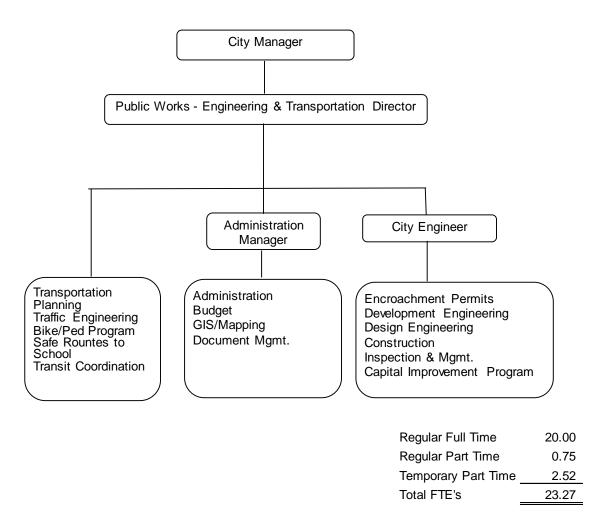
# **Public Works - Engineering & Transportation Department**



# PUBLIC WORKS ENGINEERING & TRANSPORTATION DEPARTMENT

**DEPARTMENT OVERVIEW** 

The Department provides technical support to; the City's infrastructure operating divisions by leading studies and preparing construction documents; to private developers by reviewing construction requests and issuing permits; and to other internal Departments and Divisions by providing a range of technical support services in transportation and general municipal engineering. The Department also manages the City's Capital Improvement Program, Traffic Engineering responsibilities, long term Transportation Planning, Bicycle/Pedestrian and Streetsmarts/Safe Routes to School Programs and acts as the City's liaison to local and regional transportation agencies, including Unitrans and Yolobus.

#### Activities include:

- Provide engineering design and construction inspection services for public improvements in private subdivisions and for city capital improvement projects.
- Contract administration for intra-city/inter-city public transit.
- · Provide staff support to related commissions.

#### **FY 2018-2019 DEPARTMENT ACCOMPLISHMENTS**

- Successfully pursued a grant that resulted in the City receiving an award of \$5 million from the State for the I-80/Richards Blvd. Interchange project.
- Completed the installation of the Downtown Parking Guidance system to help inform travelers where to efficiently find available public parking.
- Completed construction activity on major projects including: roadwork on L Street, Mace Blvd., and Tim Spencer Alley; water main replacement on tamarack Lane; Facilities improvements at the Veterans Memorial Center; and repairs at Manor and Arroyo Pools.
- Completed the Third Street Corridor project between downtown and the UC Davis campus.
- Completed the Anderson Blvd. Corridor Study identifying potential long-term strategies to improve the corridor to a complete street standard and safely allow al modal users to travel along this major arterial.
- Developed software to utilize the Parking Enforcement License Plate Reading technology to automate the collection of downtown parking occupancy data.
- Completed an update to the residential traffic calming program guidelines.
- Implemented the Bike Share project in partnership with SACOG. The program brings 180 electric-assist bikes to the community to offer an environmentally sensitive transportation option for residents.

#### FY 2019-20 and FY2020-21 DEPARTMENT GOALS

Efficiently complete the creation of the new department and the splitting of resources, information and processes from the former Public Works Department.

- Find and retain a Traffic Engineer to lead the Traffic Calming and other transportation technical tasks assigned to the Department.
- Combine the previously separate Safe Routes to School, Streetsmarts and Bicycle/Pedestrian Program resources into one comprehensive Program.
- Continue to evolve the public outreach for our CIP and Transportation Program activities to timely inform the community of our planned activities.
- > Implement GIS to better serve staff in carrying out their duties and to be used to provide visually helpful information to the public.
- Continue pursuit of expanding field personnel access to utility information and providing field crews the ability to conduct field inspection of assets using mobile devices, thereby doing away with paper forms and the need for duplicate data entry of inspection results into the assets management program.

#### **BUDGET HIGHLIGHTS**

Public Works Department has split into two Departments as of the FY 2019/20 Adopted Budget and FY 2020/21 Financial Plan. The PW Operations and Utilities were reported together with Public Works Engineering & Transportation in prior years. Below are brief highlights of the new Public Works Engineering & Transportation Department.

