

# INFRASTRUCTURE WORKSHOP

*April 10, 2014*



“above, below, and all around you”

# CHULA VISTA'S PUBLIC ASSETS

- Approximately 460 center line miles of paved public streets
- Over 1,000 miles of sidewalks and trails and paths
- Over 500 miles of sewer pipes
- 268 traffic signals
- Over 9,000 street lights
- Over 27,000 street trees
- Over 500 acres of park land
- Over 2,000 acres of open space
- Over 4.2 Million LF of curb and gutters
- 249 miles of storm drains
- Over 550 kW of Solar Photovoltaic systems
- Athletic Fields, Bridges, Civic Center, Drainage Channels, Equipment Inventory, Fire Stations, Fences, Golf Course, Guardrails, Jails, Libraries, Museum, Nature Center, Pipelines, Police Headquarters, Pools, Public Works Center, Recreation Centers, Retaining Walls, Rohr Manor, Visitor Information Center, South Bay Regional Household Hazardous Drop-off Facility, Street Signs, Vehicle Fleet...





# ASSET MANAGEMENT

Managing assets to minimize the life cycle cost of operation while delivering the expected service level at an acceptable level of risk

***Optimized Stewardship***

# ASSET MANAGEMENT IS ABOUT...

- Moving from **reactive** to **proactive** through managed solutions
- ◆ Working together towards a common goal of:
  - Maximizing asset useful life
  - Reducing risk
  - Minimize lifecycle cost
    - Optimizing O&M and asset replacement activities
    - Project validation (e.g., business case evaluation)
  - Understanding long-range capital investment needs
- ◆ Creating justification and documentation
- Making the **right decision**, at the **right time**, for the **right reason**, at the **right cost**

# GOAL OF ASSET MANAGEMENT



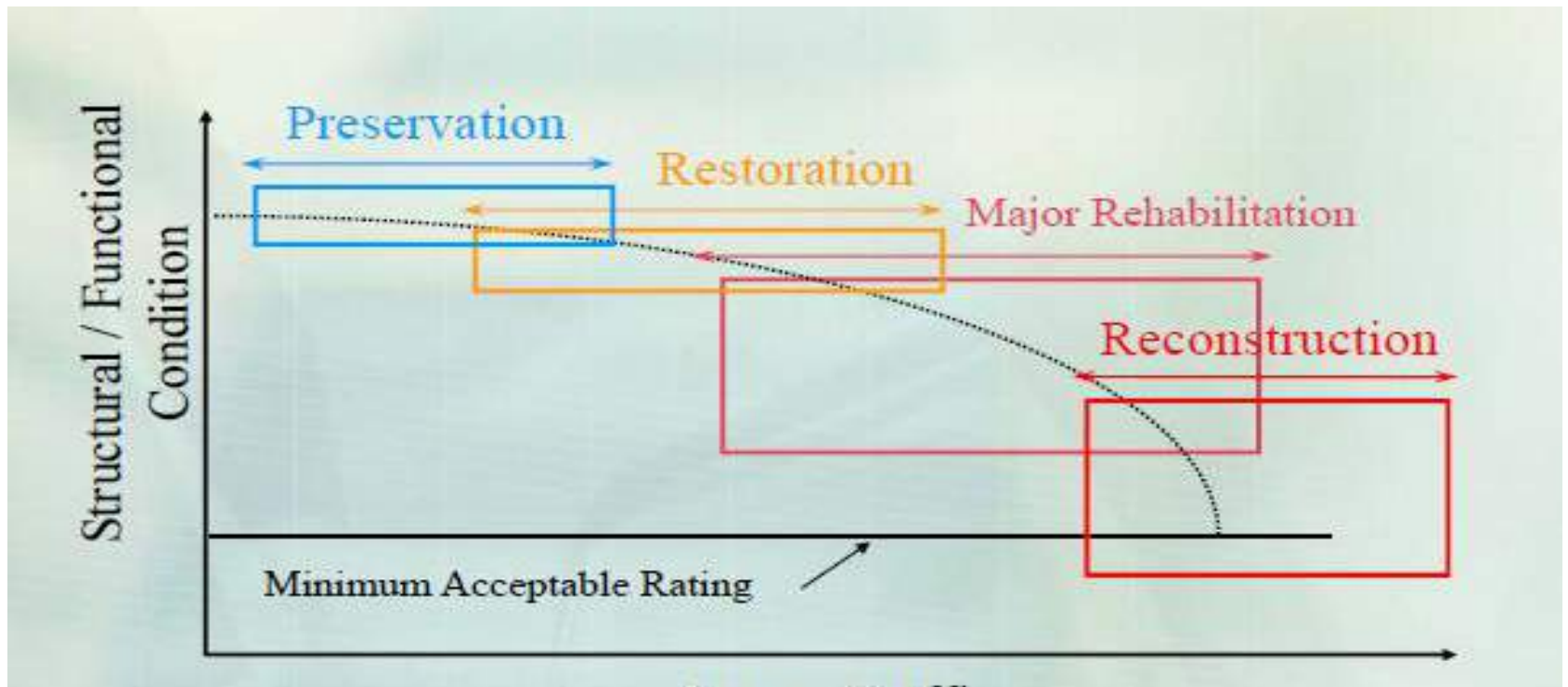
## ● Reactive

- Budgets based on last year
- Reactive projects
- Projects based on budget
- Money invested with little risk reduction

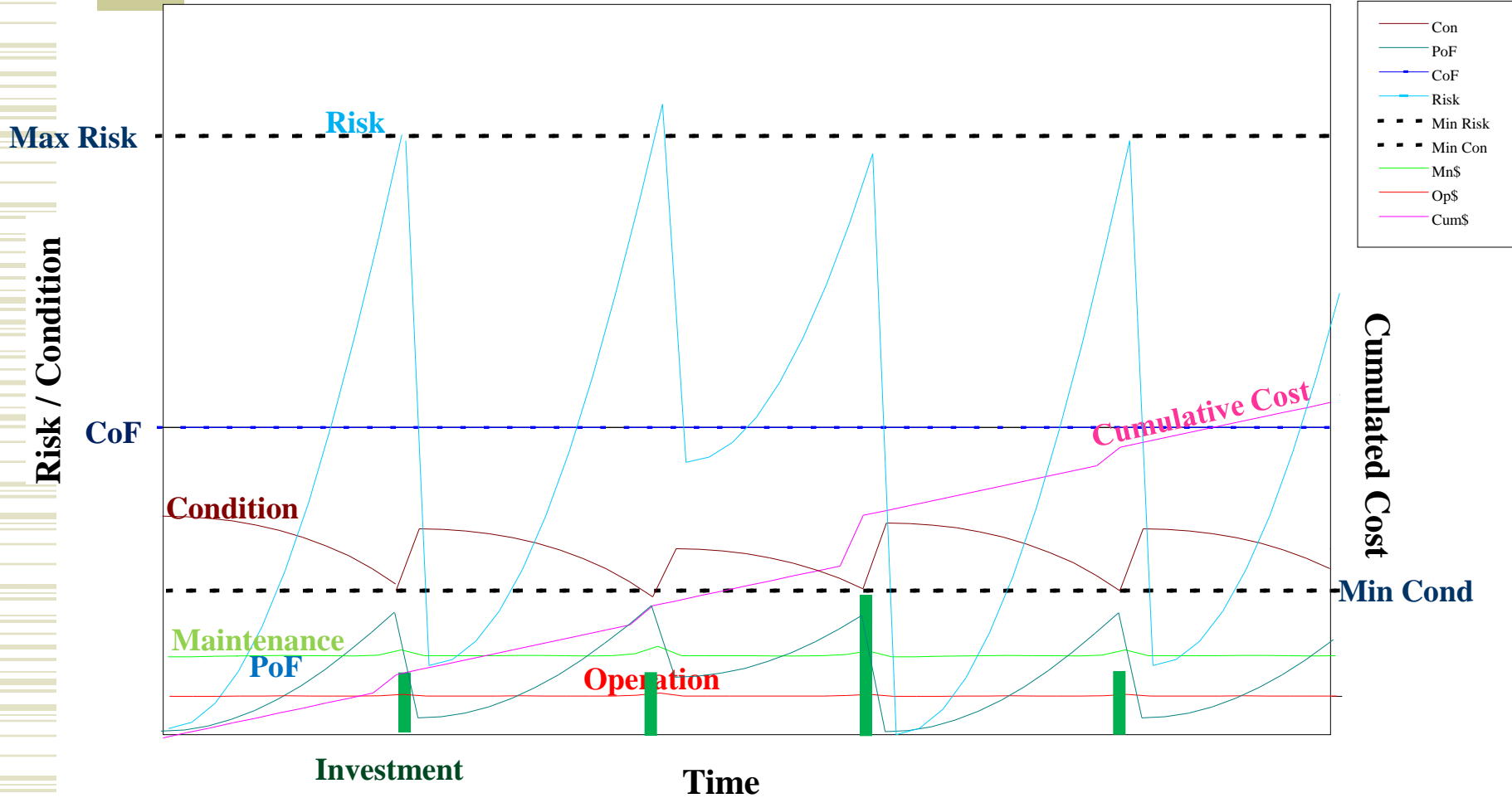
## ● Proactive

- Budgets based on future needs
- Replace high risk assets before failure
- Prioritize work based on risk
- Focus on high benefit to cost ratio

