water, Water CIP	\$ 340,000
Current	96046	Red Rock Creek Waterline Relocation	In Progress	Water	\$ 467,000
Staff	17CIP-27	Water Master Plan / SDC Study	Fully Funded	Water, Water SDC	\$ 250,000
Staff	17CIP-32	Canterbury Pump Station	Fully Funded	Water	\$ 350,000
Staff	96045	550 Zone (Price Reservoir)	Unfunded	Water	\$ -
Staff	n/a	470 to 410 PRV at Fonner St. & 121st Ave.	Unfunded	Water	\$ -
General Capital Facilities					
Current	91020	Civic Center Visioning Plan (formerly Citywide Facilities Plan)	In Progress	General Capital Facilities	\$ 350,000
Staff	n/a	Police Locker Room	Unfunded	General Fund	\$ -
Staff	n/a	Police Department Roof	Unfunded	General Fund	\$ -
Staff	n/a	Expand Red Rock Conference Room in City Hall	Unfunded	General Fund	\$ -
Staff	n/a	Expansion of CR-4 including closets and external entrance	Unfunded	General Fund	\$ -

PRIORITIZATION AND DEVELOPMENT OF THE CIP

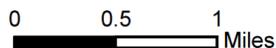
Parks Projects				
Current	92013	Fanno Creek Remeander (City/CWS)	In Progress	Parks SDC, Parks Capital \$ 513,000
Current	92016-02	Dirksen Nature Park - Oak Savanna Restoration	In Progress-Partially Funded	Urban Forestry, Stormwater, & Water \$ 318,000
Current	92016-03	Dirksen Nature Park - Oak Savanna Overlook	In Progress-awarded \$300K Nature in Neighborhood grant	Stormwater \$ 127,000
Current	92016-04	Dirksen Nature Park - Nature Play Areas	In Progress-awarded \$300K Nature in Neighborhood grant	Parks SDC, Stormwater \$ 226,000
Current	92016-05	Dirksen Nature Park - Forested Restoration and Boardwalks	Neighborhood grant	Parks SDC, Stormwater \$ 318,000
Current	92016-06	Dirksen Nature Park - Interpretive Shelter and Restroom	In Progress	Parks SDC \$ 570,000
Current	92016-11	Dirksen Nature Park - Site Interpretive Elements	In Progress	Parks SDC \$ 80,000
Current	92017	Tree Canopy Replacement Program	In Progress	Urban Forestry \$ 502,000
Current	92026	Park Land Acquisition	In Progress	Parks SDC, Parks Bond \$ 3,786,000
Current	92028	Downtown Land Acquisition	In Progress	Parks SDC, Parks Capital \$ 1,800,000
Current	92034	Tigard Street Trail and Public Space (Main St. to Tiedeman Ave. / Tigard St.)	In Progress-Applied for \$700K Connect Oregon VI Grant & Washington County grant for \$240K	Parks SDC, & Parks Bond \$ 160,000
Current	92035	City of Tigard / Tigard-Tualatin School District Park Development	In Progress	Parks SDC, Parks Bond \$ 225,000
Current	92037	Damaged Tree Replacement Program	In Progress	Urban Forestry \$ 292,000
Current	92046	Fanno Creek Trail Connection (RFFA Grant)	In Progress-awarded \$4.35M RFFA grant	Parks SDC \$ 1,105,000
Current	92051	Tiedeman Crossing / Fanno Creek Trail	In Progress	Metro Greenspace Grant \$ 660,000
Current	97013	Saxony Demolition and Remediation	In Progress	Urban Renewal \$ 550,000
Staff	95057	Fanno Creek Trail Alignment Study (Bonita Rd. to Tualatin River)	Fully Funded	Transportation SDC \$ 140,000
Staff	92016-07	Dirksen Nature Park - Half Street Improvement & Community Trail	Unfunded	Unknown \$ 1,160,000
Staff	92016-08	Dirksen Nature Park - Off Street Parking Lot	Unfunded	Unknown \$ 255,000
Staff	92016-09	Dirksen Nature Park - Small Nature Play Area (Parking Area on Tigard St.)	Unfunded	Unknown \$ 95,000
Staff	92016-10	Dirksen Nature Park - Multi Use Sports Field	Unfunded	Unknown \$ 560,000
Staff	n/a	Parks Major Maintenance Program	Unfunded	Unknown \$ -
Staff	n/a	108th Trail to Cook Park	Unfunded	Unknown \$ -
Staff	n/a	Summer Creek Trail	Unfunded	Unknown \$ -
Staff	n/a	Steve Street Park Trail	Unfunded	Unknown \$ -
Staff	n/a	Bonneville Power/Westside Trail - (Barrows to Bull Mountain Road)	Unfunded	Unknown \$ -
Stormwater				
Current	93009	Fanno Creek Slope Stabilization (Arthur Court)	In Progress	Stormwater, Sanitary Sewer \$ 996,000
Current	94001	Storm Drainage Major Maintenance Program	In Progress	Stormwater \$ 650,000
Current	94016	Slope Stabilization (Derry Dell/118th Court)	In Progress	Stormwater, Sanitary Sewer \$ 1,253,000
Current	94028	Main Street Storm Rehabilitation (Fanno Creek)	In Progress	Stormwater \$ 130,000
Current	94033	Canterbury Lane Storm Line Upgrade (106th to Pacific Highway)	In Progress	Stormwater \$ 465,000
Current	94037	Stormwater Master Plan	In Progress	Stormwater \$ 325,000
Staff	17CIP-08	Tigard Triangle Storm Implementation Plan / Pre-design	Fully Funded	Stormwater \$ 200,000
Sanitary Sewer				
Current	93003	Sanitary Sewer Major Maintenance Program	In Progress	Sanitary Sewer \$ 690,000
Current	93013	East Tigard Sewer Replacement	In Progress	Sanitary Sewer, Clean Water Services \$ 1,620,000
Current	93054	Walnut Street Sanitary Sewer	In Progress	Sanitary Sewer \$ 531,000
Staff	93055	Pacific Highway Sanitary Sewer Line	Fully Funded	Sanitary Sewer \$ 340,000
Staff	93056	Commercial Street Sanitary Sewer Line	Fully Funded	Sanitary Sewer \$ 135,000
Staff	17CIP-04	Downtown Sanitary Sewer Line Project	Fully Funded	Sanitary Sewer \$ 305,000
Staff	17CIP-06	East Fork Derry Dell Creek (Viewmont Court to Fairhaven Way)	Fully Funded	Sanitary Sewer \$ 946,000
Staff	n/a	Sewer Rehabilitation Program	Unfunded	Sanitary Sewer \$ -
Staff	n/a	Krueger Creek (Benchview) Slope Stabilization (Gallin Court)	Unfunded	Sanitary Sewer \$ -
Staff	n/a	Red Rock Creek Remediation	Unfunded	Sanitary Sewer \$ -
Staff	n/a	Sanitary Sewer Master Plan Update	Unfunded	Sanitary Sewer \$ -
Staff	n/a	Citywide Sanitary Sewer Extension Program	Unfunded	Sanitary Sewer \$ -
Staff	n/a	Bonita Trunkline	Unfunded	Sanitary Sewer \$ -
Staff	n/a	Shore Drive Trunk D-530	Unfunded	Sanitary Sewer \$ -
Staff	n/a	Varns St. Sewer Reimbursement District	Unfunded	Sanitary Sewer \$ -
Staff	n/a	Commercial	Unfunded	Sanitary Sewer \$ -
Staff	n/a	72nd Ave Lateral Diversion D-130	Unfunded	Sanitary Sewer \$ -
Staff	n/a	Katherine Street Lateral	Unfunded	Sanitary Sewer \$ -
Staff	n/a	Summerfield	Unfunded	Sanitary Sewer \$ -

CAPITAL IMPROVEMENT PLAN - STREETS



**The City of Tigard
Project Locations**

Tigard City Limits



City of Tigard Recommended Capital Improvement Plan FY 2017-22

CAPITAL IMPROVEMENT PLAN - STREETS

Project No.	Project Name	YTD 2016	2017	2018	2019	2020	2021	2022	Projected Total
17CIP-12	Bonita / Sequoia Intersection - Traffic Signal	0	0	0	0	0	230,000	370,000	600,000
17CIP-22	North Dakota Street (Fanno to Tiedeman) Sidewalk and Bike Lane	0	0	0	60,000	170,000	385,000	385,000	1,000,000
17CIP-25	Tigard Street (Fanno Creek) Bridge Replacement	0	0	0	20,000	40,000	140,000	129,000	329,000
8XXXX	System Infrastructure CIP- Transportation	0	202,044	202,044	202,044	202,044	202,044	202,044	1,212,264
95001	Pavement Management Program (PMP)	1,830,000	1,985,000	2,080,000	2,200,000	2,330,000	2,450,000	2,550,000	15,425,000
95023	Walnut Street Improvements	328,000	376,000	86,000	0	0	0	0	790,000
95027	Pedestrian and Cyclist Connections Program	0	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
95038	Tiedeman Avenue Sidewalk (Tigard Street to Greenburg Road)	0	0	0	90,000	130,000	450,000	301,000	971,000
95041	Upper Boones Ferry Road / Durham Road Adaptive Signal Coordination	7,500	20,000	0	0	0	0	0	27,500
95042	Commercial Street Sidewalk and Storm Water Facility (Main to Lincoln)	0	120,000	350,000	140,000	0	0	0	610,000
95047	Hunziker Industrial Core/Wall Street	260,000	5,196,000	420,000	0	0	0	0	5,876,000
95048	Roy Rogers Road	0	5,000	900,000	900,000	900,000	900,000	900,000	4,505,000
95049	Commercial Street Sidewalk (Lincoln Avenue to 95th Avenue)	0	56,000	144,000	0	0	0	0	200,000
95050	121st Avenue (Whistlers Lane to Tippitt) Sidewalks and Bike Lanes	0	45,000	35,000	60,000	60,000	60,000	0	260,000
95051	72nd Avenue / Tigard Triangle Transportation Study	0	250,000	0	0	0	0	0	250,000
95052	Bridge Assessment and Master Plan	0	45,000	0	0	0	0	0	45,000
95053	Durham Road School 20 When Flashing	0	70,000	80,000	0	0	0	0	150,000
95054	Hall Boulevard / Pfaffle Street New Traffic Signal	0	70,000	110,000	240,000	180,000	0	0	600,000
95055	Hall Boulevard Study	0	75,000	0	0	0	0	0	75,000
95056	North Dakota Street (Fanno Creek) Bridge Replacement	0	10,000	75,000	155,000	463,000	41,000	8,000	752,000
97017	Main Street Green Street Retrofit (Phase 2)	0	280,000	336,000	1,270,000	0	0	0	1,886,000
Total Funded		2,425,500	9,105,044	5,118,044	5,637,044	4,775,044	5,158,044	5,145,044	37,363,764

CAPITAL IMPROVEMENT PLAN - STREETS

17CIP-12 - Bonita / Sequoia Intersection - Traffic Signal

Project Need: This is a high-priority safety project. There are traffic issues and a high crash rate at this intersection.

Project Description: Construct traffic signal at the intersection of Bonita Road and Sequoia Parkway.

Project Results: Traffic signal at intersection.

Project Funding: The city has requested County MSTIP funding for this project, which if selected, could cover most or all costs.

Total Project Cost: \$600,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	0	30,000	30,000	60,000
Total Internal	0	0	0	0	0	0	30,000	30,000	60,000
External Expenses									
Design and Engineering	0	0	0	0	0	0	90,000	0	90,000
Construction	0	0	0	0	0	0	90,000	340,000	430,000
Contingency	0	0	0	0	0	0	20,000	0	20,000
Total External	0	0	0	0	0	0	200,000	340,000	540,000
Total Project Expense	0	0	0	0	0	0	230,000	370,000	600,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	0	0	0	0	230,000	370,000	600,000
Total Revenue Funding	0	0	0	0	0	0	230,000	370,000	600,000
Total Revenues	0	0	0	0	0	0	230,000	370,000	600,000

CAPITAL IMPROVEMENT PLAN - STREETS

17CIP-22 - North Dakota Street (Fanno to Tiedeman) Sidewalk and Bike Lane

Project Need: There is a lack of sidewalks and bike lanes along North Dakota Street between Tiedeman Avenue and the Fanno Creek Trail.

Project Description: Construct sidewalk and bike lane along one side of North Dakota Street from Tiedeman Avenue to the Fanno Creek Trail. The project would need to modify a railroad crossing, and would connect to sidewalk built on a replacement North Dakota bridge over Fanno Creek.

Project Results: A viable walking and cycling route using sidewalk and bike lane along North Dakota Street from the Fanno Creek Trail to Tiedeman Avenue.

Total Project Cost: \$1,000,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	10,000	20,000	35,000	35,000	100,000
Total Internal	0	0	0	0	10,000	20,000	35,000	35,000	100,000
External Expenses									
Project Estimate	0	0	0	0	50,000	150,000	350,000	350,000	900,000
Total External	0	0	0	0	50,000	150,000	350,000	350,000	900,000
Total Project Expense	0	0	0	0	60,000	170,000	385,000	385,000	1,000,000
REVENUES									
Revenue Funding Source									
205-City Gas Tax Fund	0	0	0	0	60,000	170,000	385,000	385,000	1,000,000
Total Revenue Funding	0	0	0	0	60,000	170,000	385,000	385,000	1,000,000
Total Revenues	0	0	0	0	60,000	170,000	385,000	385,000	1,000,000

CAPITAL IMPROVEMENT PLAN - STREETS

17CIP-25 - Tigard Street (Fanno Creek) Bridge Replacement

Project Need: The structure has deteriorated and needs to be replaced. There is a lack of bike lanes and sidewalk on the bridge.

Project Description: Replace existing Tigard Street Bridge over Fanno Creek with a new structurally sound bridge wide enough to accommodate pedestrians and cyclists (on both sides) along with motor vehicles. Environmental regulations would require a new bridge to be significantly higher and longer than the current bridge, which may necessitate some rework of the existing Fanno Creek Trail just west of the bridge.

Project Results: New bridge with bike lanes and sidewalks.

Project Funding: The city anticipates funding the majority of this project with an ODOT Statewide Transportation Improvement Program grant. There is \$31,000 in FY2023 through FY2026 for the remainder of anticipated environmental permit compliance requirements.

Total Project Cost: \$3,600,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	20,000	30,000	50,000	60,000	160,000
Total Internal	0	0	0	0	20,000	30,000	50,000	60,000	160,000
External Expenses									
Project Estimate	0	0	0	0	0	10,000	90,000	69,000	169,000
Total External	0	0	0	0	0	10,000	90,000	69,000	169,000
Total Project Expense	0	0	0	0	20,000	40,000	140,000	129,000	329,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	0	0	20,000	40,000	140,000	129,000	329,000
Total Revenue Funding	0	0	0	0	20,000	40,000	140,000	129,000	329,000
Other Revenue Source									
Statewide Transportation Improvement Program	0	0	0	0	0	90,000	710,000	1,300,000	2,100,000
Total Other Revenue	0	0	0	0	0	90,000	710,000	1,300,000	2,100,000
Total Revenues	0	0	0	0	20,000	130,000	850,000	1,429,000	2,429,000

CAPITAL IMPROVEMENT PLAN - STREETS

8XXXX - System Infrastructure CIP-Transportation

System Infrastructure Projects. Based on PW Engineering estimate of 1,750 hours of system infrastructure work per PW staff load from 02/18/2015.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	202,044	202,044	202,044	202,044	202,044	202,044	1,212,264
Total Internal	0	0	202,044	202,044	202,044	202,044	202,044	202,044	1,212,264
Total Project Expense	0	0	202,044	202,044	202,044	202,044	202,044	202,044	1,212,264
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	202,044	202,044	202,044	202,044	202,044	202,044	1,212,264
Total Revenue Funding	0	0	202,044	202,044	202,044	202,044	202,044	202,044	1,212,264
Total Revenues	0	0	202,044	202,044	202,044	202,044	202,044	202,044	1,212,264

95001 - Pavement Management Program (PMP)

Project Need: This project is a continuation of the annual program to preserve or replace portions of one of the city's most valuable resources - its streets and roadways.

Project Description: This project, funded by the Street Maintenance Fee, provides for the preservation or replacement of the asphaltic concrete by overlays, crack sealing or slurry sealing. A pavement condition study is then used to determine future project needs.

Projects Results: Paving a few miles of streets and preventive maintenance on about 12 miles of street each year to extend the usable service life of the pavement.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Design and Engineering	0	0	0	0	0	0	0	0	0
Project Management	0	90,000	100,000	100,000	115,000	120,000	125,000	130,000	780,000
Construction Management	0	0	0	0	0	0	0	0	0
Total Internal	0	90,000	100,000	100,000	115,000	120,000	125,000	130,000	780,000
External Expenses									
Design and Engineering	0	280,000	300,000	0	0	0	0	0	580,000
Construction	0	1,410,000	1,485,000	0	0	0	0	0	2,895,000
Project Estimate	0	0	0	1,980,000	2,085,000	2,210,000	2,325,000	2,420,000	11,020,000
Contingency	0	50,000	100,000	0	0	0	0	0	150,000
Total External	0	1,740,000	1,885,000	1,980,000	2,085,000	2,210,000	2,325,000	2,420,000	14,645,000
Total Project Expense	0	1,830,000	1,985,000	2,080,000	2,200,000	2,330,000	2,450,000	2,550,000	15,425,000
REVENUES									
Revenue Funding Source									
412-Street Maintenance Fund	0	1,830,000	1,985,000	2,080,000	2,200,000	2,330,000	2,450,000	2,550,000	15,425,000
Total Revenue Funding	0	1,830,000	1,985,000	2,080,000	2,200,000	2,330,000	2,450,000	2,550,000	15,425,000
Total Revenues	0	1,830,000	1,985,000	2,080,000	2,200,000	2,330,000	2,450,000	2,550,000	15,425,000

CAPITAL IMPROVEMENT PLAN - STREETS

95023 - Walnut Street Improvements

Project Need: The current section of Walnut Street that fronts Fowler Middle School between 116th Avenue and Tiedeman Avenue is a narrow, two-lane roadway which has not been widened to the Transportation Systems Plan (TSP) standards. This section lacks adequate sidewalks and bike lanes. The all-way stop intersection at 135th Avenue experiences considerable vehicular delays during morning and evening commute times.

Project Description: The project will reconstruct and widen the roadway section from 116th Avenue to Tiedeman Avenue. Road improvements include through lanes, a center turn lane, sidewalks and bike lanes, and a traffic control signal that will be installed at 135th Avenue. A new culvert with adequate capacity will be constructed. Utilities will be relocated underground. The project also includes replacing the existing water main and connections.

Project Results: Increased safety for: children traveling to and from Fowler Middle School, motorists making left turns, pedestrians and cyclists. Additional vehicular capacity will be realized. This project supports the vision statement in the City of Tigard's Strategic Plan: "The most walkable community in the Pacific Northwest..."