- > Salaries/wages have increased a little more than 2% in the adopted budget due to cost of living adjustments and other step increases consistent with the MOU.
- > Funding for contract civil engineer services (\$250,000) is included in the FY 2019/20 Adopted Budget, which will be necessary to accomplish the reorganization of the Public Works Department into two independent departments. The split separates engineering and all transportation engineering, planning and bicycle/pedestrian program functions into a new department. As part of the split, the current Assistant City Engineer overseeing all Transportation functions will stay with the field operations staff in Utilities and Operations, creating a need for a new managing Transportation Engineer to serve as the City's Traffic Engineer and oversee Traffic Engineering, Transportation Planning, Bike/Pedestrian Program, Safe Routes to School Program and Unitrans/YCTD transit service liaison functions. Rather than create a new position at this time, the Department will contract for the necessary services.
- > A 0.75 FTE permanent position supporting the Safe Routes to School Program was transferred from the City Manager's Office to the department to better coordinate bicycle and pedestrian programs and education with other existing programs already resourced in the Transportation Division.

Budget Descriptions	FY 2017/18 Actual	FY 2018/19 Projected	FY 2019/20 Adopted Budget	FY 2020/21 Financial Plan
Source of Funds				
Enterprise Funds	-	-	6,975,373	6,973,272
General Fund Support	-	-	2,537,107	2,588,230
Special Revenue Funds	-	-	356,697	356,099
Total Revenues			9,869,177	9,917,601
Expenses by Division				
Division				
Administration	-	-	542,952	560,441
Transportation	-	-	7,887,208	7,909,434
Engineering	-	-	1,439,017	1,447,726
Total Expenditures			9,869,177	9,917,601
Expenses by Category				
Personnel Costs				
Salaries/Wages	-	-	1,315,884	1,339,956
Retirement- PERS	-	-	414,959	450,118
Cafeteria Benefits	-	-	218,105	219,730
Retiree Health (OPEB)	-	-	295,756	304,622
Other Pays	-	-	94,964	93,454
Total Personnel			2,339,668	2,407,880
Operations and Maintenance				
Operating Expenditures	-	-	6,713,032	6,718,146
Contracts/Professional Services	-	-	545,108	545,108
Interdepartment Charges	-	-	271,369	246,467
Capital Outlay	-	-	-	-
Total Operations and Maintenance			7,529,509	7,509,721
Total Appropriations			9,869,177	9,917,601

Fiscal Year 2019/20

			<b>EXPENDITURE</b>	EXPENDITURES BY CATEGORY	i,		FL	FUNDING SOURCES	S
			Contracts &	Inter-					
	Salaries &	Operations &	Professional	departmental	Capital				
Program	Benefits	Maintenance	Services	Charges	Outlay	Program Total	General Fund	Other Funds	Program Total
61 - Administration	498,855	14,950	1,200	27,947	•	542,952	523,834	19,118	542,952
62 -Transportation	787,316	6,661,066	422,448	16,378	•	7,887,208	982,186	6,905,022	7,887,208
66 - Engineering	1,048,386	42,127	121,460	227,044		1,439,017	1,031,087	407,930	1,439,017
TOTAL PUBLIC WORKS ENGINEERING & TRANSP	2,334,557	6,718,143	545,108	271,369	-	9,869,177	2,537,107	7,332,070	9,869,177
			EXPENDITURES	EXPENDITURES BY CATEGORY	>		FU	FUNDING SOURCES	S
			Contracts &	Inter-					
	Salaries &	Operations &	Professional	departmental	Capital				
Program	Benefits	Maintenance	Services	Charges	Outlay	Program Total	General Fund	Other Funds	Program Total
6101 - Administration	281,695	14,950	1,200	25,907		323,752	323,752	•	323,752
6155 - Public Information	969'66	•	ı	2,040	1	101,736	82,618	19,118	101,736
6160 - Mapping/GIS Data	117,464				•	117,464	117,464		117,464
6234 - Transportation Planning	196,136	7,000	3,000		•	206,136	206,136		206,136
6251 - Bicycle/Pedestrian Transportation	324,344	32,700	134,048	13,577		504,669	233,491	271,178	504,669
6254 - Traffic Engineering	266,761	11,745	265,000	•		543,506	542,496	1,010	543,506
6263 - Public Transportation	75	6,609,621	20,400	2,801		6,632,897	63	6,632,834	6,632,897
6602 - Preliminary Engineering	158,620	22,530	11,260	194,838		387,248	257,849	129,399	387,248
6605 - Planning Entitlement Support	177,190	200	105,000	520	•	283,210	282,390	820	283,210
6642 - Engineering Development	204,490	13,270	4,100	19,982	•	241,842	68,932	172,910	241,842
6643 - Public Works Permits	474,822	1,118	1,100	11,704		488,744	390,550	98,194	488,744
6660 - Mapping	32,973	2,000	•		•	37,973	31,366	6,607	37,973
TOTAL PUBLIC WORKS TRANSP & ENGINEERING	2,334,266	6,718,434	545,108	271,369		9,869,177	2,537,107	7,332,070	9,869,177

