

Public Works Department



Mission:

The Public Works Department aims to design, construct, maintain, clean and ensure the safety of the City's infrastructure, including streets and sidewalks, parks and open space, City vehicles and equipment, street and traffic lights, and buildings and structures.

Key Objectives for Strategic Goals:

1. Maintain and enhance the physical environment

- Enhance and maintain the physical appearance of City buildings and community centers.
- Use bay-friendly landscaping techniques in City parks.
- Improve the attractiveness of City parks, the Bay Trail and other open spaces through scheduled maintenance.
- Improve the City's appearance by removing graffiti promptly.

2. Promote a safe and secure community

- Improve safety of City streets by promptly repairing street light outages and repairing or replacing traffic signals.
- Increase the safety of City roadway drivers by repairing potholes and providing regular street sweeping.
- Update and replace heavy duty diesel equipment to meet BAAQMD requirements.

3. Promote economic vitality

- Encourage visits to the City of Richmond by improving the aesthetic appeal of the City's streetscapes, medians, and entry ways.
- Enhance the usability of City parks, the Bay Trail, and other open spaces to increase the number of outdoor events within the City.
- Research and implement strategies in City buildings to reduce energy consumption and increase energy efficiency.
- Reduce diesel consumption and emissions from City fleet and equipment.
- Incorporate equipment and alternate fuel and technologies.

4. Promote sustainable communities

- Increase the use of solar energy in City buildings.
- Recycle all chip cuttings and reapply as mulch to public lands to the extent possible.
- Incorporate hybrid and alternate fuel vehicles where feasible in replacement of City fleet.
- Increase tree planting throughout Richmond.
- Incorporate the use of high performing green cleaners and other environmentally-preferable products as determined feasible.
- Develop integrated pest management program.
- Provide street sweeping to reduce run-off into public waterways.

5. Promote effective government

- Provide comprehensive recycling services to all City buildings.

Public Works Department

Facilities Maintenance Division

Goal

To prepare and implement a preventative maintenance and rehabilitation plan for City buildings and facilities. To provide City staff and visitors healthy, safe and aesthetically-pleasing environments in which to work and conduct City business.

Description

The Facility Maintenance Division maintains City buildings and facilities by providing custodial, electrical, structural, mechanical, heating, ventilation, and air conditioning (HVAC) repair, as well as street lights and traffic signal repair. The Division also builds and constructs City facility projects. The Division conducts administrative tasks and maintains and modifies City facilities.

2010-11 Supporting Actions

1.23.a Provide a current Facility Condition Needs Index (FCNI) analysis for all City structures.

1.23.b Maintain City buildings at a “B” service level through systematic preventive maintenance and rehabilitation.

<u>Service Level</u>	<u>FCNI</u>	<u>Condition Description</u>
“A”	0.01 – 0.05	Excellent condition, typically new construction
“B”	0.06 – 0.15	Good condition, renovation occurs on a regular schedule
“C”	0.16 – 0.30	Fair condition, in need of normal renovation
“D”	0.31 – 0.40	Below average condition, major renovation required
“E”	0.41 – 0.59	Poor condition, complete renovation required
“F”	0.60+	Complete facility replacement required

1.23.c Survey all City facilities for solar system suitability.

1.23.d Maintain traffic signals at current levels.

1.23.e Respond to street light repair requests within 48 hours.

1.23.f Eliminate graffiti within 48 hours of its report.

1.23.g Increase the percentage of Comcate reports cleared.