Project Funding: This is a \$7,000,000 Washington County Street project. City of Tigard expenses are for staff time and utility and water work. Please note: this project is tied to CIP #93054 Walnut Street Sanitary Sewer Project. Environmental Permit Compliance to be handled by the County.

Total Project Cost: \$7,000,000

City of Tigard Project Cost: \$1,400,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Design and Engineering	0	0	0	0	0	0	0	0	0
Project Management	31,901	54,000	64,000	6,000	0	0	0	0	155,901
Total Internal	31,901	54,000	64,000	6,000	0	0	0	0	155,901
External Expenses									
Land/Right of Way Acquisition	0	0	0	0	0	0	0	0	0
Design and Engineering	14,280	0	0	0	0	0	0	0	14,280
Construction	0	274,000	224,000	0	0	0	0	0	498,000
Project Estimate	0	0	0	80,000	0	0	0	0	80,000
Contingency	0	0	88,000	0	0	0	0	0	88,000
Total External	14,280	274,000	312,000	80,000	0	0	0	0	680,280
Total Project Expense	46,181	328,000	376,000	86,000	0	0	0	0	836,181
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	29,520	22,560	5,160	0	0	0	0	57,240
411-Underground Utility Fund	37,407	249,280	319,600	73,100	0	0	0	0	679,387
510-Stormwater Fund	5,080	29,520	22,560	5,160	0	0	0	0	62,320
530-Water Fund	3,694	19,680	11,280	2,580	0	0	0	0	37,234
Total Revenue Funding	46,181	328,000	376,000	86,000	0	0	0	0	836,181
Total Revenues	46,181	328,000	376,000	86,000	0	0	0	0	836,181

CAPITAL IMPROVEMENT PLAN - STREETS

95027 - Pedestrian and Cyclist Connections Program

Project Need: Missing sections of sidewalks and bike lanes and difficult crossings are located citywide.

Project Description: Projects may include sidewalk/bike lane/pathway construction, crosswalk treatments and minor intersection modifications. Projects will typically cost less than \$50,000. Funds from this program can also be used to cover matching funds for eligible grant projects benefitting pedestrians and cyclists.

Project Results: Fill gaps in the sidewalk and bike lane network to provide better walking and biking facilities. This project supports the vision statement in the City of Tigard's Strategic Plan: "The most walkable community in the Pacific Northwest..."

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	50,000	40,000	40,000	40,000	40,000	40,000	250,000
Total Internal	0	0	50,000	40,000	40,000	40,000	40,000	40,000	250,000
External Expenses									
Design and Engineering	0	0	50,000	0	0	0	0	0	50,000
Construction	0	0	180,000	0	0	0	0	0	180,000
Project Estimate	0	0	0	260,000	260,000	260,000	260,000	260,000	1,300,000
Contingency	0	0	20,000	0	0	0	0	0	20,000
Total External	0	0	250,000	260,000	260,000	260,000	260,000	260,000	1,550,000
Total Project Expense	0	0	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
Total Revenue Funding	0	0	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
Total Revenues	0	0	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000

CAPITAL IMPROVEMENT PLAN - STREETS

95038 - Tiedeman Avenue Sidewalk (Tigard Street to Greenburg Road)

Project Need: There is currently a lack of sidewalks and bike lanes along Tiedeman Avenue south of Greenburg Road to Tigard Street.

Project Description: This project will construct a sidewalk and a bike lane from Tigard Street north along the east side of Tiedeman Avenue to Greenburg Road. This project will connect to the CIP #92034 Tigard Street Trail, and will complete the connection from Main Street to Greenburg Road. Associated stormwater infrastructure will be added to treat stormwater runoff. A larger Tiedeman Avenue complete street project from Greenburg to Fanno Creek has been submitted for Major Streets Transportation Improvement Program (MSTIP) funding which would include this project.

Project Results: Pedestrians and cyclists will no longer be forced to share the roadway in the vehicle travel lane. This project supports the vision statement in the City of Tigard's Strategic Plan: "The most walkable community in the Pacific Northwest..."

Project Funding: The city has requested County MSTIP funding for a larger, more complete project.

Total Project Cost: \$978,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	20,000	30,000	50,000	30,000	130,000
Total Internal	0	0	0	0	20,000	30,000	50,000	30,000	130,000
External Expenses									
Project Estimate	0	0	0	0	70,000	100,000	400,000	271,000	841,000
Total External	0	0	0	0	70,000	100,000	400,000	271,000	841,000
Total Project Expense	0	0	0	0	90,000	130,000	450,000	301,000	971,000
REVENUES									
Revenue Funding Source									
205-City Gas Tax Fund	0	0	0	0	90,000	130,000	450,000	301,000	971,000
Total Revenue Funding	0	0	0	0	90,000	130,000	450,000	301,000	971,000
Total Revenues	0	0	0	0	90,000	130,000	450,000	301,000	971,000

CAPITAL IMPROVEMENT PLAN - STREETS

95041 - Upper Boones Ferry Road / Durham Road Adaptive Signal Coordination

Project Need: Address morning, evening and weekend traffic congestion.

Project Description: With 13 traffic signals and two rail crossings, signal coordination could significantly increase vehicular flow and could possibly reduce crash rates. The various types of traffic users (residential, school, major city park, office and retail) make this corridor a particularly good candidate for adaptive signal coordination. This project will install traffic signal coordination that extends from Durham Road to Pacific Highway.

Project Results: Signals will operate based on specific vehicular demands rather than on fixed timing programs. If successful, other heavily congested corridors could be similarly equipped.

Project Funding: The City of Tigard's responsibility is the local match and oversight for this \$1 million project funded from the Federal Surface Transportation Program administered by ODOT and managed by Washington County. Notification of grant was received in May 2013. City's match for construction was advanced to ODOT in FY2015. Project implementation has been delayed due to lengthy ODOT procurement process.

Total Project Cost: \$1,000,000

City of Tigard Project Cost: \$150,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	6,130	7,500	10,000	0	0	0	0	0	23,630
Total Internal	6,130	7,500	10,000	0	0	0	0	0	23,630
External Expenses									
Construction	114,563	0	0	0	0	0	0	0	114,563
Contingency	0	0	10,000	0	0	0	0	0	10,000
Total External	114,563	0	10,000	0	0	0	0	0	124,563
Expenses									
Total	0	0	0	0	0	0	0	0	0
Total Project Expense	120,693	7,500	20,000	0	0	0	0	0	148,193
REVENUES									
Revenue Funding Source									
405-Transportation Development Tax	120,693	7,500	20,000	0	0	0	0	0	148,193
Total Revenue Funding	120,693	7,500	20,000	0	0	0	0	0	148,193
Total Revenues	120,693	7,500	20,000	0	0	0	0	0	148,193

CAPITAL IMPROVEMENT PLAN - STREETS

95042 - Commercial Street Sidewalk and Storm Detention Facility (Main to Lincoln)

Project Need: Commercial Street currently lacks sidewalks west of Main Street. This project would connect a large residential neighborhood to downtown Tigard and the Tigard Transit Center. Rather high pedestrian volumes are observed despite the lack of adequate pedestrian facilities. Commercial Street is particularly narrow under this reach of the Pacific Highway overcrossing. There is also a lack of sidewalk along Pacific Highway between Naeve Street and Beef Bend Road.

Project Description: This project will construct a sidewalk along one side of Commercial Street from Main Street under the Pacific Highway overcrossing to Lincoln Avenue. The railroad and ODOT may dictate the location of the sidewalk which could result in the roadway being slightly shifted to the southwest so that the sidewalk can be added on the northeast side of the roadway. While the street is under construction, a stormwater facility will be added to treat stormwater runoff from 47 acres that discharges into Fanno Creek. This project meets outfall retrofitting goals identified in the regional Healthy Streams Plan. A pedestrian path connecting Commercial Street to Center Street and sidewalk along east side of Pacific Highway from Naeve Street to Beef Bend Road will be constructed. This is part of a larger TriMet-managed project to improve access to transit along the Pacific Highway corridor.

Project Results: This project improves public safety and access to downtown, to the transit center and along Pacific Highway. This project supports the vision statement in the City of Tigard's Strategic Plan: "The most walkable community in the Pacific Northwest..."

Project Funding: This project will be funded with the STIP Enhance Project to be done cooperatively with TriMet. The project total will be \$1,975,000, the STIP grant will cover \$1,305,000 and the city's minimum required match is \$134,024.

Total Project Cost: \$1,975,000

City of Tigard Project Cost: \$610,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	20,000	50,000	30,000	0	0	0	100,000
Total Internal	0	0	20,000	50,000	30,000	0	0	0	100,000
External Expenses									
Land/Right of Way Acquisition	0	0	0	50,000	0	0	0	0	50,000
Design and Engineering	0	0	100,000	50,000	0	0	0	0	150,000
Construction	0	0	0	180,000	60,000	0	0	0	240,000
Contingency	0	0	0	20,000	50,000	0	0	0	70,000
Total External	0	0	100,000	300,000	110,000	0	0	0	510,000
Total Project Expense	0	0	120,000	350,000	140,000	0	0	0	610,000
REVENUES									
Revenue Funding Source									
205-City Gas Tax Fund	0	0	40,000	140,000	50,000	0	0	0	230,000
510-Stormwater Fund	0	0	80,000	210,000	90,000	0	0	0	380,000
Total Revenue Funding	0	0	120,000	350,000	140,000	0	0	0	610,000
Total Revenues	0	0	120,000	350,000	140,000	0	0	0	610,000

CAPITAL IMPROVEMENT PLAN - STREETS

95047 - Hunziker Industrial Core/Wall Street

Project Need: There is insufficient public infrastructure and access limits the value and economic capacity of this area.

Project Description: New public infrastructure improvements to SW Wall Street, providing a connection from SW Hunziker Road to Tech Center Drive. The project supports development and redevelopment of adjacent industrial lands to achieve higher levels of employment.

Project Results: Completion of a new local industrial road and infrastructure to support new development.

Project Funding: In FY2016 the City Gas Tax fund will pay \$200,000; this will be reimbursed by the state earmark (already awarded) but not funded until FY2017. The state earmark is \$1.5 Million. The city has applied for a Federal EDA grant for up to \$3.0 Million. The developer reimbursement will be negotiated; it is anticipated to be between \$1.5 to \$2.0 Million. Right of way dedication is expected to be donated by the property owner.

Total Project Cost: \$5,876,000 entirely funded by anticipated external sources

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	60,000	100,000	20,000	0	0	0	0	180,000
Total Internal	0	60,000	100,000	20,000	0	0	0	0	180,000
External Expenses									
Land/Right of Way Acquisition	0	0	426,000	0	0	0	0	0	426,000
Design and Engineering	0	200,000	198,000	0	0	0	0	0	398,000
Construction	0	0	3,920,000	400,000	0	0	0	0	4,320,000
Environmental Permit Compliance	0	0	30,000	0	0	0	0	0	30,000
Contingency	0	0	522,000	0	0	0	0	0	522,000
Total External	0	200,000	5,096,000	400,000	0	0	0	0	5,696,000
Total Project Expense	0	260,000	5,196,000	420,000	0	0	0	0	5,876,000
REVENUES									
Revenue Funding Source									
205-City Gas Tax Fund	0	200,000	0	0	0	0	0	0	200,000
Total Revenue Funding	0	200,000	0	0	0	0	0	0	200,000
Other Revenue Source									
Other - Developer Contribution Estimate	0	50,000	1,526,000	0	0	0	0	0	1,576,000
Other - Federal EDA Grant	0	10,000	2,790,000	0	0	0	0	0	2,800,000
Other - State Earmark	0	0	1,080,000	420,000	0	0	0	0	1,500,000
Total Other Revenue	0	60,000	5,396,000	420,000	0	0	0	0	5,876,000
Total Revenues	0	260,000	5,396,000	420,000	0	0	0	0	6,076,000

CAPITAL IMPROVEMENT PLAN - STREETS

95048 - Roy Rogers Road

Project Need: Increased traffic due to River Terrace, South Cooper Mountain and other area development is driving the need for increased capacity on Roy Rogers Road.

Project Description: The Roy Rogers Road improvement project will include four vehicle travel lanes from Bull Mountain Road to Scholls Ferry Road, turn lanes as appropriate, pedestrian and bicycle facilities, intersection improvements at the Bull Mountain Road and Scholls Ferry Road intersections, and improvements to address connectivity at two additional intersections on Roy Rogers Road between Scholls Ferry Road and Bull Mountain Road, including the Lorenzo Lane / Jean Louise Road intersection.

Project Results: Widened and improved Roy Rogers Road.

Project Funding: County to pay 2/3 of total costs through MSTIP funding. City to pay remaining 1/3 with a cap of \$9.0 million. Funds to be provided to the County over a ten-year period.

Total Project Cost: \$27,000,000

City of Tigard Project Cost: \$9,000,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	5,000	5,000	5,000	5,000	5,000	5,000	30,000
Total Internal	0	0	5,000	5,000	5,000	5,000	5,000	5,000	30,000
External Expenses									
Project Estimate	0	0	0	895,000	895,000	895,000	895,000	895,000	4,475,000
Total External	0	0	0	895,000	895,000	895,000	895,000	895,000	4,475,000
Total Project Expense	0	0	5,000	900,000	900,000	900,000	900,000	900,000	4,505,000
REVENUES									
Revenue Funding Source									
405-Transportation Development Tax	0	0	5,000	900,000	900,000	900,000	900,000	900,000	4,505,000
Total Revenue Funding	0	0	5,000	900,000	900,000	900,000	900,000	900,000	4,505,000
Total Revenues	0	0	5,000	900,000	900,000	900,000	900,000	900,000	4,505,000

CAPITAL IMPROVEMENT PLAN - STREETS

95049 - Commercial Street Sidewalk (Lincoln Avenue to 95th Avenue)

Project Need: Commercial Street currently lacks sidewalks west of Main Street where it connects a large residential neighborhood to downtown Tigard and the Tigard Transit Center. The pavement on this portion of Commercial is currently about 22 feet in width, necessitating pedestrians to either walk in the vehicular travel lanes or across private property.

Project Description: Construct sidewalk along the north side of Commercial Street from 95th Avenue to Lincoln Street. This would connect with existing sidewalk along the north side of Commercial west of 95th, and would connect with a cooperative project (with the state and Trimet) to add sidewalk from Lincoln Street under the Pacific Highway bridge, and connecting to Main Street.

Project Results: Combined with project #95042, this project improves pedestrian safety and access to downtown and the transit center. This project supports the vision statement in the City of Tigard's Strategic Plan: "...the most walkable community in the Pacific Northwest..."

Project Funding: The city has been awarded a Community Development Block Grant (CDBG) to pay \$170,000 of the project cost.

Total Project Cost: \$200,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	15,000	10,000	0	0	0	0	25,000
Total Internal	0	0	15,000	10,000	0	0	0	0	25,000
External Expenses									
Land/Right of Way Acquisition	0	0	11,000	0	0	0	0	0	11,000
Design and Engineering	0	0	30,000	10,000	0	0	0	0	40,000
Construction	0	0	0	115,000	0	0	0	0	115,000
Contingency	0	0	0	9,000	0	0	0	0	9,000
Total External	0	0	41,000	134,000	0	0	0	0	175,000
Total Project Expense	0	0	56,000	144,000	0	0	0	0	200,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	15,000	15,000	0	0	0	0	30,000
Total Revenue Funding	0	0	15,000	15,000	0	0	0	0	30,000
Other Revenue Source									
Community Development Block Grant	0	0	41,000	129,000	0	0	0	0	170,000
Total Other Revenue	0	0	41,000	129,000	0	0	0	0	170,000
Total Revenues	0	0	56,000	144,000	0	0	0	0	200,000

CAPITAL IMPROVEMENT PLAN - STREETS

95050 - 121st Avenue (Whistlers Lane to Tippitt) Sidewalks and Bike Lanes

Project Need: 121st Avenue is a busy narrow roadway with no place to walk or bike outside the travel lane. This route would otherwise be used by many people to get to and from their neighborhoods. This project is the top priority project for TTAC.

Project Description: Construct sidewalks, bike lanes, and landscaped planter strips along 121st Avenue from Whistlers Lane to Tippitt Street, which would complete the sidewalks and bike lanes from Walnut Street to Gaarde Street. We would anticipate this being a context-sensitive design to minimize community impact, with two lanes (no center turn lane), and the planter strip narrowing in constrained areas.

Project Results: A roadway with bike lanes and sidewalks.

Project Funding: The city has requested County MSTIP funding for design and construction of this project, which if selected could cover most or all of the approx. \$3.7 million in costs but may delay project implementation.

Total Project Cost: \$3,900,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Contingency	0	0	10,000	0	0	0	0	0	10,000
Project Management	0	0	35,000	35,000	60,000	60,000	60,000	0	250,000
Total Internal	0	0	45,000	35,000	60,000	60,000	60,000	0	260,000
Total Project Expense	0	0	45,000	35,000	60,000	60,000	60,000	0	260,000
REVENUES									
Revenue Funding Source									
405-Transportation Development Tax	0	0	45,000	35,000	60,000	60,000	0	0	200,000
415-Transportation SDC Fund	0	0	0	0	0	0	60,000	0	60,000
Total Revenue Funding	0	0	45,000	35,000	60,000	60,000	60,000	0	260,000
Other Revenue Source									
Major Streets Transportation Improvement Program	0	0	0	0	300,000	1,700,000	1,700,000	0	3,700,000
Total Other Revenue	0	0	0	0	300,000	1,700,000	1,700,000	0	3,700,000
Total Revenues	0	0	45,000	35,000	360,000	1,760,000	1,760,000	0	3,960,000

CAPITAL IMPROVEMENT PLAN - STREETS

95051 - 72nd Avenue / Tigard Triangle Transportation Study

Project Need: There are many transportation needs in the 72nd Avenue and Tigard Triangle areas and many ideas on how these needs should be addressed.

Project Description: This study will determine the ultimate desired configuration of 72nd Avenue from Pacific Highway south to Bonita Road. Existing issues in this area include poor walking and cycling conditions along 72nd Avenue, particularly in the Highway 217 interchange area and near Pacific Highway, and a lack of alternate routes. Significant traffic congestion exists, primarily on southbound 72nd Avenue through the Highway 217 interchange. The study will take into account desires and products from the Tigard Triangle planning and code process, current and future traffic data, Southwest Corridor/transit study input, as well as ODOT and other stakeholder input. The goal is to create a walkable, bikeable, transit-oriented, livable, human-scale street cross section and intersection treatment that aligns with our strategic vision, the Triangle Strategic Plan, and the Metro High Capacity Transit Southwest Corridor Land Use Plan. The product will identify and provide conceptual level cost estimates for proposed improvements.

Project Results: A conceptual design of 72nd Avenue including the interchange at Highway 217.