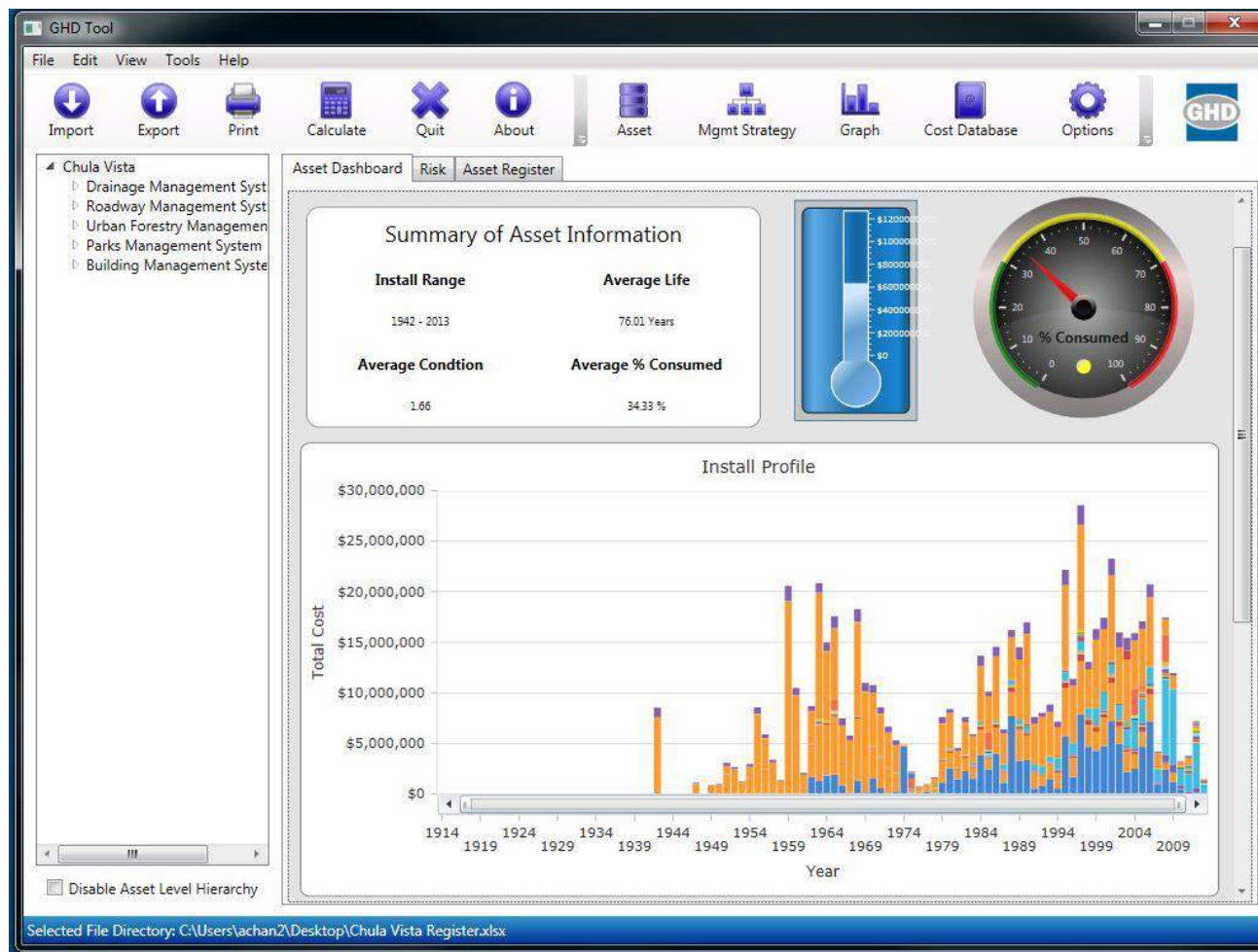
# ASSET MANAGEMENT PERFORMANCE CURVE



# ASSET LIFE CYCLE COST LOGIC



# ASSET MANAGEMENT TOOL





# HOW DO WE DEVELOP THE ASSET MANAGEMENT PROGRAM?



City Standards

Stakeholder Input

Available Resources

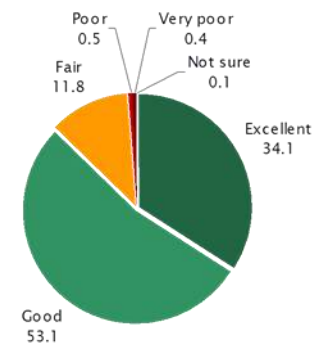
Resident Input

Inventory

Business Input

Risk Assessment

Committee Feedback



# EXAMPLE OF ASSET PRIORITIZATION BASED ON CRITICALITY

## Criticality based on:

- ◆ Usage (community vs. neighborhood park)
- ◆ Type of service (picnic area, sport fields)
- ◆ Duration of service (day use vs. extended hours)
- ◆ Safety (sport courts, play ground)
- ◆ Asset type (playsets vs. picnic tables)
- ◆ Visibility & exposure



Criticality Rating	Park Name	Address	Park Usage	Acres
5	Chula Vista Community Park	1060 Eastlake Pkwy	High Use Community	14.01
5	Discovery Park	700 Buena Vista Wy	High Use Community	20.38
5	Heritage Park	1381 E Palomar St	High Use Community	10.73
5	Monteville Park	840 Duncan Ranch Rd	High Use Community	30.55
5	Mount San Miguel Park	2335 Paseo Veracruz	High Use Community	19.69
5	Rohr Park	4548 Sweetwater Rd	High Use Community	59.90
5	Salt Creek Park	2710 Otay Lakes Rd	High Use Community	23.24
5	Veterans Park	785 E Palomar St	High Use Community	10.03

# ASSET MANAGEMENT PROGRAM (AMP)

Building Management System	BMS
Drainage Management System	DMS
Fleet Management System	FMS
General Government Management System	GGMS
Open Space Management System	OSMS
Parks Management System	PMS
Roadway Management System	RMS
Urban Forestry Management System	UFMS
Wastewater Management System	WMS

**...9 Asset Management Systems for 100 years of investments**

# WASTEWATER MANAGEMENT SYSTEM (WMS)

- 500 Miles of Sewer
- 12,000 Manholes
- 12 Pump Stations
- 8 Wastewater Basins
- Approximate flow 16 Million Gallons per Day (MGD)
- Current treatment capacity is 21 Million Gallons per Day