Success Indicators

	<u>Output</u>	<u>2010 Goal</u>	<u>2010 Mid-Year Actual</u>	<u>2010 Year End Projection</u>	<u>2011 Proposed</u>
1.23.f	# of graffiti abatements performed within 48 hours	4,000	355	2,000	2,800

Effectiveness

1.23.a	% of City buildings with a Facility Condition Needs Index	25%	6%	15%	25%
1.23.b	% of City buildings at a “B” service level	80%	80%	80%	85%
1.23.c	% of City facility solar suitability reports produced	100%	40%	50%	100%
1.23.d	% of traffic signals repaired within 24 hours of trouble calls	98%	100%	100%	100%
1.23.e	% of response rate to street light outages within 48 hours	95%	88%	90%	95%
1.23.f	% of graffiti abated within 48 hours	95%	98%	75%	80%
1.23.g	% of Comcate reports cleared	95%	93%	95%	95%

Public Works Department

Equipment Services Division

Goal

To provide comprehensive and efficient fleet management and maintenance services, and to provide services at a current municipal government “best practices” level.

Description

The Equipment Services Division provides safe, reliable, economical and environmentally-sound transportation and related support services to City departments. The Division conserves the City’s vehicle and equipment investment through preventative and as-needed maintenance, replaces vehicles and equipment based on the replacement schedule, and prepares, in collaboration with client departments, specifications for acquisition of all vehicles and equipment.

2010-11 Supporting Actions

- 1.23.a** Complete annual replacements per the adopted replacement schedule.
- 1.23.b** Develop and implement a preventative maintenance program.
- 1.23.c** Reduce obsolete and low usage parts by 10%.
- 4.23.a** Maximize the energy efficiency and environmental friendliness of City’s vehicle fleet.
- 4.23.b** Provide service and repairs on time and on budget.

Success Indicators

	Output	2010 Goal	2010 Mid-Year Actual	2010 Year End Projection	2011 Proposed
1.23.a	# of vehicles replaced (Goal: 60 vehicles per fiscal year)	62	42	62	60
4.23.a	# of ultra-low emission vehicles (ULEV) in fleet, including hybrids and all-electric vehicles (incremental number for the fiscal year)	25	25	25	10

Effectiveness

1.23.b	% of preventative maintenance programs developed and implemented	75%	35%	65%	75%
1.23.c	% of obsolete and low-usage parts eliminated	10%	15%	15%	10%

Efficiency

4.23.b	% of preventative maintenance and repairs completed on time (% of on time completions to work performed)	95%	75%	85%	90%
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Public Works Department

Parks & Landscaping Division

Goal

To maintain, improve, and expand the City parks and public land systems, including tree health, public landscape aesthetics, and open space preservation.

Description

The Parks and Landscaping Division maintains 407 acres of developed park sites and landscapes by providing turf care, horticulture, and other professionally-accepted grounds management practices. The Division oversees planning, design, and construction of parks and public landscapes and replaces old and outdated irrigation systems and play equipment. The Division provides support to the Recreation & Parks Commission, Richmond Groundwork and the Richmond Friends of Recreation. The Division preserves Richmond's tree canopy, addresses tree health for over 40,000 trees, and plants new trees. The Division maintains the City's numerous public landscapes including the Richmond Parkway, the Richmond Greenway, other right-of-ways, and the grounds of fire stations and other public buildings. The Division manages the Hilltop Landscape Maintenance District and the Marina Bay Landscaping & Lighting Maintenance District. The Division protects and supports over 510 acres of open space lands that include Very High Fire Hazard Severity Zones, trails, creeks, marshlands and shorelines.

2010-11 Supporting Actions

- 1.23.a** Adhere to the monthly service schedule for parks and other public spaces.
- 1.23.b** Advance a well maintained and sustainable urban forest as an important green canopy.
- 1.23.c** Continue necessary upgrades of children's play lots.
- 1.23.d** Collaborate with community groups to promote the "Adopt-a-Park Program" and other parks and open space efforts, such as participation in maintenance programs and facility design.
- 1.23.e** Create a comprehensive master plan for all City parks.
- 1.23.f** Ensure that daytime turf playing fields are available for use.

