

city of forest grove

**ADOPTED
CAPITAL**

IMPROVEMENTS

PROGRAM

2009 - 2014

CAPITAL IMPROVEMENTS PROGRAM

CITY OF FOREST GROVE

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May 2009

CITY OF FOREST GROVE

2009-2014 CAPITAL IMPROVEMENTS PROGRAM (CIP)

PURPOSE: To achieve two primary objectives:

Planning for public improvements and capital equipment. Coordination with the comprehensive plan will identify infrastructure and public facilities needed to meet the demands of the community. The City can plan for facility improvements and equipment needs on a long-term basis.

Identifying funding sources for public improvements and capital equipment. The CIP matches anticipated sources to high-priority projects. Therefore, the CIP helps highlight projects for which funding must be secured.

SCOPE: The Capital Improvements Program provides a five-year plan of public physical improvements and major equipment expenditures. The program is ongoing and revised annually as part of the budget process. Review and approval of the CIP is integrated with the annual budget process. The CIP is reviewed and approved every year by the Budget Committee and City Council. The planned expenditures for the coming fiscal year will be reviewed during the City's annual budget review process and may be subject to revision.

Capital improvements include maintenance, renovation, replacement, new construction or expansion of physical facilities requiring an expenditure of \$5,000 or more. This includes cost of land, engineering, architectural planning and contractual services.

The CIP also contains capital equipment expenditures of \$5,000 or more. This is equipment having a relatively long period of usefulness (i.e., over 3 years). Examples include fire engines and all city-owned vehicles.

PROGRAM DESCRIPTIONS: Projects within the Capital Improvements Program are broken into four categories. They include Utility and Transportation Projects; Public Safety Projects; Culture and Recreation Projects; and General Government Projects. These categories do not necessarily correspond to specific departments or funds in the City's annual budget. Each project in the CIP will be budgeted in the fund responsible for managing the project in the annual budget document.

Utility and Transportation Projects: The projects within this category are for constructing, maintaining and developing infrastructure relating to the City's utility and transportation functions. These functions include the provision and maintenance of streets, storm drainage, electrical

distribution, water services, and sewer services. Besides replacing existing infrastructure, projects within this program lay the foundation for future development of all types - residential, commercial and industrial. Some projects in this category play a supportive role to overall utility and transportation functions, such as equipment replacement, property acquisition and building rehabilitation.

Public Safety Projects: Projects within this category are for providing capital equipment and facilities for public safety services. These include law enforcement, crime prevention, fire prevention, fire suppression and emergency operations.

Culture and Recreation Projects: Projects within this category are for maintaining and developing cultural and recreational opportunities within the community through the Parks system, the Aquatic Center and the Library. Projects may include replacement of capital equipment and facilities to maintain existing service levels. This program would also include new equipment and facilities to expand and develop new opportunities to enrich the quality of life in the community.

General Government Projects: Projects within this category are for providing capital equipment and facilities to support the general operations of City government. This includes building construction, repair and maintenance outside of the areas listed above, as well as maintaining general parking facilities. Significant technological improvements are also included in this category, such as replacing software systems or advancing the architecture of the city computer network.

**UTILITY AND
TRANSPORTATION
PROJECTS**

UTILITY AND TRANSPORTATION PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
LP2	Substation Upgrades	35,000	0	60,000	0	755,000	850,000
LP4	Property Improvements & Office Building	400,000	50,000	0	0	0	450,000
LP8	L&P Vehicle Replacement Program	150,000	55,000	30,000	25,000	100,000	360,000
LP22	Distribution System Additions And Upgrades	45,000	25,000	25,000	25,000	25,000	145,000
LP27	Resource Devel & Acquisition Study	60,000	0	0	0	0	60,000
	L&P TOTALS	690,000	130,000	115,000	50,000	880,000	1,865,000
EQ1	Equipment Replacement Program	167,000	445,500	414,500	432,500	134,500	1,594,000
	EQUIPMENT TOTALS	167,000	445,500	414,500	432,500	134,500	1,594,000
ST1	Gales Way (From "E" Street To 23rd Avenue)	0	0	0	0	456,720	456,720
ST3	23rd/24th Ave (Industrial Area)	0	0	0	0	1,324,660	1,324,660
ST5	19th Ave (Oak St. to Hwy 47)	0	330,000	0	0	0	330,000
ST9	Town Center Ped Improvements	50,000	0	0	0	0	50,000
ST10	David Hill Road	0	0	582,253	2,911,266	2,329,013	5,822,532
ST11	County MSTIP 3/B Street Trail	109,000	0	0	0	0	109,000
ST12	TV Hwy & Quince	0	0	0	0	3,330,000	3,330,000
ST14	18th Avenue Sidewalks CDBG	190,000	0	0	0	0	190,000
ST15	19th Avenue Extension	0	0	0	0	4,768,848	4,768,848
ST16	"A" Street CDBG	317,500	0	0	0	0	317,500
ST17	Thatcher Road	0	0	0	0	3,626,136	3,626,136
ST18	Holladay Extension to Yew Street	0	0	0	0	3,486,296	3,486,296
ST19	Way Finding Signage	5,000	0	0	0	0	5,000
ST20	Bonnie Lane Mitigation	50,000	0	0	0	0	50,000
ST22	B Street North	0	0	0	0	5,500,000	5,500,000
ST23	Snow Plow	15,000	0	0	0	0	15,000
	STREET TOTALS	736,500	330,000	582,253	2,911,266	24,821,673	29,381,692
SW1	Replace / Rehabilitate Old Sewers	302,250	150,000	150,000	150,000	150,000	902,250
SW2	Sewer Oversizing Participation/SDC	4,000	50,000	50,000	50,000	50,000	204,000
SW3	CWS / City Phase III Sewer I&I Repair	94,004	94,004	94,004	94,004	94,004	470,022
SW4	Maple Street Capacity Expansion	0	0	0	0	600,000	600,000
SW7	Sunset Drive MSTIP/SDC	121,995	121,995	121,995	121,995	121,995	609,973
SW8	23rd/24th Avenue (Industrial Area)	0	0	0	0	278,960	278,960
SW9	Mountain View Sewer Line	0	0	0	0	600,000	600,000
SW10	A Street Capacity (A to 16th; 8" & 10")	0	0	590,000	0	0	590,000
SW11	Fir Road	0	0	0	0	420,000	420,000
	SEWER TOTALS	522,249	415,999	1,005,999	415,999	2,314,959	4,675,205

UTILITY AND TRANSPORTATION PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
SWM2	Hawthorne Street Drainage	0	0	0		342,000	342,000
SWM6	23rd/24th Drainage Culvert	0	0	0	0	110,000	110,000
SWM7	Alyssum and Twinflower Drainage	0	0	0	0	135,000	135,000
SWM8	Bonnie and B Street Catch Basins	0	113,000	0	0	0	113,000
SWM9	Cedar Street Pump Station	0	360,000	0	0	0	360,000
SWM10	26TH Ave to Willamina/Stites Park	352,000	0	0	0	0	352,000
SWM12	Beal Pond	0	0	26,000	0	0	26,000
SWM15	Basin 1 - Yew to 1st	0	0	0	128,000	0	128,000
SWM16	Basin 5 - 17th Ave & Hawthorne	0	0	0	134,000	0	134,000
	SWM TOTALS	352,000	473,000	26,000	262,000	587,000	1,700,000
W1	Distribution Main Improvements	267,800	275,834	284,109	292,632	301,411	1,421,787
W2	Line Oversizing Participation	100,000	100,000	75,000	75,000	75,000	425,000
W3	FG WTP Improvements	94,640	0	0	0	0	94,640
W4	Watershed Road Improvements	50,000	50,000	50,000	50,000	50,000	250,000
W6	23rd/24th Ave (Industrial Area)	0	0	0	129,004	117,396	246,400
W8	Barney Buy-In	0	0	0	0	2,400,000	2,400,000
W9	JWC Fish Screen At Fern Hill Pump St	0	0	0	0	320,000	320,000
W10	JWC Treatment Pilot And Implementat	25,000	0	0	0	185,333	210,333
W11	JWC Water Rights Consult of Record	3,466	0	0	0	0	3,466
W14	JWC Raw Water Pipeline	100,000	100,000	100,000	100,000	100,000	500,000
W16	JWC Valve Repair / Replacement Proj	52,000	0	0	0	0	52,000
W17	JWC On-Site Power Generation	66,667	333,333	0	0	0	400,000
W19	JWC Water Management/Conservation	5,400	0	0	0	0	5,400
W20	JWC FG Transmission Line Encroachr	18,582	0	0	0	0	18,582
W21	JWC Sludge/Scrubber Project	36,000	0	0	36,000	0	72,000
W22	JWC Rapid Mix	0	0	0	0	48,648	48,648
W23	JWC Master Plan	0	0	0	25,926	0	25,926
W24	JWC Thickener	0	0	0	0	66,667	66,667
W25	JWC Clearwell	0	0	0	0	56,000	56,000
W26	JWC Short Term Corrective Measures	0	0	0	0	40,000	40,000
W29	JWC Seismic Retro Fit of Current Plan	0	0	0	0	60,000	60,000
W47	Gales Creek	0	0	0	0	2,000,000	2,000,000
W48	David Hill	240,000	0	0	0	0	240,000
W50	Emergency Intertie - Heather Street PF	0	0	0	0	250,000	250,000
W51	Hilltop Water Supply	0	0	0	0	1,500,000	1,500,000
W52	Water Storage Tank	0	275,000	275,000	0	0	550,000
W53	Emergency Water Dispenser	10,000	0	0	0	0	10,000
	WATER TOTALS	1,069,555	1,134,167	784,109	708,562	7,570,455	11,266,848
	UTILITY AND TRANSPORTATION TOTALS	3,537,304	2,928,666	2,927,861	4,780,327	36,308,587	50,482,746
BOLD =	NEW PROJECTS						

Light & Power

DEPARTMENT

PROJECT DESCRIPTION:

For FY 2009-10 the station service transfer switch will be replaced at Forest Grove Substation and the insulators at all of the substations will be replaced. The two main breakers at Forest Grove Substation will be replaced and the Feeder 1 breaker at Forest Grove substation will be installed along with a feeder breaker electronic relay.

For FY 2011-12, the existing electro-mechanical relays at Forest Grove substation will be replaced with modernized electronic feeder relays.

For FY 2013-14, the Thatcher substation will be upgraded to accommodate a new substation transformer.

DISCUSSION OF PROJECT:

Station Service power at the Forest Grove substation supplies the power needed to run the relays and controls and the substation. There are two gang operated switches that allow the station service transformers to be energized from either of the two substation transformers at Forest Grove Sub. One of these existing switches is inoperable and needs to be replaced. Also, the insulators that support the high voltage bus-work at the substations are aging and forming pits and cracks which lead to faults. These insulators are made of porcelain and need to be replaced.

The electro-mechanical relays at Forest Grove substation are still reliable relays, but in order to modernize the substation and perhaps utilize newer relays for better monitoring, the relays will be upgraded to electronic relays with better display features.

The load at Thatcher substation has grown substantially over the last ten years due to high growth in residential load. The existing transformer at Thatcher sub is 50+ years old and will need to be either replaced, or have a second transformer bank installed to manage the load. These transformers are expensive and therefore an equipment fund was established 3 years ago to build up a reserve for this purpose. With residential growth flat for the next few years, we anticipate the need for the transformer upgrade sometime in FY 2013-14.

LP2 SUBSTATION UPGRADES							
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	2014-2015	5-YEAR TOTAL
Design/Engineering	0	0	30,000		30,000		60,000
Site Preparation	0	0			25,000		25,000
Construction	0	0			100,000		100,000
Equipment/Furniture	35,000	0	30,000		600,000		665,000
Other							0
							0
TOTAL	35,000	0	60,000	0	755,000		850,000
FUNDING SOURCE							
Current User Rates	35,000		60,000		755,000		850,000
							0
							0
TOTAL FUNDING SOURCES	35,000	0	60,000	0	755,000		850,000

LP4

PROPERTY IMPROVEMENTS AND OFFICE BUILDING

Light & Power

DEPARTMENT

PROJECT DESCRIPTION:

Continued renovation of the Light and Power Department office utilizing the present building. Some renovation has already taken place to accommodate for equipment space needs and staff accommodations. The project also includes updating to fiber optics for better communication interface with City Hall.

DISCUSSION OF PROJECT:

The present Light and Power Department Office Building was constructed in the early 1960's. It is nearing 50 years old. The building contains a lot of unused space which could accommodate personnel currently in inadequate facilities. The Light and Power Building renovation would include: space planning, interior and exterior surface renovation and possible minor expansion.

LP4 PROPERTY IMPROVEMENTS AND OFFICE BUILDING						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering	0					0
Site Preparation	0					0
Construction	378,000	50,000				428,000
Equipment/Furniture	22,000					22,000
Other	0					0
						0
TOTAL	400,000	50,000	0	0	0	450,000
FUNDING SOURCE						
Current User Rates	400,000	50,000				450,000
						0
						0
TOTAL FUNDING SOURCES	400,000	50,000	0	0	0	450,000

Light & Power

DEPARTMENT

PROJECT DESCRIPTION:

Light and Power maintains the fleet of vehicles associated with the operation of the electrical utility. Year over year, several of the department’s vehicles will become candidates for replacement. The vehicles are replaced on a regular schedule, adjusted in accordance with mileage and maintenance history.

In the next 4 years, the following vehicles will be replaced:

- FY 09-10 Dump Truck – 453
- Engineering Jeep – 441
- Meterman Truck – 452B
- FY 10-11 Utility Truck – 456
- Crew Flatbed - 459
- FY 11-12 General Manager 4X4 – 448
- FY 12-13 Single Bucket Truck – 443B

DISCUSSION OF PROJECT:

Light & Power incorporates vehicle replacement into a 5-year average of capital needs. These needs are considered when rates are reviewed. Because capital expenditures are considered during rate review, funding for replacement is acquired through electrical rates.

LP8 LIGHT AND POWER VEHICLE REPLACEMENT						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	150,000	55,000	30,000	25,000	100,000	360,000
Other						0
						0
TOTAL	150,000	55,000	30,000	25,000	100,000	360,000
<u>FUNDING SOURCE</u>						
Current User Rates	150,000	55,000	30,000	25,000	100,000	360,000
Reserves						0
Increased User Rates						0
TOTAL FUNDING SOURCES	150,000	55,000	30,000	25,000	100,000	360,000

Light & Power

DEPARTMENT**PROJECT DESCRIPTION:**

This project reflects the ongoing effort to upgrade and/or expand the capacity of the City's electrical distribution system to meet load growth and system reliability considerations. In addition, a consultant will be contracted to perform a fault and coordination study for the electric system.