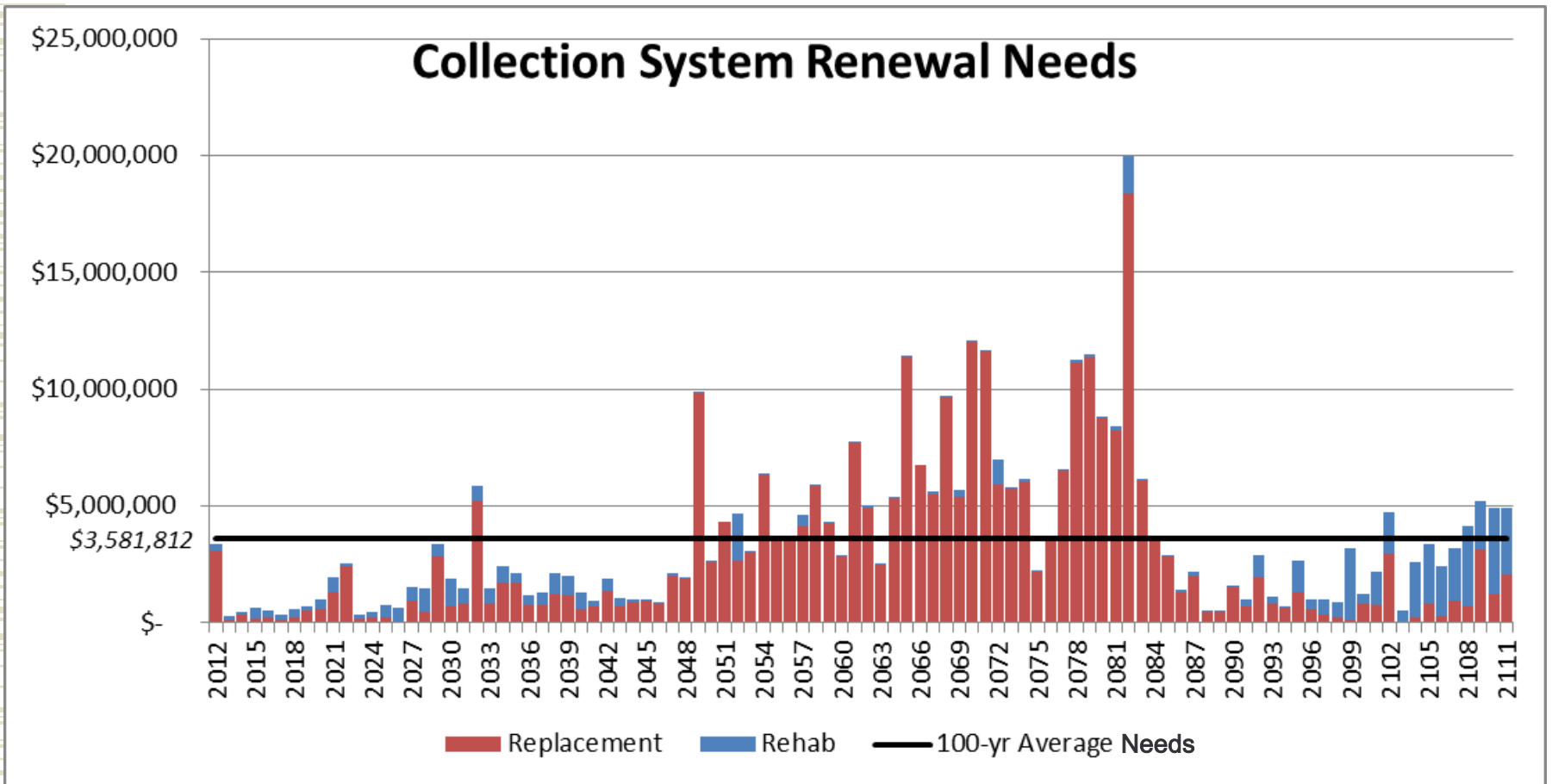


# WASTEWATER MANAGEMENT SYSTEM (WMS)

## AMP Progress:

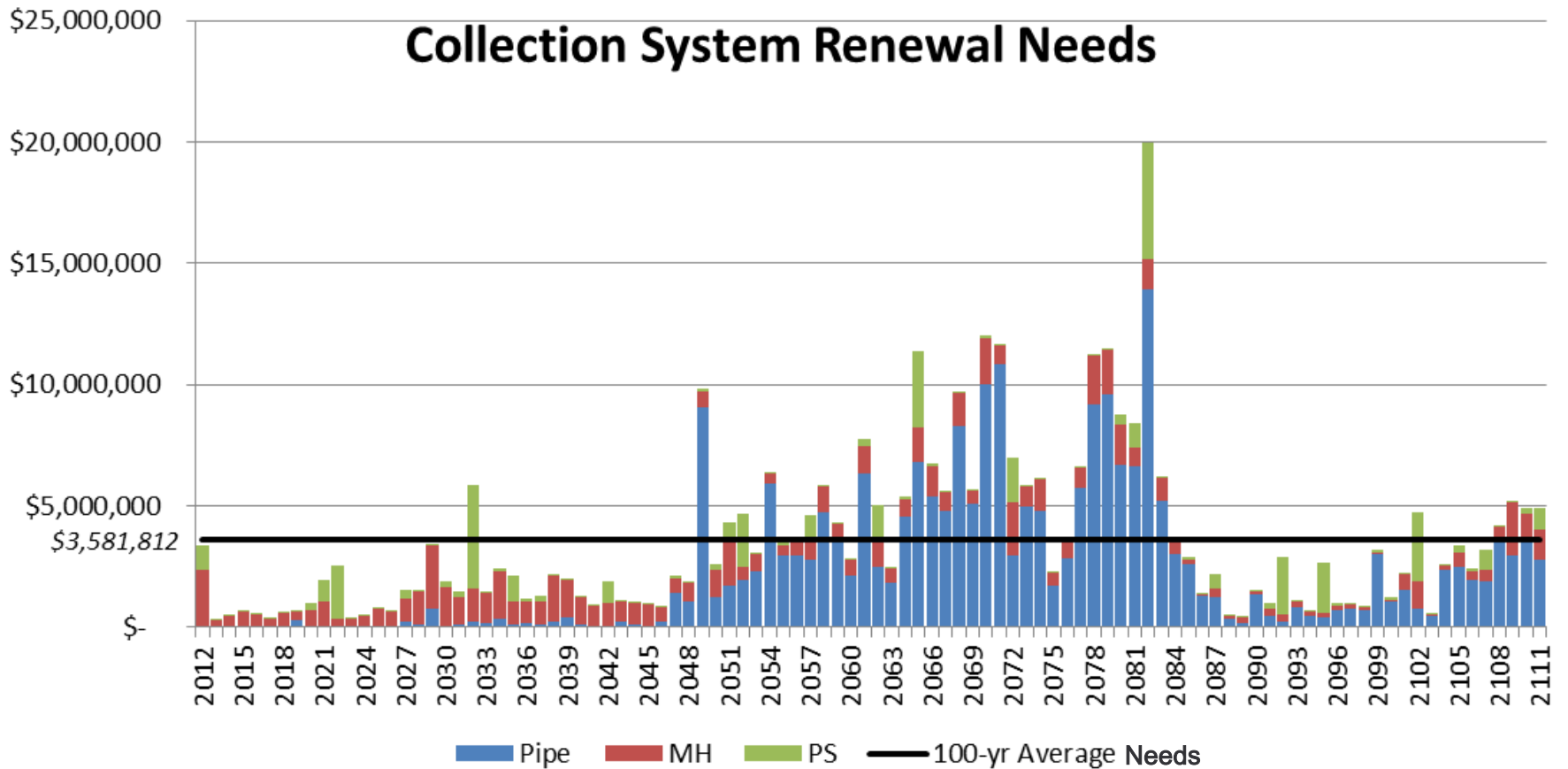
- City Council approved Rate Study and Fee adjustment (December 2013)
- City Council approved manhole inspection contract (April 2014)
- Corral Court Pump Station Rehab
- Moss Street Tunnel-(increase capacity)
- C Street Pipe Rehabilitation

# PROJECTED RENEWAL NEED



# PROJECTED RENEWAL NEED

## Collection System Renewal Needs



# ROADWAY MANAGEMENT SYSTEM (RMS)

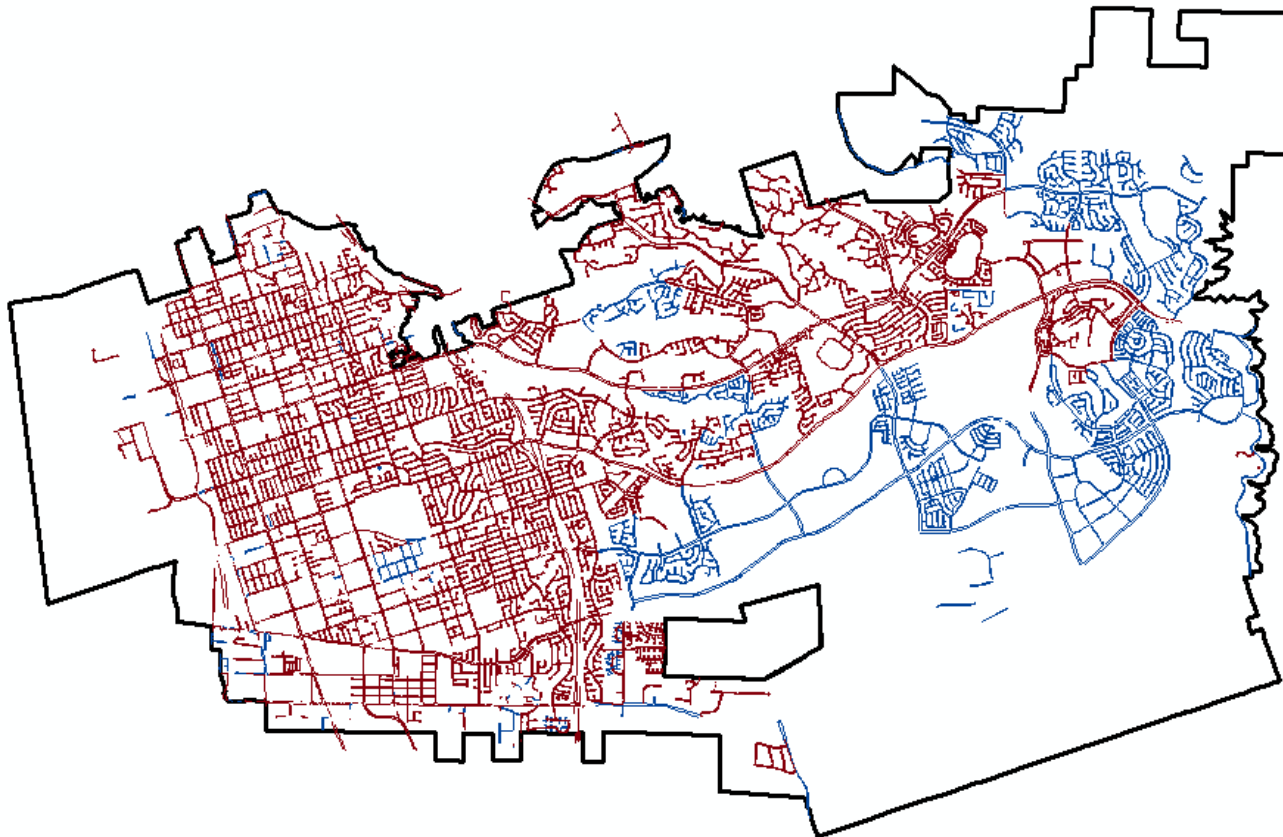
All City-owned assets in the Public Right-of-Way

- Pavement - Arterials, Collectors, Residential
- Sidewalks and Paths (Peds and Bicycles)
- Curb/Gutter and Cross Gutters
- Traffic Signals and Street Lighting
- Railings and Fences
- Signs, Traffic Striping and Pavement Markings
- Utility Coordination
- Structures (Bridges, Retaining Walls, etc.)
- Street Trees (part of UFMS)