Public Works Department

Parks & Landscaping Division

Success Indicators

	Output	2010 Goal	2010 Mid-Year Actual	2010 Year End Projection	2011 Proposed
1.23.a	# of trees trimmed and maintained	2,500	992	2,000	2,000
1.23.b	# of new trees planted in public right-of-ways and parks	750	345	800	800
1.23.c	# of assessed children's play lots in need of replacement play equipment	28	27	26	16
	# of children's play lots upgraded with replacement play equipment	4	1	1	10
1.23.d	# of parks and trails adopted through the "Adopt-a-Park Program"	8	6	10	10

Effectiveness

1.23.a	% of the 24 sports playing fields mowed within 10 days during available seasons	95%	95%	95%	95%
	% of parks maintained according to the established monthly service schedule	100%	100%	100%	100%
1.23.b	% of street trees regularly maintained and serviced	20%	4%	10%	15%
1.23.e	% parks master plan	60%	65%	90%	100%
1.23.f	% of time daytime turf playing fields are available for use	81%	81%	81%	81%

Efficiency

1.23.b	Cost per tree planted (typical for 15 gallon)	\$115	\$115	\$115	\$115
	Cost per young tree planted (15 gallon)	\$35	\$35	\$35	\$35

Public Works Department

Streets Division- Street Sweeping Program

Goal

To maintain the cleanliness of streets and thoroughfares within Richmond City limits, and through proactive cleaning and abatement; to discourage roadway blight and misuse.

Description

The Street Sweeping Division maintains the cleanliness of all residential and commercial streets within the City of Richmond, a function that includes cleaning curbs, gutters and median strips. The Division also removes any rubbish accumulation (blight) located on City roadways.

2010-11 Supporting Actions

- 1.23.a** Sweep all residential streets at least once a month; sweep an average of 522 residential curb miles per month for a total of 6,265 curb miles annually.
- 1.23.b** Sweep all commercial streets at least once a week; sweep an average of 575 commercial curb miles per month for a total of 6,895 curb miles annually.
- 1.23.c** Promote work efficiencies through vehicle and equipment replacement and the use of geographical position system (GPS) monitoring that tracks street sweeping.

Success Indicators

		2010 Goal	2010 Mid-Year Actual	2010 Year End Projection	2011 Proposed
	Output				
1.23.a	# of residential curb miles swept per month	6,000	2,976	5,952	6,000
1.23.b	# of commercial curb miles swept per month	6,900	3,129	6,258	6,500
1.23.c	# of street sweepers replaced	1	*	*	1

Public Works Department

Streets Division – Pavement Maintenance

Goal

To maintain and improve the quality of Richmond's streets through preventative and responsive maintenance. To maintain clean streets in order to minimize misuse and dumping within the City's roadways. To protect the City's roadway investment through preventative maintenance that increases pavement lifespan.

Description

The Streets Pavement Maintenance Division maintains the streets by repairing potholes, working with the City Engineering Department to devise a plan to identify specific streets that require repaving, and implementing a Crack Sealing Program to help preserve the pavement life in existing streets. The Division works with the Equipment Services Division to repair or replace vehicles and equipment.

2010-11 Supporting Actions

- 1.23.a** Work to achieve a 5% increase in the City's median Pavement Condition Index (currently 58).
- 1.23.b** Repave three City blocks per week from March through October and inspect, fill and document potholes as needed.
- 1.23.c** Continue the crack sealing of City streets.

Success Indicators

Output		2010 Goal	2010 Mid-Year Actual	2010 Year End Projection	2011 Proposed
1.23.a	Pavement Condition Index	60	55	55	57
1.23.b	# of City blocks resurfaced	65	36	72	55
	Tonnage of asphalt used	17,500	9,358	18,716	16,500
	# of potholes patched	20,000	16,590	33,180	25,000
1.23.c	# of linear footage cracks sealed	2,500	*	*	45,000

Effectiveness

1.23.b	% of potholes filled within 2 weeks	85%	84%	85%	90%
	% of potholes inspected and documented	100%	100%	100%	100%

Efficiency

1.23.a	Average cost per linear mile of roads maintained	\$66,000	\$90,281	\$78,141	\$68,000
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Public Works Department

Street Division – Traffic Signs & Lines

Goal

To ensure the safety of the City's streets by installing and maintaining street name and traffic signs and pavement messages and markings.