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	EXPEND	EXPENDITURES BY CATEGORY	IEGORY				FL	FUNDING SOURCES	S
			Contracts &	Inter-					
	Salaries &	Operations &	Professional	departmental					
Program	Benefits	Maintenance	Services	Charges	Capital Outlay	Program Total	General Fund	Other Funds	Program Total
61 - Administration	516,263	14,950	1,200	28,028		560,441	540,391	20,050	560,441
62 -Transportation	809,542	6,661,066	422,448	16,378	•	7,909,434	999,055	6,910,379	7,909,434
66 - Engineering	1,082,075	42,130	121,460	202,061	-	1,447,726	1,048,784	398,942	1,447,726
TOTAL PUBLIC WORKS ENGINEERING & TRANSP	2,407,880	6,718,146	545,108	246,467	-	9,917,601	2,588,230	7,329,371	9,917,601
		FISCAL YE	FISCAL YEAR 2020/21 EXPENDITURES BY CATEGORY	PENDITURES B	Y CATEGORY		FU	FUNDING SOURCES	S
			Contracts &	Inter-					
	Salaries &	Operations &	Professional	departmental					
Program	Benefits	Maintenance	Services	Charges	Capital Outlay	Program Total	General Fund	Other Funds	Program Total
6101 - Administration	291,199	14,950	1,200	25,907	•	333,256	333,256	•	333,256
6155 - Public Information	104,102	•		2,121	•	106,223	86,173	20,050	106,223
6160 - Mapping/GIS Data	120,962	•	•	•	•	120,962	120,962	•	120,962
6234 - Transportation Planning	201,859	7,000	3,000	•	•	211,859	211,859	•	211,859
6251 - Bicycle/Pedestrian Transportation	333,425	32,700	134,048	13,577	•	513,750	237,247	276,503	513,750
6254 - Traffic Engineering	274,183	11,745	265,000	•		550,928	549,918	1,010	550,928
6263 - Public Transportation	75	6,609,621	20,400	2,801		6,632,897	31	6,632,866	6,632,897
6602 - Preliminary Engineering	163,286	22,532	11,260	180,740	•	377,818	258,460	119,358	377,818
6605 - Planning Entitlement Support	183,774	200	105,000	240		289,814	288,974	840	289,814
6642 - Engineering Development	213,503	13,270	4,100	20,781	•	251,654	70,592	181,062	251,654
6643 - Public Works Permits	487,233	826	1,100	•	•	489,159	398,377	90,782	489,159
6660 - Mapping	34,279	5,002		•	•	39,281	32,381	006'9	39,281
TOTAL PUBLIC WORKS ENGINEERING & TRANSP	2.407.880	6.718.146	545,108	246.467		9.917.601	2.588.230	7.329.371	9.917.601

# **ADMINISTRATION - DIVISION 61**

The Administration Division provides policy administration and management of the overall operation of the Department. The Administration Division provides department leadership, support, information and expertise in the following areas:

- Departmental financial and budget management
- Public communication, response and engagement
- Human Resources coordination
- Contract and grant management
- Executive and management team support

#### **FY 2018-19 ACCOMPLISHMENTS**

Public Works – Engineering & Transportation is a new department beginning in FY 2019/20. Accomplishments addressing the new department's areas of responsibility that occurred in FY 2018/19 were part of the former Public Works Department administrative functions and included;



- Processed grant reimbursements and received from Caltrans grant revenue of more than \$5M related to four Capital projects (Mace Blvd, Third Street, L Street and 14th St/Villanova).
- Provided administrative staff support directly to Engineering after the departure of their full time Administrative Aide.
- Supported eight recruitments for full-time and temporary staff positions in Engineering and Transportation
- Provided fiscal support on approximately 500 purchase orders related to Engineering and Transportation activity.
- Addressed the budgetary, personnel and organizational changes resulting from the City Manager's decision to split the Public works department into two separate Departments.