DISCUSSION OF PROJECT:

As the City's electrical distribution continues to age and also carry more electrical load, an ongoing program to ensure its ability to provide reliable service to the customer base is essential. Areas within this system are continually monitored for reliability and growth-related problems or capacity shortcomings.

The City has considerable underground primary voltage cable that was installed over 25 years ago. Virtually all of this wire is direct buried and is of a type that has not exhibited a long life span. Therefore, a systematic replacement program has been underway to upgrade these circuits to a more reliable type of cable on a managed and reasonable basis.

A fault and coordination study was performed 10 years ago and it is necessary to update this information to ensure the protection devices on the system are adequately sized to maximize reliability. A contractor with appropriate software will be used to perform this study.

LP22 DISTRIBUTION SYSTEM ADDITIONS AND UPGRADES						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering	20,000	0	0	0	0	20,000
Site Preparation						0
Construction	25,000	25,000	25,000	25,000	25,000	125,000
Equipment/Furniture						0
Other						0
						0
TOTAL	45,000	25,000	25,000	25,000	25,000	145,000
FUNDING SOURCE						
Current User Rates	45,000	25,000	25,000	25,000	25,000	145,000
						0
						0
TOTAL FUNDING SOURCES	45,000	25,000	25,000	25,000	25,000	145,000

Light & Power

DEPARTMENT**PROJECT DESCRIPTION:**

This project reflects the effort to utilize outside consultation for the purpose of a feasibility study for new resource acquisition.

DISCUSSION OF PROJECT:

The Light and Power Department will receive an allocated amount of power from the Bonneville Power Administration that may or may not meet our future load requirements. The Department is currently engaged in a feasibility study with Oregon State University to the potential of woody biomass as a utility resource. The utility may also utilize outside consultant services to research the viability of renewable purchases in the areas of wind, geothermal or new small hydro. The results will identify if there are opportunities to seek further action.

LP27 RESOURCE DEVELOPMENT AND ACQUISITION						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	60,000	0				60,000
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other						0
						0
TOTAL	60,000	0	0	0	0	60,000
						0
<u>FUNDING SOURCE</u>						0
Current User Rates	60,000	0	0	0	0	60,000
						0
						0
TOTAL FUNDING SOURCES	60,000	0	0	0	0	60,000

EQ1

EQUIPMENT REPLACEMENT PROGRAM

Equipment

DEPARTMENT

PROJECT DESCRIPTION:

The Equipment Fund owns and maintains seventy-four (74) pieces of equipment. The vehicles are replaced on a regular schedule unless mileage is low and the vehicle has a good maintenance history. Over the next five years, the following are expected to be replaced:

FY 2009-10	FY 2011-12 Continued
One Mower #14B	Four Patrol Vehicles #s 404, 406B, 407B, 408
One PD Patrol #402B	Patch King #23B
One PD Admin #410	One Crane Truck #466
1 Ton Utility Truck #463B	One Dump Truck #479B
5 Yard Dump Truck #468	One Jet Cleaner #473
FY 2010-11	FY 2012-13
Two Admin Vehicles #486B, #487B	One Admin Vehicle #482
One JD Tractor #3	One Toro Mower #16
One Chipper #19	One 1 Ton Dump Trk #478
Three PD Admin Vehicles #403, #412, #413	One SUV Patrol #400 & # 401
CSO Van #415B	One 8 Yd Dump #471
Three PD Vehicles #411, #414B, #419	One Camel Cleaner #472
One 4x4 Pickup #460	One 1 Ton Utility #488B
One 4X4 Vehicle #420	
One Elgin Sweeper #5	FY 2013-14
	One Roller #22
FY 2011-12	One 1 ton Utility Truck #464
One Engineer Vehicle #485B	One 1 ton Truck #469
One Admin Vehicle #480	One PD Patrol Vehicle #402

DISCUSSION OF PROJECT:

The Equipment Fund owns vehicles and equipment used by Public Works and all other city departments except Light & Power (L&P) and Fire. The Equipment shop maintains these vehicles and equipment and replaces them when length of time or mileage warrants replacement. Funding for vehicle maintenance, repair and replacement is derived from monthly lease amounts charged to the participating departments.

The Equipment shop also maintains and repairs the 60 vehicles owned by L&P and the Fire Department as necessary, and bills those departments directly.

In 2009-10, one patrol car and one administration car will be replaced in the Police Department. For the Parks Department, one piece of equipment, a mower, will be replaced. In the Public Works arena, 2 large pieces of equipment will be replaced: a one-ton utility truck and 1 large dump truck. One Engineering vehicle and one Public Works vehicle that were due for replacement will be deferred until 2010-2011.

EQ1 EQUIPMENT REPLACEMENT PROGRAM						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	167,000	445,500	414,500	432,500	134,500	1,594,000
Other						0
						0
TOTAL	167,000	445,500	414,500	432,500	134,500	1,594,000
<u>FUNDING SOURCE</u>						
						0
Equipment Fund Reserve	167,000	445,500	414,500	432,500	134,500	1,594,000
TOTAL FUNDING SOURCES	167,000	445,500	414,500	432,500	134,500	1,594,000

ST1

**GALES WAY
(From "E" Street to 23rd Avenue)**

Street

DEPARTMENT

PROJECT DESCRIPTION:

Reconstruct and widen Asphaltic Concrete (AC) pavement with curbs, gutters, sidewalks, storm drain and landscaping.

DISCUSSION OF PROJECT:

This street is identified as a collector in the Transportation System Plan. This route provides direct access to the downtown area and carries significant traffic volumes. This project is postponed to seek matching funding.

ST1 GALES WAY (from "E" Street to 23rd Avenue)						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering				0	45,672	45,672
Site Preparation						0
Construction				0	411,048	411,048
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	456,720	456,720
<u>FUNDING SOURCE</u>						
						0
Street Fund	0	0	0	0	456,720	456,720
						0
TOTAL FUNDING SOURCES	0	0	0	0	456,720	456,720

ST3

23rd/24th AVENUE (INDUSTRIAL AREA)

Street

DEPARTMENT

PROJECT DESCRIPTION:

Construct new road to connect Hawthorne Street and Quince Street. Project will include Asphaltic Concrete (AC) pavement curbs, gutter, sidewalk, storm drain and landscaping to current construction standards.

DISCUSSION OF PROJECT:

This section of roadway is identified on the Transportation System Plan. This project is needed to carry east/west traffic in the north part of town to relieve congestion on Pacific Avenue and provide access to the industrial land identified in the Comprehensive Plan. This project has been postponed pending development of the area. Cost participation will come from adjacent development.

ST3 23rd/24th AVENUE (Industrial Area)						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering	0	0	0	0	229,110	229,110
Site Preparation						0
Construction	0	0	0	0	1,095,550	1,095,550
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	1,324,660	1,324,660
FUNDING SOURCE						
CDBG						0
TIF	0	0		0	806,696	806,696
Street		0	0	0		0
Sewer SDC	0				278,960	278,960
SWM SDC	0				110,000	110,000
Water SDC	0	0			129,004	129,004
						0
TOTAL FUNDING SOURCES	0	0	0	0	1,324,660	1,324,660

ST5

19th AVENUE
From Oak Street to Highway 47

Street

DEPARTMENT

PROJECT DESCRIPTION:

Construction of a new section of 19th Avenue to collector standards in conjunction with a potential development project.

DISCUSSION OF PROJECT:

If a proposed development project occurs, the City has the opportunity to finish 19th Avenue to Highway 47 which could give emergency vehicles another east-west route through the City. This project would allow right turn access only to and from southbound Highway 47. This project is contingent on development of the adjacent shopping center.

ST5 19th AVENUE (Oak St. to Hwy 47)						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	0	330,000				330,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	330,000	0	0	0	330,000
<u>FUNDING SOURCE</u>						
TIF	0	330,000	0			330,000
						0
TOTAL FUNDING SOURCES	0	330,000	0	0	0	330,000

ST9

TOWN CENTER PEDESTRIAN IMPROVEMENTS

Street

DEPARTMENT

PROJECT DESCRIPTION:

Replace or repair deteriorated sidewalks and curbing and install new sidewalks and curbing in areas without them. The project will also provide illumination, benches and bicycle racks as well as enhance pedestrian crossings.

DISCUSSION OF PROJECT:

This project is conducted as a part of the Federal-Aid Surface Transportation Program (STP), Title 23, United States Code. It has been on the 2000 Regional Transportation Plan (RTP) adopted by Metro Joint Policy Advisory Committee on Transportation (JPAC) and Transportation Policy Advisory Committee (TPAC). Funding will be 90% Federal Transportation dollars and 10% local match. This project will replace deteriorated sidewalks in the downtown area similar to the Main Street and Council Street projects.

ST9 TOWN CENTER PEDESTRIAN IMPROVEMENTS						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	50,000					50,000
Equipment/Furniture						0
Other						0
						0
TOTAL	50,000	0	0	0	0	50,000
<u>FUNDING SOURCE</u>						
Street Fund	50,000	0	0			50,000
						0
TOTAL FUNDING SOURCES	50,000	0	0	0	0	50,000

ST10

DAVID HILL ROAD (Thatcher Road to Hwy 47)

Street

DEPARTMENT

PROJECT DESCRIPTION:

Three-lane Arterial connecting Thatcher Road with State Highway 47.

DISCUSSION OF PROJECT:

This road is identified in the City's Transportation System Plan and is a major east-west connection. It is planned to extend easterly from Thatcher Road to Highway 47 as a two-lane arterial facility with left-turn lanes at major intersections. Most of the facility will be built by adjacent development. A portion of the roadway is proposed to be funded by Traffic Impact Fees (TIF) because a significant section is along the Urban Growth Boundary, and as such development is limited to the south side of the road. Washington County has pledged County TIF dollars toward this project.

ST10 DAVID HILL ROAD (Thatcher Road to Hwy 47)						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction			582,253	2,911,266	2,329,013	5,822,532
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	582,253	2,911,266	2,329,013	5,822,532
FUNDING SOURCE						
TIF			582,253	1,455,633	562,114	2,600,000
Private	0	0		1,455,633	1,766,899	3,222,532
TAL FUNDING SOURCES	0	0	582,253	2,911,266	2,329,013	5,822,532

ST11

COUNTY MSTIP 3 (Bike and Pedestrian Program)

Street

DEPARTMENT

PROJECT DESCRIPTION:

This project will construct a paved pathway along the old railroad right-of-way from the existing end at Hwy 47 north to approximately 16th Avenue.

DISCUSSION OF PROJECT:

These MSTIP funds are dedicated to Forest Grove for pedestrian improvements. They will be combined with a State grant and Parks SDC funds to complete the project. This project is also budgeted in the Parks CIP project PR13 – Trails/Greenways/Linear Parks.

ST11 "B" STREET TRAIL						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	109,000					109,000
Equipment/Furniture						0
Other						0
						0
TOTAL	109,000	0	0	0	0	109,000
FUNDING SOURCE						
Street Fund	109,000	0	0	0		109,000
						0
TOTAL FUNDING SOURCES	109,000	0	0	0	0	109,000

ST12

TV HWY & QUINCE STREET

Street

DEPARTMENT

PROJECT DESCRIPTION:

This project will construct new turn lanes at this intersection.

DISCUSSION OF PROJECT:

This project is identified on the MSTIP 4 priority list.

ST12 TV HWY & QUINCE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	0	0	0		333,000	333,000
Site Preparation						0
Construction					2,997,000	2,997,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	3,330,000	3,330,000
<u>FUNDING SOURCE</u>						
CDBG						0
TIF						0
SWM						0
Other/MSTIP	0				3,330,000	3,330,000
						0
TOTAL FUNDING SOURCES	0	0	0	0	3,330,000	3,330,000

ST14

18th AVENUE SIDEWALKS CDBG

Street

DEPARTMENT

PROJECT DESCRIPTION:

New sidewalks on both sides of 18th Avenue between Hawthorne and Maple Streets.

DISCUSSION OF PROJECT:

A total of 3,200 lineal feet of new sidewalks will be constructed. 50% of the construction funding has been approved through Washington County's CDBG program with funding for the other 50% from the Street fund. As an in-kind contribution, the Engineering Department will provide design and construction inspection services.

The project will result in significant safety improvements in the area as the sidewalks will serve children walking to school at Joseph Gale Elementary School as well as the adjacent playground. Currently, students and other pedestrians must walk in the street, creating a dangerous mix with passing vehicles.

ST14 18th AVENUE SIDEWALKS CDBG						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	20,000	0	0			20,000
Site Preparation						0
Construction	170,000					170,000
Equipment/Furniture						0
Other						0
						0
TOTAL	190,000	0	0	0	0	190,000
<u>FUNDING SOURCE</u>						
CDBG	85,000					85,000
TIF						0
Street	105,000					105,000
Other						0
TOTAL FUNDING SOURCES	190,000	0	0	0	0	190,000

ST15

19TH AVENUE EXTENSION

Street

DEPARTMENT

PROJECT DESCRIPTION:

This project will extend 19th Avenue west to intersect with Hwy 47.

DISCUSSION OF PROJECT:

Development of the property located north of 19th Avenue and east of Poplar will require the connection of 19th Avenue to Hwy 47. This project should move forward only as this property develops. The City will have partial participation according to the TIF statute.

ST15 19th AVENUE EXTENSION						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering					476,885	476,885
Site Preparation						0
Construction					4,291,963	4,291,963
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	4,768,848	4,768,848
<u>FUNDING SOURCE</u>						
Street Fund						0
Other/MSTIP					4,768,848	4,768,848
						0
TOTAL FUNDING SOURCES	0	0	0	0	4,768,848	4,768,848

ST16

“A” STREET CDBG

Street

DEPARTMENT

PROJECT DESCRIPTION:

Reconstruct existing street section to current City standards. Project will include curbs, sidewalks, storm drainage, and new pavement section from north of 23rd Avenue to 26th Avenue.

DISCUSSION OF PROJECT:

Current street section consists of pavement with no curbs, sidewalks, or storm drainage. 50% of the construction funding has been approved through Washington County’s CDBG program with funding for the other 50% from the Street fund. As an in-kind contribution, the Engineering Department will provide design and construction inspection services.

ST16 "A" STREET CDBG						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering	31,750					31,750
Site Preparation						0
Construction	285,750					285,750
Equipment/Furniture						0
Other						0
						0
TOTAL	317,500	0	0	0	0	317,500
<u>FUNDING SOURCE</u>						
Street Fund	169,000					169,000
CDBG	148,500					148,500
						0
TOTAL FUNDING SOURCES	317,500	0	0	0	0	317,500

ST17

THATCHER ROAD

Street

DEPARTMENT

PROJECT DESCRIPTION:

Re-align Thatcher Road at its intersection with Gales Creek Road to eliminate substandard angles and improve intersection spacing.