Description

The Streets Traffic Signs & Lines Division fabricates, installs and maintains all City street name and traffic-related directional and informational signs. This Division assists the Pavement Maintenance Division by re-installing speed delineators, pavement messages, markings and signs after minor pavement projects. It assists the Engineering Services Department with new installations of street signs and traffic-related pavement maintenance needs.

2010-11 Supporting Actions

- 1.23.a** Install and maintain yellow, red, white and blue curbs, crosswalks, directional and street name signs, and pavement markings.
- 1.23.b** Replace pavement markings and signage after minor street pavement repair in conjunction with the Pavement Maintenance and Engineering Divisions.
- 1.23.c** Respond to striping and sign installation and maintenance requests within 24 hours.
- 1.23.d** Respond to complaints in a timely manner.

Success Indicators

Output		2010 Goal	2010 Mid-Year Actual	2010 Year End Projection	2011 Proposed
1.23.a	# of curbs maintained in linear feet	10,000	4,886	9,772	9,500
	# of new sign installations	1,200	192	284	600
	# of preventative maintenance of signs	750	543	1,086	900
	# of lane markers replaced	3,000	2,666	5,332	4,000
1.23.b	# of pavement delineation markings	2,000	1,345	2,690	2,500

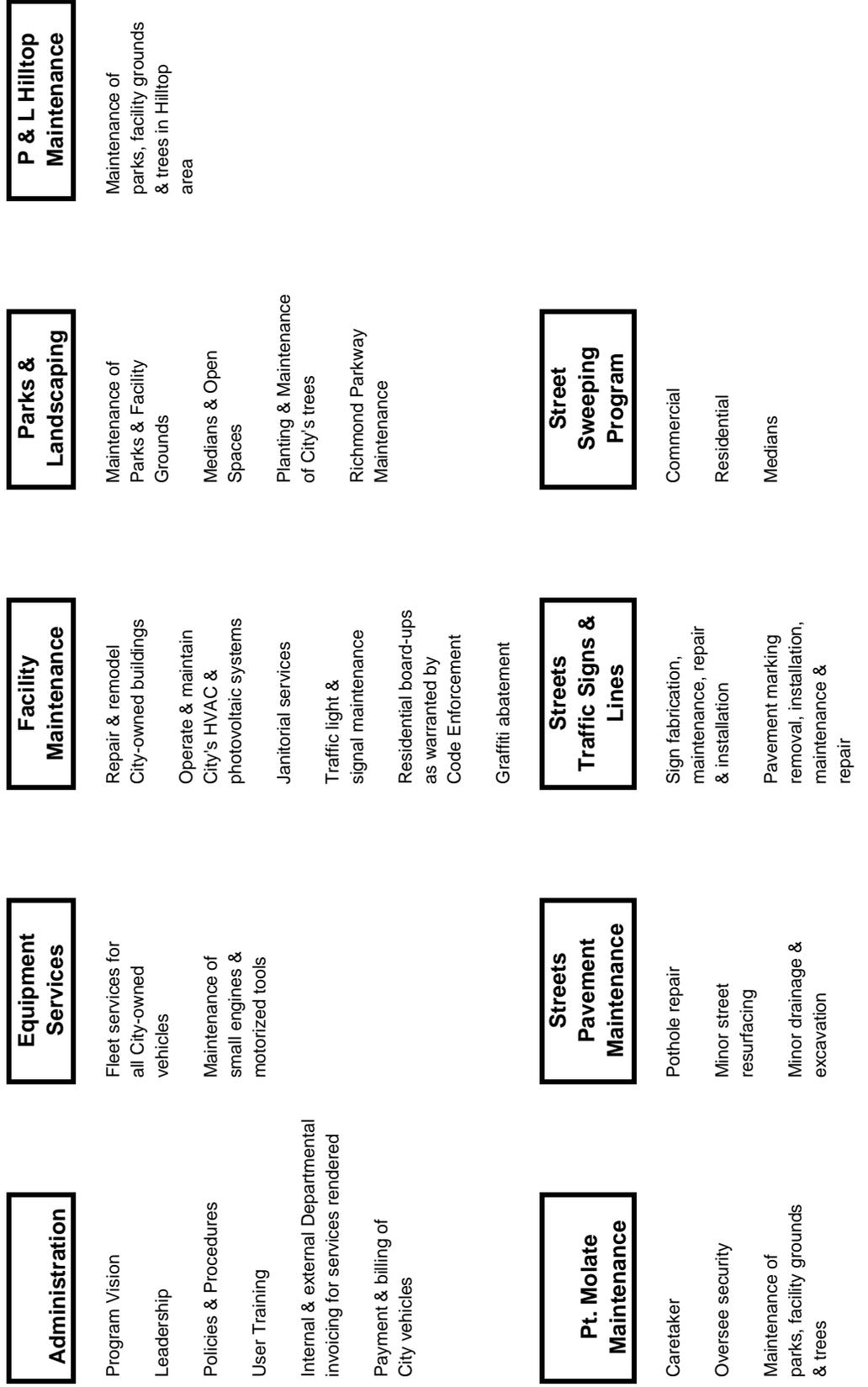
Effectiveness

1.23.a	% of City-wide signs replaced	75%	15%	30%	45%
1.23.b	% of pavement marking replacements	70%	26%	52%	61%
1.23.c	% of striping and sign installation and maintenance responded to within 24 hours	100%	90%	90%	95%
1.23.d	% of complaints completed within 24 hours	100%	95%	95%	95%

Efficiency

1.23.a	Cost per sign replacement	\$60	\$65	\$63	\$60
1.23.b	Cost per pavement marking replacement	\$300	\$300	\$300	\$300