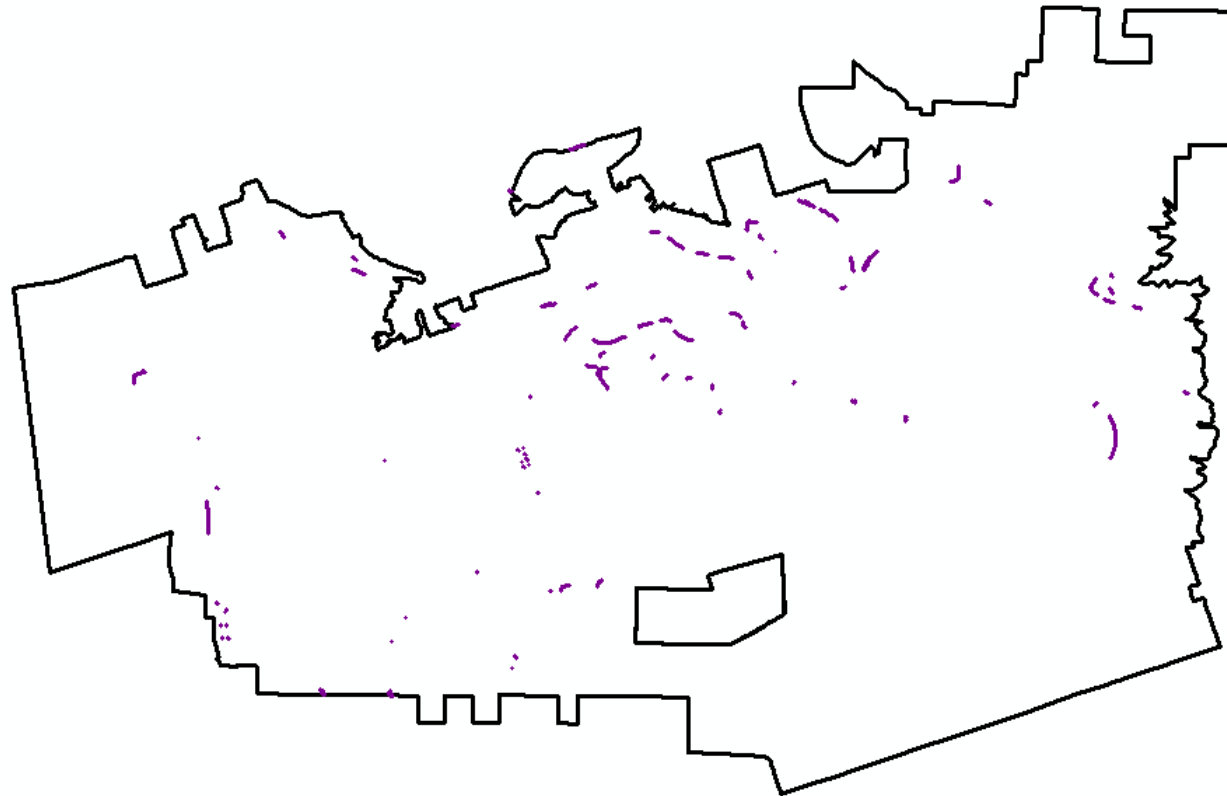




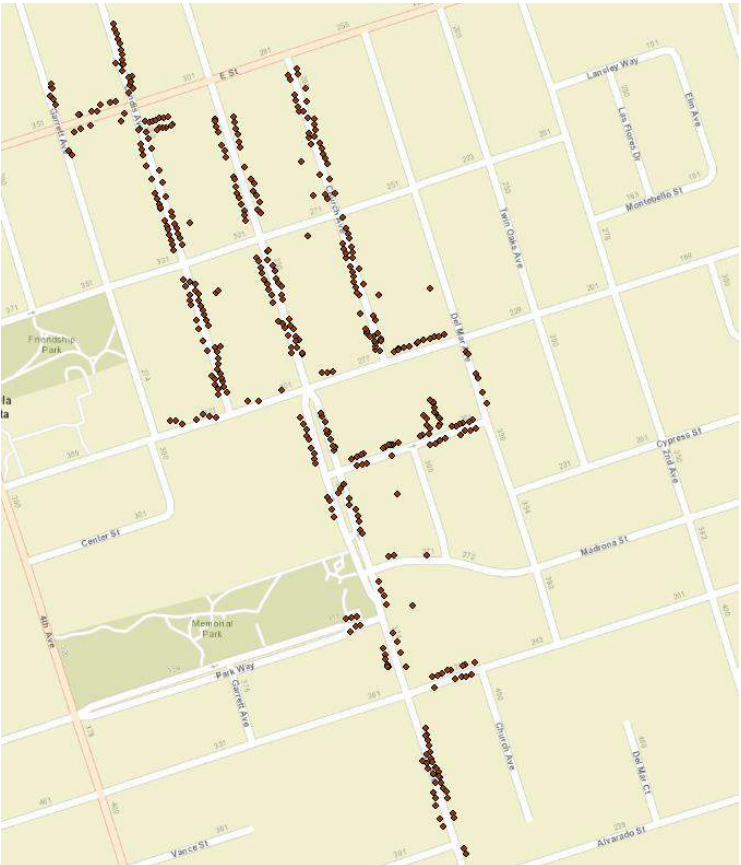
# CURB & GUTTER



# GUARDRAILS



# PARKING METERS AND PARKING LOTS



# ROADWAY MANAGEMENT SYSTEM (RMS)

## AMP Progress:

- City Crews-respond to work requests (potholes, sidewalks, graffiti, trash, weeds)
- Completed 2.6 miles of preventative maintenance
- Completed 0.25 miles of pavement rehabilitation
- 46,000 square feet of sidewalk constructed (CIP only)

# PAVEMENT ASSETS

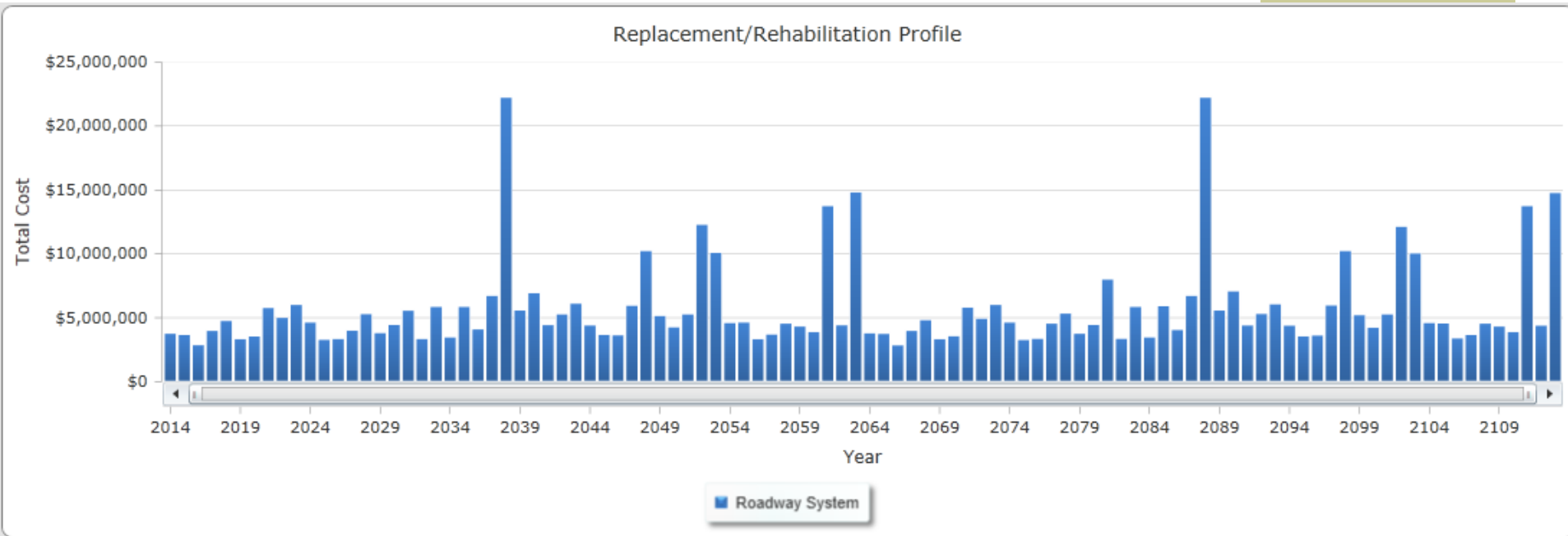
<b>Category</b>	<b>Centerline Miles</b>	<b>Lane Miles</b>	<b>Area – Million Sq. Ft.</b>	<b>Current PCI*</b>	<b>Target PCI*</b>
Arterials	58.3	287.4	22.0	82	80
Collectors	77.7	223.2	19.8	73	75
Residential	316.4	642.5	56.4	73	70
Alleys	10.6	22.0	1.3	51	
<b>TOTAL NETWORK</b>	<b>463.0</b>	<b>1175.1</b>	<b>99.5</b>	<b>74</b>	

\*PCI – Pavement Condition Index

# ROADWAY ASSETS

Row Labels	Count	Length (ft)	Length (mi)
Medians	360	489,344	93
Sidewalk	10,049	6,019,111	1,140
Curb & Gutter	10,620	4,081,929	773
Median Curbs	360	489,344	93
ADA Ramp	4,969		
Guardrail	108	35,186	6.7
Driveway Approach	61,082		
Bridge	21	1,792	0.34
Parkway	2,624	2,725,814	516
Street Lights	7,926		
Traffic Signal System	260		
Traffic Signs	27,324	36,281	6.9
Pavement Marking	16,237	3,098,927	587
Parking Area	92		
Parking Meter	335		
<b>Total</b>	<b>142,367</b>	<b>16,977,727</b>	<b>3,215</b>

# ROADWAY SYSTEM (Does Not Include Pavement)



100-year average: \$5.7M/yr

# RMS ASSET MANAGEMENT FUNDING AND CRITICAL NEEDS

***Current Annual Operations and Maintenance (O&M)  
Expenditure*** ***\$4.7 million***

## **Critical Replacement and Repair Needs**

➤ Faulted Sidewalks	\$250,000
➤ Gutter Replacements/Repairs	\$250,000
➤ Parking Lots Seals/Repairs	\$200,000
➤ Traffic Striping & Signing	\$250,000

## **Annual Service Level Deficiencies**

➤ Graffiti Eradication Crews	\$460,000
➤ Increase to Street Sweeping Contract (currently \$150,000/year)	\$100,000
➤ Litter and Weed Abatement 2-Person Crew	\$145,000

**Estimated Deferred Maintenance - \$467 Million (Replacement of Sidewalk, Curb/Gutter, Pavement, Bikeway, Pedestrian, Traffic Signals, Street Lighting, Bridges, etc.)**



# OPEN SPACE MANAGEMENT SYSTEM (OSMS)

***Current Annual Maintenance Expenditure***      ***\$11 million***

***Asset Management Inventory and Condition Assessment in Process***

- Trees, Shrubs, and Ground Cover
- Irrigation Systems
- Trails, Pedestrian Bridges, Lighting
- Environmentally Sensitive Areas (ESA's)
- Gates, Fences, Railings and Signs
- Misc. Hardscape (Ditches, Channels, Walls, and Monuments)
- Public and Private Commercial Landscape Inspection



**Long Term Maintenance Plans being prepared**

# URBAN FORESTRY MANAGEMENT SYSTEM (UFMS)

- Trim City Street and Park Trees
- Provide Storm Response
- Remove Dead and Unsafe Trees
- Provide Sign and Line of Sight Clearance
- Stump Grind and Root Prune
- Plant, Train and Water Young Trees