DISCUSSION OF PROJECT:

Thatcher Road intersects with Gales Creek Road at a bad angle which creates sight visibility problems. In addition, recent development in the west and northwest part of town has increased traffic at this intersection. This project is identified in the Transportation System Plan to study this area to determine if the intersection can be re-aligned to improve the visibility. In addition, signalization may be warranted.

ST17 THATCHER ROAD						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering					362,614	362,614
Site Preparation						0
Construction					3,263,522	3,263,522
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	3,626,136	3,626,136
<u>FUNDING SOURCE</u>						
Street Fund						0
TIF					3,626,136	3,626,136
						0
TOTAL FUNDING SOURCES	0	0	0	0	3,626,136	3,626,136

ST18

HOLLADAY EXTENSION TO YEW STREET

Street

DEPARTMENT

PROJECT DESCRIPTION:

Construct east-west industrial collector from Yew Street easterly to connect to Holladay in the City of Cornelius.

DISCUSSION OF PROJECT:

Currently there are only two east-west connections with the City of Cornelius, TV Hwy and Heather Street. There is no connection north of TV Hwy. As this industrial area develops, it is anticipated that an east-west connection will be needed to allow truck delivery traffic to move without using TV Hwy.

ST18 HOLLADAY EXTENSION TO YEW STREET						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering					348,630	348,630
Site Preparation						0
Construction					3,137,666	3,137,666
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	3,486,296	3,486,296
<u>FUNDING SOURCE</u>						
Street Fund						0
TIF					3,486,296	3,486,296
						0
TOTAL FUNDING SOURCES	0	0	0	0	3,486,296	3,486,296

ST19

WAY FINDING SIGNAGE

Street

DEPARTMENT

PROJECT DESCRIPTION:

Improve communication to traveling public through proper placement of directional and informational signs.

DISCUSSION OF PROJECT:

Following a study titled "A Look At Forest Grove Through the Eyes of a Visitor," completed and presented to City Council in February 2007, the Council established transportation and signage as high priorities. City staff has formed a Way Finding Committee to further develop plans to implement the findings and suggestions in the study.

ST19 WAY FINDING SIGNAGE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	5,000					5,000
Other						0
						0
TOTAL	5,000	0	0	0		5,000
<u>FUNDING SOURCE</u>						
						0
Street Fund	5,000					5,000
						0
TOTAL FUNDING SOURCES	5,000	0	0	0		5,000

ST20

BONNIE LANE MITIGATION

Street

DEPARTMENT

PROJECT DESCRIPTION:

Continued mitigation efforts related to the construction of Bonnie Lane.

DISCUSSION OF PROJECT:

Work will be done at the Geiger Road site and also at an additional site in the area. Work will consist of landscaping and plantings and irrigation. Work is being directed through the Division of State Lands (DSL) and the Corp of Engineers (COE) wetland mitigation permit.

ST20 BONNIE LANE MITIGATION						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	50,000					50,000
Equipment/Furniture						0
Other						0
						0
TOTAL	50,000	0	0	0	0	50,000
<u>FUNDING SOURCE</u>						
						0
Street Fund	50,000					50,000
						0
TOTAL FUNDING SOURCES	50,000	0	0	0	0	50,000

ST22

"B" STREET NORTH

Street

DEPARTMENT

PROJECT DESCRIPTION:

Extend "B" Street north from Hartford Drive to David Hill Road.

DISCUSSION OF PROJECT:

This project would extend "B" Street from the current north end at the intersection with Hartford Drive to the future intersection with David Hill Road. This project is scheduled in future years and will be funded by both private development and TIF monies.

ST22 "B" STREET NORTH						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering					550,000	550,000
Site Preparation						0
Construction					4,950,000	4,950,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	5,500,000	5,500,000
<u>FUNDING SOURCE</u>						
TIF					2,732,400	2,732,400
Street Fund						0
Private					2,767,600	2,767,600
TOTAL FUNDING SOURCES	0	0	0	0	5,500,000	5,500,000

ST23

SNOW PLOW

Street

DEPARTMENT

PROJECT DESCRIPTION:

Plow to attach to a front-end loader, to clear streets of snow and debris.

DISCUSSION OF PROJECT:

The snow storm in late 2008 overwhelmed the City's resources. The City used the front-end loader with a bucket, and relied on ODOT to plow. However, this was not adequate. An attachable plow will allow the City to properly plow the side streets in the future, while still relying on ODOT to plow Pacific Avenue and 19th Avenue.

ST 23 SNOW PLOW						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	15,000					15,000
Contingency						0
						0
TOTAL	15,000	0	0	0	0	15,000
<u>FUNDING SOURCE</u>						
Street Fund	15,000					15,000
TIF						0
CDBG						0
Other						0
TOTAL FUNDING SOURCES	15,000	0	0	0	0	15,000

SW1

REPLACE / REHABILITATE OLD SEWERS

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Reconstruct existing sewer mains as needed due to pipe condition. This is an ongoing project designed to replace all old and deteriorated sewers. Projects are generally scheduled to coincide with proposed street reconstruction projects.

DISCUSSION OF PROJECT:

The Sewer Master Plan recommends annual replacement/rehabilitation of portions of the old collection piping until it is completely upgraded. The goal is to rehabilitate 1,500 linear feet of sewer each year. Projects are generally selected to coincide with paving projects so that we minimize cutting trenches through good roads.

Recent improvements in technology have allowed more thorough inspection of pipe sections, leading to a series maintenance projects in older areas of the city. Problems include pipe clogging, infiltration by ground water, or damage by roots or other organic matter. While these pipes overall are still functioning, there is a concern that maintenance costs will continue to increase and flow capacity will be compromised. Over the CIP period of 2009 to 2014, pipe sections along 18th Ave, 17th Ave, 20th Place, 24th Ave, 23rd Ave, Gales Way and Cedar have been selected for further review for possible replacement. In the short term, 18th Ave and 17th Ave are the priority and are slated for major maintenance in FY 09-10.

SW1 REPLACE / REHABILITATE OLD SEWERS						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	302,250	150,000	150,000	150,000	150,000	902,250
Equipment/Furniture						0
Other						0
						0
TOTAL	302,250	150,000	150,000	150,000	150,000	902,250
<u>FUNDING SOURCE</u>						
Sewer Fund	302,250	150,000	150,000	150,000	150,000	902,250
Sewer SDC						0
TOTAL FUNDING SOURCES	302,250	150,000	150,000	150,000	150,000	902,250

SW2

SEWER OVERSIZING PARTICIPATION

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Developments in certain areas of the City may trigger the need for excess pipe capacity for future growth, that is beyond what that specific developer needs. This project allows the City flexibility to cost participate in the oversizing of sewer pipes to adequately prepare for future growth.

DISCUSSION OF PROJECT:

Revenue is collected as system development charges on new sewer hook-ups. The money is used to provide funding flexibility to cost participate with developers to provide increased capacity in the sewer system.

SW2 SEWER OVERSIZING PARTICIPATION						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	4,000	50,000	50,000	50,000	50,000	204,000
Equipment/Furniture						0
Other						0
						0
TOTAL	4,000	50,000	50,000	50,000	50,000	204,000
<u>FUNDING SOURCE</u>						
Sewer SDC	4,000	50,000	50,000	50,000	50,000	204,000
						0
						0
TOTAL FUNDING SOURCES	4,000	50,000	50,000	50,000	50,000	204,000

Sewer

DEPARTMENT**PROJECT DESCRIPTION:**

This project was the rehabilitation of the public sanitary sewer line and the private sanitary sewer laterals in the area around Pacific Avenue and SW Cedar Street. To minimize inflow and infiltration of ground water into the existing sanitary sewer system, the public sanitary sewer lines and private service laterals were rehabilitated. The project area is generally bounded by 16th Avenue to the south and Pacific Avenue to the north, "A" Street to the west and Hawthorne Street to the east.

DISCUSSION OF PROJECT:

This project was a joint effort between the City of Forest Grove and the Clean Water Services (CWS). CWS designed the project and provided construction administration. The City's Public Works Department provided in-kind services such as pre-design pipe TV inspection. Project costs including engineering and inspection have been split between the City and CWS on a 50% basis. Only the City's portion of the project is shown in the CIP. City funds will come from the operation and maintenance element of the sewer budget. CWS funded the entire cost of the project. The City has financed its portion with CWS over a ten-year period. The amounts shown on the facing page represents the payment schedule to CWS over the next five years.

SW3 CWS / CITY PHASE III SEWER I&I REPAIR						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other: Debt	94,004	94,004	94,004	94,004	94,004	470,022
						0
TOTAL	94,004	94,004	94,004	94,004	94,004	470,022
<u>FUNDING SOURCE</u>						
						0
Sewer Fund	94,004	94,004	94,004	94,004	94,004	470,022
						0
TOTAL FUNDING SOURCES	94,004	94,004	94,004	94,004	94,004	470,022

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Increase sanitary sewer capacity by installing a pipe that would parallel the existing system from the intersection of Laurel Street and 22nd Avenue to the south side of Pacific Avenue then east to Maple Street then south to 19th Avenue:

1. Intersection of Laurel Street and 22nd Avenue to the south side of Pacific Avenue
1100 feet of pipeline
2. South side of Pacific Avenue east to Maple Street
300 feet of pipeline
3. Intersection of Pacific Avenue and Maple Street south to 19th Avenue
500 feet of pipeline

DISCUSSION OF PROJECT:

1. The CWS Sewer System Master Plan Update (dated April 1995) identifies existing capacity deficiencies in the Maple Street Trunk F-3.
2. The 2007 City of Forest Grove Master Plan recommends this project should be considered "contingent" and the City need not move forward with it until the need has been verified through flow monitoring.

SW4 MAPLE STREET CAPACITY EXPANSION						
<u>COSTS</u>	2009-10	2010-11	2011-12	2012-13	2013-14	5-YR TOTAL
Design/Engineering	0	0	0	0	0	0
Site Preparation						0
Construction	0	0	0	0	600,000	0
Equipment/Furniture						0
Other					0	0
						0
TOTAL	0	0	0	0	600,000	0
<u>FUNDING SOURCE</u>						
Sewer SDC	0	0	0	0	300,000	0
Sewer	0	0	0	0	300,000	0
TOTAL FUNDING SOURCES	0	0	0	0	600,000	0

SW7

SUNSET DRIVE MSTIP

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Install approximately 2400 LF of 10" sanitary sewer with the reconstruction of Sunset Drive.

DISCUSSION OF PROJECT:

The Forest Grove Sanitary Sewer Master Plan identified portions of Sunset Drive to be served with sanitary sewer from the Council Creek trunk line. These portions of sanitary sewer have been installed with the construction of Sunset Drive. CWS funded the entire cost of the project. The City has financed its portion with CWS over a ten year period. The amounts shown on the facing page represents the payment schedule to CWS over the next five years.

SW7 SUNSET DRIVE MSTIP						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other: Debt	121,995	121,995	121,995	121,995	121,995	609,973
						0
TOTAL	121,995	121,995	121,995	121,995	121,995	609,973
<u>FUNDING SOURCE</u>						
Sewer Fund						0
Sewer SDC	121,995	121,995	121,995	121,995	121,995	609,973
						0
TOTAL FUNDING SOURCES	121,995	121,995	121,995	121,995	121,995	609,973

SW8

23RD/24TH AVENUE (INDUSTRIAL AREA)

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Construct new road to connect Hawthorne Street and Quince Street. Project will include Asphaltic Concrete (AC) pavement, curbs, gutter, sidewalk, storm drain, sewer, water line, and landscaping to current construction standards.

DISCUSSION OF PROJECT:

This section of roadway is identified on the Transportation System Plan. This project is needed to carry east/west traffic in the north part of town to relieve congestion on Pacific Avenue and provide access to the industrial land identified in the Comprehensive Plan. This project has been postponed pending development of the area. Cost participation will come from adjacent development.

SW8 23RD/24TH AVENUE (INDUSTRIAL AREA)						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering	0				25,360	25,360
Site Preparation						0
Construction	0				253,600	253,600
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	278,960	278,960
<u>FUNDING SOURCE</u>						
Sewer Fund	0	0			278,960	278,960
Sewer SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	278,960	278,960

SW9

MOUNTAIN VIEW LANE

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Replace the 12" line on Mountain View Lane south of the Southern Pacific Railroad (SPRR) and the 18" line north of SPRR.

DISCUSSION OF PROJECT:

The existing 12" line located to the west of Mountain View Lane and south of the SPRR trunk will require replacement. Additionally, this project should include improvements made to the north of the SPRR. The Mountain View Lane south of the railroad trunk will be increased in size from 12 to 18-inch diameter line covering approximately 1,300 lineal feet. Lines located north of the railroad trunk will be increased from 18" to 21" for approximately 1,000 lineal feet. The north and south segments 2030 design flow is approximately 2,100 gpm and 1,550 gpm respectively. The total project cost is estimated at \$600,000.

This CIP should be considered "contingent" and the City need not move forward with it until the need has been verified through flow monitoring.

SW9 MOUNTAIN VIEW LANE SEWER LINE						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering				0	120,000	120,000
Site Preparation						0
Construction				0	480,000	480,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	600,000	600,000
FUNDING SOURCE						
Sewer Fund				0	300,000	300,000
Sewer SDC				0	300,000	300,000
TOTAL FUNDING SOURCES	0	0	0	0	600,000	600,000

SW10

“A” STREET CAPACITY

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

The 8-inch and 10-inch diameter lines from the B Street pump station should be increased to 15-inches in diameter.

DISCUSSION OF PROJECT:

As development occurs, it is anticipated that additional sewer capacity may be needed along this route. The Sanitary Sewer Master Plan Update is confirming the size of capacity increase and the estimated schedule when it will occur. This project will not be required until the B Street pump station capacity is increased by CWS and development occurs in the area northwest of the Pump station, just north of Gales Creek.

SW10 A STREET CAPACITY						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction			590,000	0		590,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	590,000	0	0	590,000
<u>FUNDING SOURCE</u>						
Sewer Fund			295,000			295,000
Sewer SDC			295,000			295,000
TOTAL FUNDING SOURCES	0	0	590,000	0	0	590,000

SW11

FIR ROAD
From 19th to Hwy 47

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Replace 12" Line on Fir Road from Pacific Avenue to the Southern Pacific Railroad (SPRR).