Total Project Cost: \$250,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	40,000	0	0	0	0	0	40,000
Total Internal	0	0	40,000	0	0	0	0	0	40,000
External Expenses									
Design and Engineering	0	0	210,000	0	0	0	0	0	210,000
Total External	0	0	210,000	0	0	0	0	0	210,000
Total Project Expense	0	0	250,000	0	0	0	0	0	250,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	250,000	0	0	0	0	0	250,000
Total Revenue Funding	0	0	250,000	0	0	0	0	0	250,000
Total Revenues	0	0	250,000	0	0	0	0	0	250,000

CAPITAL IMPROVEMENT PLAN - STREETS

95052 - Bridge Assessment and Master Plan

Project Need: The city is lacking information about the condition and maintenance and replacement needs of many of Tigard's auto and pedestrian bridges and major culverts.

Project Description: Citywide vehicle and pedestrian bridge and major culvert condition assessment and master plan for maintenance and upgrade needs.

Project Results: A condition assessment and maintenance and construction master plan.

Total Project Cost: \$45,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	5,000	0	0	0	0	0	5,000
Total Internal	0	0	5,000	0	0	0	0	0	5,000
External Expenses									
Design and Engineering	0	0	40,000	0	0	0	0	0	40,000
Total External	0	0	40,000	0	0	0	0	0	40,000
Total Project Expense	0	0	45,000	0	0	0	0	0	45,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	45,000	0	0	0	0	0	45,000
Total Revenue Funding	0	0	45,000	0	0	0	0	0	45,000
Total Revenues	0	0	45,000	0	0	0	0	0	45,000

CAPITAL IMPROVEMENT PLAN - STREETS

95053 - Durham Road School 20 When Flashing

Project Need: Desire to change Durham Road from "School 20 7:00 a.m. To 5:00 p.m." to "School 20 When Flashing" to enhance pedestrian safety and driver efficiency.

Project Description: Convert Durham Road school 20 zones at Tigard High School and Durham Elementary School from "School 20 7:00 a.m. to 5:00 p.m." to "School 20 When Flashing." Requires about 15 electronic signs.

Project Results: "School 20 When Flashing" speed zones around Tigard High School and Durham Elementary School.

Total Project Cost: \$150,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	10,000	10,000	0	0	0	0	20,000
Total Internal	0	0	10,000	10,000	0	0	0	0	20,000
External Expenses									
Design and Engineering	0	0	25,000	15,000	0	0	0	0	40,000
Construction	0	0	35,000	35,000	0	0	0	0	70,000
Contingency	0	0	0	20,000	0	0	0	0	20,000
Total External	0	0	60,000	70,000	0	0	0	0	130,000
Total Project Expense	0	0	70,000	80,000	0	0	0	0	150,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	70,000	80,000	0	0	0	0	150,000
Total Revenue Funding	0	0	70,000	80,000	0	0	0	0	150,000
Total Revenues	0	0	70,000	80,000	0	0	0	0	150,000

CAPITAL IMPROVEMENT PLAN - STREETS

95054 - Hall Boulevard / Pfaffle Street New Traffic Signal

Project Need: Currently drivers can experience difficulty pulling out from Pfaffle Street onto Hall Boulevard especially during the morning and evening commute hours. The bridge railing to the south and the vertical curve along Hall Boulevard make visibility difficult for drivers turning in either direction from Pfaffle Street. The addition of traffic from the newly-constructed high school has increased these congestive conditions.

Project Description: This project will construct a new traffic control signal with appropriate illumination, crosswalks, lengthening and separation of the turn lanes on Pfaffle Street. The project will be complicated by the proximity to the Hall Boulevard/Highway 217 Bridge and the fact that Hall Boulevard is an ODOT controlled facility necessitating agency approval and permits.

Project Results: Completion of these improvements will increase safety for vehicles, pedestrians and cyclists using the intersection or traveling to and from the new school, Pacific Highway and Washington Square Regional Center.

Project Funding: The city has requested County MSTIP funding for the project which would cover most or all costs but may delay implementation.

Total Project Cost: \$600,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	20,000	20,000	20,000	20,000	0	0	80,000
Total Internal	0	0	20,000	20,000	20,000	20,000	0	0	80,000
External Expenses									
Design and Engineering	0	0	50,000	0	0	0	0	0	50,000
Project Estimate	0	0	0	90,000	220,000	160,000	0	0	470,000
Total External	0	0	50,000	90,000	220,000	160,000	0	0	520,000
Total Project Expense	0	0	70,000	110,000	240,000	180,000	0	0	600,000
REVENUES									
Revenue Funding Source									
415-Transportation SDC Fund	0	0	70,000	110,000	240,000	180,000	0	0	600,000
Total Revenue Funding	0	0	70,000	110,000	240,000	180,000	0	0	600,000
Total Revenues	0	0	70,000	110,000	240,000	180,000	0	0	600,000

CAPITAL IMPROVEMENT PLAN - STREETS

95055 - Hall Boulevard Study

Project Need: There are many transportation needs along Hall Boulevard in Tigard and many different ideas on how to address them. This is further complicated by ODOT ownership and maintenance of Hall Boulevard which can limit the city's ability to establish priorities and address needs.

Project Description: Study to determine the ultimate configuration of Hall Boulevard from Locust Street to Durham Road.

Project Results: Conceptual configuration, ownership, and design of projects for future engineering and construction.

Total Project Cost: \$75,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	15,000	0	0	0	0	0	15,000
Total Internal	0	0	15,000	0	0	0	0	0	15,000
External Expenses									
Design and Engineering	0	0	60,000	0	0	0	0	0	60,000
Total External	0	0	60,000	0	0	0	0	0	60,000
Total Project Expense	0	0	75,000	0	0	0	0	0	75,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	75,000	0	0	0	0	0	75,000
Total Revenue Funding	0	0	75,000	0	0	0	0	0	75,000
Total Revenues	0	0	75,000	0	0	0	0	0	75,000

CAPITAL IMPROVEMENT PLAN - STREETS

95056 - North Dakota Street (Fanno Creek) Bridge Replacement

Project Need: Structure has deteriorated and needs to be replaced. There is a lack of bike lanes and sidewalk on the bridge.

Project Description: This project would replace the existing bridge with a new bridge wide enough to accommodate pedestrians and cyclists along with vehicles. Environmental regulations would require a new bridge to be significantly higher and longer than the current bridge. The project may also reduce flooding over the roadway. The city has applied to ODOT for STIP grant funding to cover most of the project cost. The grant application outlines several project scope and cost options and includes a city match of up to \$800,000

Project Results: New bridge with bike lanes and sidewalks.

Project Funding: This project will be funded up to \$2,950,000 of Statewide Transportation Improvement Program dollars and city match. There is additional funding needs in FY 2023 through FY 2025 for the remainder of anticipated environmental permit compliance requirements.

Total Project Costs: \$3,750,000

City of Tigard Project Cost: \$776,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	10,000	35,000	55,000	70,000	30,000	0	200,000
Total Internal	0	0	10,000	35,000	55,000	70,000	30,000	0	200,000
External Expenses									
Project Estimate	0	0	0	40,000	100,000	393,000	0	0	533,000
Environmental Permit Compliance	0	0	0	0	0	0	11,000	8,000	19,000
Total External	0	0	0	40,000	100,000	393,000	11,000	8,000	552,000
Total Project Expense	0	0	10,000	75,000	155,000	463,000	41,000	8,000	752,000
REVENUES									
Revenue Funding Source									
205-City Gas Tax Fund	0	0	10,000	75,000	155,000	463,000	41,000	8,000	752,000
Total Revenue Funding	0	0	10,000	75,000	155,000	463,000	41,000	8,000	752,000
Other Revenue Source									
Statewide Transportation Improvement Program	0	0	0	300,000	600,000	1,242,000	808,000	0	2,950,000
Total Other Revenue	0	0	0	300,000	600,000	1,242,000	808,000	0	2,950,000
Total Revenues	0	0	10,000	375,000	755,000	1,705,000	849,000	8,000	3,702,000

CAPITAL IMPROVEMENT PLAN - STREETS

97017 - Main Street Green Street Retrofit (Phase 2)

Project Need: Continue Phase 1 improvements from the railroad tracks north to Scoffins Street.

Project Description: The project will extend the improvements constructed in conjunction with Phase 1 northward, providing a seamless extension to the recent improvements at the intersection of Pacific Highway/Main Street/Greenburg Road. Similar to Phase 1, Phase 2 includes funding from a grant from the Metropolitan Transportation Improvement Program (MTIP) to comply with green street standards. The disbursement and oversight of this grant will be handled by ODOT.

Project Results: With the completion of Phase 2, the entire length of Main Street from Pacific Highway on the south to Pacific Highway on the north will have been reconstructed to green street standards.

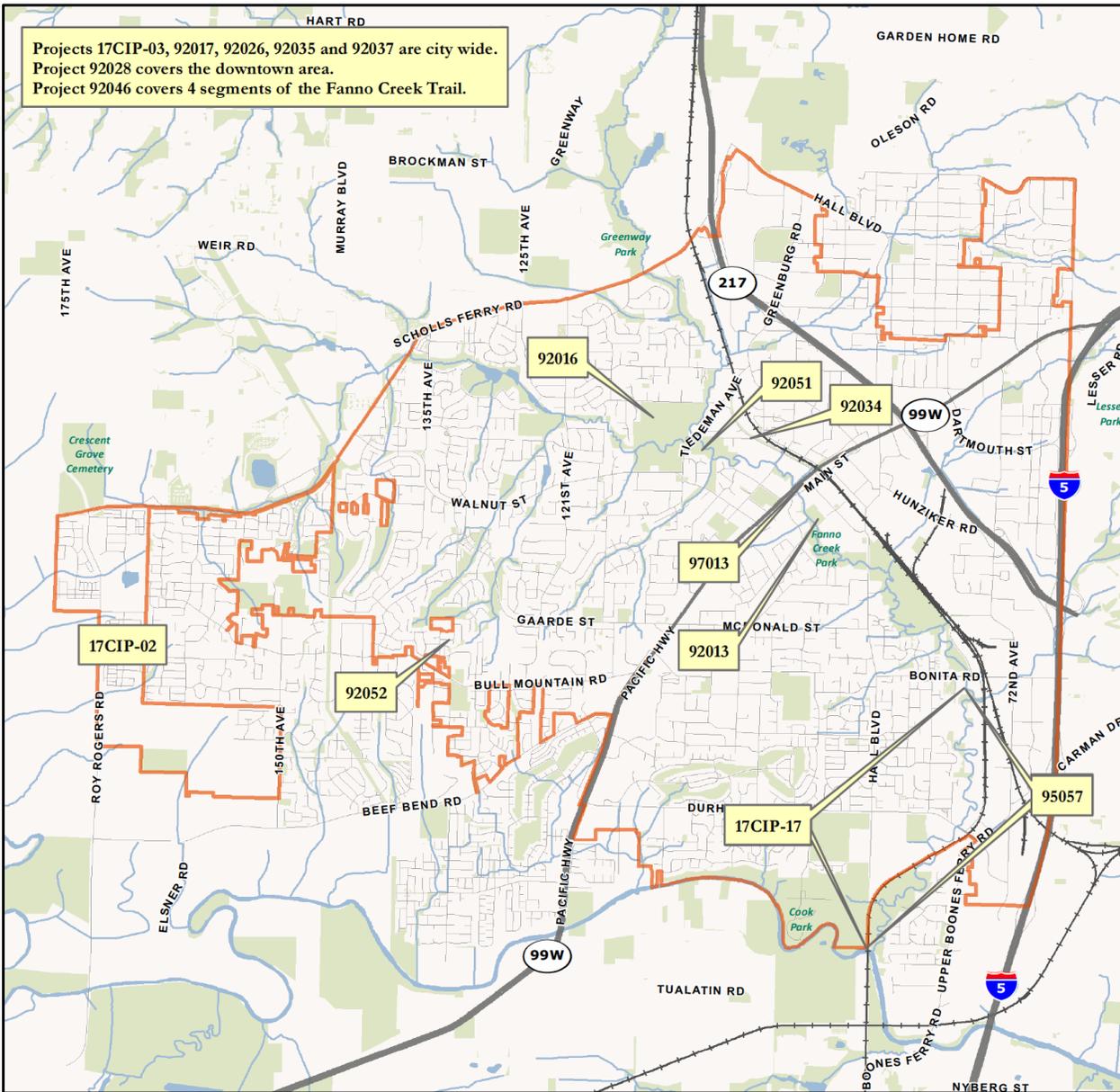
Project Funding: The total project estimate is \$3,120,000. There is \$1,234,424 remaining as part of the MTIP grant. This leaves the city's responsibility at \$1,885,576.

Total Project Cost: \$3,120,000

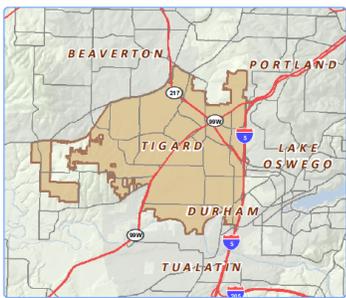
City of Tigard Project Cost: \$1,886,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	30,000	40,000	50,000	0	0	0	120,000
Total Internal	0	0	30,000	40,000	50,000	0	0	0	120,000
External Expenses									
Design and Engineering	0	0	250,000	0	0	0	0	0	250,000
Project Estimate	0	0	0	296,000	1,220,000	0	0	0	1,516,000
Total External	0	0	250,000	296,000	1,220,000	0	0	0	1,766,000
Total Project Expense	0	0	280,000	336,000	1,270,000	0	0	0	1,886,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	0	336,000	1,100,000	0	0	0	1,436,000
205-City Gas Tax Fund	0	0	280,000	0	170,000	0	0	0	450,000
Total Revenue Funding	0	0	280,000	336,000	1,270,000	0	0	0	1,886,000
Other Revenue Source									
Metropolitan Transportation Improvement Program	0	0	0	954,424	280,000	0	0	0	1,234,424
Total Other Revenue	0	0	0	954,424	280,000	0	0	0	1,234,424
Total Revenues	0	0	280,000	1,290,424	1,550,000	0	0	0	3,120,424

CAPITAL IMPROVEMENT PLAN - PARKS



Projects 17CIP-03, 92017, 92026, 92035 and 92037 are city wide.
 Project 92028 covers the downtown area.
 Project 92046 covers 4 segments of the Fanno Creek Trail.



**The City of Tigard
 Project Locations**

 Tigard City Limits



0 0.5 1
 Miles



City of Tigard Recommended Capital Improvement Plan FY 2017-22

CAPITAL IMPROVEMENT PLAN - PARKS

Project No.	Project Name	YTD 2016	2017	2018	2019	2020	2021	2022	Projected Total
17CIP-02	River Terrace Parks Development	0	0	0	0	0	250,000	500,000	750,000
17CIP-03	Parks Master Plan Update	0	0	0	100,000	0	0	0	100,000
17CIP-17	Fanno Creek Trail Design and Construction (Bonita Road - Tualatin River)	0	0	0	1,000,000	2,250,000	2,198,000	13,000	5,461,000
17CIP-26	Bull Mountain Park Trail	20,000	80,000	0	0	0	0	0	100,000
92013	Fanno Creek Remeander (City/CWS)	12,000	23,000	478,000	0	0	0	0	513,000
92016-02	Dirksen Nature Park - Oak Savanna Restoration	128,000	110,000	50,000	30,000	0	0	0	318,000
92016-03	Dirksen Nature Park - Oak Savanna Overlook	6,000	88,000	0	0	0	0	0	94,000
92016-04	Dirksen Nature Park - Nature Play Areas	0	5,000	221,000	0	0	0	0	226,000
92016-05	Dirksen Nature Park - Forested Wetland Restoration and Boardwalks	7,000	311,000	0	0	0	0	0	318,000
92016-06	Dirksen Nature Park - Interpretive Shelter and Restroom	10,000	0	0	0	0	560,000	0	570,000
92016-11	Dirksen Nature Park - Site Interpretive Elements	0	0	80,000	0	0	0	0	80,000
92017	Tree Canopy Replacement Program	25,000	27,000	70,000	80,000	100,000	100,000	100,000	502,000
92026	Park Land Acquisition	886,000	150,000	150,000	600,000	2,000,000	0	0	3,786,000
92028	Downtown Land Acquisition	515,000	1,285,000	0	0	0	0	0	1,800,000
92034	Tigard Street Trail and Public Space (Main St. to Tiedeman Ave. / Tigard St.)	10,000	110,000	1,130,000	0	0	0	0	1,250,000
92035	City of Tigard / Tigard-Tualatin School District Park Development	46,000	69,000	55,000	55,000	0	0	0	225,000
92037	Damaged Tree Replacement Program	25,000	27,000	40,000	50,000	50,000	50,000	50,000	292,000
92046	Fanno Creek Trail Connection (RFFA Grant)	160,000	505,000	335,000	60,000	15,000	15,000	15,000	1,105,000
92051	Tiedeman Crossing / Fanno Creek Trail	10,000	270,000	380,000	0	0	0	0	660,000
95057	Fanno Creek Trail Alignment Study (Bonita Road to Tualatin River)	0	140,000	0	0	0	0	0	140,000
97013	Saxony Demolition and Remediation	0	505,000	45,000	0	0	0	0	550,000
Total Funded		1,860,000	3,705,000	3,034,000	1,975,000	4,415,000	3,173,000	678,000	18,840,000

CAPITAL IMPROVEMENT PLAN - PARKS

17CIP-02 - River Terrace Parks Development

Project Need: The River Terrace Community Plan, adopted by City Council in December 2014, recommends that a minimum of two community parks be developed in the River Terrace area.

Project Description: The City purchased land just southwest of River Terrace in 2015 that is expected to provide the location for one of the community parks. This project is a place holder for design and construction of park facilities at two sites. The second site would be purchased under project #92026 Park Land Acquisition.

Project Results: Two complete community parks in River Terrace.

Total Project Cost: \$750,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
External Expenses									
Project Estimate	0	0	0	0	0	0	250,000	500,000	750,000
Total External	0	0	0	0	0	0	250,000	500,000	750,000
Total Project Expense	0	0	0	0	0	0	250,000	500,000	750,000

REVENUES

Revenue Funding Source									
425-Parks SDC Fund	0	0	0	0	0	0	250,000	500,000	750,000
Total Revenue Funding	0	0	0	0	0	0	250,000	500,000	750,000
Total Revenues	0	0	0	0	0	0	250,000	500,000	750,000

17CIP-03 - Parks Master Plan Update

Project Need: The current Parks Master Plan was completed in 2009 and is due for updating in 2019. The plan is critical to identify, prioritize, and guide parks development across the city through 2030. The plan is also critical to respond to the recreational needs of an expanding urban growth boundary.

Project Description: Parks Master Plan Update will include a public input process and gathering of information from key stakeholders. A consultant working with city staff will facilitate and develop a plan for parks that will identify and guide parks infrastructure development and redevelopment needs. The plan will focus on existing and developing areas of Tigard such as River Terrace and Tigard Triangle.