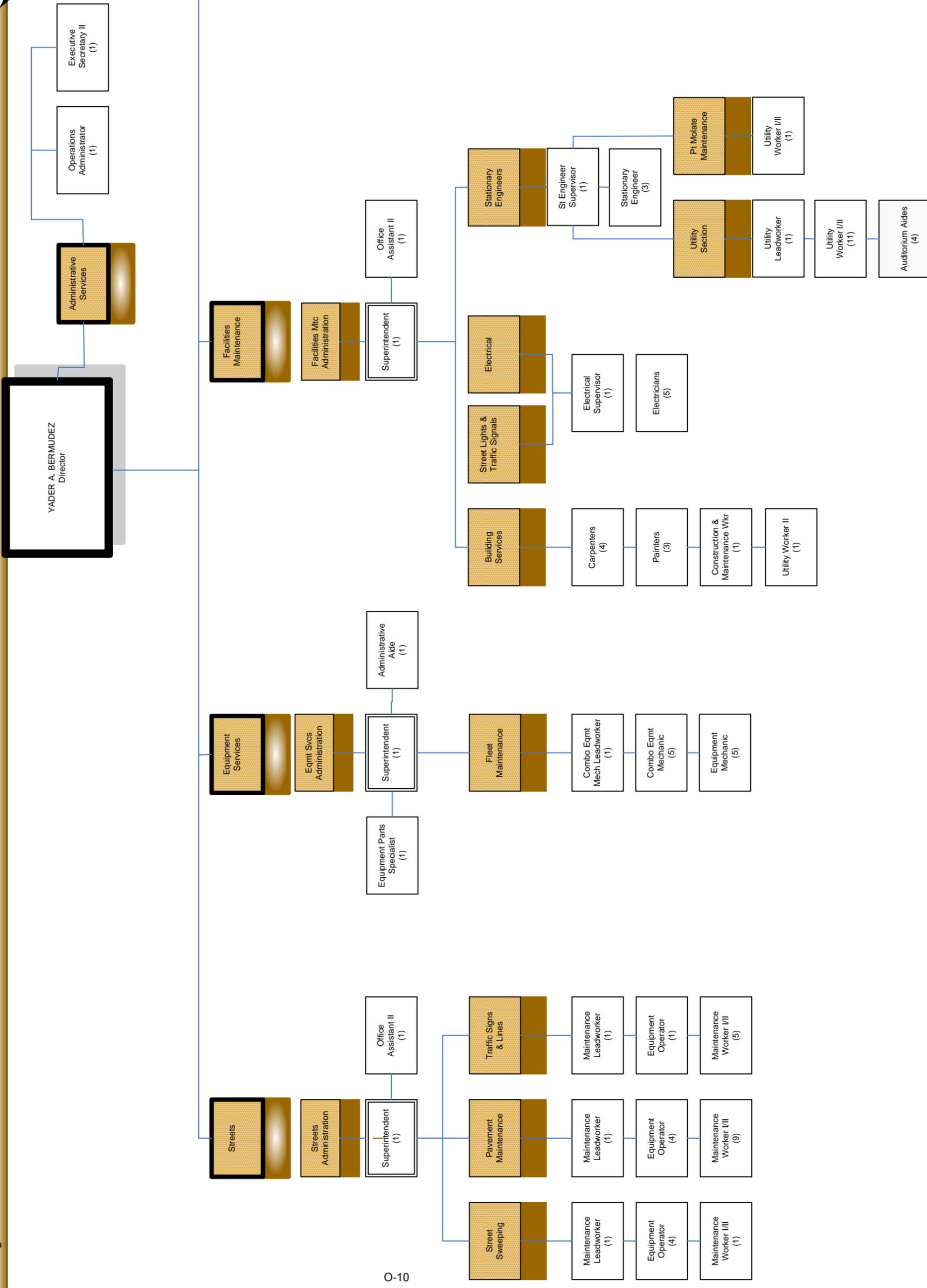
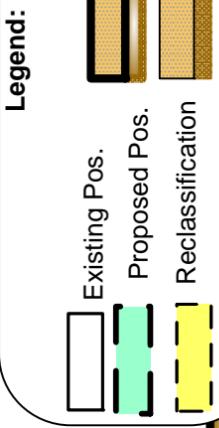
PUBLIC WORKS OPERATION AND MAINTENANCE PROGRAMS ORGANIZATIONAL CHART