## Urban Forestry Risk Profile

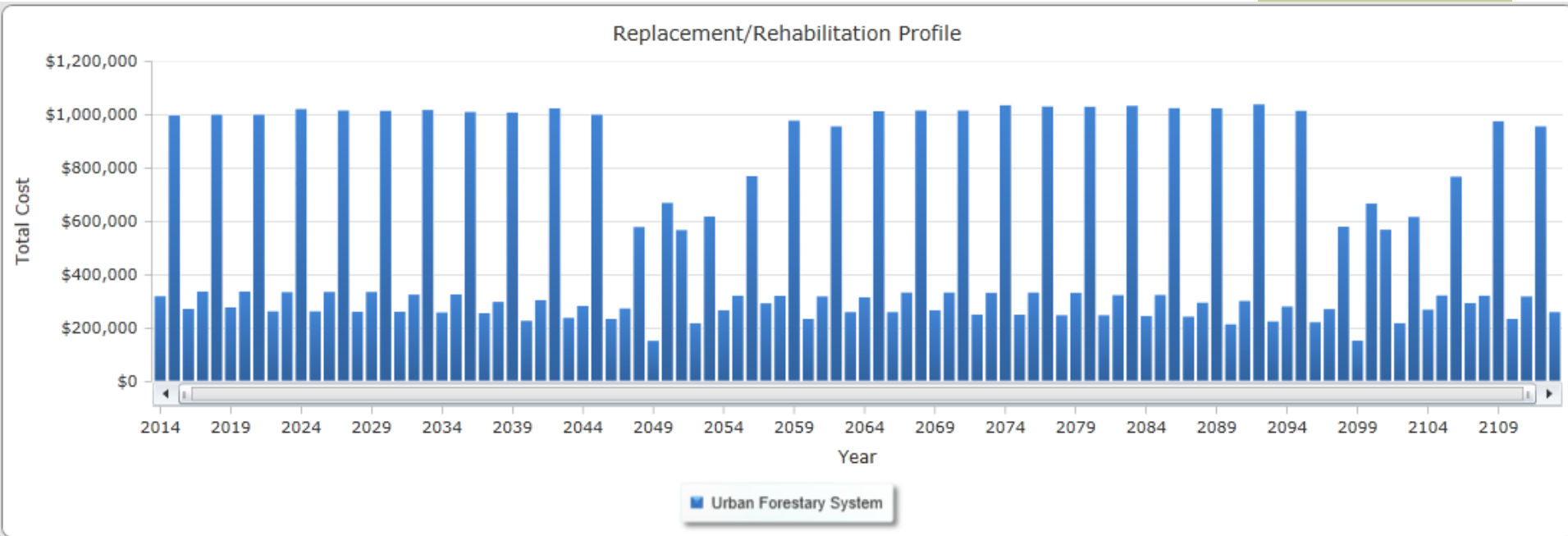
<b>RED</b>	Roadway Management System	RMS
<b>RED</b>	Park Management System	PMS
<b>GREEN</b>	Open Space Management System	OSMS



# URBAN FORESTRY ASSETS

- Over 165 tree species
- To date, over 9,500 trees inventoried and condition assessed within all parks, facilities, and parking lots
- Currently conducting inventory verification and condition assessment of street trees within the City's right of way

# URBAN FORESTRY SYSTEM (Parks & Facility Only)



100-year average: \$590K/yr

# UFMS ASSET MANAGEMENT FUNDING AND CRITICAL NEEDS

***Current Annual O&M Expenditure*** ***\$300,000***

**Critical Need**

➤ Tree Trimming (2013 deficit of 4,767 trees) \$210,000

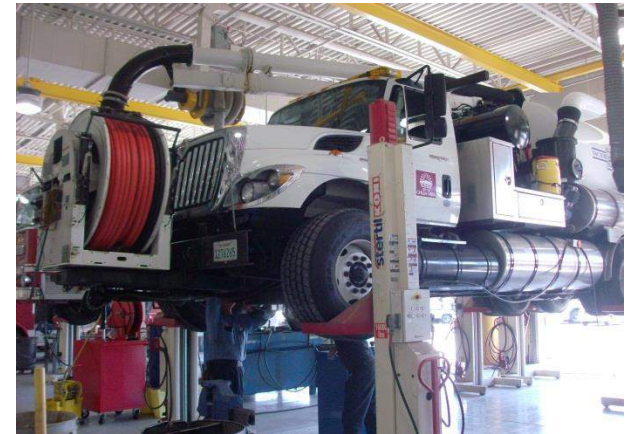
**Annual Service Level Deficiency**

➤ Under Study

**Estimated Deferred Maintenance - \$1.0 Million**

# FLEET MANAGEMENT SYSTEM (FMS)

- Police Dept – 174 vehicles
- Fire Dept – 50 vehicles
- Other Depts. – 317 vehicles



# PREVENTATIVE VEHICLE MAINTENANCE

	<b>PM'S COMPLETED</b>	<b>PM'S COMPLETED ON SCHEDULE (%) (1)</b>
2013-14 YTD <sup>(2)</sup>	597	65%
2012-13	742	52%
2011-12	765	57%
2010-11	712	42%
2009-10	738	59%
2008-09	942	52%
(1) Goal is 70% (85% prior to FY07-08)		
(2) Thru March 2014		

# FMS CRITICAL VEHICLE REPLACEMENT NEEDS

<b>Department</b>	<b># of Vehicles</b>	<b>Replacement Amount</b>
Animal Care Services	1	\$85,000
Community Patrol	13	\$780,000
Police Administration	1	\$30,000
Fire Administration	2	\$140,000
Fire Suppression	2	\$150,000
Public Works	8	\$999,250
<b>TOTAL</b>	<b>27</b>	<b>\$2,184,250</b>



# FMS ASSET MANAGEMENT FUNDING

***Current Annual O&M Expenditure***

***\$3.7 million***

***Asset Management Inventory and Condition Assessment***

- Vehicle Inventory and Maintenance Records Managed in-House (Faster Software)

**Critical Need**

- Vehicle Replacement

**\$2.18M**

**Annual Service Level Deficiency**

- Under Study

**Estimated Deferred Maintenance of Vehicles – Over \$8M**

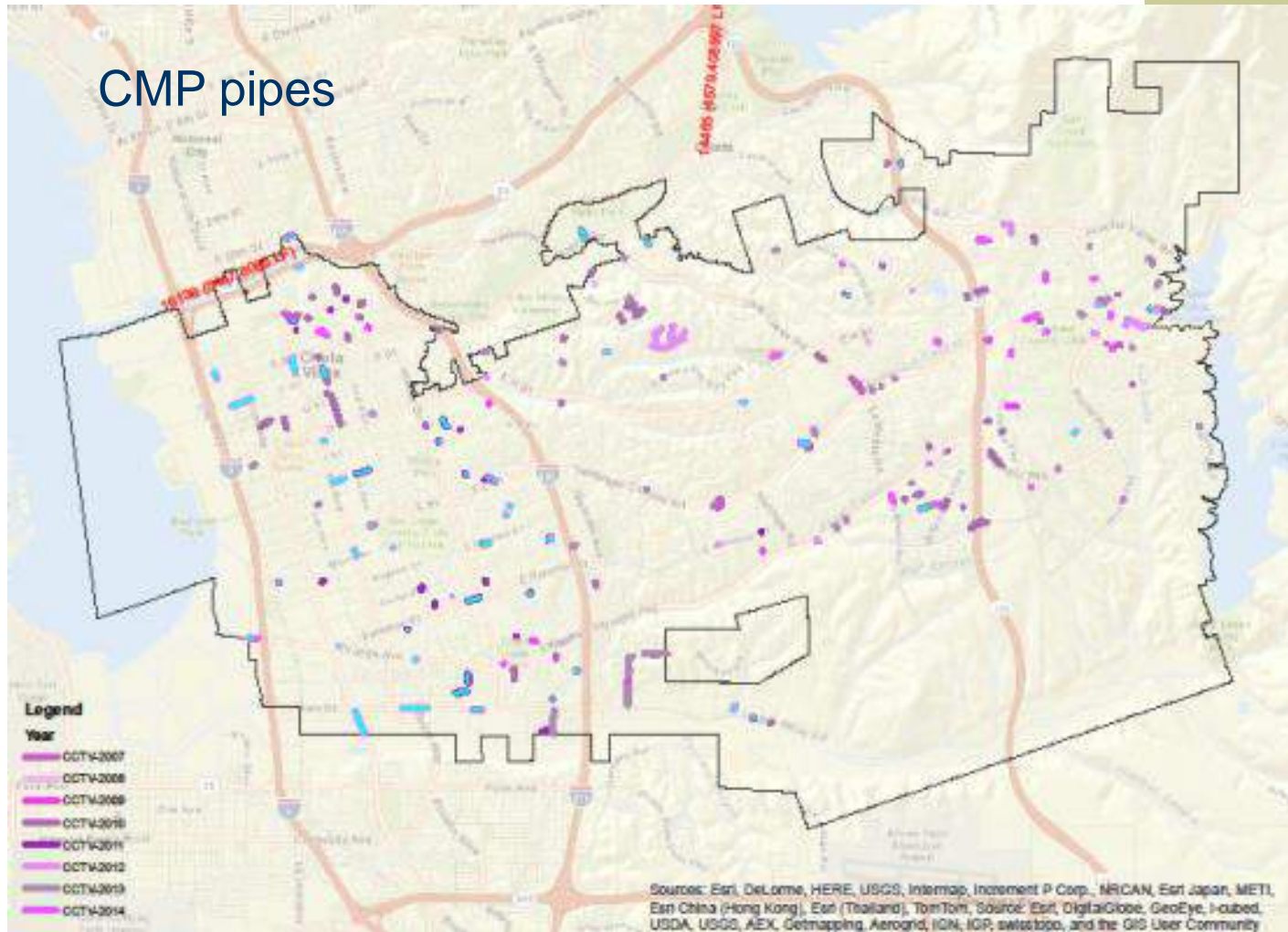
# DRAINAGE MANAGEMENT SYSTEM (DMS)

- **Approximately 1.1 million feet of pipe**  
(CMP, HDPE, PVC, RCB, RCP, VC) size ranging from 4" to 180"
- **Approximately 420,000 feet of channel**  
(Brow Ditch, Concrete Lined Rectangular and Trapezoidal, Natural)
- **Approximately 10,500 Public Access Points**  
(Clean Outs, Head Walls, Inlets, Junction Structures, NPDES Structures, Outlets)
- **Approximately 80 Other Structures**  
(Desilting Basins, Detention Basins, Gabion Structures, Water Quality Basins)