Project Results: A planning level document to guide future decisions on park acquisitions, development, and fiscal impacts for 2020 through approximately 2030.

Total Project Cost: \$100,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
External Expenses									
Project Estimate	0	0	0	0	100,000	0	0	0	100,000
Total External	0	0	0	0	100,000	0	0	0	100,000
Total Project Expense	0	0	0	0	100,000	0	0	0	100,000

REVENUES

Revenue Funding Source									
425-Parks SDC Fund	0	0	0	0	100,000	0	0	0	100,000
Total Revenue Funding	0	0	0	0	100,000	0	0	0	100,000
Total Revenues	0	0	0	0	100,000	0	0	0	100,000

CAPITAL IMPROVEMENT PLAN - PARKS

17CIP-17 - Fanno Creek Trail Design and Construction (Bonita Road - Tualatin River)

Project Need: Complete the Fanno Creek Trail.

Project Description: Design, permit and build this remaining section of the Fanno Creek Trail from Bonita Road to the Tualatin River.

Project Result: Completed trail system within the City of Tigard. This project supports the vision statement in the City of Tigard's Strategic Plan: "...the most walkable community in the Pacific Northwest..."

Project Funding: It is anticipated that the majority of the funding for this project will come from grants.

Total Project Cost: \$5,500,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	100,000	150,000	100,000	0	350,000
Total Internal	0	0	0	0	100,000	150,000	100,000	0	350,000
External Expenses									
Project Estimate	0	0	0	0	900,000	2,100,000	2,080,000	0	5,080,000
Environmental Permit Compliance	0	0	0	0	0	0	18,000	13,000	31,000
Total External	0	0	0	0	900,000	2,100,000	2,098,000	13,000	5,111,000
Total Project Expense	0	0	0	0	1,000,000	2,250,000	2,198,000	13,000	5,461,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	0	0	130,000	300,000	300,000	13,000	743,000
Total Revenue Funding	0	0	0	0	130,000	300,000	300,000	13,000	743,000
Other Revenue Source									
Other	0	0	0	0	870,000	1,950,000	1,898,000	0	4,718,000
Total Other Revenue	0	0	0	0	870,000	1,950,000	1,898,000	0	4,718,000
Total Revenues	0	0	0	0	1,000,000	2,250,000	2,198,000	13,000	5,461,000

CAPITAL IMPROVEMENT PLAN - PARKS

17CIP-26 - Bull Mountain Park Trail

Project Need: Pedestrian access connecting two roads through a neighborhood park and providing access to the amenities that the Friends of Bull Mountain Park are building.

Project Description: Design and construction of a paved ADA accessible trail through Bull Mountain Park from Woodshire Lane to Alpine Crest Way. This will include necessary stormwater management features.

Project Results: Paved trail connection through the park. This project supports the vision statement in the City of Tigard's Strategic Plan: "...the most walkable community in the Pacific Northwest..." It helps serve as a match for the Friends of Bull Mountain Park Nature in Neighborhood Grant from Metro.

Total Project Cost: \$100,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	10,000	15,000	0	0	0	0	0	25,000
Total Internal	0	10,000	15,000	0	0	0	0	0	25,000
External Expenses									
Design and Engineering	0	10,000	0	0	0	0	0	0	10,000
Construction	0	0	50,000	0	0	0	0	0	50,000
Contingency	0	0	15,000	0	0	0	0	0	15,000
Total External	0	10,000	65,000	0	0	0	0	0	75,000
Total Project Expense	0	20,000	80,000	0	0	0	0	0	100,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	20,000	80,000	0	0	0	0	0	100,000
Total Revenue Funding	0	20,000	80,000	0	0	0	0	0	100,000
Total Revenues	0	20,000	80,000	0	0	0	0	0	100,000

CAPITAL IMPROVEMENT PLAN - PARKS

92013 - Fanno Creek Remeander (City/CWS)

Project Need: Clean Water Services (CWS) has proposed a historic stream remeander restoration for a section of Fanno Creek near Ash Avenue.

Project Description: This joint project with CWS will result in lengthening the stream channel which is recommended in order to lower or eliminate the rate of incision or erosion by decreasing the steepness/slope of the stream bed. This will require the removal and replacement of the Ash Avenue Pedestrian Bridge, replacing it with one designed for better flood passage. The project also includes reconstructing a segment of the Fanno Creek Trail providing for an upgraded trail that is not subject to failures due to creek bank erosion.

Project Results: The project will aid in the effort to restore the water quality of Fanno Creek and provides new bridge and trail sections. This project supports the vision statement in the City of Tigard's Strategic Plan: "...the most walkable community in the Pacific Northwest..."

Project Funding: This is a part of Segment 2 from the Fanno Creek Trail Construction CIP #92046. This portion of the project to do the remeander with Clean Water Services is not grant eligible and is funded by city sources. This is a \$1.4M project that will be partially funded by Clean Water Services. Tigard must spend a minimum of \$430,180 per Memorandum of Understanding with Metro due to spending previous trail funds from Metro on a street project.

Total Project Cost: \$1,400,000

City of Tigard Project Cost: \$513,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	40,203	12,000	23,000	15,000	0	0	0	0	90,203
Total Internal	40,203	12,000	23,000	15,000	0	0	0	0	90,203
External Expenses									
Design and Engineering	25,573	0	0	55,000	0	0	0	0	80,573
Construction	0	0	0	334,000	0	0	0	0	334,000
Contingency	0	0	0	74,000	0	0	0	0	74,000
Total External	25,573	0	0	463,000	0	0	0	0	488,573
Total Project Expense	65,776	12,000	23,000	478,000	0	0	0	0	578,776
REVENUES									
Revenue Funding Source									
420-Parks Capital Fund	0	0	0	336,628	0	0	0	0	336,628
425-Parks SDC Fund	65,776	12,000	23,000	141,372	0	0	0	0	242,148
Total Revenue Funding	65,776	12,000	23,000	478,000	0	0	0	0	578,776
Total Revenues	65,776	12,000	23,000	478,000	0	0	0	0	578,776

CAPITAL IMPROVEMENT PLAN - PARKS

92016-02 - Dirksen Nature Park - Oak Savanna Restoration

Project Description: Nine acres of Dirksen Nature Park houses remnant Oregon white oak populations. This area is being restored back to a native oak savanna to be used for education and enjoyment by the public. The project has commenced and restoration will continue through FY2019. Restoration includes removal of non-native trees, shrubs, and grasses; planting and establishment of native grasses and wildflowers; planting of additional oak trees; and planting of a native shrub hedge around the savanna to control the influx of non-native seeds. A walking trail through the savanna will be lined with rustic buck and pole fencing made from trees taken down as part of the restoration. Approximately 85% of the oak savanna is a large wetland that receives water from the surrounding neighborhood. Restoration of this savanna will improve stormwater quality in the area.

Total Project Cost: \$318,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	12,000	10,000	10,000	10,000	0	0	0	42,000
Total Internal	0	12,000	10,000	10,000	10,000	0	0	0	42,000
External Expenses									
Project Estimate	0	116,000	100,000	40,000	20,000	0	0	0	276,000
Total External	0	116,000	100,000	40,000	20,000	0	0	0	276,000
Total Project Expense	0	128,000	110,000	50,000	30,000	0	0	0	318,000
REVENUES									
Revenue Funding Source									
260-Urban Forestry Fund	0	100,000	96,000	40,000	20,000	0	0	0	256,000
510-Stormwater Fund	0	12,000	10,000	10,000	10,000	0	0	0	42,000
530-Water Fund	0	0	4,000	0	0	0	0	0	4,000
Total Revenue Funding	0	112,000	110,000	50,000	30,000	0	0	0	302,000
Other Revenue Source									
Department of Environmental Quality	0	16,000	0	0	0	0	0	0	16,000
Total Other Revenue	0	16,000	0	0	0	0	0	0	16,000
Total Revenues	0	128,000	110,000	50,000	30,000	0	0	0	318,000

CAPITAL IMPROVEMENT PLAN - PARKS

92016-03 - Dirksen Nature Park - Oak Savanna Overlook

Project Description: Installation of a hard surface overlook at a high point in the Oak Savanna will provide park users an area to experience and view the newly-restored savanna. The overlook will include a walkway and will incorporate a stone veneer seat wall and basalt columns laid sideways to discourage entry into the savanna thus encouraging users to enjoy the resource without disrupting or impacting the health of the wetland. Brass replicas of plants, insects and animals that live in an oak savanna will be embedded into the paving of the overlook.

Project Funding: A portion of this project is funded through a Metro Nature in Neighborhood Grant

Total Project Cost: \$94,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	6,000	15,000	0	0	0	0	0	21,000
Total Internal	0	6,000	15,000	0	0	0	0	0	21,000
External Expenses									
Construction	0	0	64,000	0	0	0	0	0	64,000
Contingency	0	0	9,000	0	0	0	0	0	9,000
Total External	0	0	73,000	0	0	0	0	0	73,000
Total Project Expense	0	6,000	88,000	0	0	0	0	0	94,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	6,000	15,000	0	0	0	0	0	21,000
Total Revenue Funding	0	6,000	15,000	0	0	0	0	0	21,000
Other Revenue Source									
Department of Environmental Quality	0	0	33,000	0	0	0	0	0	33,000
Nature in Neighborhoods	0	0	40,000	0	0	0	0	0	40,000
Total Other Revenue	0	0	73,000	0	0	0	0	0	73,000
Total Revenues	0	6,000	88,000	0	0	0	0	0	94,000

CAPITAL IMPROVEMENT PLAN - PARKS

92016-04 - Dirksen Nature Park - Nature Play Areas

Project Description: This project will construct two play areas designed to provide park users with the opportunities to climb, run, jump and build with rocks, logs and other natural features. One area will be designed for toddlers and younger children while the other will provide more challenging natural play elements. The play areas will be sited on the outer edge of the park's mowed playfield bordering a forest. They will be covered in bark chips and adjacent to the future restroom/interpretive shelter.

Project Funding: A portion of this project is funded through a Metro Nature in Neighborhood Grant.

Total Project Cost: \$226,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	5,000	10,000	0	0	0	0	15,000
Total Internal	0	0	5,000	10,000	0	0	0	0	15,000
External Expenses									
Construction	0	0	0	176,000	0	0	0	0	176,000
Contingency	0	0	0	35,000	0	0	0	0	35,000
Total External	0	0	0	211,000	0	0	0	0	211,000
Total Project Expense	0	0	5,000	221,000	0	0	0	0	226,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	0	90,000	0	0	0	0	90,000
510-Stormwater Fund	0	0	5,000	10,000	0	0	0	0	15,000
Total Revenue Funding	0	0	5,000	100,000	0	0	0	0	105,000
Other Revenue Source									
Nature in Neighborhoods	0	0	0	121,000	0	0	0	0	121,000
Total Other Revenue	0	0	0	121,000	0	0	0	0	121,000
Total Revenues	0	0	5,000	221,000	0	0	0	0	226,000

CAPITAL IMPROVEMENT PLAN - PARKS

92016-05 - Dirksen Nature Park - Forested Restoration and Boardwalks

Project Description: A forested wetland is located in the center of Dirksen Nature Park. The health of the wetland is threatened by numerous demand trails and the presence of non-native plants. The project will restore and protect the wetland by removing non-native vegetation and abandoning old demand trails, replanting with native emergent vegetation and establishing a new trail and elevated boardwalk. The boardwalk will allow park users an up close and personal look at this watery and unusual wetland. A second boardwalk will be constructed at the existing Fanno Creek Trail and will allow park users an elevated view of the Fanno Creek floodplain. Willow will be trained along the sides of the boardwalk to provide blinds for bird watching.

Project Funding: A portion of this project is funded through a Metro Nature in Neighborhood Grant.

Total Project Cost: \$318,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	7,000	15,000	0	0	0	0	0	22,000
Total Internal	0	7,000	15,000	0	0	0	0	0	22,000
External Expenses									
Construction	0	0	246,000	0	0	0	0	0	246,000
Contingency	0	0	50,000	0	0	0	0	0	50,000
Total External	0	0	296,000	0	0	0	0	0	296,000
Total Project Expense	0	7,000	311,000	0	0	0	0	0	318,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	67,000	0	0	0	0	0	67,000
510-Stormwater Fund	0	7,000	15,000	0	0	0	0	0	22,000
Total Revenue Funding	0	7,000	82,000	0	0	0	0	0	89,000
Other Revenue Source									
Nature in Neighborhoods	0	0	229,000	0	0	0	0	0	229,000
Total Other Revenue	0	0	229,000	0	0	0	0	0	229,000
Total Revenues	0	7,000	311,000	0	0	0	0	0	318,000

CAPITAL IMPROVEMENT PLAN - PARKS

92016-06 - Dirksen Nature Park - Interpretive Shelter and Restroom

Project Description: Tigard working with Tualatin Riverkeepers hosts 2,000 student visitors per year to Dirksen Nature Park. The park is currently served by a single stall portable plastic restroom and offers no covered picnic or learning areas. The project will construct a covered interpretive shelter with attached restrooms adjacent to the nature play area. It will incorporate a hard-surfaced pathway to the Fanno Creek trail, benches, picnic tables, a covered awning, and all required site utilities. This facility will be designed to accommodate undercover outdoor learning and picnicking and provide a needed gathering area for the park and the adjacent Fanno Creek Trail.

Project Funding: The city will be pursuing a State Parks grant to fund the project.

Total Project Cost: \$570,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	10,000	0	0	0	0	30,000	0	40,000
Total Internal	0	10,000	0	0	0	0	30,000	0	40,000
External Expenses									
Project Estimate	0	0	0	0	0	0	530,000	0	530,000
Total External	0	0	0	0	0	0	530,000	0	530,000
Total Project Expense	0	10,000	0	0	0	0	560,000	0	570,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	10,000	0	0	0	0	0	0	10,000
Total Revenue Funding	0	10,000	0	0	0	0	0	0	10,000
Other Revenue Source									
Other	0	0	0	0	0	0	560,000	0	560,000
Total Other Revenue	0	0	0	0	0	0	560,000	0	560,000
Total Revenues	0	10,000	0	0	0	0	560,000	0	570,000

CAPITAL IMPROVEMENT PLAN - PARKS

92016-11 - Dirksen Nature Park - Site Interpretive Elements

Project Description: This project will develop a plan for interpretation and wayfinding at Dirksen Nature Park. Park stakeholders including but not limited to city parks staff, Tualatin Riverkeeper education staff, Fowler Middle School staff and students, and Community Partners for Affordable Housing will work with a consultant to brainstorm and identify needed interpretation at the park. Interpretive and wayfinding elements will include signage, artwork, and experiential elements. These elements will be designed to develop a signature look and identity for the park. The plan will be used as a tool to pursue future grant funding and to solicit corporate and private donations to fund site interpretation.

Total Project Cost: \$80,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	5,000	0	0	0	0	5,000
Total Internal	0	0	0	5,000	0	0	0	0	5,000
External Expenses									
Project Estimate	0	0	0	75,000	0	0	0	0	75,000
Total External	0	0	0	75,000	0	0	0	0	75,000
Total Project Expense	0	0	0	80,000	0	0	0	0	80,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	0	80,000	0	0	0	0	80,000
Total Revenue Funding	0	0	0	80,000	0	0	0	0	80,000
Total Revenues	0	0	0	80,000	0	0	0	0	80,000

CAPITAL IMPROVEMENT PLAN - PARKS

92017 - Tree Canopy Replacement Program

Project Need: Replacing lost tree canopy along stream corridors, school grounds, streets or other locations where canopy replacement is needed.

Project Description: The Canopy Replacement Program is funded by developers who remove trees but are unable to meet tree replacement standards or requirements. Tigard residents may request free tree(s) via the Free Street Tree Program, which is part of the Tree Canopy Replacement Program. Throughout the fall and winter, the city will deliver and plant these trees. In the spring, after completion of the program, the city will pursue planting opportunities in other areas. These funds can also be used to maintain prior plantings during the establishment period when additional care is needed.

Project Results: Maintaining a balance in the number of trees removed during development and improving the quality/quantity of trees in neighborhoods and other suitable areas.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
External Expenses									
Construction	0	25,000	27,000	70,000	80,000	100,000	100,000	100,000	502,000
Total External	0	25,000	27,000	70,000	80,000	100,000	100,000	100,000	502,000
Total Project Expense	0	25,000	27,000	70,000	80,000	100,000	100,000	100,000	502,000
REVENUES									
Revenue Funding Source									
260-Urban Forestry Fund	0	25,000	27,000	70,000	80,000	100,000	100,000	100,000	502,000
Total Revenue Funding	0	25,000	27,000	70,000	80,000	100,000	100,000	100,000	502,000
Total Revenues	0	25,000	27,000	70,000	80,000	100,000	100,000	100,000	502,000

CAPITAL IMPROVEMENT PLAN - PARKS

92026 - Park Land Acquisition

Project Need: Identify and acquire park land.

Project Description: Funding is to purchase new park land including the purchase of two community parks in River Terrace.

Project Results: Additional park land. Parks and properties that have been purchased as a result of the bond include: Summer Creek #1 and #2 (Dirksen Nature Park), Potso, Sunrise, Bull Mountain, Fields, Eiswerth, Bagan, Steve Street and Lasich.

Project Funding: Once the Park Bond Funds are expended, funding will come from Parks SDCs and other funding sources.

Total Project Cost: \$4,046,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	0	0	0	0
Total Internal	0	0	0	0	0	0	0	0	0
External Expenses									
Land/Right of Way Acquisition	260,000	886,000	150,000	150,000	600,000	2,000,000	0	0	4,046,000
Total External	260,000	886,000	150,000	150,000	600,000	2,000,000	0	0	4,046,000
Total Project Expense	260,000	886,000	150,000	150,000	600,000	2,000,000	0	0	4,046,000
REVENUES									
Revenue Funding Source									
421-Parks Bond Fund	260,000	551,000	0	0	0	0	0	0	811,000
425-Parks SDC Fund	0	335,000	150,000	150,000	600,000	2,000,000	0	0	3,235,000
Total Revenue Funding	260,000	886,000	150,000	150,000	600,000	2,000,000	0	0	4,046,000
Total Revenues	260,000	886,000	150,000	150,000	600,000	2,000,000	0	0	4,046,000

CAPITAL IMPROVEMENT PLAN - PARKS

92028 - Downtown Land Acquisition

Project Need: Purchase park sites within the downtown Tigard area.

Project Description: Purchase park sites within the downtown Tigard area. Part of the \$17,000,000 Parks Bond was set aside to purchase and develop property for parks within the downtown area.

Project Results: Property which will be developed for park purposes in downtown Tigard.