Public Works FY2010-11 Organizational Chart

Existing FTE = 123



City of Richmond Multi-Year Comparative Position Listing

Department	Adopted 2006-2007	Adopted 2007-2008	Adjusted 2008-2009	Adopted 2009-2010	Adopted 2010-2011
PUBLIC WORKS					
Administrative Aide		2.0	2.0	2.0	2.0
Assistant to the Parks Superintendent	1.0	1.0	1.0	1.0	
Auditorium Aide					4.0
Building Maintenance Supervisor	1.0	1.0	1.0	1.0	
Carpenter	3.0	3.0	4.0	4.0	4.0
Combo Equipment Mechanic	6.0	6.0	6.0	6.0	5.0
Combo Equipment Mechanic Leadworker	1.0	1.0	1.0	1.0	1.0
Combo Welder	1.0	1.0			
Construction & Maintenance Supervisor	3.0	3.0	1.0	1.0	
Custodial Supervisor		1.0			
Electrical Supervisor	1.0	1.0	1.0	1.0	1.0
Electrician	6.0	6.0	5.0	6.0	5.0
Equipment Mechanic I					1.0
Equipment Mechanic III/IV	3.0	5.0	5.0	5.0	4.0
Equipment Operator	7.0	10.0	10.0	11.0	9.0
Equipment Parts Specialist	1.0	1.0	2.0	2.0	2.0
Equipment Services Superintendent	1.0	1.0	1.0	1.0	1.0
Equipment Supervisor		1.0	1.0	1.0	
Executive Secretary II		1.0	1.0	1.0	1.0
Gardener	5.0	6.0	5.0	5.0	5.0
Groundskeeper/Gardener	16.0	17.0	16.0	16.0	14.0
Maintenance Leadworker	5.0	7.0	7.0	7.0	6.0
Maintenance Utility Worker	4.0	4.0	3.0		
Maintenance Worker I / II	21.0	28.0	25.0	25.0	15.0
Office Assistant I / II	2.0	1.0	2.0	2.0	2.0
Office Specialist	2.0	1.0	1.0	1.0	
Operations Administrator	1.0	1.0	1.0	1.0	1.0
Painter	3.0	3.0	3.0	3.0	3.0
Parking Enforcement Representative	2.0	2.0	2.0		
Parks & Landscaping Superintendent	1.0	1.0	1.0	1.0	1.0
Parks Construction & Maintenance Worker	9.0	9.0	10.0	10.0	10.0
Parks Equipment Specialist		1.0			
Parks Supervisor	3.0	5.0	4.0	4.0	4.0
Public Works Administrative Manager	1.0				
Public Works Operations & Maintenance Director	1.0	1.0	1.0	1.0	1.0
PW Facilities Maintenance Superintendent	1.0	1.0	1.0	1.0	1.0
PW Streets Maintenance Superintendent	1.0	1.0	1.0	1.0	1.0
Secretary	1.5				
Stationery Engineer	4.0	4.0	4.0	4.0	3.0
Stationery Engineer Supervisor	1.0	1.0	1.0	1.0	1.0
Storekeeper	1.0				
Supervising Office Assistant	0.5				
Tree Leadworker	1.0	1.0	1.0	1.0	1.0
Utility Leadworker	1.0	1.0	1.0	1.0	1.0
Utility Worker I / II	11.0	13.0	15.0	17.0	13.0
Total Full-Time Equivalents (FTEs)	134.0	154.0	147.0	146.0	123.0