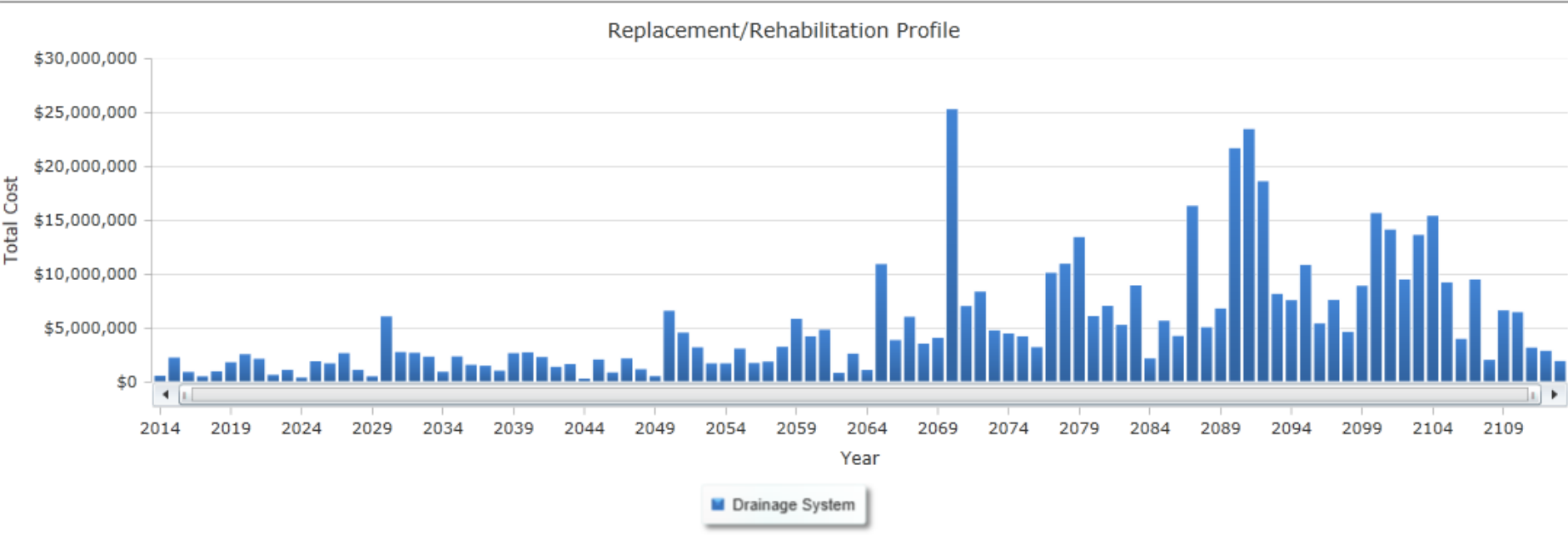


# IDENTIFICATION AND DOCUMENTATION OF STORM DRAINAGE

CMP pipes



# DRAINAGE SYSTEM



100-year average: \$5.4M/yr

# DMS ASSET MANAGEMENT FUNDING AND CRITICAL NEEDS

***Current Annual O&M Expenditure*** **\$1 million**

***Asset Management Condition Assessment***  
*(Additional Field Assessment/Verification)* **\$400,000**

## **Critical Needs**

- Telegraph Canyon Channel Erosion (between Paseo Ladera and Medical Center Dr) Phase 1 **\$1 million**
- Storm Channel/Detention Basin Maint. Plans **\$225,000**
- Flood Control & Invasive Plant/Debris Removal **\$250,000**
- Annual CMP Failures **\$600,000**

## **Annual Service Level Deficiency**

- Storm Channel Cleaning/Inspections **\$60,000**

**Estimated Deferred Maintenance (non CFD areas) - \$80 Million (Replacement of Drainage Facilities, CMP, Canyon/Channel Erosion, etc.)**



# BUILDING MANAGEMENT SYSTEM (BMS)

The City owns 86 buildings with over 1.2 million square feet of space

- Animal Care Facility
- Civic Center
- Fire Stations
- Libraries
- Living Coast Discovery Center
- Police Headquarters
- Public Works Operations Center
- Recreation Centers
- Visitor Information Center (E Street)
- Other



# BUILDING MAINTENANCE AND REPAIR CHALLENGES



# BUILDING MAINTENANCE AND REPAIR CHALLENGES





# ADA COMPLIANCE ASSESSMENT

- ◆ Approach and entrance (parking, ramps, doors, etc.)
- ◆ Access to goods and services
- ◆ Toilet rooms
- ◆ Additional access (public phone, drinking fountain, visual alarm)



# ADA ASSESSMENT - BUILDINGS

ent	ADA Category	Elements	Components	
	Approach & Entrance	Parking		# of Handicap Parking Stalls # of Van Accessible Stalls
				Handicap Parking Stall Signage
		Exterior Accessible Route	Slopes	
		Ramps	Slopes, handrails	
		Entrance	Signs, threshold, doors, mats	

ADA Category	Count of Components Checked	Count of Non-Compliant Components	Non-Compliance (%)
Access to Goods & Services	5	0	0%
Additional Access	20	5	25%
Approach & Entrance	34	20	59%
Toilet Rooms	92	42	46%
<b>Total</b>	<b>151</b>	<b>67</b>	<b>44%</b>

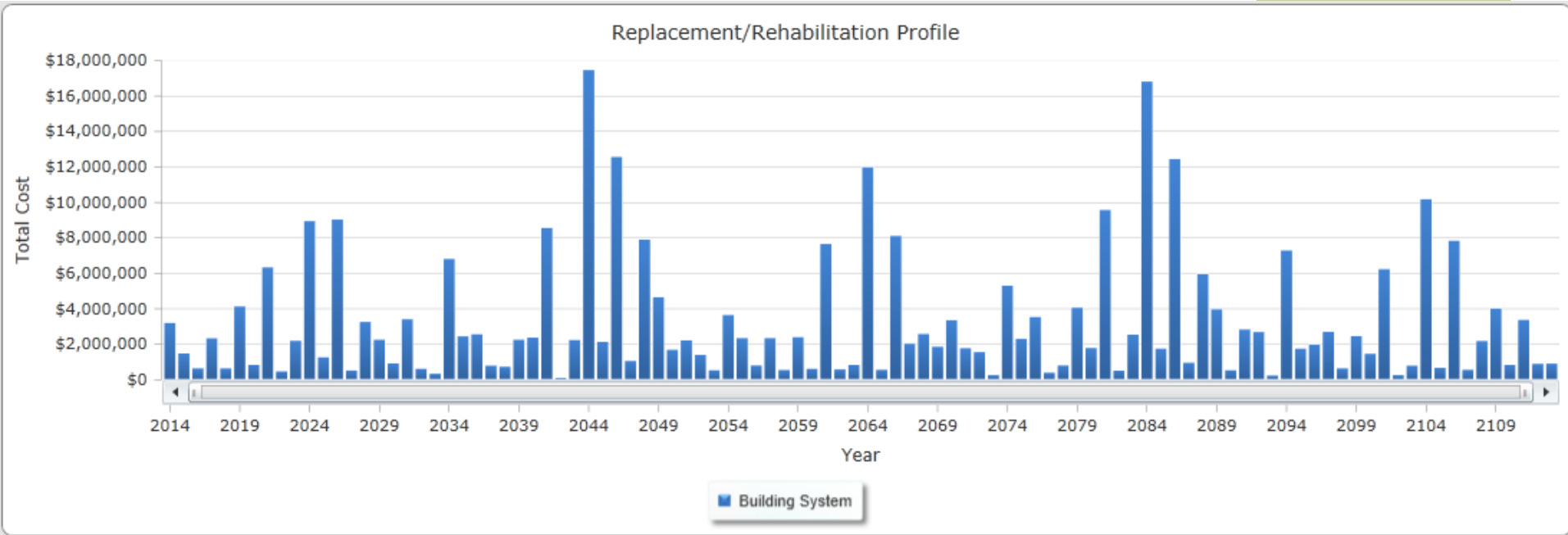
ADA	Toilet Rooms	Elements	Components
	Toilet Rooms	Laboratories; Stalls	Clearance, grab rails sinks, faucets,
		Restroom #3: Entrance; Inside; Laboratories; Stalls	Signs, door handles, toilets, clearance, grab rails sinks, faucets,
	Additional Access	Drinking Fountains	Access and clearance
		Public Telephones	Access and clearance
		Fire Alarm Systems	Audible and Visual Alarms

# ADA ASSESSMENT - BUILDINGS

◆ Facilities with highest non-compliance

Buildings	Count of Components Checked	Count of <b>Non-Compliant</b> Components
Civic Center Library Site	17	11
Norman Park Center	12	6
Fire Station 2	5	5
Fire Station 1	7	4
Fire Station 5	4	4
Fire Station 7	6	4
South Chula Vista Library Site	9	4
Veteran Park Rec Center	4	4
Fire Station 9	4	3
Parkway Community Center & Pool	9	3
...	...	...
<b>Total</b>	<b>151</b>	<b>67</b>

# BUILDING SYSTEM (Replacement & Rehabilitation)



100-year average: \$3.5M/yr

# BMS ASSET MANAGEMENT FUNDING AND CRITICAL NEEDS

***Current Annual O&M Expenditure*** ***\$3.4 million***

## **Critical Replacement and Repair Needs**

- Inspection of Fire Risers \$75,000
- Repairs at Recreation Facilities and Pools \$150,000
- HVAC Replacement/Repairs (various facilities) \$150,000
- Roof Replacement/Repairs (various facilities) \$110,000

## **Annual Service Level Deficiency**

- Facilities Structural Repair – C&R Position \$90,000
- Citywide Minor Capital Repair Budget \$100,000

**Estimated Deferred Maintenance of Buildings & Facilities –  
\$60 Million (Replacement of Roofing, HVAC, Plumbing,  
Electrical Systems, etc.)**

# PARKS MANAGEMENT SYSTEM (PMS)

- 56 parks → over 533 Acres
- Over 80 separate Play Structures
- 88 Athletic Fields and Trails
- 64 Shelters 90 total Picnic areas, and BBQ's
- Benches, Monuments and Kiosks, Water Feature
- Over 62 Courts, 3 Dog Parks and 7 Skate Parks
- 33 Restrooms, Parking Lots and Gates
- Fences and Railings and Drinking Fountains
- Irrigation Systems, 4 Weather Stations
- Trees, Shrubs and Lighting
- Contracts, Pocket Parks, Medians and the Golf Course
- Park Ranger Program and Park Reservations



# CAPITAL PROJECT HIGHLIGHTS

## Pedestrian Bridge and Trail Project



← Before



After →

# FIELD INVENTORY ACTIVITIES

- ◆ Identify and collect GIS position of assets
- ◆ Take pictures
- ◆ Visually assess their condition