#### FY 2019-20 and FY 2020-21 GOALS

- Complete the transition of the Public Works reorganization into two departments, including the division of electronic and physical files, revising guidance and operating documents, changing Ordinances and physically relocating staff, equipment and furniture to accommodate the new staff organization.
- Complete recruitments to hire a new Management Analyst to lead the Administrative functions of the Department and a new Principle Civil Engineer to lead the Transportation Division.
- Improve community communication efforts of Department activity.

#### PERFORMANCE MEASURES

- Tracking frequency and types of PW Web e-mails and response times.
- Distribution of public inquiries and outreach memorandum in a timely manner
- Number of Standard Operating Procedures created, or updated.
- Budget trends and analysis over the year.
- POs created and Invoices processed
- Number of Policies/Ordinances reviewed and updated.

# **ADMINISTRATION - DIVISION 61**

Budget Descriptions	FY 2017/18 Actual	FY 2018/19 Projected	FY 2019/20 Adopted Budget	FY 2020/21 Financial Plan
		.,		
Revenues				
Enterprise Funds	-	-	15,920	16,696
General Fund Support	-	-	523,834	540,391
Special Revenue Funds	-	-	3,198	3,354
Total Revenues			542,952	560,441
Appropriations				
Personnel Costs				
Salaries/Wages	-	-	266,973	273,896
Retirement- PERS	-	-	94,280	102,338
Cafeteria Benefits	-	-	59,555	60,098
Retiree Health (OPEB)	-	-	61,821	63,317
Other Pays	-	-	16,226	16,614
Total Personnel			498,855	516,263
Operations and Maintenance				
Operating Expenditures	-	-	14,950	14,950
Contracts/Professional Services	-	-	1,200	1,200
Interdepartment Charges	-	-	27,947	28,028
Capital Outlay	-	-		
Total Operations and Maintenance			44,097	44,178
Total Appropriations _	<u>-</u>	-	542,952	560,441

#### Transportation – Division 62

The City's Transportation Division plans for improvements to the City's transportation infrastructure for the safe and efficient use by pedestrians, bicyclists, motorists, and public transit users.

The division consists of three programs comprised of 4.75 full-time staff members, including Traffic Engineering, Transportation Planning and the Bike/Pedestrian Program. Members of the Transportation Division also staff the Bicycling, Transportation, and Street Safety Commission (BTSSC) and the Unitrans Advisory Committee, are liaisons to the Yolo County Transportation District and SACOG, and staff the Safe Routes to School and StreetSmarts initiatives.

The division responsibilities include:

- Traffic engineering studies
- Transportation corridor advance planning
- Bicycle education, safety, and promotion
- Safe Routes to Schools and StreetSmarts initiatives
- Bike rack/locker installation and maintenance
- Interagency coordination with UC Davis Transportation and Parking Services, Yolo County Transportation District, Yolo Transportation Management Association, Sacramento Area Council of Governments, Caltrans, Unitrans, and non-governmental organizations
- Administer Unitrans and Yolobus contracts and pass-through grants
- Traffic Calming Program
- Transportation design review of new development.
- Downtown & neighborhood parking policy.
- Grant writing

#### **FY 2018 - 19 ACCOMPLISHMENTS**

- Updated the City of Davis and UC Davis bike map. The new map was created in GIS which allows for future updates to occur on a more regular basis.
- Organized and attended 88 community bike/ped events in FY 18-19. The majority of events, 48 were focused on bike education. The remainder of events were concentrated on encouragement, enjoyment, equity, and enforcement.
- Relaunched the www.gettingarounddavis.org website. The website includes information about travel options and community events.
- Completed downtown paid parking implementation plan.
- Supported the design and construction efforts for over 20 capital projects.
- Updated Transportation Implementation Plan.
- Held two Travel Training workshop for seniors & mobility-challenged citizens to help them access fixed route transit, paratransit, and ridesharing.