Total Project Cost: \$1,802,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
External Expenses									
Land/Right of Way Acquisition	2,000	515,000	1,285,000	0	0	0	0	0	1,802,000
Total External	2,000	515,000	1,285,000	0	0	0	0	0	1,802,000
Total Project Expense	2,000	515,000	1,285,000	0	0	0	0	0	1,802,000

REVENUES

Revenue Funding Source									
420-Parks Capital Fund	0	46,000	0	0	0	0	0	0	46,000
421-Parks Bond Fund	2,000	469,000	1,285,000	0	0	0	0	0	1,756,000
Total Revenue Funding	2,000	515,000	1,285,000	0	0	0	0	0	1,802,000
Total Revenues	2,000	515,000	1,285,000	0	0	0	0	0	1,802,000

CAPITAL IMPROVEMENT PLAN - PARKS

92034 - Tigard Street Trail and Public Space (Main St. to Tiedeman Ave. / Tigard St.)

Project Need: Repurpose an existing and inactive rail corridor to a beneficial multi-modal public use.

Project Description: The city has signed a lease for the use of the inactive railroad corridor from Tiedeman Avenue to Main Street. If the city receives a grant, this project will create a bike/pedestrian path and amenities including fencing, lighting, landscaping and a public plaza area. This project is related to a FY2016 Lighter Quicker Cheaper project which used porous paving material to create a pathway in advance of the full project.

Project Results: Improved pedestrian and cycle access to downtown Tigard, the Tigard Transit Center, the Fanno Creek and Summer Creek Trails and Dirksen Nature Park. This project supports the vision statement in the City of Tigard's Strategic Plan: "...the most walkable community in the Pacific Northwest..."

Project Funding: The city applied for a Connect Oregon VI Grant which would fund the majority of the project, supplemented by a match from Washington County and city match from Parks SDC and Urban Renewal Funds.

Total Project Cost: \$1,292,000

City of Tigard Project Cost: \$352,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	2,765	10,000	50,000	30,000	0	0	0	0	92,765
Total Internal	2,765	10,000	50,000	30,000	0	0	0	0	92,765
External Expenses									
Public Involvement	0	0	5,000	0	0	0	0	0	5,000
Design and Engineering	39,049	0	55,000	20,000	0	0	0	0	114,049
Construction	0	0	0	935,000	0	0	0	0	935,000
Contingency	0	0	0	145,000	0	0	0	0	145,000
Total External	39,049	0	60,000	1,100,000	0	0	0	0	1,199,049
Total Project Expense	41,814	10,000	110,000	1,130,000	0	0	0	0	1,291,814
REVENUES									
Revenue Funding Source									
100-General Fund	0	0	0	0	0	0	0	0	0
421-Parks Bond Fund	41,814	0	0	0	0	0	0	0	41,814
425-Parks SDC Fund	0	10,000	110,000	40,000	0	0	0	0	160,000
Total Revenue Funding	41,814	10,000	110,000	40,000	0	0	0	0	201,814
Other Revenue Source									
Connect Oregon VI	0	0	0	700,000	0	0	0	0	700,000
Urban Renewal Capital Improvement	0	0	0	150,000	0	0	0	0	150,000
Washington County MSTIP	0	0	0	240,000	0	0	0	0	240,000
Total Other Revenue	0	0	0	1,090,000	0	0	0	0	1,090,000
Total Revenues	41,814	10,000	110,000	1,130,000	0	0	0	0	1,291,814

CAPITAL IMPROVEMENT PLAN - PARKS

92035 - City of Tigard / Tigard-Tualatin School District Park Development

Project Need: The Tigard Tualatin School District has land that could be developed for shared park uses. For example, the Metzger area is short on park amenities. The Tigard Park System Master Plan recommends that the city fund the needed improvements to the field at Metzger School. In addition, once the improvements are completed, the park will be used by the public when not in use by the school district.

Project Description: This project provides funding for a partnership between the city and the Tigard-Tualatin School District. The project supports an IGA between the school district and the City of Tigard for public use of school property. The field area north of Metzger School is the first site targeted for field and picnic improvements in an area that can use more park amenities. More school partnering projects may be targeted in the future.

Project Results: Increased park amenities.

Total Project Cost: \$225,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
External Expenses									
Project Estimate	0	46,000	69,000	55,000	55,000	0	0	0	225,000
Total External	0	46,000	69,000	55,000	55,000	0	0	0	225,000
Total Project Expense	0	46,000	69,000	55,000	55,000	0	0	0	225,000

REVENUES

Revenue Funding Source									
421-Parks Bond Fund	0	46,000	0	0	0	0	0	0	46,000
425-Parks SDC Fund	0	0	69,000	55,000	55,000	0	0	0	179,000
Total Revenue Funding	0	46,000	69,000	55,000	55,000	0	0	0	225,000
Total Revenues	0	46,000	69,000	55,000	55,000	0	0	0	225,000

92037 - Damaged Tree Replacement Program

Project Need: Replacement for large trees lost due to damage, disease and other circumstances. This also plants trees in areas where it is determined that there is a need for new trees.

Project Description: This project plants replacement trees for large trees lost due to damage, disease and other circumstances. Large trees are planted citywide where additional tree canopy is needed.

Project Results: Increased quality and quantity of large trees and tree canopy.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
External Expenses									
Construction	0	25,000	27,000	40,000	50,000	50,000	50,000	50,000	292,000
Total External	0	25,000	27,000	40,000	50,000	50,000	50,000	50,000	292,000
Total Project Expense	0	25,000	27,000	40,000	50,000	50,000	50,000	50,000	292,000
REVENUES									
Revenue Funding Source									
260-Urban Forestry Fund	0	25,000	27,000	40,000	50,000	50,000	50,000	50,000	292,000
Total Revenue Funding	0	25,000	27,000	40,000	50,000	50,000	50,000	50,000	292,000
Total Revenues	0	25,000	27,000	40,000	50,000	50,000	50,000	50,000	292,000

CAPITAL IMPROVEMENT PLAN - PARKS

92046 - Fanno Creek Trail Connection (RFFA Grant)

Project Need: Construct segments of the Fanno Creek Trail.

Project Description: This project constructs four segments of the Fanno Creek Trail. Segment 1 - Grant Avenue to Woodard Park, Segment 2 - Ash Avenue to Hall Boulevard, Segment 3 - City Library to Bonita Road, Segment 4 - 85th Avenue (south of Durham Road) to the Tualatin River. There is a separate CIP (#92013 - The Fanno Creek Remeander) which will realign the trail from Main Street to Ash Avenue.

Project Results: All segments of the Fanno Creek Trail within Tigard will be complete except for the segment from Bonita Road to the Tualatin River. This project supports the vision statement in the City of Tigard's Strategic Plan: "The most walkable community in the Pacific Northwest..."

Project Funding: The Regional Flexible Funds (RFFA) grant federal dollars that will require coordination with Metro and Oregon Department of Transportation. Minimum city matching contribution is \$500,000, total project cost includes \$4,350,000 RFFA grant and reflects anticipated additional cost for the complete project.

Total Project Cost: \$5,357,000

City of Tigard Project Cost: \$1,006,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	6,342	60,000	120,000	80,000	30,000	0	0	0	296,342
Total Internal	6,342	60,000	120,000	80,000	30,000	0	0	0	296,342
External Expenses									
Land/Right of Way Acquisition	0	0	150,000	0	0	0	0	0	150,000
Design and Engineering	0	100,000	235,000	0	0	0	0	0	335,000
Project Estimate	0	0	0	255,000	0	0	0	0	255,000
Environmental Permit Compliance	0	0	0	0	30,000	15,000	15,000	15,000	75,000
Total External	0	100,000	385,000	255,000	30,000	15,000	15,000	15,000	815,000
Total Project Expense	6,342	160,000	505,000	335,000	60,000	15,000	15,000	15,000	1,111,342
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	6,342	160,000	505,000	335,000	60,000	15,000	15,000	15,000	1,111,342
Total Revenue Funding	6,342	160,000	505,000	335,000	60,000	15,000	15,000	15,000	1,111,342
Total Revenues	6,342	160,000	505,000	335,000	60,000	15,000	15,000	15,000	1,111,342

CAPITAL IMPROVEMENT PLAN - PARKS

92051 - Tiedeman Crossing / Fanno Creek Trail

Project Need: The Fanno Creek trail near Tiedeman Avenue has gaps creating safety issues, including a dangerous connection to the Tiedeman Avenue sidewalk.

Project Description: With the Open Spaces Bond Measure, Metro is funding the design and construction of the Tiedeman Connection gap in the Fanno Creek Trail. The project will realign the trail near Tiedeman Avenue to address safety issues. Construction will include a new pedestrian bridge over Fanno Creek.

Project Results: A safer and complete trail connection.

Project Funding: Metro is funding the entire cost.

Total Project Cost: \$660,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	10,000	40,000	20,000	0	0	0	0	70,000
Total Internal	0	10,000	40,000	20,000	0	0	0	0	70,000
External Expenses									
Design and Engineering	0	0	200,000	0	0	0	0	0	200,000
Construction	0	0	0	300,000	0	0	0	0	300,000
Environmental Permit Compliance	0	0	20,000	0	0	0	0	0	20,000
Contingency	0	0	10,000	60,000	0	0	0	0	70,000
Total External	0	0	230,000	360,000	0	0	0	0	590,000
Total Project Expense	0	10,000	270,000	380,000	0	0	0	0	660,000
REVENUES									
Other Revenue Source									
Metro Greenspace	0	10,000	270,000	380,000	0	0	0	0	660,000
Total Other Revenue	0	10,000	270,000	380,000	0	0	0	0	660,000
Total Revenues	0	10,000	270,000	380,000	0	0	0	0	660,000

CAPITAL IMPROVEMENT PLAN - PARKS

95057 - Fanno Creek Trail Alignment Study (Bonita Road to Tualatin River)

Project Need: This section of Fanno Creek Trail was originally envisioned as an on-street trail alignment on SW 74th Avenue. Subsequent review suggests that the constrained nature of the 74th Avenue right-of-way and adjacent properties will not readily accommodate widening for a trail.

Project Description: This study will involve local stakeholders and other partners in evaluating alternate alignment options along Fanno Creek and include development of a conceptual recommended trail alignment.

Project Results: This will provide the materials necessary for applying for potential grant funding for design and construction.

Total Project Cost: \$140,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	40,000	0	0	0	0	0	40,000
Total Internal	0	0	40,000	0	0	0	0	0	40,000
External Expenses									
Design and Engineering	0	0	100,000	0	0	0	0	0	100,000
Total External	0	0	100,000	0	0	0	0	0	100,000
Total Project Expense	0	0	140,000	0	0	0	0	0	140,000
REVENUES									
Revenue Funding Source									
415-Transportation SDC Fund	0	0	140,000	0	0	0	0	0	140,000
Total Revenue Funding	0	0	140,000	0	0	0	0	0	140,000
Total Revenues	0	0	140,000	0	0	0	0	0	140,000

CAPITAL IMPROVEMENT PLAN - PARKS

97013 - Saxony Demolition and Remediation

Project Need: Redevelopment of site is needed to revitalize downtown properties.

Project Description: Demolition and redevelopment of the Saxony-Pacific properties on Main Street into a combination of public space and private development which would include commercial and residential or office spaces. The redevelopment will include the environmental clean-up of the site.

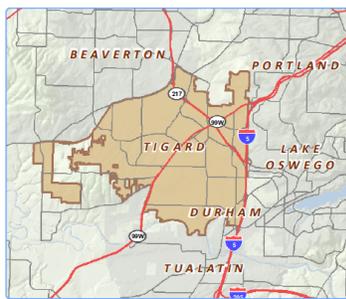
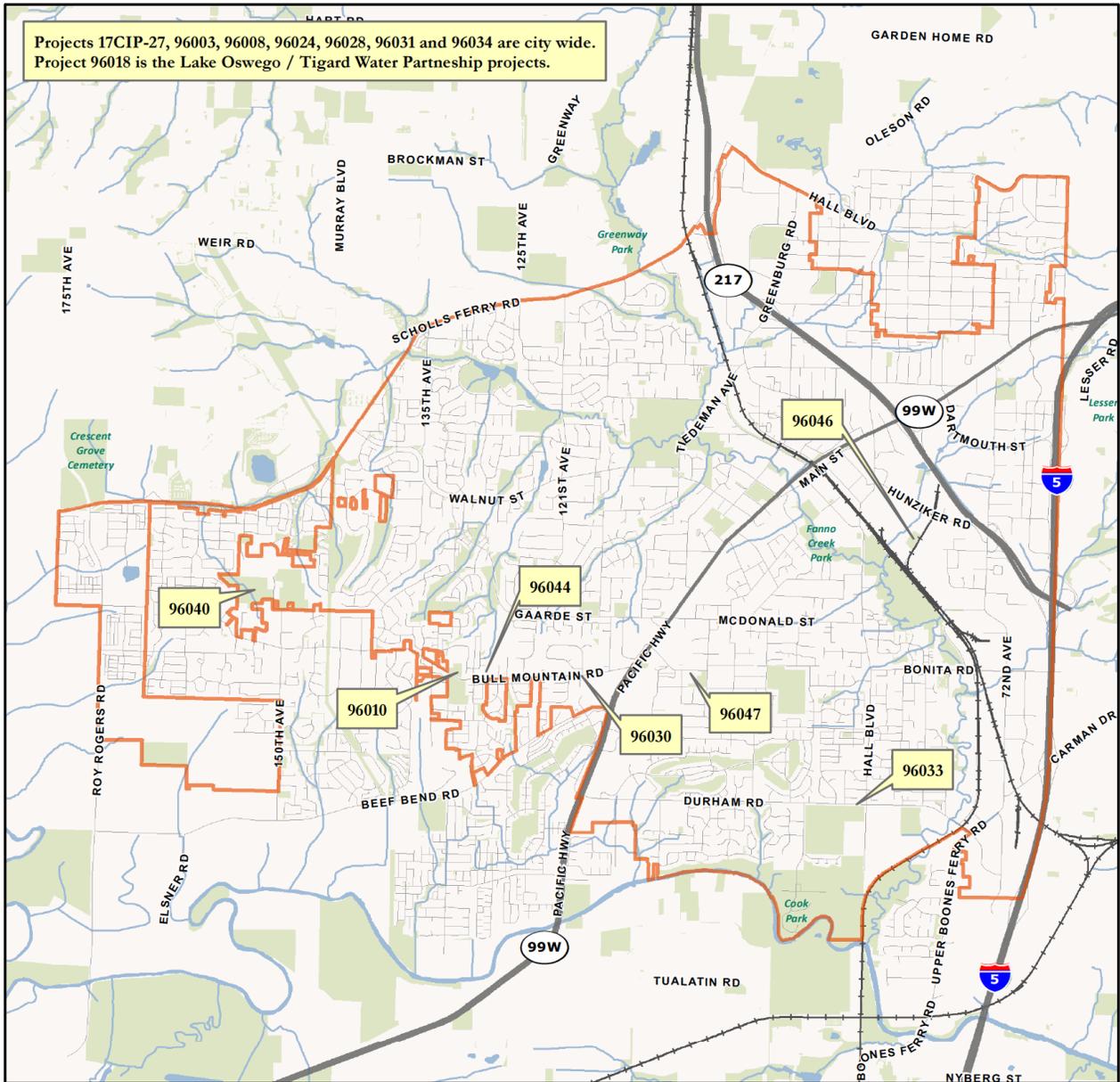
Project Results: Revitalization of downtown with high-quality development and the creation of additional public space areas.

Project Funding: Project costs reflected are for demolition and remediation only; property purchase, architectural site planning and site monitoring are not included.

Total Project Cost: \$550,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	35,000	5,000	0	0	0	0	40,000
Total Internal	0	0	35,000	5,000	0	0	0	0	40,000
External Expenses									
Design and Engineering	0	0	35,000	40,000	0	0	0	0	75,000
Construction	0	0	380,000	0	0	0	0	0	380,000
Contingency	0	0	55,000	0	0	0	0	0	55,000
Total External	0	0	470,000	40,000	0	0	0	0	510,000
Total Project Expense	0	0	505,000	45,000	0	0	0	0	550,000
REVENUES									
Revenue Funding Source									
940-Urban Renewal Capital Improvements	0	0	505,000	45,000	0	0	0	0	550,000
Total Revenue Funding	0	0	505,000	45,000	0	0	0	0	550,000
Total Revenues	0	0	505,000	45,000	0	0	0	0	550,000

CAPITAL IMPROVEMENT PLAN - WATER



**The City of Tigard
Project Locations**

Tigard City Limits



0 0.5 1
Miles



City of Tigard Recommended Capital Improvement Plan FY 2017-22

CAPITAL IMPROVEMENT PLAN - WATER

Project No.	Project Name	YTD 2016	2017	2018	2019	2020	2021	2022	Projected Total
17CIP-27	Water Master Plan / SDC Study	0	0	250,000	0	0	0	0	250,000
17CIP-32	Canterbury Pump Station	0	350,000	0	0	0	0	0	350,000
96003	Water Meter Replacement Program	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,400,000
96008	Water Main Line Oversizing Program	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000
96010	Aquifer Storage & Recovery Well # 3	0	0	0	453,000	3,650,000	0	0	4,103,000
96018	Lake Oswego/Tigard Water Partnership	33,550,323	7,570,000	0	0	0	0	0	41,120,323
96024	Waterline Replacement Program	142,000	140,000	140,000	140,000	140,000	140,000	140,000	982,000
96028	Fire Hydrant Replacement Program	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
96030	Bull Mountain Road Water Pipeline	0	0	0	0	0	630,000	7,476,000	8,106,000
96031	Fire Flow Improvement Program	90,000	90,000	90,000	90,000	90,000	90,000	90,000	630,000
96033	Well Abandonment (Tigard High School)	0	185,000	0	0	0	0	0	185,000
96034	New Water Source Systemwide Improvements Program	193,000	164,000	139,000	139,000	0	0	0	635,000
96040	Cach Reservoir and Pump Station Design	70,000	1,080,000	9,240,000	2,714,000	1,500	1,500	1,500	13,108,500
96044	Aquifer Storage & Recovery Well #2 Electrical Rehabilitation	0	0	0	0	340,000	0	0	340,000
96046	Red Rock Creek Waterline Relocation	50,000	354,000	63,000	0	0	0	0	467,000
Total Funded		34,545,323	10,383,000	10,372,000	3,986,000	4,671,500	1,311,500	8,157,500	73,426,823

CAPITAL IMPROVEMENT PLAN - WATER

17CIP-27 - Water Master Plan / SDC Study

Project Need: The city conducts water master planning every five to seven years. The current Water Master Plan was adopted in May 2010, with a minor addendum in 2014 to include River Terrace development.

Project Description: Review of current Water Master Plan; evaluation of water supply requirements necessary to operate the water distribution system based on the Lake Oswego/Tigard Water supply system; and identify recommendations and cost estimates for projects related to deficiencies or required enhancements for municipal supply and fire protection. The master plan will identify needed improvements to the water supply system for the next 20 years. From this 20-year water master planning, the capital improvement plan list provides information to update the water system development charges methodology.