DISCUSSION OF PROJECT:

The existing 12" diameter line ties into the SPRR trunk line. Fir Road upgrades will require the existing line to be upgraded to a 15" diameter line spanning approximately 2,000 lineal feet. The total improvements along Fir Road are estimated to cost \$420,000.

The 2007 City of Forest Grove Master Plan recommends this project should be considered "contingent" and the City need not move forward with it until the need has been verified through flow monitoring.

SW11 FIR ROAD SEWER LINE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction				0	420,000	420,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	420,000	420,000
<u>FUNDING SOURCE</u>						
Sewer SDC				0	420,000	420,000
Sewer						0
TOTAL FUNDING SOURCES	0	0	0	0	420,000	420,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

This project is proposed in the Storm Drainage Master Plan project list, and will provide stream restoration on open channels. The project replaces a 36-inch railroad culvert with a 54-inch culvert, and replaces Hawthorne Road 48-inch culvert with a 54-inch culvert.

DISCUSSION OF PROJECT:

These improvements are designed to increase the storm water conveyance capacity of the City's system. Projects follow recommendations in the Storm Drainage Master Plan and are designed to alleviate localized drainage problems due in part to the lack of hydraulic capacity.

SWM2 HAWTHORNE STREET DRAINAGE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction				0	342,000	342,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	342,000	342,000
<u>FUNDING SOURCE</u>						
SWM SDC				0	171,000	171,000
SWM				0	171,000	171,000
						0
FUNDING SOURCES	0	0	0	0	342,000	342,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Construct a new road to connect Hawthorne Street and Quince Street. The project will include Asphaltic Concrete (AC) pavement, curbs, gutter, sidewalk, storm drain, sewer, water line, and landscaping to current construction standards.

DISCUSSION OF PROJECT:

This section of roadway is identified on the Transportation System Plan. This project is needed to carry east/west traffic in the north part of town to relieve congestion on Pacific Avenue and provide access to the industrial land identified in the Comprehensive Plan. This project has been postponed pending development of the area. Cost participation will come from adjacent development.

SWM6 23rd/24th DRAINAGE CULVERT						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering					10,000	10,000
Site Preparation						0
Construction					100,000	100,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	110,000	110,000
<u>FUNDING SOURCE</u>						
SWM SDC					110,000	110,000
SWM						0
						0
TOTAL FUNDING SOURCES	0	0	0	0	110,000	110,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

This project is proposed in the Storm Drainage Master Plan project list. It replaces a 12-inch and 18-inch pipeline along Alyssum from Twinflower east approximately 550 feet.

DISCUSSION OF PROJECT:

These improvements are designed to increase the storm water conveyance capacity of the City's system. Projects follow recommendations in the Storm Drainage Master Plan and are designed to alleviate localized drainage problems due in part to the lack of hydraulic capacity.

SWM7 ALYSSUM and TWINFLOWER DRAINAGE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					135,000	135,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	135,000	135,000
<u>FUNDING SOURCE</u>						
SWM SDC					135,000	135,000
SWM						0
						0
TOTAL FUNDING SOURCES	0	0	0	0	135,000	135,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Install additional catch basins at corner of intersection of Bonnie Lane and "B" Street.

DISCUSSION OF PROJECT:

Currently the intersection of Bonnie Lane and "B" Street is served by a single catch basin located in the center of the intersection. The intersection often becomes overloaded with storm water runoff or blinded by debris, and becomes a hazard to safe traffic passage. The project will add four new catch basins to intercept the storm flow, take it off the street surface and convey it underground. In addition, paving will be constructed to raise the center of the intersection approximately ½ foot to give it a crown for proper drainage.

SWM8 BONNIE AND "B" STREET CATCH BASINS						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction		113,000				113,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	113,000	0	0	0	113,000
FUNDING SOURCE						
SWM SDC		0				0
SWM		113,000				113,000
TOTAL FUNDING SOURCES	0	113,000	0	0	0	113,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

This project is proposed in the Storm Drainage Master Plan project list. The current Cedar Street Pump Station will be removed and replaced with a gravity line to Douglas Street.

DISCUSSION OF PROJECT:

These improvements are designed to increase the storm water conveyance capacity of the City's system. Projects follow recommendations in the Storm Drainage Master Plan and are designed to alleviate localized drainage problems due in part to the lack of hydraulic capacity.

SWM9 CEDAR STREET PUMP STATION						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction		360,000				360,000
Equipment/Furniture						0
Other						0
						0
TOTAL		360,000	0	0	0	360,000
<u>FUNDING SOURCE</u>						
SWM SDC						0
SWM		360,000				360,000
TOTAL FUNDING SOURCES		360,000	0	0	0	360,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Stream restoration and wetland enhancement to improve storm conveyance in Stites Park.

DISCUSSION OF PROJECT:

The existing drainage system is located near 26th and Douglas and is overgrown, obstructed and limiting storm flow discharging to the north. This area includes the Stites Park land. The City recently purchased property adjacent to Stites Park. This property includes the drainage ditch that drains Douglas Street and the surrounding area. Currently, a storm water pump station pumps storm flows out of this basin and into the Sunset Drive basin. When this stream restoration and wetland enhancement project is completed, the flow capacity will be greater, upstream land will be able to be developed, and the pump station can be removed from service.

SWM10 26TH AVENUE TO WILLAMINA AVENUE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	352,000					352,000
Equipment/Furniture						0
Other						0
						0
TOTAL	352,000	0	0	0	0	352,000
<u>FUNDING SOURCE</u>						
SWM SDC	176,000					176,000
SWM	176,000					176,000
TOTAL FUNDING SOURCES	352,000	0	0	0	0	352,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Install a continuous stage recording device at the pond to record the frequency of specific high water levels.

DISCUSSION OF PROJECT:

Beal Pond is located near Beal Road and Highway 47. This pond influences and plays a key role in the City's storm drainage system. A well functioning storm drainage system can prevent flooding. The Master Plan suggests that water levels in Beal Pond be studied and measured through several seasons to determine whether storm drainage flow can be improved. This project installs equipment to do that measuring.

SWM12 BEAL POND STUDY

COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction			26,000			26,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	26,000	0	0	26,000
FUNDING SOURCE						
SWM SDC						0
SWM			26,000			26,000
TOTAL FUNDING SOURCES	0	0	26,000	0	0	26,000

SWM 15

BASIN 1: YEW STREET TO 1ST AVENUE

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Additional storm piping.

DISCUSSION OF PROJECT:

This project includes a piping system along Baseline Road between Yew Street and Forest Grove east City limit boundary. This project is needed to minimize maintenance and traffic safety concerns. This project is identified in the Storm Water Master plan.

SWM15 BASIN 1 - YEW STREET TO 1st AVENUE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction				128,000		128,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	128,000	0	128,000
<u>FUNDING SOURCE</u>						
SWM SDC						0
SWM				128,000		128,000
TOTAL FUNDING SOURCES	0	0	0	128,000	0	128,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Additional storm piping with catch basins along 17th Avenue from Hawthorne east to Kingwood.

DISCUSSION OF PROJECT:

This project will construct a new storm pipe in an existing neighborhood. It is needed to pickup the slow draining intersection at 17th and Hawthorne. This project is identified in the Storm Water Master Plan.

SWM16 BASIN 5 - 17th AVENUE and HAWTHORNE STREET						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction				134,000		134,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	134,000	0	134,000
<u>FUNDING SOURCE</u>						
SWM SDC						0
SWM				134,000		134,000
TOTAL FUNDING SOURCES	0	0	0	134,000	0	134,000

W1

DISTRIBUTION MAIN IMPROVEMENTS

Water

DEPARTMENT

PROJECT DESCRIPTION:

Proposed in the Master Plan are the following waterline improvements:

6" Pipe-	7,440
8" Pipe-	1,149
10" Pipe	1,381
12" Pipe	0

Specific projects in 2009-10 will be identified during the year after engineering's prioritization review.

DISCUSSION OF PROJECT:

These improvements are designed to increase flows to certain areas of the City for better fire protection or to replace old deteriorated pipe. The goal is to fund depreciation by replacing 1.0% of the system each year. Funding is from the Water Fund, to be completed by City crews. Cost estimates are based upon the Water Rate Analysis completed in 2001 by FCSG, adjusted for revised inflationary and construction cost assumptions.

W1 DISTRIBUTION MAIN IMPROVEMENTS						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	267,800	275,834	284,109	292,632	301,411	1,421,787
Equipment/Furniture						0
Other						0
						0
TOTAL	267,800	275,834	284,109	292,632	301,411	1,421,787
<u>FUNDING SOURCE</u>						
Water Fund	267,800	275,834	284,109	292,632	301,411	1,421,787
Water SDC	0	0	0	0		0
TOTAL FUNDING SOURCES	267,800	275,834	284,109	292,632	301,411	1,421,787

W2

LINE OVERSIZING PARTICIPATION

Water

DEPARTMENT

PROJECT DESCRIPTION:

Developments in certain areas of the City may trigger the need for excess pipe capacity for future growth, that is beyond what that specific developer needs. This project allows the City flexibility to cost participate in the oversizing of water pipes to adequately prepare for future growth.

DISCUSSION OF PROJECT:

Revenue is collected as system development charges on new sewer hook-ups. The money is used to provide funding flexibility to cost participate with developers to provide increased capacity in the water system.

W2 LINE OVERSIZING PARTICIPATION						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	100,000	100,000	75,000	75,000	75,000	425,000
Equipment/Furniture						0
Other						0
						0
TOTAL	100,000	100,000	75,000	75,000	75,000	425,000
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	0	0
Water SDC	100,000	100,000	75,000	75,000	75,000	425,000
TOTAL FUNDING SOURCES	100,000	100,000	75,000	75,000	75,000	425,000

Water

DEPARTMENT

PROJECT DESCRIPTION:

This project will purchase Alar Sludge dewatering equipment and a pump to transfer the sludge from the lagoon to the dewatering equipment. Unit will dewater the Forest Grove Water Treatment Plant (WTP) lagoon residuals and provide a cake that can be removed from the site for either landfill or beneficial use application

DISCUSSION OF PROJECT:

WTP residuals are currently hauled to a local field for land application. Hauling costs have tripled in past years from \$10,000 in past years to \$28,959 in FY 2008-09, making field application an expensive way to remove WTP residuals. Also, local fields are utilized via the good will of local farmers - there is no contract for this practice. Utilizing fields is contingent on open, dry fields that have been harvested, and also upon clear weather to haul the material. Unfortunately, there is no guarantee this can continue in the future. If there is no local field to haul to, the treatment plant is unable to remove its collected solids. This equipment will allow the dewatering of sludge to happen all year and would be unaffected by weather and crop harvesting.

W3 FG WATER TREATMENT PLANT IMPROVEMENTS						
COSTS	2009-10	2010-11	2011-12	2012-2013	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	94,640					94,640
Contingency						0
						0
TOTAL	94,640	0	0	0	0	94,640
FUNDING SOURCE						
Water Fund	94,640					94,640
Water SDC						0
						0
TOTAL FUNDING SOURCES	94,640	0	0	0	0	94,640

W4

WATERSHED ROAD IMPROVEMENTS

Water

DEPARTMENT

PROJECT DESCRIPTION:

Improve drainage and roadways within the Watershed.

DISCUSSION OF PROJECT:

The Watershed Road Survey has identified hazards and problems along roads located in the watershed. Projects will install drainage crossings and re-surface existing roads for better surface water run-off. Projects will be improved to Department of Forestry Standards.

W4 WATERSHED ROAD IMPROVEMENTS						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	50,000	50,000	50,000	50,000	50,000	250,000
Equipment/Furniture						0
Other						0
						0
TOTAL	50,000	50,000	50,000	50,000	50,000	250,000
FUNDING SOURCE						
Water	50,000	50,000	50,000	50,000	50,000	250,000
Water SDC	0	0	0	0	0	0
TOTAL FUNDING SOURCES	50,000	50,000	50,000	50,000	50,000	250,000

W6

23RD/24TH AVENUE (INDUSTRIAL AREA)

Water

DEPARTMENT

PROJECT DESCRIPTION:

Construct new road to connect Hawthorne Street and Quince Street. Project will include Asphaltic Concrete (AC) pavement, curbs, gutter, sidewalk, storm drain, sewer, water line, and landscaping to current construction standards.

DISCUSSION OF PROJECT:

This section of roadway is identified on the Transportation System Plan. This project is needed to carry east/west traffic in the north part of town to relieve congestion on Pacific Avenue and provide access to the industrial land identified in the Comprehensive Plan. This project has been postponed pending development of the area. Cost participation will come from adjacent development.

W6 23RD/24TH AVENUE (INDUSTRIAL AREA)

<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	0			22,400		22,400
Site Preparation						0
Construction	0	0		106,604	117,396	224,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	129,004	117,396	246,400
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	129,004	117,396	246,400
						0
TOTAL FUNDING SOURCES	0	0	0	129,004	117,396	246,400

W8

BARNEY BUY-IN

Water

DEPARTMENT

PROJECT DESCRIPTION:

Purchase additional 800-acre feet storage capacity in Barney Reservoir.

DISCUSSION OF PROJECT:

The 1994 Joint Ownership Agreement – Barney Project provides an expansion in ownership to Forest Grove. This option will be exercised at the time Forest Grove’s water demand shows additional water supply is necessary to meet the City’s need.

W8 BARNEY BUY-IN

<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other					2,400,000	2,400,000
						0
TOTAL	0	0	0	0	2,400,000	2,400,000
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	2,400,000	2,400,000
Water SDC	0	0	0	0		0
Water Revenue Bond	0	0	0	0		0
TOTAL FUNDING SOURCES	0	0	0	0	2,400,000	2,400,000

W9

JWC FISH SCREEN AT FERN HILL PUMP STATION

Water

DEPARTMENT

PROJECT DESCRIPTION:

Replace existing fish screen on the intakes at the Joint Water Commission Plant on Fern Hill Road.

DISCUSSION OF PROJECT:

This federally required project requires a federal match, which has not yet been budgeted. This project has been folded into the Tualatin Basin Water Supply Project – which is the raising of Scoggins Dam. Forest Grove is required to participate at our percent ownership.

W9 JWC FISH SCREEN AT FERN HILL PUMP STATION						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	0	0	0	0	320,000	320,000
						0
TOTAL	0	0	0	0	320,000	320,000
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	320,000	320,000
Water SDC	0	0	0	0		0
TOTAL FUNDING SOURCES	0	0	0	0	320,000	320,000

W10 JWC TREATMENT PILOT AND IMPLEMENTATION (OZONE) PROJECT

Water

DEPARTMENT

PROJECT DESCRIPTION: Initially, this project will study the ozone treatment technology and its applicability and feasibility for both the existing plant and the expansion plant. If the decision is made to go forward with Ozone treatment, this project will add ozone treatment to the current plant, on a timeline congruent with the expansion plant.