### Assets that Require GPS Coordinates

- All covered structures (e.g., restroom, gazebo, dumpster structure)
- Picnic tables
- Playgrounds (as a whole, not by equipment)
- Gates
- Large signage (e.g., park monument, dedication plaque, large announcement boards)
- Water fountain
- All sports courts or field

### Assets that Need Measurements

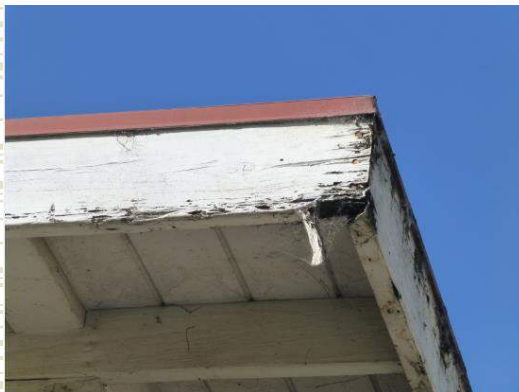
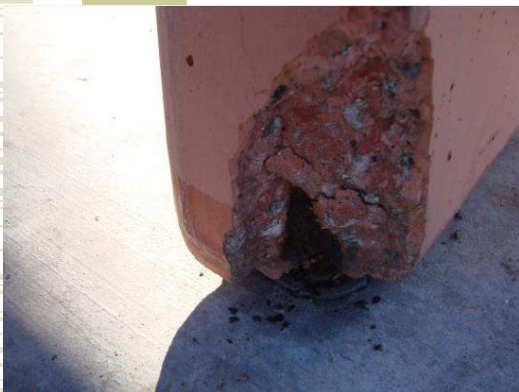
- Walkways (Length X Average Width)
- Walking trails/unpaved walkways (If within park boundaries)
- Decorative concrete
- Driveway
- Concrete pads/other pavements (e.g., underneath picnic tables, gazebo area)
- Large signage (e.g., park monument, dedication plaque, large announcement boards)
- Gates
- All covered structures (e.g., restroom, gazebo, dumpster structure)
- Picnic tables
- Curb & gutters

### Assets that Doesn't Require GPS Coordinates (Need Counts)

- Benches
- Lights
- Barbecue grills & hot coal bins
- Trash & recycled bins
- Curb & gutters
- Bollards
- Bike rack
- Dog waste bag dispenser
- Assets inside the restrooms or dumpster structures
- Concrete pads
- Small signage (e.g., "reclaimed water do not drink", "pick up after your dogs")



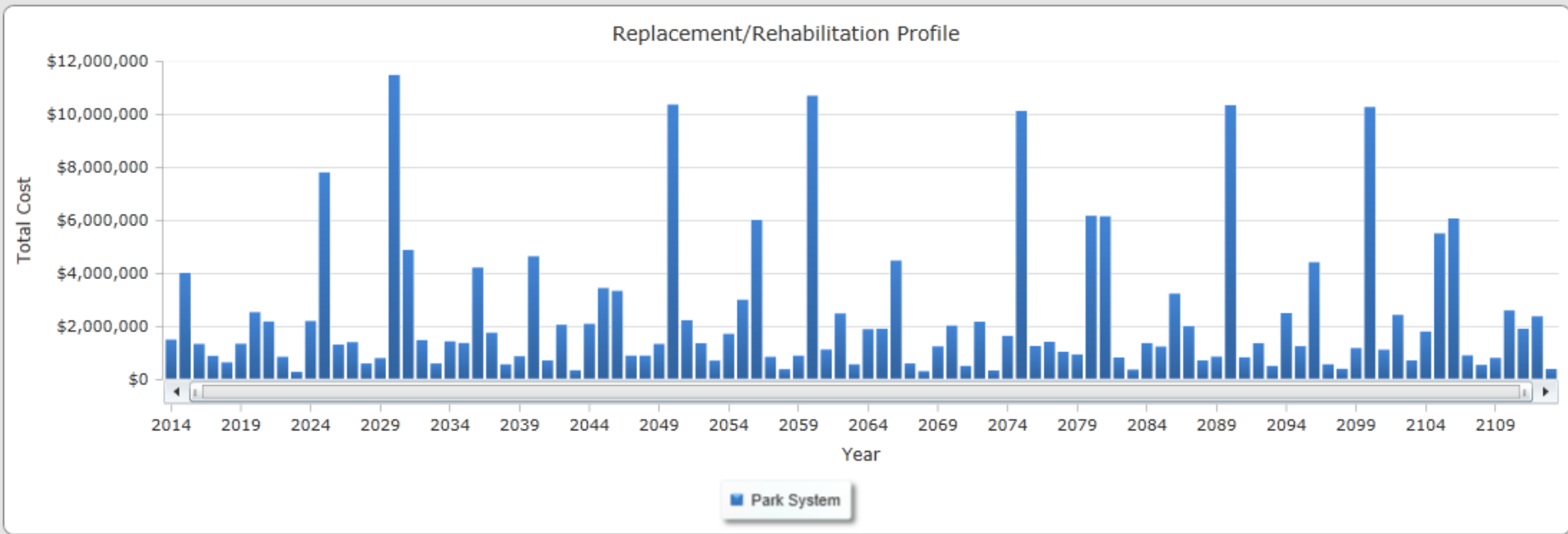
# FIELD INVENTORY ACTIVITIES



# PARK #31 MONTEVALLE PARK



# PARK SYSTEM



100-year average: \$2.4M/yr

# ADA Assessment - Parks

ADA Categories	Count of Components Checked	Count of Non-ADA Compliant Components	Non-Compliance (%)
Bathroom	540	14	3%
Curb Ramp	324	112	35%
Parking Spaces	162	35	22%
Paths	108	27	25%
<b>Total</b>	<b>1134</b>	<b>188</b>	<b>17%</b>

# ADA Assessment - Parks

Park Name	Count of Components Checked	Count of Non-ADA Compliant Components	Non-Compliance (%)
Palomar Park	21	10	48%
Terra Nova Park	21	9	43%
Voyager Park	21	9	43%
Bay Boulevard Park	21	8	38%
Discovery Park	21	8	38%
Heritage Park	21	8	38%
Greg Rogers	21	7	33%
Mackenzie Creek Park	21	7	33%
SDG&E East (Loma Verde Park & Rec Center)	21	7	33%
Chula Vista Community Park	21	6	29%
...			
<b>Grand Total</b>	<b>1134</b>	<b>188</b>	<b>17%</b>

**Curb ramp missing**  
**No van space, add sign**



**Pathways non-compliant**



**Pathways non-compliant**



**No domes**



**No van space, add sign**



**Faucet height > 36"**



**No domes**



**Slope > 8.33%**

**Flare sides > 10%**

**Turning zone < 60"**



**Slope > 5%**



Palomar Park

Terra Nova Park

Voyager Park

# PMS ASSET MANAGEMENT FUNDING AND CRITICAL NEEDS

***Current Annual O&M Expenditure*** ***\$6.2 million***

## **Critical Needs**

- Playground Surfacing (various parks) \$50,000
- Playground Equipment Repair (various parks) \$300,000
- Court Resurfacing (various parks) \$100,000
- Tot Lot Installation (Valle Lindo and Los Ninos) \$80,000
- Sidewalk Replacement (Tiffany and Discovery) \$175,000

## **Annual Service Level Deficiencies**

- Under Study

**Estimated Deferred Maintenance – \$20 Million (Replacement/  
Renovation of Fields, Playgrounds, Restrooms, Shelters, etc.)**

# GENERAL GOVERNMENT MANAGEMENT SYSTEM (GGMS)

- Communications Network
- Parking Meters
- Real Property
- Survey Control Network
- Utility Undergrounding