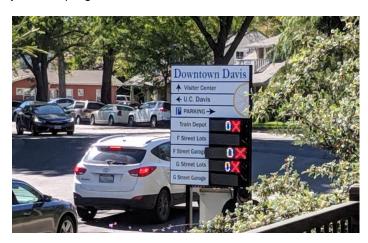
- Continued Light the Night and Lights in a Pinch campaigns to help improve bicycling safety at night.
- Supported regional May is Bike Month campaign.
- Held Car Free October campaign.
- Partnered on implementation of Sacramento Area Council of Governments (SACOG) Regional Bike Share project with the Cities of Sacramento, West Sacramento, UC Davis, Regional Transit, and Sacramento State.
- Chaired Yolo Commute and Cool Davis Transportation Task Force organizations.
- Completed development of residential traffic calming program.
- Completed Anderson Road Improvements planning and outreach phase.

#### **FY 2019-20 GOALS**

- Contract for Principal Civil Engineer services
- Implement downtown paid parking.
- Implement residential traffic calming program.
- Initiate corridor study for Second Street
- Complete Phase 2 of the Bike/Pedestrian Wayfinding project.
- Conduct a citywide household travel survey.
- Complete annual Transportation Implementation Plan report.
- Transition Safe Routes to School to a locally funded program in Public Works.

#### PERFORMANCE MEASURES

- Complete evaluation of 10 20 traffic calming requests, depending on budget availability.
- Complete traffic volume counts and speed surveys on 20% of the required streets to support a five year cycle to maintain current data on traffic.
- Provide at least one transportation educational event at every school in the DJUSD.



# **TRANSPORTATION - DIVISION 62**

Budget Descriptions	FY 2017/18 Actual	FY 2018/19 Projected	FY 2019/20 Adopted Budget	FY 2020/21 Financial Plan
Revenues				
Enterprise Funds			6,632,834	6,632,866
General Fund Support	-	_	982,186	999,055
Special Revenue Funds	_	_	272,188	277,513
Total Revenues	-	<u> </u>	7,887,208	7,909,434
Appropriations				
Personnel Costs				
Salaries/Wages	-	-	446,206	454,167
Retirement- PERS	-	-	131,827	141,753
Cafeteria Benefits	-	-	89,103	89,862
Retiree Health (OPEB)	_	-	94,518	96,430
Other Pays	-	-	25,662	27,330
Total Personnel	-	-	787,316	809,542
Operations and Maintenance				
Operating Expenditures	-	-	6,661,066	6,661,066
Contracts/Professional Services	-	-	422,448	422,448
Interdepartment Charges	-	-	16,378	16,378
Capital Outlay				
Total Operations and Maintenance	-	-	7,099,892	7,099,892
Total Appropriations	-	-	7,887,208	7,909,434

#### **ENGINEERING - DIVISION 66**

The Engineering Division strives to enhance the quality of life for residents by planning, designing and constructing reliable and cost-effective public works facilities and systems in a manner that emphasizes longevity and good stewardship of environmental and fiscal resources. This includes managing construction of new infrastructure by developers to ensure the same goals are accomplished. This mission is achieved through the efficient use of resources, technology, innovation, teamwork, and coordination with other service providers in the City.

#### **FY 2018-19 ACCOMPLISHMENTS**



The Engineering Division tasks include;

- Administering the City's Capital Improvement Program (CIP) and other public works projects to support operational programs
- Processing development applications and encroachment permits
- Managing the budget for all CIP Projects
- Managing up to 14 on-call consultant firms for design work and other professional services
- Construction management and inspection of all CIP projects
- Working with the City asset groups to support their engineering and technical needs
- Providing weekly updates to the City Manager's Office

#### Capital Improvement Program projects

Several large CIP projects were delivered this year that took significant effort and coordination to complete in spite of significant impacts with utility coordination issues due to the major California fires. These large projects included the Third Street surface improvements between A and B, the L Street corridor improvements between Fifth and Covell, the Mace Boulevard corridor improvements from Cowell to Redbud, the Tim Spencer Alley rehabilitation, the sidewalk improvements on 2<sup>nd</sup> street near G, the VMC interior modernization, and the new bike undercrossing on Covell at the Cannery.

#### **Operational Project Support**

Engineering provided support to the Facilities division, the Wastewater Division, the Parks Department, and the Fire Department in FY 2018/19. Projects supported included studying and planning for the replacement of the VMC siding and roof; efforts towards improving the historic restroom near the Hattie Weber Museum; design efforts for repairing the Hunt Boyer Mansion due to settlement; repairing the damaged road to the wetlands area; upgrading various wastewater maintenance holes; design efforts for replacing the corroded electrical system for the Community Pool; and design efforts for upgrading the kitchens in Fire Stations 31 and 32.