DISCUSSION OF PROJECT:

The JWC Master Plan study recommends including ozone treatment in the first phase of the treatment plant expansion. If the expansion plant proceeds with ozone treatment, it will also be added to the current plant, so that all plant water produced at that time would be treated with ozone.

Ozone has several benefits: effective treatment of taste and odor, enhanced coagulation for filtration, and treatment of iron and manganese if that should occur in the source water, and oxidation of other contaminants that occur in open river systems. Further, the Scoggins Dam raise will present new and unknown raw water quality challenges to the JWC treatment plant which will more effectively be handled by ozone as compared to any present system at the plant today. The 2005 CH2MHILL Facility Plan also recommended ozone addition in future upgrades to the plant to handle "unknown" water quality parameters associated with the Scoggins Dam Raise.

The first part of this project will be to conduct pilot testing in order to provide a more accurate estimate of the ozone dose required for taste and odor and provide additional design information for a full-scale ozone facility. Pilot testing will also determine the impact of ozone on disinfection by-products (Trihalomethane-THMs, haloacetic acids-HAAs, and bromate). The estimated cost for the ozone pilot test is on both raw water sources of the Tualatin River and the Raw Water Pipeline. The ultimate cost will vary depending on the actual scope and duration of the pilot testing.

W10 JWC TREATMENT PILOT AND IMPLEMENTATION (OZONE)						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	25,000				185,333	210,333
						0
TOTAL	25,000	0	0	0	185,333	210,333
FUNDING SOURCE						
Water Fund	25,000				185,333	210,333
Water SDC						0
TOTAL FUNDING SOURCES	25,000	0	0	0	185,333	210,333

Water

DEPARTMENT

PROJECT DESCRIPTION:

New Joint Water Commission (JWC) project for water rights consultant of record.

DISCUSSION OF PROJECT:

This project provides funding for technical assistance relating to the JWC water rights permits.

The JWC water right permit (Permit S-50879 for 75 cfs) needs to be extended to maintain the water right permit for future development. Although the permit initially required construction and complete application of the water to beneficial use by October 1, 1992, Oregon Water Resources Department (OWRD) has extended this deadline on two occasions. The current deadline for completion is October 1, 2000. The JWC filed an extension application with the OWRD on June 29, 2001 requesting additional time to complete development under the permit. The application is still pending at this time. No changes to this permit, such as a permit amendment to move the point of diversion downstream, can be approved until the pending extension is approved. The current permit application pending at the state is outdated and needs to be updated with current demands and for coordination with the Tualatin Basin Water Supply Project (TBWSP).

W11 JWC WATER RIGHTS CONSULTANT OF RECORD						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	3,466					3,466
						0
TOTAL	3,466	0	0	0	0	3,466
<u>FUNDING SOURCE</u>						
Water Fund	2,080					2,080
Water SDC	1,386					1,386
TOTAL FUNDING SOURCES	3,466	0	0	0	0	3,466

W14

JWC RAW WATER PIPE LINE

Water

DEPARTMENT

PROJECT DESCRIPTION:

Water pipe connecting Hagg Lake with the JWC water treatment plant.

DISCUSSION OF PROJECT:

During the summer months, stored water is released from Scoggins dam into Scoggins Creek which flows into the Tualatin River and is then pumped out at the treatment plant. The travel from Scoggins dam to the plant, approximately nine hours, causes problems with water loss and water quality, and occasionally causes flooding of properties along the channel. To remedy these problems, a 96-inch diameter pipe 38,000 feet in length is planned to carry water directly from the reservoir to the treatment plant. This same pipeline will also be designed to convey water from the Tualatin River back up to fill Scoggins dam during the winter, for the Tualatin Basin Water Supply Project (TBWSP) partners.

W14 JWC RAW WATER PIPELINE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other: Debt	100,000	100,000	100,000	100,000	100,000	500,000
						0
TOTAL	100,000	100,000	100,000	100,000	100,000	500,000
<u>FUNDING SOURCE</u>						
Water Fund	50,000	50,000	50,000	50,000	50,000	250,000
Water SDC	50,000	50,000	50,000	50,000	50,000	250,000
TOTAL FUNDING SOURCES	100,000	100,000	100,000	100,000	100,000	500,000

Water

DEPARTMENT

PROJECT DESCRIPTION:

The JWC has identified several valves that need replacement under the planned equipment replacement program identified in the JWC Master Plan.

DISCUSSION OF PROJECT:

The following components have been identified for replacement under this project:

14-inch Pratt Ball Valves (BV) w/ cylinder operators for Finished Water pumps 3 and 5. These ball valves are original plant equipment (32 years old) and according to valve the manufacturer, the useful life expectancy is 15 to 20 years. These ball valves have been leaking for several years. 14-inch Butterfly Valves (Manual Style) are also leaking.

Staff recommends the replacement of six (6), 30-inch Butterfly Valves (BFV) for filters 9 through 14. These BFV were installed in the 1996 expansion project. The valve manufacturer, "Keystone", was purchased several years ago by another valve manufacturer. Unfortunately, that new valve manufacturer suffered an anti-trust legal suit with the federal government and had to sell the Keystone line. Therefore, these valves are no longer supported by any manufacturer. Because the BFV's no longer seal, water is continuously leaking through to the system, and they need to be replaced.

Staff recommends replacement of the current JWC polymer feed system. The current JWC polymer feeders were part of the original plant equipment (32 years old) and have never been replaced. Staff has kept it in service with an excess inventory of spare parts that can no longer be purchased and the JWC no longer has anymore on the shelf.

Staff recommends replacement of the current JWC filter turbidity meters which are two generations old. Continuous turbidity monitoring is one of the most important water quality parameters that operators monitor. Turbidity meters are used to monitor and record the data from each filter, the combined filter effluent, side streams, raw water, and finished water at each pump station.

W16 JWC VALVE REPAIR / REPLACEMENT PROJECT						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	52,000					52,000
						0
TOTAL	52,000	0	0	0	0	52,000
<u>FUNDING SOURCE</u>						
Water Fund	52,000	0	0			52,000
Water SDC						0
TOTAL FUNDING SOURCES	52,000	0	0	0	0	52,000

Water

DEPARTMENT**PROJECT DESCRIPTION:**

This project is for the design of an on-site power generation system to run the existing plant up to 50% of the plant rated peak capacity of 75 MGD.

DISCUSSION OF PROJECT:

This project would include all design, field investigation, and permitting efforts needed to bid the project construction in FY 2010/11. Staff has applied for \$250,000 of grant funding through an Urban Areas Security Initiative (UASI) Public Works Grant. Additional grant funding may be available for the construction portion of the project. By having the design completed it is anticipated our success in acquiring funding assistance for construction will be greatly increased.

Uninterruptable or redundant power supply has been identified as a priority by the Carollo Seismic Report and also the Black & Veatch Master Plan. On-site power generation was also listed as a need in the Water Treatment Plant Facility plan that was developed by CH2MHill and adopted by the JWC in April 2005. The JWC is the largest conventional water treatment plant in Oregon, provides water to over 400,000 customers, and drives the economic engine of greater Washington County. The JWC treatment plant is also on the fringe of the Portland General Electric (PGE) power transmission grid and as a result, this critical facility is in one of the most vulnerable locations in the PGE transmission network.

W17 JWC ON-SITE POWER GENERATION						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	66,667					66,667
Site Preparation						0
Construction		333,333				333,333
Equipment/Furniture						0
Other						0
						0
TOTAL	66,667	333,333	0	0	0	400,000
<u>FUNDING SOURCE</u>						
Water Fund	66,667	333,333				400,000
Water SDC						0
TOTAL FUNDING SOURCES	66,667	333,333	0	0	0	400,000

Water

DEPARTMENT

PROJECT DESCRIPTION:

Update JWC Water Management and Conservation Plan.

DISCUSSION OF PROJECT:

Allows continuation of the existing Water Management Conservation Plan (WMCP) project in new fiscal year. WMCP's are required by the state for undeveloped water right permit extension approvals. The JWC water right permit (S-50879) for 75 CFS currently has a pending permit extension application at the state. The JWC WMCP will be submitted to the state for review during the current fiscal year, however, the Water Resources Department may have several questions and require revisions to the plan prior to approval. Additional technical assistance from professional services may be required to address comments back to the state and to complete revisions to the plan.

W19 WATER MANAGEMENT/CONSERVATION PLAN						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	5,400					5,400
						0
TOTAL	5,400	0	0	0	0	5,400
<u>FUNDING SOURCE</u>						
Water Fund	5,400					5,400
Water SDC						0
TOTAL FUNDING SOURCES	5,400	0	0	0	0	5,400

W20

JWC TRANSMISSION LINE ENCROACHMENT SURVEY

Water

DEPARTMENT

PROJECT DESCRIPTION:

This project will include locating transmission lines (190,206'), surveying transmission lines, plotting easements, identifying encroachment issues, and providing hard copy and digital maps to the Joint Water Commission (JWC).

DISCUSSION OF PROJECT:

This project will include locating transmission lines (190,206') with ground penetrating radar, surveying all transmission lines location marks, plotting easements, identifying encroachment issues, and providing hard copy and digital maps to the JWC. Percentage of costs are based on length relationship of all transmission lines and the corresponding ownership of each transmission line.

W20 JWC TRANSMISSION LINE ENCROACHMENT SURVEY						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	18,582					18,582
						0
TOTAL	18,582	0	0	0	0	18,582
<u>FUNDING SOURCE</u>						
Water Fund	18,582					18,582
Water SDC						0
TOTAL FUNDING SOURCES	18,582	0	0	0	0	18,582

W21

JWC SLUDGE REMOVAL

Water

DEPARTMENT

PROJECT DESCRIPTION:

Removal of sludge generated from the JWC water Treatment Plant

DISCUSSION OF PROJECT:

This project is for the removal of sludge in the existing JWC Water Treatment Plant drying beds which are near capacity. This is a one-year duration project that will occur every three to four years depending on the volume of sludge generated at the treatment plant. The dollar estimate covers only the next six years.

W21 SLUDGE REMOVAL PROJECT						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	36,000			36,000		72,000
Equipment/Furniture						0
Other						0
						0
TOTAL	36,000	0	0	36,000	0	72,000
<u>FUNDING SOURCE</u>						
Water Fund	36,000	0	0	36,000		72,000
Water SDC	0	0	0	0		0
TOTAL FUNDING SOURCES	36,000	0	0	36,000	0	72,000

W22

JWC RAPID MIX UPGRADE EXISTING PLANT

Water

DEPARTMENT

PROJECT DESCRIPTION:

Make improvements to the existing JWC Water Treatment Plant (WTP) Rapid Mix System.

DISCUSSION OF PROJECT:

Rapid mix is used in initial treatment to mix chemicals. Rapid mix improvements are required at the exiting plant to bring the existing JWC WTP maximum capacity to 75 MGD. This capacity improvement is expected to be addressed in the phase 1 JWC Water Treatment Plant expansion project.

The current facility only has one (1) rapid mix. Therefore the existing plant has no redundant rapid mix capabilities. Current plants of similar size either being built new, or in existence today have two rapid mix components. The proposed new dual rapid mix, as part of the expansion, will be sized to handle 185 MGD worth of flow and will provide redundancy to the existing plant. Therefore allocation to both the existing and ultimate treatment plant ownerships is warranted.

W22 JWC RAPID MIX UPGRADE EXISTING PLANT						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other				0	48,648	48,648
						0
TOTAL	0	0	0	0	48,648	48,648
FUNDING SOURCE						
Water Fund				0	48,648	48,648
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	48,648	48,648

Water

DEPARTMENT

PROJECT DESCRIPTION:

Update to the JWC Master Plan

DISCUSSION OF PROJECT:

The Oregon Department of Human Services Drinking Water Program requires the JWC to maintain a current master plan for its water system. A JWC Master Plan update is recommended every five years through the planning period of this project. A regular master plan update will provide flexibility to adjust the timing and magnitude of projects based on changing water demands and other conditions.

W23 JWC MASTER PLAN						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other				25,926		25,926
						0
TOTAL	0	0	0	25,926	0	25,926
<u>FUNDING SOURCE</u>						
Water Fund				25,926		25,926
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	25,926	0	25,926

W24

JWC THICKENER UPGRADE EXISTING PLANT

Water

DEPARTMENT

PROJECT DESCRIPTION:

Make improvements to the existing Joint Water Commission (JWC) water treatment plant solids thickener system.

DISCUSSION OF PROJECT:

Gravity thickener is a Water Treatment Plant (WTP) solids process and used to reduce the volume of liquid in the solids. Gravity thickener improvements are required at the exiting plant to bring the existing JWC WTP maximum capacity to 75 MGD. This capacity improvement is expected to be addressed in the phase 1 JWC water treatment plant expansion project.

The first phase of the expansion will include costs for the gravity thickener & a reclamation system and additional costs for mechanical dewatering facilities. According to the CH2MHill 2005 Facility Plan, the existing plant only has 57 MGD worth of gravity thickener capacity and therefore temporary bypass measures were installed as part of the Near Term Improvements project. Currently each of the two existing thickeners has an estimated 28.5 MGD worth of capacity. A third gravity thickener & reclamation component needs to be added with approximately 18 MGD required to bring the current plant up to the 75 MGD level and the remaining 10.5 MGD to be utilized for the expansion. Therefore, a portion of the cost, approximately 63.16%, will be allocated to the existing plant and 36.84% will be allocated to the expansion. The mechanical dewatering facility is needed for the expansion only and is not allocated to the existing plant.

W24 JWC THICKENER UPGRADE EXISTING PLANT						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other				0	66,667	66,667
						0
TOTAL	0	0	0	0	66,667	66,667
<u>FUNDING SOURCE</u>						
Water Fund				0	66,667	66,667
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	66,667	66,667

W25

JWC CLEARWELL UPGRADE EXISTING PLANT

Water

DEPARTMENT

PROJECT DESCRIPTION:

Make improvements to the existing JWC water treatment plant clearwell system.

DISCUSSION OF PROJECT:

A reservoir for storing filtered water of sufficient quantity to prevent the need to vary the filtration rate with variations in demand. The clearwell is also used to provide chlorine contact time for disinfection. Clearwell improvements are required at the existing plant to bring the existing JWC WTP maximum capacity to 75 MGD. This capacity improvement is expected to be addressed in the phase 1 JWC water treatment plant expansion project.

A total of 10 million gallons will be built in the phase 1 expansion, but 2.63 million gallons will be allocated for the use of the existing plant. 8.6 MG is recommended for clearwell capacity at the existing plant.