Public Works-23 Summary

TOTAL BUDGET - HISTORICAL COMPARISON

	FY2008-09 Actual	FY2009-10 Adjusted	FY2009-10 Actual Thru March-2010	FY2010-11 Adopted	\$ Chg From FY2009-10	% Chg From FY2009-10
SOURCES BY FUND						
General Fund-0001	15,378,480	26,483,191	16,558,222	11,908,795	(14,574,396)	-122%
Point Molate-1008	191,882	674,096	8,951	842,035	167,939	20%
Hilltop Landscape Maintenance District-1012	913,598	878,975	514,889	950,822	71,847	8%
Marina Bay Landscape & Lighting District-1015	-	766,915	560,020	703,365	(63,550)	-9%
Equipment Services-5003	8,004,881	6,906,626	5,397,866	5,915,426	(991,200)	-17%
Facilities Maintenance-5004	7,635,553	6,781,364	5,378,652	5,701,364	(1,080,000)	-19%
Impact Fees-2110	110,644	-	49,875	66,500	66,500	1
Sources Total	32,235,037	42,491,167	28,468,474	26,088,307	(16,402,860)	-63%
USES BY TYPE						
Salaries	10,183,018	9,270,945	6,923,994	8,077,642	(1,193,303)	-15%
Benefits	5,694,555	7,074,056	4,098,446	4,916,819	(2,157,237)	-44%
Professional Services	1,029,852	690,014	339,857	561,184	(128,830)	-23%
Other Operating Expenses	3,315,944	3,263,619	2,218,943	4,354,803	1,091,184	25%
Utilities	2,698,729	2,627,915	1,416,696	2,207,614	(420,301)	-19%
Equipment & Contract Services	1,842,518	1,283,066	661,905	1,109,944	(173,122)	-16%
Cost Pool	5,468,906	5,269,631	3,965,107	5,740,297	470,666	8%
Asset/Capital Outlay	1,641,943	4,889,253	1,555,660	5,640,510	751,257	13%
Debt Service	248,930	992,668	107,989	992,668	-	0%
Transfer Out	0	7,130,000	7,130,000	3,257,311	(3,872,689)	-119%
Uses-Operating Expenditure Total	32,124,393	42,491,167	28,418,598	36,858,792	(5,632,375)	-15%
USES BY ORG CODE						
Administration-01231031	1,573,022	798,478	633,342	752,586	(45,892)	-6%
Facilities Maint Admin-01232131	9,011	-	-	-	-	0%
Facilities Maint-Engineers-01232231	6,237	-	-	-	-	0%
Facilities Maint-Street Lights/Signs-01232831	-	1,329,947	909,107	1,301,374	-	0%
Parks & Landscape-01233131	7,471	-	334	-	-	0%
Parks & Landscape Tree Maint -01233331	196	-	13,938	-	-	0%
Parks & Landscape Admin-0123361	6,605,500	6,138,465	4,452,271	5,279,689	(858,776)	-16%
Parks & Landscape Fire Safety-01233831	28,964	-	10,015	-	-	0%
Parks & Landscape Marina-01233931	3,140	-	972	-	-	0%
Streets Administration-01234231	87,435	42,508	73,180	83,090	40,582	49%
Street Sweeping-01234331	-	1,450,809	1,096,091	1,086,592	(364,217)	-34%
Pavement Maintenance-01234431	3,506,022	3,055,883	2,070,882	2,511,083	(544,800)	-22%
Traffic Signs & Lines-01234531	938,764	1,091,913	655,460	894,381	(197,532)	-22%
Abatement-01234631	1,650,513	461,611	446,861	-	(461,611)	0%
Pt Molate-10832931	650,336	674,096	464,852	842,035	167,939	20%
Hilltop LMD-11233731	945,016	1,267,959	846,623	939,260	(328,699)	-35%
Marina Bay L&L District-11533931	-	657,665	89,992	705,683	48,018	7%
Street Sweeping-40634331	1,909,573	840	2,407	-	(840)	0%

Public Works-23 Summary

TOTAL BUDGET - HISTORICAL COMPARISON

	FY2008-09 Actual	FY2009-10 Adjusted	FY2009-10 Actual Thru March-2010	FY2010-11 Adopted	\$ Chg From FY2009-10	% Chg From FY2009-10
USES BY ORG CODE						
Capital Outlay-PW-20136031	450,454	493,464	37,592	2,000,000	1,506,536	75%
Impact Fees-21033131	143,762	402,649	280,562	1,781,000	1,378,351	77%
Equipment Services ISF-50335031	5,641,918	14,465,099	10,707,247	10,284,013	(4,181,086)	-41%
Equipment Services (CIP)-50336031	904,774	3,585,770	1,416,883	2,122,000	(1,463,770)	-69%
Facilities Maint ISF-50432031	5,734	-	8,043	-	-	0%
Facilities Maint ISF-Admin-50432131	5,760,741	3,039,069	1,217,926	2,217,293	(821,776)	-37%
Facilities Maint ISF-Engineers-50432231	814,307	1,172,414	1,028,208	724,237	(448,177)	-62%
Facilities Maint ISF-Building-50432331	714,851	1,526,798	1,108,605	1,220,586	(306,212)	-25%
Facilities Maint ISF-Utility-50432431	6,350	972,646	534,347	1,353,419	380,773	28%
Facilities Maint ISF-Electrical-50432531	354,518	759,197	631,010	760,471	1,274	0%
TOTAL BUDGET	32,718,608	43,387,281	28,736,751	36,858,792	(6,499,915)	-18%