Project Results: Comprehensive Water Master Plan; 20-year capital improvement plan list; cost estimates, and SDC study.

Total Project Cost: \$250,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	25,000	0	0	0	0	25,000
Total Internal	0	0	0	25,000	0	0	0	0	25,000
External Expenses									
Project Estimate	0	0	0	225,000	0	0	0	0	225,000
Total External	0	0	0	225,000	0	0	0	0	225,000
Total Project Expense	0	0	0	250,000	0	0	0	0	250,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	200,000	0	0	0	0	200,000
531-Water SDC Fund	0	0	0	50,000	0	0	0	0	50,000
Total Revenue Funding	0	0	0	250,000	0	0	0	0	250,000
Total Revenues	0	0	0	250,000	0	0	0	0	250,000

CAPITAL IMPROVEMENT PLAN - WATER

17CIP-32 - Canterbury Pump Station

Project Need: The existing booster pump station is at the end of its service life and in need of repair. This project will enhance the pumping capacity for firefighting needs in the local distribution zone. Long-term the Bull Mountain Road Water Pipeline project CIP # 96030 will permanently resolve the firefighting capacity deficiencies.

Project Description: This project will rehabilitate the existing pumps and electrical components. This will extend the life of the existing pump station until the Bull Mountain Road Water Pipeline is constructed.

Project Results: Extends the life of the existing pump station.

Total Project Costs: \$350,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	50,000	0	0	0	0	0	50,000
Total Internal	0	0	50,000	0	0	0	0	0	50,000
External Expenses									
Design and Engineering	0	0	25,000	0	0	0	0	0	25,000
Construction	0	0	250,000	0	0	0	0	0	250,000
Contingency	0	0	25,000	0	0	0	0	0	25,000
Total External	0	0	300,000	0	0	0	0	0	300,000
Total Project Expense	0	0	350,000	0	0	0	0	0	350,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	350,000	0	0	0	0	0	350,000
Total Revenue Funding	0	0	350,000	0	0	0	0	0	350,000
Total Revenues	0	0	350,000	0	0	0	0	0	350,000

CAPITAL IMPROVEMENT PLAN - WATER

96003 - Water Meter Replacement Program

Project Need: Water meters that are defective or at the end of their service life need replacement.

Project Description: As required, meters are purchased and replaced by Public Works crews.

Project Results: Newer meters more accurately measure the volume of water consumed and require less maintenance.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
External Expenses									
Construction	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,400,000
Total External	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,400,000
Total Project Expense	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,400,000
 REVENUES									
Revenue Funding Source									
530-Water Fund	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,400,000
Total Revenue Funding	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,400,000
Total Revenues	0	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,400,000

CAPITAL IMPROVEMENT PLAN - WATER

96008 - Water Main Line Oversizing Program

Project Need: Upsize water distribution waterlines.

Project Description: Waterlines that are in need of upsizing are identified in the city's Water System Master Plan. The city may elect to upsize water transmission lines that are greater than 12 inches in diameter in conjunction with ongoing development.

Project Results: More efficient water flow, decreased water age, increased water quality and fire flow availability.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	6,000	10,000	10,000	10,000	10,000	10,000	10,000	66,000
Total Internal	0	6,000	10,000	10,000	10,000	10,000	10,000	10,000	66,000
External Expenses									
Construction	0	144,000	140,000	140,000	140,000	140,000	140,000	140,000	984,000
Total External	0	144,000	140,000	140,000	140,000	140,000	140,000	140,000	984,000
Total Project Expense	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000
Total Revenue Funding	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000
Total Revenues	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000

CAPITAL IMPROVEMENT PLAN - WATER

96010 - Aquifer Storage & Recovery Well # 3

Project Need: The Water System Master Plan has identified the need to expand the city's Aquifer Storage and Recovery program to meet its long-term water demands.

Project Description: The project improvements include the construction of a well house containing a pump, motor, various motor controls, power supply, pipes and valves, and a chlorination system which are all constructed to integrate with the existing well that was installed in FY 2007-08. Once fully developed, the improvements could supply up to 2,500,000 gallons of water per day into the city's distribution system. This project will be coordinated with project Aquifer Storage & Recovery Well #2 CIP #96044.

Project Results: Water can be stored during periods of low demand and withdrawn during periods of high demand, lessening the need to expand the water treatment plant or purchase additional water supplies.

Total Project Cost: \$4,300,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	62,589	0	0	0	50,000	150,000	0	0	262,589
Total Internal	62,589	0	0	0	50,000	150,000	0	0	262,589
External Expenses									
Design and Engineering	133,441	0	0	0	403,000	0	0	0	536,441
Construction	0	0	0	0	0	3,500,000	0	0	3,500,000
Total External	133,441	0	0	0	403,000	3,500,000	0	0	4,036,441
Total Project Expense	196,030	0	0	0	453,000	3,650,000	0	0	4,299,030
REVENUES									
Revenue Funding Source									
530-Water Fund	196,030	0	0	0	453,000	3,650,000	0	0	4,299,030
Total Revenue Funding	196,030	0	0	0	453,000	3,650,000	0	0	4,299,030
Total Revenues	196,030	0	0	0	453,000	3,650,000	0	0	4,299,030

CAPITAL IMPROVEMENT PLAN - WATER

96018 - Lake Oswego/Tigard Water Partnership

Project Need: To secure supply and rate certainty, Tigard entered into a partnership agreement with the City of Lake Oswego in 2008 to secure water rights and construct a water treatment plant sourced by the Clackamas River.

Project Description: The project includes reconstruction and expansion of the raw water intake structure and water treatment plant, new transmission piping, storage and pumping facilities. Construction is scheduled for completion in 2017.

Project Results: Once completed, Tigard and Lake Oswego will have constructed a facility through which they can effectively manage their own water supplies and rates.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	809,291	171,500	0	0	0	0	0	0	980,791
Total Internal	809,291	171,500	0	0	0	0	0	0	980,791
External Expenses									
Construction	128,037,804	33,378,823	7,570,000	0	0	0	0	0	168,986,627
Total External	128,037,804	33,378,823	7,570,000	0	0	0	0	0	168,986,627
Total Project Expense	28,847,095	33,550,323	7,570,000	0	0	0	0	0	169,967,418

REVENUES

Revenue Funding Source									
530-Water Fund	0	17,092,000	0	0	0	0	0	0	17,092,000
531-Water SDC Fund	0	3,400,000	2,500,000	0	0	0	0	0	5,900,000
532-Water CIP Fund	128,847,095	13,058,323	5,070,000	0	0	0	0	0	146,975,418
Total Revenue Funding	128,847,095	33,550,323	7,570,000	0	0	0	0	0	169,967,418
Total Revenues	28,847,095	33,550,323	7,570,000	0	0	0	0	0	169,967,418

Project Comments:

FY 2016 Q1: additional appropriation to pay for Tigard's share that was delayed in prior FY. This action doesn't change the total cost of the project, only the timing of the expenditures.

CAPITAL IMPROVEMENT PLAN - WATER

96024 - Waterline Replacement Program

Project Need: Waterlines that are defective or at the end of their service life need to be replaced.

Project Description: As required, waterlines are replaced by Public Works crews or private contractors.

Project Results: Newer waterlines are less prone to failure and require less maintenance. In addition, fewer leaking pipes will result in reduced 'unaccounted for' water loss.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	12,000	10,000	10,000	10,000	10,000	10,000	10,000	72,000
Total Internal	0	12,000	10,000	10,000	10,000	10,000	10,000	10,000	72,000
External Expenses									
Project Estimate	0	130,000	130,000	130,000	130,000	130,000	130,000	130,000	910,000
Total External	0	130,000	130,000	130,000	130,000	130,000	130,000	130,000	910,000
Total Project Expense	0	142,000	140,000	140,000	140,000	140,000	140,000	140,000	982,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	142,000	140,000	140,000	140,000	140,000	140,000	140,000	982,000
Total Revenue Funding	0	142,000	140,000	140,000	140,000	140,000	140,000	140,000	982,000
Total Revenues	0	142,000	140,000	140,000	140,000	140,000	140,000	140,000	982,000

96028 - Fire Hydrant Replacement Program

Project Need: There are approximately 2,100 fire hydrants located throughout the city. Of these, 550 have been identified for replacement due to unavailable replacement or service parts which limits the ability to adequately maintain them.

Project Description: This project allows for the replacement of 50 hydrants per year. It is estimated that it will take approximately 11 years to replace all 550 hydrants. The city is currently in year four of the program.

Project Results: Newer fire hydrants are less prone to leakage which reduces 'unaccounted for' water loss and less maintenance is required.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
External Expenses									
Construction	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
Total External	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
Total Project Expense	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
Total Revenue Funding	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
Total Revenues	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000

CAPITAL IMPROVEMENT PLAN - WATER

96030 - Bull Mountain Road Water Pipeline

Project previously known as Pipeline Connecting 550 Zone to 530 Zone

Project Need: Alleviate a firefighting water deficiency in the city's distribution system. This project has been postponed and in the interim project #17CIP-32 Canterbury Pump Station will be constructed to provide the necessary fireflow.

Project Description: The project, as identified in the Water Master Plan, will connect the 530-foot and the 550-foot pressure zones.

Project Results: Deficiency will be eliminated providing adequate capacities to meet the area's firefighting demands.

Total Project Cost: \$8,106,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	0	30,000	356,000	386,000
Total Internal	0	0	0	0	0	0	30,000	356,000	386,000
External Expenses									
Project Estimate	0	0	0	0	0	0	600,000	7,120,000	7,720,000
Total External	0	0	0	0	0	0	600,000	7,120,000	7,720,000
Total Project Expense	0	0	0	0	0	0	630,000	7,476,000	8,106,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	0	0	428,000	5,084,000	5,512,000
531-Water SDC Fund	0	0	0	0	0	0	202,000	2,392,000	2,594,000
Total Revenue Funding	0	0	0	0	0	0	630,000	7,476,000	8,106,000
Total Revenues	0	0	0	0	0	0	630,000	7,476,000	8,106,000

96031 - Fire Flow Improvement Program

Project Need: Improve firefighting flow capacity.

Project Description: The project works within identified areas of the city and provides the necessary piping, etc. to improve the water distribution system. Most of this work is undertaken by Public Works crews as resources can be allocated.

Project Results: Deficiency will be eliminated thus providing adequate capacities to meet the area's firefighting demands.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
External Expenses									
Design and Engineering	0	15,000	15,000	15,000	15,000	15,000	15,000	15,000	105,000
Construction	0	75,000	75,000	75,000	75,000	75,000	75,000	75,000	525,000
Total External	0	90,000	90,000	90,000	90,000	90,000	90,000	90,000	630,000
Total Project Expense	0	90,000	90,000	90,000	90,000	90,000	90,000	90,000	630,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	90,000	90,000	90,000	90,000	90,000	90,000	90,000	630,000
Total Revenue Funding	0	90,000	90,000	90,000	90,000	90,000	90,000	90,000	630,000
Total Revenues	0	90,000	90,000	90,000	90,000	90,000	90,000	90,000	630,000

CAPITAL IMPROVEMENT PLAN - WATER

96033 - Well Abandonment (Tigard High School)

Project Need: Tigard High School (THS) has an existing irrigation well that is no longer in use. This well is in close proximity of Aquifer Storage & Recovery (ASR) Well #1. Due to ASR injection activities, the THS well has seeped above its casing. Seepage is an indication that the well is a possible risk to ASR water quality. To ensure water quality within the ASR system, the THS well needs to be properly abandoned in accordance with Oregon Water Resources Department standards. The city has placed a temporary cap on the well to seal the casing from further seepage and possible contamination. However, ASR #3 construction and increased groundwater storage in the future may place greater hydraulic water pressure on the THS well, requiring a permanent abandonment.

Project Description: In order to meet the necessary regulatory approval, the project will include engineering design and construction inspection. Likely improvements will include perforation of the metal well casing at designed increments and concrete encasement of the interior well casing.

Project Results: Proper abandonment of the THS well to prevent water seepage and stop possible contaminants from entering the ASR groundwater.

Total Project Cost: \$185,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	20,000	0	0	0	0	0	20,000
Total Internal	0	0	20,000	0	0	0	0	0	20,000
External Expenses									
Design and Engineering	0	0	15,000	0	0	0	0	0	15,000
Construction	0	0	135,000	0	0	0	0	0	135,000
Contingency	0	0	15,000	0	0	0	0	0	15,000
Total External	0	0	165,000	0	0	0	0	0	165,000
Total Project Expense	0	0	185,000	0	0	0	0	0	185,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	185,000	0	0	0	0	0	185,000
Total Revenue Funding	0	0	185,000	0	0	0	0	0	185,000
Total Revenues	0	0	185,000	0	0	0	0	0	185,000

CAPITAL IMPROVEMENT PLAN - WATER

96034 - New Water Source Systemwide Improvements Program

Project Need: Improvements may be needed to Tigard's water system when the Lake Oswego/Tigard Water Partnership improvements are complete.

Project Description: Depending on needs determined by engineering analysis and modeling, various minor improvements to the distribution, storage and pumping systems may be necessary.

Project Results: A stable and reliable water system that meets all requirements.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	18,000	15,000	15,000	15,000	0	0	0	63,000
Total Internal	0	18,000	15,000	15,000	15,000	0	0	0	63,000
External Expenses									
Design and Engineering	0	50,000	0	0	0	0	0	0	50,000
Construction	0	125,000	149,000	124,000	124,000	0	0	0	522,000
Total External	0	175,000	149,000	124,000	124,000	0	0	0	572,000
Total Project Expense	0	193,000	164,000	139,000	139,000	0	0	0	635,000
REVENUES									
Revenue Funding Source									
532-Water CIP Fund	0	193,000	164,000	139,000	139,000	0	0	0	635,000
Total Revenue Funding	0	193,000	164,000	139,000	139,000	0	0	0	635,000
Total Revenues	0	193,000	164,000	139,000	139,000	0	0	0	635,000

CAPITAL IMPROVEMENT PLAN - WATER

96040 - Cach Reservoir and Pump Station Design

Project Need: In conjunction with the development of the River Terrace Planning Area and to address storage and pumping deficiencies identified in the River Terrace Updated Water Master Plan, system improvements are required.

Project Description: The project is for the design of a new water reservoir, associated new water lines, and replacement of a temporary pump station for the city's 550-foot service area. The reservoir will be constructed on City property located on the west side of Bull Mountain in the Sun Rise Lane vicinity. A new permanent pump station will replace an existing temporary pump station on the Menlor Reservoir site to move water from the 410-foot to the 550-foot service areas. This project is proposed to be moved forward to meet demand from new development in River Terrace.

Project Results: The project will provide additional storage and pumping facilities to address system deficiencies and development demands.

Total Project Cost: \$13,110,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	20,000	230,000	450,000	100,000	0	0	0	800,000
Total Internal	0	20,000	230,000	450,000	100,000	0	0	0	800,000
External Expenses									
Design and Engineering	0	50,000	850,000	0	0	0	0	0	900,000
Project Estimate	0	0	0	8,790,000	2,612,500	0	0	0	11,402,500
Environmental Permit Compliance	0	0	0	0	1,500	1,500	1,500	1,500	6,000
Total External	0	50,000	850,000	8,790,000	2,614,000	1,500	1,500	1,500	12,308,500
Total Project Expense	0	70,000	1,080,000	9,240,000	2,714,000	1,500	1,500	1,500	13,108,500
REVENUES									
Revenue Funding Source									
530-Water Fund	0	57,000	875,000	7,484,000	2,194,000	1,500	1,500	1,500	10,614,500
531-Water SDC Fund	0	13,000	205,000	1,756,000	520,000	0	0	0	2,494,000
Total Revenue Funding	0	70,000	1,080,000	9,240,000	2,714,000	1,500	1,500	1,500	13,108,500
Total Revenues	0	70,000	1,080,000	9,240,000	2,714,000	1,500	1,500	1,500	13,108,500

CAPITAL IMPROVEMENT PLAN - WATER

96044 - Aquifer Storage & Recovery Well #2 Electrical Rehabilitation

Project Need: The existing electrical system (variable frequency drive) is becoming increasingly difficult to maintain.

Project Description: The project will allow the efficient operation of existing pump motors by upgrading and cleaning the existing well. This will consist of replacing electrical devices (variable frequency drive) with easier-to-maintain components and removing and cleaning the screens which are located in the well. This project will be coordinated with the design and construction of CIP #96010 Aquifer Storage & Recovery Well #3.

Project Results: Increase operational reliability of Aquifer Storage & Recovery Well #2.

Total Project Cost: \$340,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	20,000	0	0	20,000
Total Internal	0	0	0	0	0	20,000	0	0	20,000
External Expenses									
Project Estimate	0	0	0	0	0	320,000	0	0	320,000
Total External	0	0	0	0	0	320,000	0	0	320,000
Total Project Expense	0	0	0	0	0	340,000	0	0	340,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	0	234,600	0	0	234,600
532-Water CIP Fund	0	0	0	0	0	105,400	0	0	105,400
Total Revenue Funding	0	0	0	0	0	340,000	0	0	340,000
Total Revenues	0	0	0	0	0	340,000	0	0	340,000

CAPITAL IMPROVEMENT PLAN - WATER

96046 - Red Rock Creek Waterline Relocation

Project Need: Project will be constructed with East Tigard Sewer and will include relocating an inaccessible 12" waterline that runs parallel to Red Rock Creek.