W25 JWC CLEARWELL UPGRADE EXISTING PLANT						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other				0	56,000	56,000
						0
TOTAL	0	0	0	0	56,000	56,000
FUNDING SOURCE						
Water Fund				0	56,000	56,000
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	56,000	56,000

Water

DEPARTMENT**PROJECT DESCRIPTION:**

As part of the Phase 1 expansion project, upgrades to the existing JWC WTP have been planned. Corrective measures were identified during the JWC Fernhill Reservoir #2 and Near-Term Improvements Project.

DISCUSSION OF PROJECT:

As part of the Fernhill Reservoir #2 and near term improvement projects, the engineering consultant (CH2MHill) identified corrective measures that were needed for the existing JWC WTP facilities. The list of identified improvements was developed jointly with JWC WTP operations staff. The list of identified improvements is:

- Add new electrical feeder to Transformer T3.
- Automate the sludge pump from thickeners.
- Repair Basin A channel cracks.
- Repair Basin C floor cracks.
- Install flowmeter on decant pump station to headworks.
- Install additional hatches in the Flocculation/Sedimentation Basins in the inlet area to allow easier personal access.
- Install new-higher capacity drain lines for Flocculation/Sedimentation basins D through G.
- Revise piping from recycle pump station to thickeners.
- Interconnect the TSS analyzers to the cable vac system to initiate operation.
- Install flowmeters into each existing Floc/Sed. Basin.
- Replace sludge drain valves from Floc/Sed. Basin A/B/C.
- Reprogramming of solids diversion pump station VFDs.

W26 JWC SHORT TERM CORRECTIVE MEASURES EXISTING PLANT						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other				0	40,000	40,000
						0
TOTAL	0	0	0	0	40,000	40,000
<u>FUNDING SOURCE</u>						
Water Fund				0	40,000	40,000
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	40,000	40,000

Water

DEPARTMENT**PROJECT DESCRIPTION:**

This project will make improvements at the existing plant to minimize damage and protect the safety of staff following a medium earthquake event, and make improvements to minimize operational damage at the plant following a small earthquake event. This project is scheduled to coincide with the expansion of the JWC plant to 135 million gallons per day (MGD).

DISCUSSION OF PROJECT:

In September 2007, the JWC engaged a consultant to perform a seismic evaluation of the JWC water treatment plant. The purpose of the evaluation was to asses the reliability of the water treatment plant and associated facilities following potential seismic events and develop recommended improvements to mitigate identified vulnerabilities.

Following is a list of recommended areas in the existing plant that need improvement:

- Raw water Pump Station
- Main office building
- Finish water pump station 1 & 2
- Rapid mix basin
- Filters 1-4
- Site Components
- Flocculation/ Sedimentation Basin

W29 SEISMIC RETROFIT CURRENT PLANT						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering					30,000	30,000
Site Preparation						0
Construction					30,000	30,000
Equipment/Furniture						0
Contingency						0
						0
TOTAL	0	0	0	0	60,000	60,000
<u>FUNDING SOURCE</u>						
Water Fund					60,000	60,000
Water SDC						0
						0
TOTAL FUNDING SOURCES	0	0	0	0	60,000	60,000

Water

DEPARTMENT

PROJECT DESCRIPTION:

Preliminary engineering study, permitting and building of infrastructure.

DISCUSSION OF PROJECT:

The City of Forest Grove proactively seeks all means to most efficiently and most economically meet long-term water demand needs. Preliminary engineering analysis will provide the City of Forest Grove with critical information necessary to best guide critical next-step decisions. The work program proposed will take a preliminary look at Environmental/Regulatory Review, Preliminary Project Definition, Preliminary Hydraulic Analysis, and Preliminary Project Cost Estimates. This project will construct necessary infrastructure in the future to take advantage of this water source.

W47 GALES CREEK INTAKE AND PUMPING STATION						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction				0	2,000,000	0
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	2,000,000	0
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	1,000,000	0
Water SDC	0	0	0	0	1,000,000	0
TOTAL FUNDING SOURCES	0	0	0	0	2,000,000	0

W48

DAVID HILL ROAD WATER LINE

Water

DEPARTMENT

PROJECT DESCRIPTION:

Construct 8" ductile iron water main.

DISCUSSION OF PROJECT:

As a part of the David Hill Road extension project, an extension of the City's water distribution piping system will also occur. It is anticipated that adjacent development will participate in the cost of this project.

W48 DAVID HILL ROAD						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	240,000					240,000
Equipment/Furniture						0
Other						0
						0
TOTAL	240,000	0	0	0	0	240,000
<u>FUNDING SOURCE</u>						
Water Fund						0
Water SDC	240,000					240,000
TOTAL FUNDING SOURCES	240,000	0	0	0	0	240,000

W50

EMERGENCY INTERTIE

Water

DEPARTMENT

PROJECT DESCRIPTION:

Build a water valve station at Heather Street.

DISCUSSION OF PROJECT:

A connection to the JWC transmission line near Heather Street has been recommended in the 2000 Forest Grove Water Master Plan. This project requires designing and constructing a valve station to meter the flow of water into the Forest Grove system. This valve would only be opened in the event of an emergency.

W50 EMERGENCY INTERTIE - HEATHER STREET PRV						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					250,000	250,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	250,000	250,000
<u>FUNDING SOURCE</u>						
Water Fund					250,000	250,000
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	250,000	250,000

W51

HILLTOP WATER SUPPLY

Water

DEPARTMENT

PROJECT DESCRIPTION:

Build 400,000 gallon treated water storage tank and pumping station

DISCUSSION OF PROJECT:

The small, high-elevation land area above the 440 feet elevation, near David Hill, will require a special additional facility for water service. This project is identified in the Water Master Plan and will occur as development in this area occurs.

W51 HILLTOP WATER SUPPLY						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering				0	150,000	150,000
Site Preparation						0
Construction				0	1,350,000	1,350,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	1,500,000	1,500,000
<u>FUNDING SOURCE</u>						
Water Fund						0
Water SDC					1,500,000	1,500,000
TOTAL FUNDING SOURCES	0	0	0	0	1,500,000	1,500,000

W52

TREATED WATER STORAGE TANK

Water

DEPARTMENT

PROJECT DESCRIPTION:

Build treated water storage tank.

DISCUSSION OF PROJECT:

The Water Master Plan identifies the need for additional treated water storage capacity for the lower level pressure zone in the next few years as the city's population increases. This storage will most likely be located at or near the Watercrest Road Treatment Plant and may require the purchase of additional property. This project will design the future tank and determine how much land will be required. Additional funds are included for land purchase.

W52 TREATED WATER STORAGE TANK						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation/Acquisition		275,000	275,000			550,000
Construction						0
Equipment/Furniture						0
Other						0
						0
TOTAL	0	275,000	275,000	0	0	550,000
<u>FUNDING SOURCE</u>						
Water Fund		137,500	137,500	0		275,000
Water SDC		137,500	137,500	0		275,000
TOTAL FUNDING SOURCES	0	275,000	275,000	0	0	550,000

W53

EMERGENCY WATER DISPENSER

Water

DEPARTMENT

PROJECT DESCRIPTION:

Purchase one emergency water dispensing Blivet and trailer.

DISCUSSION OF PROJECT:

During an emergency or a large scale water line break, it is anticipated that a section of town could be without water. In this scenario, cities are purchasing Water Blivets that will be used to dispense water in the interim until the distribution system is repaired. This unit is trailer mounted and will be taken to a location near the emergency area. It is connected to the water distribution system through a fire hydrant. Residential customers drive through and fill small water containers with potable water.

W53 EMERGENCY WATER DISPENSER						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	10,000					10,000
Other						0
						0
TOTAL	10,000	0	0	0	0	10,000
<u>FUNDING SOURCE</u>						
Water Fund	10,000					10,000
Water SDC						0
TOTAL FUNDING SOURCES	10,000	0	0	0	0	10,000

**PUBLIC SAFETY
PROJECTS**

PUBLIC SAFETY PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
FF3	Replacement Of Turnouts/Safety Equipment	16,000	18,000	19,000	19,000	19,000	91,000
FF4	Replacement Of Fire Hose, Nozzles, Etc.	24,000	12,500	12,500	12,500	12,500	74,000
FF8	Fire Apparatus Replacement Program	50,000	100,000	50,000	50,000	50,000	300,000
FF12	Construct New Sub-Station	0	0	0	0	1,300,000	1,300,000
FF25	Portable Radios	108,000	10,000	10,000	15,000	15,000	158,000
FF26	Thermal Imager	0	0	0	0	24,000	24,000
FF27	Purchase of CPAP Machines	5,100	0	0	0	0	5,100
FF28	Firefighter Dormitory Remodel	20,000	0	0	0	0	20,000
FF29	Fire Shelters	20,000	0	0	0	0	20,000
FF30	Community Emergency Notification Sign	20,000	0	0	0	0	20,000
	FIRE TOTALS	263,100	140,500	91,500	96,500	1,420,500	2,012,100
PD11	Replacement Of Mobile And Portable Radios	10,800	108,000	0	0	0	118,800
PD12	Replacement Of MDC's	18,000	18,000	18,000	18,000	18,000	90,000
PD25	Purchase Handheld Citation Writers, Printers And	0	0	57,250	0	0	57,250
PD26	Narcotics Detection Canine	0	23,000	0	0	0	23,000
PD27	Department Carpeting	31,500	0	0	0	0	31,500
PD28	New Police Patrol Vehicle	26,000	0	0	0	0	26,000
	POLICE TOTALS	86,300	149,000	75,250	18,000	18,000	346,550
	PUBLIC SAFETY TOTALS	349,400	289,500	166,750	114,500	1,438,500	2,358,650
Bold = NEW PROJECTS							

FF3

REPLACEMENT OF TURNOUTS

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Replace turnout on an annual basis and other accessories as needed to insure maintenance of required safety equipment.

DISCUSSION OF PROJECT:

The Fire Department has approximately sixty-five (60) sets of turnouts in the department with an average cost of \$1,700 each. Life of a set of turnouts is approximately five (5) years. The department also has suspenders, gloves and flashlights that are replaced on an as-needed basis resulting in an annual expenditure of approximately \$10,000 to \$15,000. Turnouts are required safety equipment and must be maintained in good condition at all times. Other than the cost of replacing the turnouts, there is no fiscal impact associated with this project.

FF3 REPLACEMENT OF TURNOUTS/SAFETY EQUIPMENT						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	16,000	18,000	19,000	19,000	19,000	91,000
Other						0
						0
TOTAL	16,000	18,000	19,000	19,000	19,000	91,000
FUNDING SOURCE						
General Fund	8,000	9,000	9,500	9,500	9,500	45,500
Fire District	8,000	9,000	9,500	9,500	9,500	45,500
						0
TOTAL FUNDING SOURCES	16,000	18,000	19,000	19,000	19,000	91,000

FF4

REPLACEMENT OF FIRE HOSE, NOZZLES, ETC.

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Replacement of fire hose on an annual basis to insure maintenance of required equipment.

DISCUSSION OF PROJECT:

Replacement of fire hose is a continuous program that results in replacing fire hose when it is approximately seven (7) years of age. Cost of the hose ranges from \$194 per 100 feet for 1-3/4" hose to \$450 per 100 feet for 4" hose with a total of approximately 26,000 feet of hose in service and a total dollar amount of \$81,340 worth of hose. Also included in this is the replacement of nozzles. The 2009-2010 includes the purchase of three Blitz Fire nozzles, which are designed to flow large quantities of water (500 GPM) in a quick attack line, which expands the suppression capabilities of the firefighters in limited staffing situations. Annual expenditures are estimated based on prior years' costs. Other than the cost of replacing the hose, there is no fiscal impact associated with this project.

FF4 REPLACEMENT OF FIRE HOSE, NOZZLES, ETC.						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	24,000	12,500	12,500	12,500	12,500	74,000
Other						0
						0
TOTAL	24,000	12,500	12,500	12,500	12,500	74,000
FUNDING SOURCE						
General Fund	12,000	6,250	6,250	6,250	6,250	37,000
Fire District	12,000	6,250	6,250	6,250	6,250	37,000
						0
TOTAL FUNDING SOURCES	24,000	12,500	12,500	12,500	12,500	74,000

Fire

DEPARTMENT**PROJECT DESCRIPTION:**

The Fire Department's 14 pieces of apparatus are replaced on a scheduled basis. Capital costs are split on a 50/50 basis between the City and Rural District. Pickups are replaced every 7 to 10 years, pumpers are replaced every 17 years, and tankers and ladder trucks are replaced every 20 years.

DISCUSSION OF PROJECT:

The City and the District both maintain a reserve to replace fire apparatus. With the reserve, money to fund replacement of vehicles is built up over the life of the vehicle. This practice maintains annual expenditures for apparatus and allows both the City and District to avoid periods of high and low spending. This funding method is the same method that the City uses to maintain its equipment fund. While there is no measurable fiscal impact associated with this project, technological changes in the vehicles improve vehicle efficiency and improve firefighter productivity.

Slated for purchase in 2009-10:

- Replacement of staff vehicle

FF8 FIRE APPARATUS REPLACEMENT PROGRAM						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	50,000	100,000	50,000	50,000	50,000	300,000
Other						0
						0
TOTAL	50,000	100,000	50,000	50,000	50,000	300,000
<u>FUNDING SOURCE</u>						
Fire Equipment Repl Fund	25,000	50,000	25,000	25,000	25,000	150,000
Fire District	25,000	50,000	25,000	25,000	25,000	150,000
						0
TOTAL FUNDING SOURCES	50,000	100,000	50,000	50,000	50,000	300,000

FF12

NEW SUB-STATION

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Construct new sub-station.

DISCUSSION OF PROJECT:

With the increased population in the northwest part of the City and the growth in the District, it becomes necessary to build a single engine fire station in the northwest part of the City and that area of the District. As the area grows the department will be unable to maintain a four-minute response time and the travel distances will become excessive to provide fire service to populated areas. Construction of the sub-station is included with the City's five-year plan and is based on development of the northwest section of Forest Grove. The City is currently funding its share over a five-year period so the funds will be available when the sub-station is constructed.

FF12 CONSTRUCT NEW SUB-STATION						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering					130,000	130,000
Site Preparation					500,000	500,000
Construction					670,000	670,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	1,300,000	1,300,000
FUNDING SOURCE						
Fire Equipment Replacement Fund					650,000	650,000
Fire District					650,000	650,000
						0
TOTAL FUNDING SOURCES	0	0	0	0	1,300,000	1,300,000

FF25

PORTABLE RADIOS

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Replace portable radios used in the day to day fire/rescue/EMS operations.