#### **Development and Permitting**

Engineering provided review and comments on many tenant improvements, some environmental impact reports, design review, and improvement plans for new development. We also provided inspection services for some of the site improvements of new construction including the Marriott Residence Inn on 2<sup>nd</sup> and Mace Blvd, the Creekside and the Sterling apartments on 5<sup>th</sup> Street, and the Grande subdivision. Some of the more prominent efforts include the EIR review for Bretton Woods, map and improvement plan review for Lincoln 40, map and improvement plan review for the Mace and Alhambra site which will include the new building for the Nugget Market headquarters, review of all cannabis business locations, and review and input on the Downtown Plan Update.



#### FY 2019-20 and FY 2020-21 GOALS

#### Capital Improvement Program projects

Deliver on time and within budget the major planned CIP activity for FY19/20, including; the I-80/Richards Blvd Interchange modifications, the new bike path connection from Pole line Road to Olive Drive, improvements along 14<sup>th</sup> Street and Villanova Drive, the Russell Green Street Demonstration project at City Hall, the Bike Pump Track at Community Park, the improvements of the bike path connection at Tulip and Ponteverde, the Downtown Restrooms, and the lighting at the dog park at Toad Hollow.

Improving communication and engagement with the community is a priority with plans being initiated to enhance the information available on the City website about projects, particularly timing and construction impacts that residents will want to be aware of. Staff are working with the City Manager's Office to develop a standard approach for keeping the community informed via social media and other electronic communication platforms is underway and will be finalized and implemented early in FY 19/20.

#### **Development and Permitting**

Goals for FY 19/20 continue to focus on standardization and optimizing department processes. Standard Operating Procedures continue to be developed for various activities to streamline processes to minimize approval times. Templates are being created to provide a more consistent workflow with input from various departments during development review, and plan check processes. For permitting, and development, our goal is to continue to add more online forms so the public can complete forms online, and electronically process them, as well as have a checklist of items required for each application, or permit.

Improvements are planned for inspection processes to increase efficiency in completing the daily and weekly reporting documents. The goal is to create a template combining multiple forms into one linked file, and make it user friendly to eliminate/reduce unnecessary or redundant work.

The Division is also working on using Geographic Information System (GIS) Mapping Technology in a more prominent fashion. Some goals are to use GIS to track new developments, and recorded documents, track pavement conditions, and any moratorium on recently repaired streets. Developing an application to help staff report and track sidewalk damage that needs to be repaired or replaced to meet ADA standards will also help select concrete replacement locations for the annual concrete replacement project.

#### PERFORMANCE MEASURES

- Percent Change Orders: For CIP projects, track the percentage of the project that results in change orders
- Contract Bid vs Engineer's Estimate: Track degree of accuracy of engineer's estimates.
- CIP Jobs Bid on Time: Quantity of jobs awarded per the master schedule for projects approved during the budget process.
- CIP Jobs Completed on Time: Determine if CIPs were completed within the given working days per each contract.
- Record Documentation: Set a schedule for updating maps and permanent databases as new construction is completed and adhere to this schedule.
- Track timeliness of new development applications being processed (TM, FM, Construction).
- Track number of and resources expended on encroachment permits.
- Track amount of time spent responding to public information requests.
- Compare anticipated revenue with actual revenue collected and with actual staff costs to determine if fees are set appropriately.

### **ENGINEERING SERVICES - DIVISION 66**

	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
Budget Descriptions	Actual	Projected	Adopted Budget	Financial Plan
Revenues				
Enterprise Funds	-	-	326,619	323,710
General Fund Support	-	-	1,031,087	1,048,784
Special Revenue Funds	-	-	81,311	75,232
Total Revenues	-	-	1,439,017	1,447,726
Appropriations				
Personnel Costs				
Salaries/Wages	-	-	602,705	611,893
Retirement- PERS	-	-	188,852	206,027
Cafeteria Benefits	-	-	69,447	69,770
Retiree Health (OPEB)	-	-	139,417	144,875
Other Pays	-	-	47,965	49,510
Total Personnel	-	-	1,048,386	1,082,075
Operations and Maintenance				
Operating Expenditures	-	-	42,127	42,130
Contracts/Professional Services	-	-	121,460	121,460
Interdepartment Charges	-	-	227,044	202,061
Capital Outlay	-	-	-	-
Total Operations and Maintenance	-	-	390,631	365,651
Total Appropriations	-	-	1,439,017	1,447,726