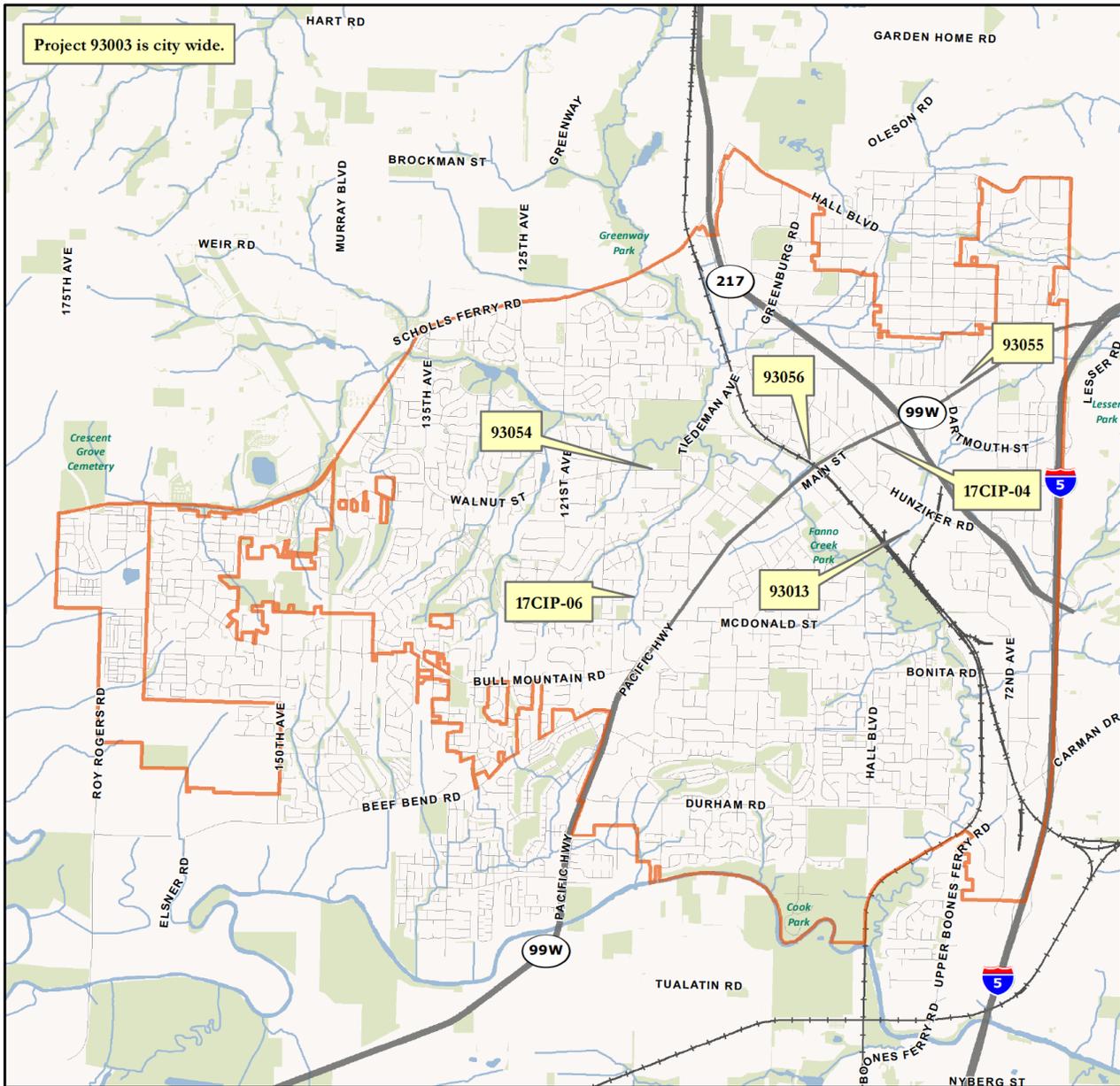
Project Description: Replacement of over a half mile of existing 12" waterline currently located in Red Rock Creek. Installation of fire lines to properties currently being served on the northwest side of the creek.

Project Results: Replacement of an aging waterline resulting in improved accessibility for maintenance.

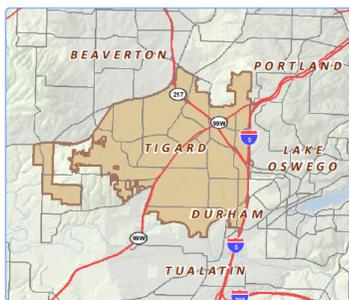
Total Project Cost: \$467,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	20,000	30,000	5,000	0	0	0	0	55,000
Total Internal	0	20,000	30,000	5,000	0	0	0	0	55,000
External Expenses									
Land/Right of Way Acquisition	0	0	37,000	0	0	0	0	0	37,000
Design and Engineering	0	30,000	57,000	0	0	0	0	0	87,000
Construction	0	0	182,000	46,000	0	0	0	0	228,000
Contingency	0	0	48,000	12,000	0	0	0	0	60,000
Total External	0	30,000	324,000	58,000	0	0	0	0	412,000
Total Project Expense	0	50,000	354,000	63,000	0	0	0	0	467,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	50,000	354,000	63,000	0	0	0	0	467,000
Total Revenue Funding	0	50,000	354,000	63,000	0	0	0	0	467,000
Total Revenues	0	50,000	354,000	63,000	0	0	0	0	467,000

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER



Project 93003 is city wide.



**The City of Tigard
Project Locations**

 Tigard City Limits



0 0.5 1 Miles



City of Tigard Recommended Capital Improvement Plan FY 2017-22

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER

Project No.	Project Name	YTD 2016	2017	2018	2019	2020	2021	2022	Projected Total
17CIP-04	Downtown Sanitary Sewer Line Project	0	0	0	0	65,000	240,000	0	305,000
17CIP-06	East Fork Derry Dell Creek (Viewmont Court to Fairhaven Way)	0	0	315,000	595,000	12,000	12,000	12,000	946,000
93003	Sanitary Sewer Major Maintenance Program	90,000	100,000	100,000	100,000	100,000	100,000	100,000	690,000
93013	East Tigard Sewer Replacement	105,000	417,000	1,067,000	7,000	7,000	7,000	10,000	1,620,000
93054	Walnut Street Sanitary Sewer	144,000	387,000	0	0	0	0	0	531,000
93055	Pacific Highway Sanitary Sewer Line	0	75,000	265,000	0	0	0	0	340,000
93056	Commercial Street Sanitary Sewer Line	0	135,000	0	0	0	0	0	135,000
Total Funded		339,000	1,114,000	1,747,000	702,000	184,000	359,000	122,000	4,567,000

17CIP-04 - Downtown Sanitary Sewer Line Project

Project Need: The sanitary sewer line was constructed in the 1960s and after years of monthly and quarterly cleaning, the pipe walls have become thin.

Project Description: This project will rehabilitate approximately 2,745 lineal feet of sanitary sewer line in Pacific Highway from Hall Boulevard to Main Street and in Main Street from Pacific Highway to Commercial Street. If possible, a cured-in-place-pipe (CIPP) trenchless method will be used.

Project Results: Extended life of this sanitary sewer pipe.

Total Project Cost: \$305,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	20,000	15,000	0	35,000
Total Internal	0	0	0	0	0	20,000	15,000	0	35,000
External Expenses									
Project Estimate	0	0	0	0	0	45,000	225,000	0	270,000
Total External	0	0	0	0	0	45,000	225,000	0	270,000
Total Project Expense	0	0	0	0	0	65,000	240,000	0	305,000

REVENUES

Revenue Funding Source									
500-Sanitary Sewer Fund	0	0	0	0	0	65,000	240,000	0	305,000
Total Revenue Funding	0	0	0	0	0	65,000	240,000	0	305,000
Total Revenues	0	0	0	0	0	65,000	240,000	0	305,000

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER

17CIP-06 - East Fork Derry Dell Creek (Viewmont Court to Fairhaven Way)

Project Need: Erosion of the East Fork of Derry Dell Creek has resulted in exposed manholes and laterals of the adjacent sanitary sewer system from approximately Viewmont Court to Fairhaven Way adjacent to 110th Avenue.

Project Description: The incised stream areas will be brought back up to previous stream elevations to provide protection to the sanitary sewer system. Project will include new stream cross sections, insertion of wood logs and bank treatment.

Project Results: A stable stream with a protected sanitary sewer system.

Total Project Cost: \$946,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	40,000	30,000	0	0	0	70,000
Total Internal	0	0	0	40,000	30,000	0	0	0	70,000
External Expenses									
Project Estimate	0	0	0	275,000	540,000	0	0	0	815,000
Environmental Permit Compliance	0	0	0	0	25,000	12,000	12,000	12,000	61,000
Total External	0	0	0	275,000	565,000	12,000	12,000	12,000	876,000
Total Project Expense	0	0	0	315,000	595,000	12,000	12,000	12,000	946,000
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	0	0	315,000	595,000	12,000	12,000	12,000	946,000
Total Revenue Funding	0	0	0	315,000	595,000	12,000	12,000	12,000	946,000
Total Revenues	0	0	0	315,000	595,000	12,000	12,000	12,000	946,000

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER

93003 - Sanitary Sewer Major Maintenance Program

Project Need: Provide major maintenance of the sanitary sewer system.

Project Description: This program is used for urgent projects to renew, repair or replace sections of the sanitary sewer system that have failed or are near failure. Normal operations and maintenance includes work on the system to keep it functioning but does not result in renewing or replacing the pipe or other appurtenances. Projects included in the Major Maintenance Program exceed normal maintenance and operations and typically replace pipe and add a renewed service life.

Project Results: Reduction in the possibilities of service interruptions and spills.

		Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES										
Internal Expenses										
Project Management		0	12,000	10,000	10,000	10,000	10,000	10,000	10,000	72,000
Total Internal		0	12,000	10,000	10,000	10,000	10,000	10,000	10,000	72,000
External Expenses										
Project Estimate		0	78,000	90,000	90,000	90,000	90,000	90,000	90,000	618,000
Total External		0	78,000	90,000	90,000	90,000	90,000	90,000	90,000	618,000
Total Project Expense		0	90,000	100,000	100,000	100,000	100,000	100,000	100,000	690,000
REVENUES										
Revenue Funding Source										
500-Sanitary Sewer Fund		0	90,000	100,000	100,000	100,000	100,000	100,000	100,000	690,000
Total Revenue Funding		0	90,000	100,000	100,000	100,000	100,000	100,000	100,000	690,000
Total Revenues		0	90,000	100,000	100,000	100,000	100,000	100,000	100,000	690,000

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER

93013 - East Tigard Sewer Replacement

Project Need: Upgrade line capacity to reduce higher than normal maintenance needs.

Project Description: This project is in the Sanitary Sewer Master Plan and involves increasing the capacity of an existing sanitary sewer line (serving the area north of Hunziker Street) to prevent overflows and to improve the access for routine maintenance. It will also provide sanitary sewer service for a portion of the undeveloped adjacent parcel (the Fields property).

Project Results: Additional sanitary sewer pipe capacity for development and improved maintenance access.

Project Funding: Clean Water Services is funding 100% of the 15" main line sanitary sewer. The city is funding an 8" sanitary sewer line that will serve future development on Wall Street.

Total Project Cost: \$1,683,000

City of Tigard Project Cost: \$246,345

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	11,128	35,000	35,000	61,000	0	0	0	0	142,128
Total Internal	11,128	35,000	35,000	61,000	0	0	0	0	142,128
External Expenses									
Land/Right of Way Acquisition	0	0	180,000	0	0	0	0	0	180,000
Design and Engineering	51,717	70,000	56,000	17,000	0	0	0	0	194,717
Construction	0	0	96,000	864,000	0	0	0	0	960,000
Environmental Permit Compliance	0	0	0	10,000	7,000	7,000	7,000	10,000	41,000
Contingency	0	0	50,000	115,000	0	0	0	0	165,000
Total External	51,717	70,000	382,000	1,006,000	7,000	7,000	7,000	10,000	1,540,717
Total Project Expense	62,845	105,000	417,000	1,067,000	7,000	7,000	7,000	10,000	1,682,845
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	62,845	57,000	34,000	61,000	7,000	7,000	7,000	10,000	245,845
Total Revenue Funding	62,845	57,000	34,000	61,000	7,000	7,000	7,000	10,000	245,845
Other Revenue Source									
Clean Water Services	0	48,000	383,000	1,006,000	0	0	0	0	1,437,000
Total Other Revenue	0	48,000	383,000	1,006,000	0	0	0	0	1,437,000
Total Revenues	62,845	105,000	417,000	1,067,000	7,000	7,000	7,000	10,000	1,682,845

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER

93054 - Walnut Street Sanitary Sewer

Project Need: Lack of sanitary sewer along Walnut Street.

Project Description: Construction of sanitary sewer service to approximately 20 homes along Walnut Street and 112th Avenue. This project is connected to the Walnut Street Improvement project CIP #95023.

Total Project Cost: \$535,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	4,968	4,000	33,000	0	0	0	0	0	41,968
Total Internal	4,968	4,000	33,000	0	0	0	0	0	41,968
External Expenses									
Design and Engineering	0	0	20,000	0	0	0	0	0	20,000
Construction	0	140,000	280,000	0	0	0	0	0	420,000
Contingency	0	0	54,000	0	0	0	0	0	54,000
Total External	0	140,000	354,000	0	0	0	0	0	494,000
Total Project Expense	4,968	144,000	387,000	0	0	0	0	0	535,968
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	4,968	144,000	387,000	0	0	0	0	0	535,968
Total Revenue Funding	4,968	144,000	387,000	0	0	0	0	0	535,968
Total Revenues	4,968	144,000	387,000	0	0	0	0	0	535,968

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER

93055 - Pacific Highway Sanitary Sewer Line

Project Need: The sanitary sewer line was constructed in the 1960s and after years of monthly and quarterly cleaning, the pipe walls have become thin.

Project Description: This project will repair approximately 3,520 linear feet of sanitary sewer line from 65th Avenue to Pfaffle Street within the southbound lane of Pacific Highway. If possible, a cured-in-place-pipe (CIPP) trenchless construction method will be used; this should minimize traffic disruption on Pacific Highway.

Project Results: Extended life of this sanitary sewer pipe.

Total Project Cost: \$340,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	25,000	15,000	0	0	0	0	40,000
Total Internal	0	0	25,000	15,000	0	0	0	0	40,000
External Expenses									
Design and Engineering	0	0	50,000	0	0	0	0	0	50,000
Project Estimate	0	0	0	250,000	0	0	0	0	250,000
Total External	0	0	50,000	250,000	0	0	0	0	300,000
Total Project Expense	0	0	75,000	265,000	0	0	0	0	340,000
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	0	75,000	265,000	0	0	0	0	340,000
Total Revenue Funding	0	0	75,000	265,000	0	0	0	0	340,000
Total Revenues	0	0	75,000	265,000	0	0	0	0	340,000

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER

93056 - Commercial Street Sanitary Sewer Line

Project Need: The sanitary sewer line was constructed in the 1950s and after years of monthly and quarterly cleaning, the pipe walls have become thin. There is also a long sag within the line that requires frequent cleaning. This line is identified in the master plan to be upsized to 12".

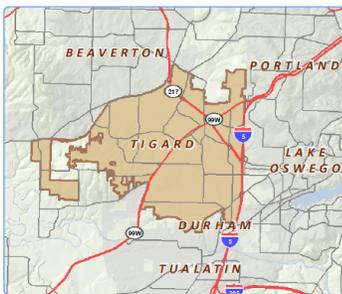
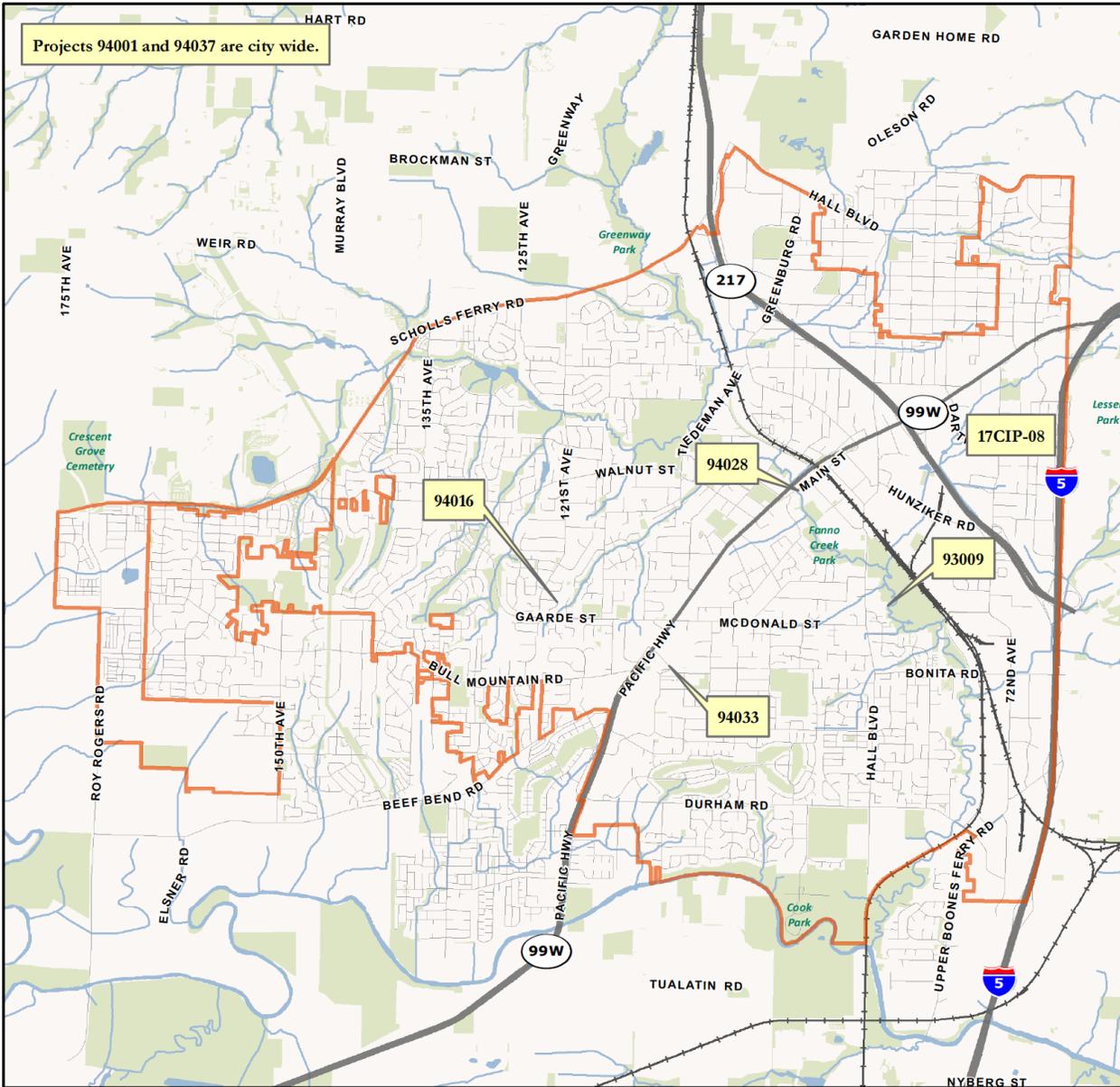
Project Description: Approximately 358 linear feet of new 12" line will be constructed.

Project Results: An upsized sanitary sewer line to serve future development.