DISCUSSION OF PROJECT:

The current portable radios will need to be replaced due to general wear and tear from daily use and due to upgrades at Washington County Consolidated Communications Center. The new radios will need to be capable of a larger channel template. A grant was received to purchase new portable radios from the State Homeland Security Program, but on-going replacement will need to be maintained.

FF25 Portable Radios						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	108,000	10,000	10,000	15,000	15,000	158,000
Other						0
						0
TOTAL	108,000	10,000	10,000	15,000	15,000	158,000
<u>FUNDING SOURCE</u>						
Fire Equipment Replacement	0	5,000	5,000	7,500	7,500	25,000
Fire District	0	5,000	5,000	7,500	7,500	25,000
Grant	108,000					108,000
TOTAL FUNDING SOURCES	108,000	10,000	10,000	15,000	15,000	158,000

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Purchase a thermal imager for fire engine.

DISCUSSION OF PROJECT:

Not all of the fire engines have a thermal imager. Thermal imagers are used in a variety of ways for fire suppression and search & rescue. The use of a thermal imager insures we have found all of the burning in a wall or ceiling without causing more property damage than necessary.

Thermal imagers are also critical to firefighter safety, to allow them to see through heavy smoke conditions, and to rescue situations, allowing them quickly locate victims in fires, water rescues and vehicle accidents with ejected patients.

FF26 THERMAL IMAGER						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-2013</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture					24,000	24,000
Other						0
						0
TOTAL	0	0	0	0	24,000	24,000
<u>FUNDING SOURCE</u>						
General Fund	0	0	0		12,000	12,000
Fire District	0	0	0		12,000	12,000
						0
TOTAL FUNDING SOURCES	0	0	0	0	24,000	24,000

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Purchase of three portable continuous positive airway pressure (CPAP) devices for emergency medical responses.

DISCUSSION OF PROJECT:

These oxygen powered devices are used to treat patients suffering from a variety of shortness of breath events, including pulmonary edema, emphysema and chronic obstructive pulmonary disease (COPD). The immediate use of these devices can significantly reduce or eliminate the symptoms of shortness of breath associated with these diseases, often described by patients as a drowning sensation. These are proven advance life support intervention tools that make a critical difference in patient outcomes and pre-hospital treatment. Other than the cost of the devices, there is no fiscal impact associated with this project.

FF27 CPAP MACHINES						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	5,100					5,100
Contingency						0
						0
TOTAL	5,100	0	0	0	0	5,100
<u>FUNDING SOURCE</u>						
General Fund	2,550					2,550
Fire District	2,550					2,550
Grant funding						0
TOTAL FUNDING SOURCES	5,100	0	0	0	0	5,100

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Remodel of the living quarters in the fire station to accommodate more intern firefighters.

DISCUSSION OF PROJECT:

To increase firefighter staffing and safety, the Fire Department would like to expand the dormitory space to accommodate more intern volunteer firefighters. The building was designed to accommodate this eventual expansion. Expanding the living space would allow us to expand the number of firefighters that are in the station, improving response time and increasing staffing on emergency scenes for a minimal one-time investment.

FF28 FIREFIGHTER DORMITORY REMODEL						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	20,000					20,000
Equipment/Furniture						0
Contingency						0
						0
TOTAL	20,000	0	0	0	0	20,000
<u>FUNDING SOURCE</u>						
General Fund	10,000					10,000
Other	10,000					10,000
Grant funding						0
TOTAL FUNDING SOURCES	20,000	0	0	0	0	20,000

FF29

FIRE SHELTER REPLACEMENT

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Replaces wildland fire shelter equipment with new required fire shelters.

DISCUSSION OF PROJECT:

Fire shelters are required safety devices that must be carried by every firefighter on wildland fires. These aluminum safety “tents” are designed to protect the firefighter in the event of a sudden wind shift and the firefighter is overrun by a flame front. The new fire shelters will be required for all firefighters in fiscal year 2009-10. Firefighters must be issued an individual fire shelter, as they size dependent. The fire department is pursuing grants to purchase these, but they will have to be purchased regardless of grant approval.

FF29 FIRE SHELTERS						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	20,000					20,000
Contingency						0
						0
TOTAL	20,000	0	0	0	0	20,000
FUNDING SOURCE						
General Fund	10,000					10,000
Other	10,000					10,000
Grant funding						0
TOTAL FUNDING SOURCES	20,000	0	0	0	0	20,000

FF30

COMMUNITY EMERGENCY NOTIFICATION SIGN

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Purchase of an electronic community notification sign for emergency events, disasters and public education.

DISCUSSION OF PROJECT:

This sign will be used to notify residents of pending emergency events such as wind storms, snow storms, ice storms etc. with emergency procedures, shelter information, etc. Powered by the station generator it can provide information for preparedness and recovery events after a local or region-wide disaster. It can also be used for public education and awareness to lessen the impact of such events.

FF30 COMMUNITY EMERGENCY NOTIFICATION SIGN						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	20,000					20,000
Contingency						0
						0
TOTAL	20,000	0	0	0	0	20,000
FUNDING SOURCE						
General Fund						0
Other						0
Grant funding	20,000					20,000
TOTAL FUNDING SOURCES	20,000	0	0	0	0	20,000

PD11

REPLACEMENT OF MOBILE AND PORTABLE RADIOS

Police

DEPARTMENT

PROJECT DESCRIPTION:

Complete replacement of radios to ensure properly functioning equipment capable of maintaining interagency and interoperability communications. FY 2009-10 replacement due to damaged and technologically inadequate radios; FY 2010-11 replacement to address technological improvements and loss due to equipment usage.

DISCUSSION OF PROJECT:

The Department has a responsibility in maintaining Forest Grove's part in the integrity of the county-wide system.

PD11 REPLACEMENT OF MOBILE AND PORTABLE RADIOS						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	10,800	108,000				118,800
Other						0
						0
TOTAL	10,800	108,000	0	0	0	118,800
<u>FUNDING SOURCE</u>						
Grants	10,800	108,000				118,800
						0
						0
TOTAL FUNDING SOURCES	10,800	108,000	0	0	0	118,800

PD12 REPLACEMENT OF MOBILE DATA COMPUTER (MDC's)

Police

DEPARTMENT

PROJECT DESCRIPTION:

Complete replacement of MDC's over the course of three years, aligning the purchase of new units for new vehicles.

DISCUSSION OF PROJECT:

The Department has a responsibility to maintain Forest Grove's part in the integrity of the countywide system. It is up to the individual departments in the County to keep current with technology. This technology ensures interoperability between regional law enforcement agencies and the countywide dispatch center. The Department must be prepared to expend the funds necessary to maintain the technology used in the rest of the County agencies. This expenditure projects for the projected life of the in-vehicle mobile data computers. The proposed configuration will support advanced emerging technologies with the mobile data computers such as GPS, mapping, and access to informational databases.

PD12 REPLACEMENT OF MDC'S						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	18,000	18,000	18,000	18,000	18,000	90,000
Other						0
						0
TOTAL	18,000	18,000	18,000	18,000	18,000	90,000
<u>FUNDING SOURCE</u>						
CIP Excise Tax Fund	18,000	18,000	18,000	18,000	18,000	90,000
Homeland Security Grant						0
						0
TOTAL FUNDING SOURCES	18,000	18,000	18,000	18,000	18,000	90,000

PD25 HANDHELD CITATION WRITERS, PRINTERS AND SOFTWARE

Police

DEPARTMENT

PROJECT DESCRIPTION:

Purchase handheld citation writers, printers and software for use by Traffic and Parking Enforcement Officers, and upgrade Municipal Court software to accept new technology.

DISCUSSION OF PROJECT:

The Police Department issued approximately 3,570 traffic citations during calendar year 2006, compared with 2,500 issued in 2005. These citations were all completed by hand and were manually entered into the department's records management system by Records Clerks. They were then hand delivered to Municipal Court and again manually processed. Various officers' handwriting is routinely difficult to discern and this creates errors during data entry. Leveraging technology in this manner improves the efficiency of officers, and records and court personnel. Paper citations are prone to loss or destruction.

The ticket writers would automate citation completion in the field via use of mobile handheld computers which read barcodes on driver's licenses, automatically filling driver's information into the system. The officer would complete remaining fields and print off a copy of the citation for the violator. The information in the handheld computer would subsequently be downloaded into the department's records management system and the Municipal Court system, virtually eliminating paper documents which can be lost, and/or destroyed. With this system, downloading multiple citations can be done in seconds, with zero errors versus several minutes per citation that it takes a Records Clerk to manually enter the citations now.

PD25 - HANDHELD CITATION WRITERS, PRINTERS AND SOFTWARE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture			57,250			57,250
Other						0
						0
TOTAL	0	0	57,250	0	0	57,250
<u>FUNDING SOURCE</u>						
General Fund Operating						0
CIP Excise Tax Fund			57,250			57,250
TOTAL FUNDING SOURCES	0	0	57,250	0	0	57,250

Police

DEPARTMENT**PROJECT DESCRIPTION:**

Purchase a narcotics detection canine to assist with drug investigations, community relations programs, and regional law enforcement partnerships.

DISCUSSION OF PROJECT:

As of 2008, three narcotics detection canines are assigned to law enforcement agencies in Washington County. Supporting a narcotics detection canine program in Forest Grove advances our ability to conduct interdiction drug investigations and enhances our ability to conduct more comprehensive narcotics investigations. Additionally, a narcotics detection canine supports our involvement in regional law enforcement activities within Washington County and beyond.

Numerous studies show links between other crimes and drug-related activities. According to the Office of National Drug Control Policy (ONDCP), about 25% of burglaries, personal larcenies (thefts), and robberies are attributed to drug abuse.

According to Forest Grove Police Department records, 2% of all initial reports taken in 2007 were for exclusively drug-related calls. In 2008, Forest Grove Police Department records again show 2% of all initial reports taken were for exclusively drug-related activities. According to the ONDCP, 11% of arrests nationwide are for drug offenses. These numbers suggest an opportunity for our agency to make significant progress towards successful drug enforcement.

A narcotics detection canine may also have a significant deterrent effect in the community, forcing drug-related activities out of our community. A narcotics detection canine also has collateral applications towards community relations and community policing goals.

PD26 NARCOTICS DETECTION CANINE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture		23,000				23,000
Other						0
						0
TOTAL	0	23,000	0	0	0	23,000
<u>FUNDING SOURCE</u>						
Grant		23,000				23,000
						0
						0
TOTAL FUNDING SOURCES	0	23,000	0	0	0	23,000

PD27 REPLACEMENT OF DEPARTMENT FLOORING WITH CARPET

Police

DEPARTMENT

PROJECT DESCRIPTION:

Complete replacement of department flooring with carpet to improve professional decor and sustain the usability of the building for department and public use.

DISCUSSION OF PROJECT:

In 2009, the department completed a major interior painting project to improve the professional decor of the department. Several current areas of department carpeting are frayed from heavy foot traffic, in some cases creating trip hazards. Replacing department flooring with carpeting in most areas will improve the professional image and decor of the building.

PD27 DEPARTMENT CARPETING						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	31,500					31,500
Other						0
						0
TOTAL	31,500	0	0	0	0	31,500
<u>FUNDING SOURCE</u>						
CIP Excise Tax Fund	31,500					31,500
						0
						0
TOTAL FUNDING SOURCES	31,500	0	0	0	0	31,500

PD28

NEW POLICE PATROL VEHICLE

Police

DEPARTMENT

PROJECT DESCRIPTION:

The City has applied for two additional patrol positions through the COPS Grant program created by the Federal stimulus programs.

DISCUSSION OF PROJECT:

If the two officer positions applied for through the COPS Grant program are approved, the Police Department will need to purchase an extra patrol vehicle to have sufficient vehicles available for patrol shifts and to prevent excess wear and tear on the existing patrol fleet.

PD 28 NEW POLICE PATROL VEHICLE

COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	26,000					26,000
Contingency						0
						0
TOTAL	26,000	0	0	0	0	26,000
<u>FUNDING SOURCE</u>						
General Fund						0
CIP Excise Tax Fund	26,000					26,000
						0
TOTAL FUNDING SOURCES	26,000	0	0	0	0	26,000

**CULTURE
AND RECREATION
PROJECTS**

CULTURE AND RECREATION PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
L11	Security System for Library Materials	0	0	45,000	0	0	45,000
L14	Print Vending System	5,000	0	0	0	0	5,000
L15	Furnishings for Renovated Space	100,000	100,000	0	0	0	200,000
	LIBRARY TOTALS	105,000	100,000	45,000	0	0	250,000
AQ2	Aquatic Center Parking Expansion	0	0	115,000	0	0	115,000
PR9	Rogers Park Renovation	0	0	339,200	0	0	339,200
PR12	Lincoln Park Land Acquisition And Developme	0	0	0	1,150,000	0	1,150,000
PR13	Trails/Greenways/Linear Parks	617,000	0	548,500	0	0	1,165,500
PR14	Thatcher Park	0	0	0	150,000	1,850,000	2,000,000
PR25	Bard Park Improvements	0	0	330,000	0	0	330,000
PR26	Off Leash Dog Park Development	0	77,500	0	0	0	77,500
	AQUATICS & PARKS TOTALS	617,000	77,500	1,332,700	1,300,000	1,850,000	5,177,200
	CULTURE AND RECREATION TOTALS	722,000	177,500	1,377,700	1,300,000	1,850,000	5,427,200
Bold =	NEW PROJECTS						

L11

SECURITY SYSTEM FOR LIBRARY MATERIALS

Library

DEPARTMENT

PROJECT DESCRIPTION:

This project will provide for the purchase of a security system to be used with library materials.

DISCUSSION OF PROJECT:

The approximate cost for purchase of security system equipment will be \$20,000 with an additional \$25,000 needed for supplies to convert the library collection to the new system. The use of such a system would prevent the loss of library materials due to theft. This system could be coordinated with RFID technology for future circulation related uses.

L11 SECURITY SYSTEM FOR LIBRARY MATERIALS						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture			45,000			45,000
Other						0
						0
TOTAL	0	0	45,000	0	0	45,000
<u>FUNDING SOURCE</u>						
General Fund Reserves			45,000			45,000
						0
						0
TOTAL FUNDING SOURCES	0	0	45,000	0	0	45,000

L14

PRINT VENDING SYSTEM

Library

DEPARTMENT

PROJECT DESCRIPTION:

This project will provide for the purchase of a self-service print vending system for use with public access computers.

DISCUSSION OF PROJECT:

This project no longer qualifies for the CIP budget. The cost of the equipment has decreased significantly due to a change in software.