Total Project Cost: \$135,000

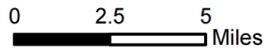
	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	25,000	0	0	0	0	0	25,000
Total Internal	0	0	25,000	0	0	0	0	0	25,000
External Expenses									
Design and Engineering	0	0	6,000	0	0	0	0	0	6,000
Construction	0	0	84,000	0	0	0	0	0	84,000
Contingency	0	0	20,000	0	0	0	0	0	20,000
Total External	0	0	110,000	0	0	0	0	0	110,000
Total Project Expense	0	0	135,000	0	0	0	0	0	135,000
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	0	135,000	0	0	0	0	0	135,000
Total Revenue Funding	0	0	135,000	0	0	0	0	0	135,000
Total Revenues	0	0	135,000	0	0	0	0	0	135,000

CAPITAL IMPROVEMENT PLAN - STORMWATER



**The City of Tigard
Project Locations**

Tigard City Limits



City of Tigard Recommended Capital Improvement Plan FY 2017-22

CAPITAL IMPROVEMENT PLAN - STORMWATER

Project No.	Project Name	YTD 2016	2017	2018	2019	2020	2021	2022	Projected Total
17CIP-08	Tigard Triangle Storm Implementation Plan / Predesign	0	0	100,000	100,000	0	0	0	200,000
93009	Fanno Creek Slope Stabilization (Arthur Court)	0	0	60,000	915,000	7,000	7,000	7,000	996,000
94001	Storm Drainage Major Maintenance Program	50,000	100,000	100,000	100,000	100,000	100,000	100,000	650,000
94016	Slope Stabilization (Derry Dell/118th Court)	0	187,000	1,024,000	10,000	10,000	10,000	12,000	1,253,000
94028	Main Street Storm Rehabilitation (Fanno Creek)	0	0	0	0	130,000	0	0	130,000
94033	Canterbury Lane Storm Line Upgrade (106th to Pacific Highway)	57,500	407,500	0	0	0	0	0	465,000
94037	Stormwater Master Plan	65,000	260,000	0	0	0	0	0	325,000
Total Funded		172,500	954,500	1,284,000	1,125,000	247,000	117,000	119,000	4,019,000

17CIP-08 - Tigard Triangle Storm Implementation Plan / Predesign

Project Need: The new lean development code for the Tigard Triangle is anticipated to work best using a regional stormwater management approach in which most of the volume of runoff generated by new and re-development would be handled in a series of floodplain restoration areas along Red Rock Creek.

Project Description: This project will include taking stormwater data and general storm facility location/sizing information generated in the citywide Stormwater Master Plan project and creating a more site-specific preliminary design for regional facilities, floodplain restoration, trail alignment, right of way/easement acquisition needs and storm conveyance infrastructure. It will also include generation of costing information and development of funding recommendations including fee-in-lieu and SDCs for the Triangle area.

Project Results: Implementation plan for regional stormwater management in the Tigard Triangle.

Project Funding: Funding for this project and/or design and construction of the regional facilities may be partly or fully provided by a potential future urban renewal district.

Total Project Cost: \$200,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	20,000	20,000	0	0	0	40,000
Total Internal	0	0	0	20,000	20,000	0	0	0	40,000
External Expenses									
Project Estimate	0	0	0	80,000	80,000	0	0	0	160,000
Total External	0	0	0	80,000	80,000	0	0	0	160,000
Total Project Expense	0	0	0	100,000	100,000	0	0	0	200,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	0	0	100,000	100,000	0	0	0	200,000
Total Revenue Funding	0	0	0	100,000	100,000	0	0	0	200,000
Total Revenues	0	0	0	100,000	100,000	0	0	0	200,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

93009 - Fanno Creek Slope Stabilization (Arthur Court)

Project Need: Sanitary sewer piping and a section of Fanno Creek Trail are being threatened by erosion on the outside bend of Fanno Creek.

Project Description: A section of the bank along Fanno Creek near Arthur Court has eroded due to high water levels which is threatening a sanitary sewer main and a portion of the Fanno Creek Trail. The project will restore the section of eroding bank and divert high flows from the impacted area.

Project Results: A stabilized bank, providing protection of the sanitary sewer main and the Fanno Creek Trail.

Total Project Cost: \$1,160,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	44,602	0	0	10,000	70,000	0	0	0	124,602
Total Internal	44,602	0	0	10,000	70,000	0	0	0	124,602
External Expenses									
Design and Engineering	108,047	0	0	0	0	0	0	0	108,047
Project Estimate	0	0	0	50,000	835,000	0	0	0	885,000
Environmental Permit Compliance	0	0	0	0	10,000	7,000	7,000	7,000	31,000
Total External	108,047	0	0	50,000	845,000	7,000	7,000	7,000	1,024,047
Total Project Expense	152,649	0	0	60,000	915,000	7,000	7,000	7,000	1,148,649
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	0	0	30,000	457,500	3,500	3,500	3,500	498,000
510-Stormwater Fund	152,649	0	0	30,000	457,500	3,500	3,500	3,500	650,649
Total Revenue Funding	152,649	0	0	60,000	915,000	7,000	7,000	7,000	1,148,649
Total Revenues	152,649	0	0	60,000	915,000	7,000	7,000	7,000	1,148,649

CAPITAL IMPROVEMENT PLAN - STORMWATER

94001 - Storm Drainage Major Maintenance Program

Project Need: Provide major maintenance of the storm drainage system.

Project Description: This program is used for urgent projects to renew, repair or replace sections of the storm system that have failed or are near failure. Normal operations and maintenance includes work on the system to keep it functioning, however this does not result in renewing or replacing the pipe or other appurtenances. Projects included in the Storm Drainage Major Maintenance Program exceed normal maintenance and operations because they typically replace facilities and add a renewed service life.

Project Results: Repairs made prior to or just after unexpected failure, reducing the possibilities of service interruptions.

Project Funding: Funding levels are increased starting FY2017 reflecting the level of actual needs. This will be further refined upon completion of the Stormwater Master Plan.

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	10,000	15,000	15,000	15,000	15,000	15,000	15,000	100,000
Construction Management	0	0	0	0	0	0	0	0	0
Total Internal	0	10,000	15,000	15,000	15,000	15,000	15,000	15,000	100,000
External Expenses									
Construction	0	40,000	85,000	85,000	85,000	85,000	85,000	85,000	550,000
Total External	0	40,000	85,000	85,000	85,000	85,000	85,000	85,000	550,000
Total Project Expense	0	50,000	100,000	100,000	100,000	100,000	100,000	100,000	650,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	50,000	100,000	100,000	100,000	100,000	100,000	100,000	650,000
Total Revenue Funding	0	50,000	100,000	100,000	100,000	100,000	100,000	100,000	650,000
Total Revenues	0	50,000	100,000	100,000	100,000	100,000	100,000	100,000	650,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

94016 - Slope Stabilization (Derry Dell/118th Court)

Project Need: Stabilize an active slide and stream erosion on Derry Dell Creek that is threatening sewer infrastructure, impacting city-owned greenway and trail and private property. A geotechnical assessment of this location in December 2015/January 2016 has re-confirmed the need and timing for this project due to ongoing slide activity.

Project Description: The project will design and construct slope stabilization measures for an active slide just downstream of 118th Court. The project will also restore a length of Derry Dell Creek where erosion and stream incision are contributing to these landslides and threatening sewer infrastructure. As part of the permitting process, stream channel mitigation will be required. The project will strategically identify and implement stream channel mitigation sites between 118th Court and 115th Avenue. Stream channel mitigation sites will be selected to restore areas of Derry Dell Creek that are currently incising and without restoration would cause future erosion threats to private property, and existing sewer infrastructure.

Project Results: The project will protect existing sewer infrastructure, stabilize an active landslide, improve water quality in Derry Dell Creek by reconnecting the creek to its floodplain, stabilize the creek in areas that are expected to worsen downstream by restoring them as part of stream channel mitigation for the project.

Total Project Cost: \$1,259,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	5,525	0	55,000	40,000	0	0	0	0	100,525
Total Internal	5,525	0	55,000	40,000	0	0	0	0	100,525
External Expenses									
Design and Engineering	0	0	110,000	0	0	0	0	0	110,000
Project Estimate	0	0	0	801,000	0	0	0	0	801,000
Environmental Permit Compliance	0	0	0	12,000	10,000	10,000	10,000	12,000	54,000
Contingency	0	0	22,000	171,000	0	0	0	0	193,000
Total External	0	0	132,000	984,000	10,000	10,000	10,000	12,000	1,158,000
Total Project Expense	5,525	0	187,000	1,024,000	10,000	10,000	10,000	12,000	1,258,525
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	0	93,500	512,000	5,000	5,000	5,000	6,000	626,500
510-Stormwater Fund	5,525	0	93,500	512,000	5,000	5,000	5,000	6,000	632,025
Total Revenue Funding	5,525	0	187,000	1,024,000	10,000	10,000	10,000	12,000	1,258,525
Total Revenues	5,525	0	187,000	1,024,000	10,000	10,000	10,000	12,000	1,258,525

CAPITAL IMPROVEMENT PLAN - STORMWATER

94028 - Main Street Storm Rehabilitation (Fanno Creek)

Project Need: Upgrade multiple stormwater outfalls in a way that promotes visual appeal in the downtown area.

Project Description: The project will upgrade functional stormwater outfalls and abandon inactive stormwater outfalls along Fanno Creek in the vicinity of Main Street. The goal of the project will be to develop a plan for outfall design that improves the aesthetics of downtown Tigard and takes advantage of this well-used location to provide public education about the creek. The plan will develop a vision to be used to attract grant funding.

Project Results: Improved Fanno Creek stormwater outfalls in the vicinity of Main Street that are easy to maintain and provide a component of public education about stormwater management and the health of Fanno Creek.

Total Project Cost: \$130,000 (conceptual planning and grant application only)

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	30,000	0	0	30,000
Total Internal	0	0	0	0	0	30,000	0	0	30,000
External Expenses									
Project Estimate	0	0	0	0	0	100,000	0	0	100,000
Total External	0	0	0	0	0	100,000	0	0	100,000
Total Project Expense	0	0	0	0	0	130,000	0	0	130,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	0	0	0	0	130,000	0	0	130,000
Total Revenue Funding	0	0	0	0	0	130,000	0	0	130,000
Total Revenues	0	0	0	0	0	130,000	0	0	130,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

94033 - Canterbury Lane Storm Line Upgrade (106th to Pacific Highway)

Project Need: The current system does not allow access, which could result in a failure causing damage to downstream properties.

Project Description: This project will provide a storm drainage system with structure and access for proper maintenance.

Project Results: New stormwater facility with improved maintenance access.

Total Project Cost: \$465,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	17,500	85,000	0	0	0	0	0	102,500
Total Internal	0	17,500	85,000	0	0	0	0	0	102,500
External Expenses									
Design and Engineering	0	40,000	60,000	0	0	0	0	0	100,000
Construction	0	0	197,500	0	0	0	0	0	197,500
Contingency	0	0	65,000	0	0	0	0	0	65,000
Total External	0	40,000	322,500	0	0	0	0	0	362,500
Total Project Expense	0	57,500	407,500	0	0	0	0	0	465,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	57,500	407,500	0	0	0	0	0	465,000
Total Revenue Funding	0	57,500	407,500	0	0	0	0	0	465,000
Total Revenues	0	57,500	407,500	0	0	0	0	0	465,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

94037 - Stormwater Master Plan

Project Need: Tigard's Stormwater Master Plan has not been updated in over 30 years. The environmental regulations regarding the management of stormwater infrastructure have changed dramatically. Tigard's stormwater infrastructure is aging and many stream systems in the city are experiencing erosion issues with risk of infrastructure and property damage. This Master Plan will describe projects and programs that will address the regulatory requirements and will also identify and prioritize projects to address needs for the existing stormwater system.

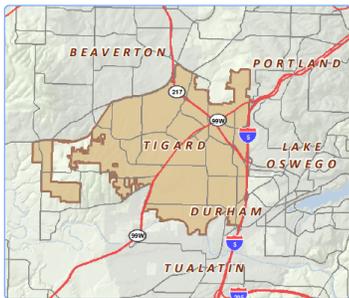
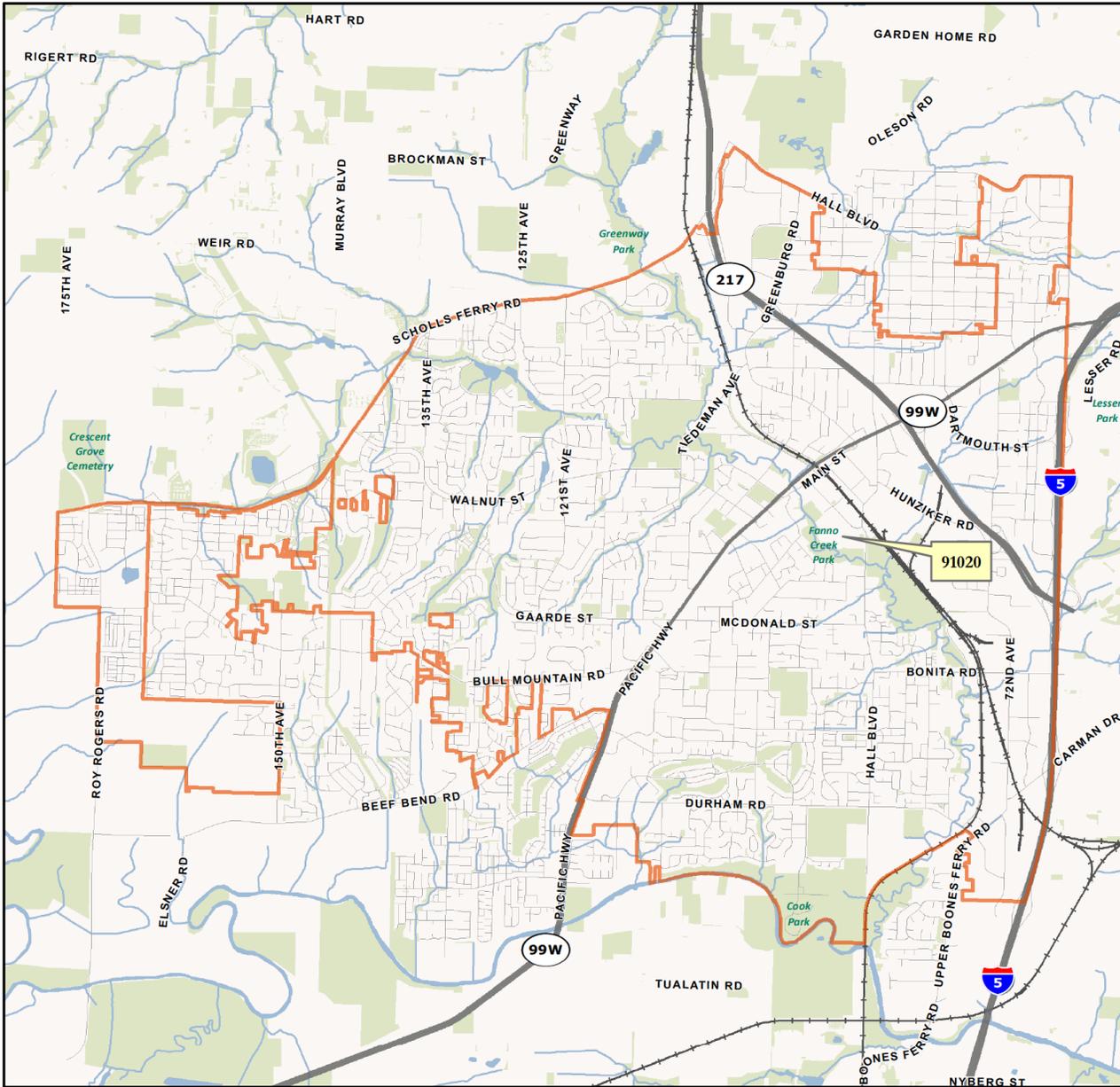
Project Description: Identification of citywide drainage needs. This project should include assessment and prioritization of Significant Stormwater Outfall (SSWO) retrofit projects, the maintenance and updating of existing stormwater infrastructure and the development of policies for addressing stream erosion.

Project Results: Development of a guideline for the expenditure of stormwater funds across the City of Tigard's piped and green infrastructure. This project will assess needs related to regional permit requirements.

Total Project Cost: \$325,000

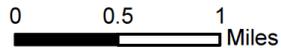
	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	20,000	55,000	0	0	0	0	0	75,000
Total Internal	0	20,000	55,000	0	0	0	0	0	75,000
External Expenses									
Design and Engineering	0	45,000	205,000	0	0	0	0	0	250,000
Total External	0	45,000	205,000	0	0	0	0	0	250,000
Total Project Expense	0	65,000	260,000	0	0	0	0	0	325,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	65,000	260,000	0	0	0	0	0	325,000
Total Revenue Funding	0	65,000	260,000	0	0	0	0	0	325,000
Total Revenues	0	65,000	260,000	0	0	0	0	0	325,000

CAPITAL IMPROVEMENT PLAN - FACILITIES



**The City of Tigard
Project Locations**

 Tigard City Limits



City of Tigard Recommended Capital Improvement Plan FY 2017-22

CAPITAL IMPROVEMENT PLAN - FACILITIES

Project No.	Project Name	YTD 2016	2017	2018	2019	2020	2021	2022	Projected Total
91020	Citywide Facilities Plan	35,000	315,000	0	0	0	0	0	350,000
	Total Funded	35,000	315,000	0	0	0	0	0	350,000

91020 - Citywide Facilities Plan

Project Need: The city has exceeded capacity in its existing facilities.

Project Description: The City of Tigard and community partners envision a more vibrant and prosperous community, as the City prepares for growth and development for the next 20 years. Several recent studies have been commissioned by the City in an effort to focus and develop strategies for smart urban growth in several areas, including the 2014-2034 Strategic Plan. With City-owned facilities located on several sites, the purpose of this study is to take a holistic look at the operational needs and placement of these facilities within a 20-year planning timeframe. Public facilities and infrastructure investments should align with the City's projected growth and long term planning goals. The Facilities Plan and Visioning Study is to assist the City in determining improvements to its existing facilities and properties, in keeping with established community and planning goals. Work will include assessing all existing properties and facilities, projecting future needs within a 20-year timeframe, and identifying a preferred option and method for improving and/or relocating City services.

Project Results: A Citywide Facilities plan will achieve the following:

- Meet projected service demands, based on future growth and anticipated level of service
- Increase operational efficiencies through recommendations, based on the findings of the Consultant's analysis that best meet project City requirements and goals
- Provide cost-effective strategies that best achieve the recommendations of the Facilities Plan
- Maximize land-use potential of existing City-owned properties in conformance with established community and planning goals, and current City provided studies deemed relevant to include in this planning effort and;
- Identify and propose financial funding approaches, successfully used by other governmental agencies, to be utilized for implementing the recommendations.

Total Project Cost: \$350,000

	Actual through 2015	Projected 2016	2017	2018	2019	2020	2021	2022	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	10,000	40,000	0	0	0	0	0	50,000
Total Internal	0	10,000	40,000	0	0	0	0	0	50,000
External Expenses									
Design and Engineering	0	25,000	275,000	0	0	0	0	0	300,000
Total External	0	25,000	275,000	0	0	0	0	0	300,000
Total Project Expense	0	35,000	315,000	0	0	0	0	0	350,000
REVENUES									
Revenue Funding Source									
400-Facilities Capital Projects Fund	0	35,000	315,000	0	0	0	0	0	350,000
Total Revenue Funding	0	35,000	315,000	0	0	0	0	0	350,000
Total Revenues	0	35,000	315,000	0	0	0	0	0	350,000