L14 PRINT VENDING SYSTEM						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	5,000					5,000
Other						0
						0
TOTAL	5,000	0	0	0	0	5,000
<u>FUNDING SOURCE</u>						
Information System Fund	5,000					5,000
						0
						0
TOTAL FUNDING SOURCES	5,000	0	0	0	0	5,000

L15

FURNISHINGS FOR RENOVATED LIBRARY SPACE

Library

DEPARTMENT

PROJECT DESCRIPTION:

This project will provide for the purchase of a furniture, shelving, and artwork to furnish the renovated space in the library.

DISCUSSION OF PROJECT:

The approximate cost for purchase of furnishings to complete the renovation project is \$200,000.

L15 FURNISHINGS FOR RENOVATED LIBRARY SPACE						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	100,000	100,000				200,000
Other						0
						0
TOTAL	100,000	100,000	0	0	0	200,000
<u>FUNDING SOURCE</u>						
General Fund Reserves						0
Library Foundation Campaign	100,000	100,000				200,000
						0
TOTAL FUNDING SOURCES	100,000	100,000	0	0	0	200,000

AQ 2

AQUATIC CENTER PARKING LOT EXPANSION

Aquatics

Department

PROJECT DESCRIPTION:

This project, in cooperation with Pacific University, will add approximately 22 additional parking spaces to the lot at the Aquatic Center.

DISCUSSION OF PROJECT:

The City Council has approved an easement agreement with Pacific University for joint use of property the University owns north of the Aquatic Center. This is the last project related to the Lincoln Park renovation. The City of Forest Grove's obligation is to complete design and construction of the site.

AQ2 Aquatic Center Parking Expansion						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering			5,000			5,000
Site Preparation						0
Construction			110,000			110,000
Equipment/Furniture						0
Contingency						0
						0
TOTAL	0	0	115,000	0	0	115,000
<u>FUNDING SOURCE</u>						
Parks SDC Funds			115,000			115,000
						0
						0
TOTAL FUNDING SOURCES	0	0	115,000	0	0	115,000

PR9

ROGERS PARK RENOVATION

Parks & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Make improvements to park based on master plan.

DISCUSSION OF PROJECT:

Renovation of Rogers Park started in 1995-96 has continued. Remaining work includes restroom construction and possible construction of an additional picnic shelter. Included also will be expansion of play equipment, the relocation of sand play area and additional benches for park users. This project is identified in the Parks and Recreation Master Plan.

PR9 ROGERS PARK RENOVATION						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering			21,200			21,200
Site Preparation						0
Construction			180,000			180,000
Equipment/Furniture			110,000			110,000
Contingency			28,000			28,000
						0
TOTAL	0	0	339,200	0	0	339,200
<u>FUNDING SOURCE</u>						
Grant funding			339,200			339,200
						0
TOTAL FUNDING SOURCES	0	0	339,200	0	0	339,200

PR12 LINCOLN PARK LAND ACQUISITION AND DEVELOPMENT

Parks & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Ten acres of additional parkland will be purchased adjacent to Lincoln Park and will be developed.

DISCUSSION OF PROJECT:

Lincoln Park has 22.5 acres, most of which are developed for active play. There is a need for more passive areas and picnic space. Community parks are usually 20-30 acres in size. When organized play is taking place in the park, there is little space for group and family picnics. Land acquisition will take place as property becomes available. Anticipated funding will come from SDC's.

PR12 LINCOLN PARK LAND ACQUISITION AND DEVELOPMENT

COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Land Purchase				1,150,000		1,150,000
						0
TOTAL	0	0	0	1,150,000	0	1,150,000
FUNDING SOURCE						
						0
SDC (Future)				1,150,000		1,150,000
						0
TOTAL FUNDING SOURCES	0	0	0	1,150,000	0	1,150,000

Park & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Development of trails/greenways/linear parks that connect these areas to each other and various parks and recreational facilities in the community.

DISCUSSION OF PROJECT:

During the development of the Parks Master Plan in 2002 it became clear that connecting our community with trails and greenways is a high priority to the citizens. These projects provide ten opportunities to circle our community and add trail connections to parklands. Cost will be shared by in-kind donations and SDC funds. The projects listed in the 5 year CIP include the "B" street trail project that will connect old town and Highway 47 along city owned property and a section of trail that loops and then connects the B Street Trail with Old Town.

PR13 TRAILS/GREENWAYS/LINEAR PARKS						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	87,000		90,000			177,000
Site Preparation						0
Construction	520,000		450,000			970,000
In-Kind Construction Services						0
Equipment/Furniture						0
Land Acquisition						0
Contingency	10,000		8,500			18,500
TOTAL	617,000	0	548,500	0	0	1,165,500
<u>FUNDING SOURCE</u>						
SDC	170,000		274,250			444,250
Grants	288,000		274,250			562,250
Solid Waste Contribution	50,000					50,000
Street (MSTIP 3b)	109,000					109,000
TOTAL FUNDING SOURCES	617,000	0	548,500	0	0	1,165,500

Park & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Develop 15 acres of open space and park land in the north-northwest section of Forest Grove.

DISCUSSION OF PROJECT:

Thatcher Park (Loomis Property) was purchased with Metro Greenspaces Funds in FY 2000. This site will remain a passive recreation area in accordance with the Greenspaces program. Development of a master plan and management plan for this property is included in this project. Improvements may include interpretive trail and signage, benches, picnic tables and parking area. Phase II of the active area of the park will include features approved in the Master Plan adopted in 2008. This area will include water spray recreation area, picnic areas, trail development, and additional parking.

PR14 THATCHER PARK PHASE II						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering				150,000	50,000	200,000
Site Preparation						0
Construction					1,800,000	1,800,000
Equipment/Furniture						0
						0
						0
TOTAL	0	0	0	150,000	1,850,000	2,000,000
<u>FUNDING SOURCE</u>						
Parks SDC				150,000	950,000	1,100,000
Grants					900,000	900,000
						0
TOTAL FUNDING SOURCES	0	0	0	150,000	1,850,000	2,000,000

PR25

BARD PARK IMPROVEMENTS

Parks & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Continue improvements to Bard Park.

DISCUSSION OF PROJECT:

Bard Park received a major renovation in FY 2005-06. This project continues this renovation with construction of restrooms and new playground equipment. This well-used facility has playground equipment that was installed in the early 1990's. This equipment was not replaced in the 05-06 renovation.

PR25 BARD PARK IMPROVEMENTS						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering			20,000			20,000
Site Preparation						0
Construction			180,000			180,000
Equipment/Furniture			110,000			110,000
Contingency			20,000			20,000
						0
TOTAL	0	0	330,000	0	0	330,000
FUNDING SOURCE						
Grants			165,000			165,000
SDC Funds			165,000			165,000
TOTAL FUNDING SOURCES	0	0	330,000	0	0	330,000

Parks & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

This project will develop an off-leash dog park in the community.

DISCUSSION OF PROJECT:

The development of an off-leash dog park has become an interest to a number of community members. While this project is not a part of the Master Plan adopted in 2002, it has become needed in the community. This project would provide perimeter fencing, separate areas for large and small dogs, a water supply, and parking.

PR26 OFF-LEASH AREA DEVELOPMENT						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction		70,000				70,000
Equipment/Furniture						0
Contingency		7,500				7,500
						0
TOTAL	0	77,500	0	0	0	77,500
FUNDING SOURCE						
						0
In-Kind Donation		77,500				77,500
						0
TOTAL FUNDING SOURCES	0	77,500	0	0	0	77,500

**GENERAL
GOVERNMENT
PROJECTS**

GENERAL GOVERNMENT PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
AS29	Storage Building (Replace Old L&P Bldg)	0	0	160,000	0	0	160,000
AS30	Replace Telephone System	24,000	0	0	0	100,000	124,000
AS33	Downtown Parking Improvements	0	0	70,000	0	0	70,000
AS34	Fiber Optic	62,000	0	0	0	0	62,000
AS35	Downtown Campus Improvement Project	0	0	0	0	14,750,000	14,750,000
CD1	Permit Software	0	98,000	0	0	0	98,000
	ADMINISTRATIVE SERVICES TOTAL	86,000	98,000	230,000	0	14,850,000	15,264,000
	GENERAL GOVERNMENT TOTALS	86,000	98,000	230,000	0	14,850,000	15,264,000
Bold = NEW PROJECTS							

Administrative Services

DEPARTMENT

PROJECT DESCRIPTION:

The project will replace the deteriorating building on B Street across from the Transfer Station that was formerly the Light & Power Department Building.

DISCUSSION OF PROJECT:

The old Light & Power building is currently used for storage. It is an old building and is deteriorating. Our insurance company has asked us what our plan for the building as they believe the building should be torn down and replaced if the City needs the space provided by the building. The insurance company commented the building has fallen into disrepair and will eventually become hazardous. The building is currently used by several departments to store various items. Since the City lacks indoor storage space, the preliminary plan is to construct (erect) a new storage building that can be separated into sections so departments that need to keep their items secure can have a separate area. The replacement building might not be located at that site depending on space availability at other sites.

AS29 STORAGE BUILDING (REPLACE OLD L&P BUILDING)						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction			160,000			160,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	160,000	0	0	160,000
FUNDING SOURCE						
CIP Excise Tax Fund			80,000			80,000
Capital Projects Fund			50,000			50,000
Light & Power Fund			30,000			30,000
TOTAL FUNDING SOURCES	0	0	160,000	0	0	160,000

Administrative Services

DEPARTMENT

PROJECT DESCRIPTION:

The project will replace the current telephone system with a new telephone system.

DISCUSSION OF PROJECT:

The current telephone system was installed in 2000. The phone system will continue to age and technology continues to advance. The phone system is currently being upgraded so the City can continue to function in the near future. The main switch will be upgraded by replacing and upgrading the hardware and software within the current switch. Eventually the City will replace the current system with a VOIP (voice-over-internet-protocol) system. The City is not ready to go to a VOIP system yet as the fiber optic system is not completed and network switches at many buildings would need to be replaced. This project will allow for the implementation of a replacement phone system in the future.

The upgrade discussed above was scheduled to be completed by June 30, 2009. The project will not happen now until July or August 2009, so the funds for the upgrade need to be added to the CIP Plan so the CIP Excise Tax Funds can be used to fund the upgrade.

AS30 REPLACE TELEPHONE SYSTEM						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	24,000				100,000	124,000
Other						0
						0
TOTAL	24,000	0	0	0	100,000	124,000
FUNDING SOURCE						
GFSS Charges					50,000	50,000
CIP Excise Tax Fund	24,000				20,000	44,000
Information Systems Fund					30,000	30,000
TOTAL FUNDING SOURCES	24,000	0	0	0	100,000	124,000

Administrative Services

DEPARTMENT

PROJECT DESCRIPTION:

The project will repair and improve the City-owned downtown parking lots.

DISCUSSION OF PROJECT:

The City-owned parking lots on 19th Street east of Main Street (including the alley from the bank parking lots) and central parking lot behind the downtown business are in need of repair. This project would repair those lots and help improve the appearance of the downtown area. No specific design has been done so the cost of the project is an estimate. In the next fiscal year, the Engineering Department will be asked to assess the condition of the parking lots and what work needs to be done to repair the lots. For the 19th Street parking lot, it is anticipated that grinding down of some of the parking lot and an overlay with asphalt will be required.

AS33 DOWNTOWN PARKING						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation			10,000			10,000
Construction			60,000			60,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	70,000	0	0	70,000
FUNDING SOURCE						
Capital Projects Fund						0
General Fund			70,000			70,000
						0
TOTAL FUNDING SOURCES	0	0	70,000	0	0	70,000

Administrative Services

DEPARTMENT

PROJECT DESCRIPTION:

The project will connect all City building except for the Water Treatment Plant with fiber optic cable.

DISCUSSION OF PROJECT:

City Hall, Engineering, Police, Fire, and Library are currently connected to each by fiber optic. The remaining buildings (Light & Power, Public Works, Aquatics, and the Water Treatment Plant) are connected to the other building by copper telephone line using high-speed modems. In order to improve connection speed so departments can fully utilize certain software and to be able to consolidate servers to the City's server room, all of the buildings except the Water Treatment Plant will be connected by fiber optic cable.

AS34 FIBER OPTIC PROJECT						
<u>COSTS</u>	<u>2009-10</u>	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	45,000					45,000
Installation	17,000					17,000
						0
TOTAL	62,000	0	0	0	0	62,000
<u>FUNDING SOURCE</u>						
Capital Projects Fund	15,000					15,000
Light & Power Fund	25,000					25,000
Water Fund	22,000					22,000
TOTAL FUNDING SOURCES	62,000	0	0	0	0	62,000

Administrative Services

DEPARTMENT

PROJECT DESCRIPTION:

The project will construct a new police facility and remodel existing City facilities.

DISCUSSION OF PROJECT:

The City is currently completing a Master Facility Plan Update for the downtown campus (City Hall, Engineering, Police, Fire, and Library), Light & Power, and Public Works. The update should be complete within the next few months. The most likely option for the downtown campus is a new Police facility and the current Police facility and City Hall remodeled. Even though the final option with cost estimates has not been completed, this project is being added to allow discussion of the project to commence. The project can be done in phases so the costs and timing of phasing the project can be included in the discussions. The current funding source identified is a general obligation bond for the project.

AS 35 DOWNTOWN CAMPUS IMPROVEMENT PROJECT

COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering					1,500,000	1,500,000
Construction					12,500,000	12,500,000
Equipment/Furniture					750,000	750,000
Contingency						0
						0
TOTAL	0	0	0	0	14,750,000	14,750,000
FUNDING SOURCE						
General Obligation Bond					14,750,000	14,750,000
						0
						0
TOTAL FUNDING SOURCES	0	0	0	0	14,750,000	14,750,000

Community Development

DEPARTMENT

PROJECT DESCRIPTION:

Acquisition and implementation of an updated permit tracking software.

DISCUSSION OF PROJECT:

The project is the purchase and implementation of permit tracking software. Currently, the City has a permit tracking software purchased in 1998. The current software is not user friendly and has limited functionality and reporting capability.

Due to its age, the software is not supported and new features cannot be added. Potential expansions that may be available with a new software package include web based permit information and application submittals, in-the-field electronic data inputs, geo-based data, and interactive voice recognition (IVR).

CD1 UPDATED PERMIT TRACKING SOFTWARE						
COSTS	2009-10	2010-11	2011-12	2012-13	2013-14	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	0	98,000				98,000
Other						0
						0
TOTAL	0	98,000	0	0	0	98,000
<u>FUNDING SOURCE</u>						
General Fund	0	0	0	0		0
Building Fund	0	98,000	0	0		98,000
						0
TOTAL FUNDING SOURCES	0	98,000	0	0	0	98,000