**Estimated Deferred Maintenance of General Government  
Assets – under study**



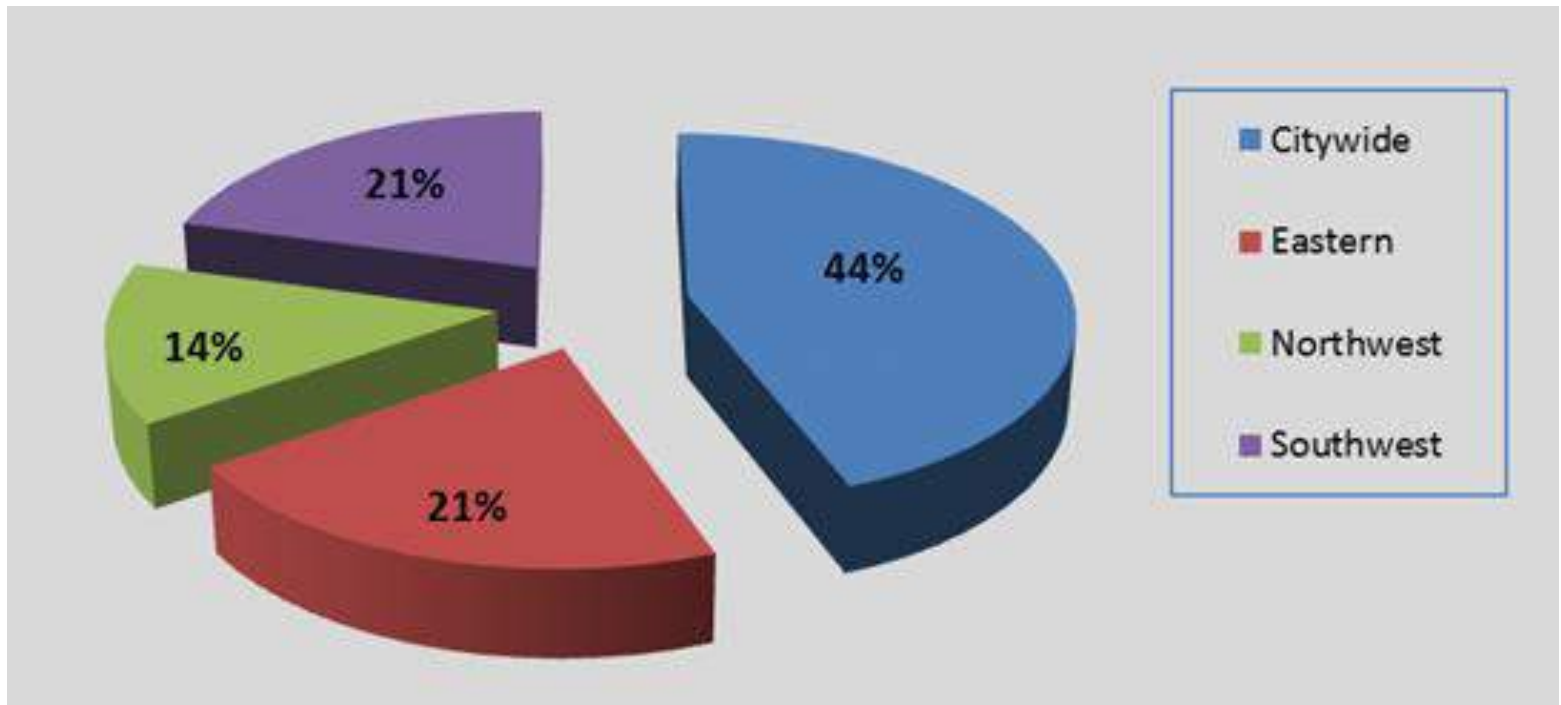
# SUMMARY OF GENERAL FUND FUNDING NEEDS

System	Critical Needs	Service Level Deficiencies	Maintenance Backlog
OSMS			
WMS			
GGMS	Under development		
PMS	\$705K	Under Study	\$20M
FMS	\$2.2M	Under Study	\$8M
BMS	\$485K	\$190K	\$60M
DMS	\$2.1M	\$60K	\$80M
RMS	\$950K	\$705K	\$467M
UFMS	\$210K	\$340K	\$1M
<b>Total</b>	<b>\$6.6M</b>	<b>\$1.3M</b>	<b>\$636M</b>

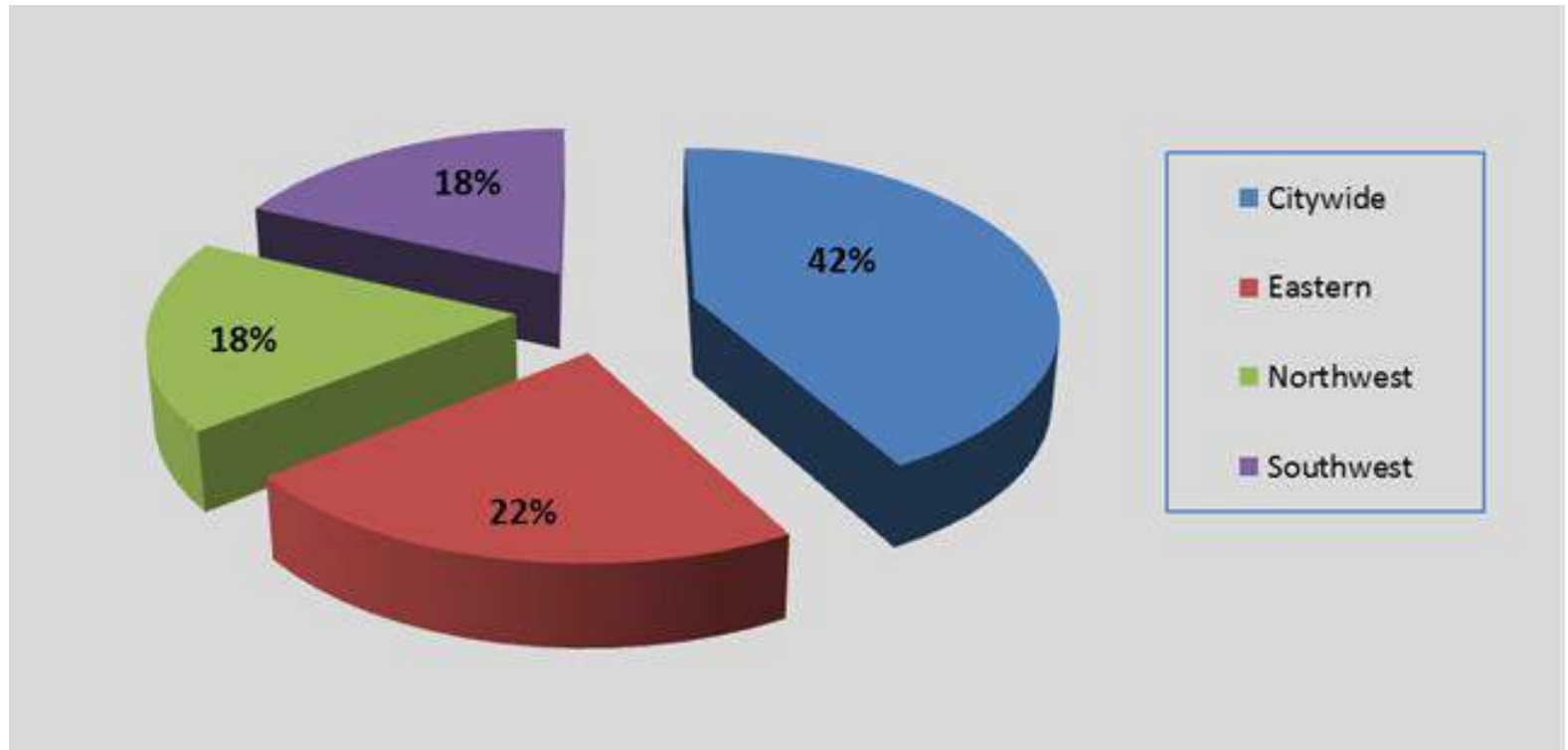
# POTENTIAL FUNDING STRATEGIES

- *Assessment Districts*
- *Bond Measure*
- *Fees*
- *Gas Excise Tax Increase*
- *Local Sales Tax Increase*
- *Other (i.e. State Revolving Loans, Infrastructure Financing District)*

# Capital Improvement Program Last Five Fiscal Years by Location






# Proposed Capital Improvement Program FY 2014/2015 by Location

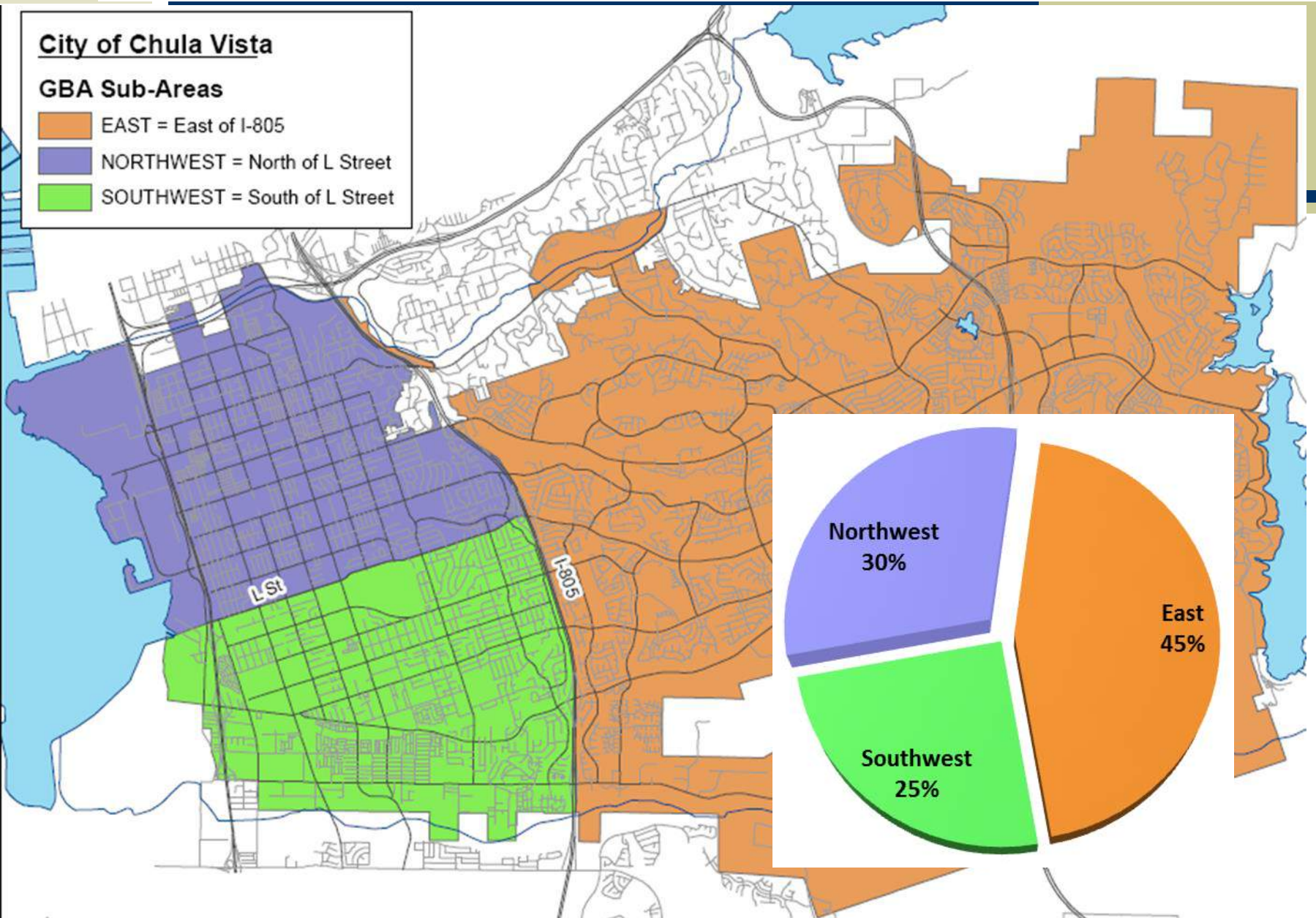


# MAINTENANCE COST DISTRIBUTION 2008 – 2013, by Location

## City of Chula Vista

### GBA Sub-Areas

-  EAST = East of I-805
-  NORTHWEST = North of L Street
-  SOUTHWEST = South of L Street



# COMMUNITY SURVEY

Conducted for the  
City of Chula Vista

Presented by  
Timothy McLarney, Ph.D.





# PURPOSE OF STUDY



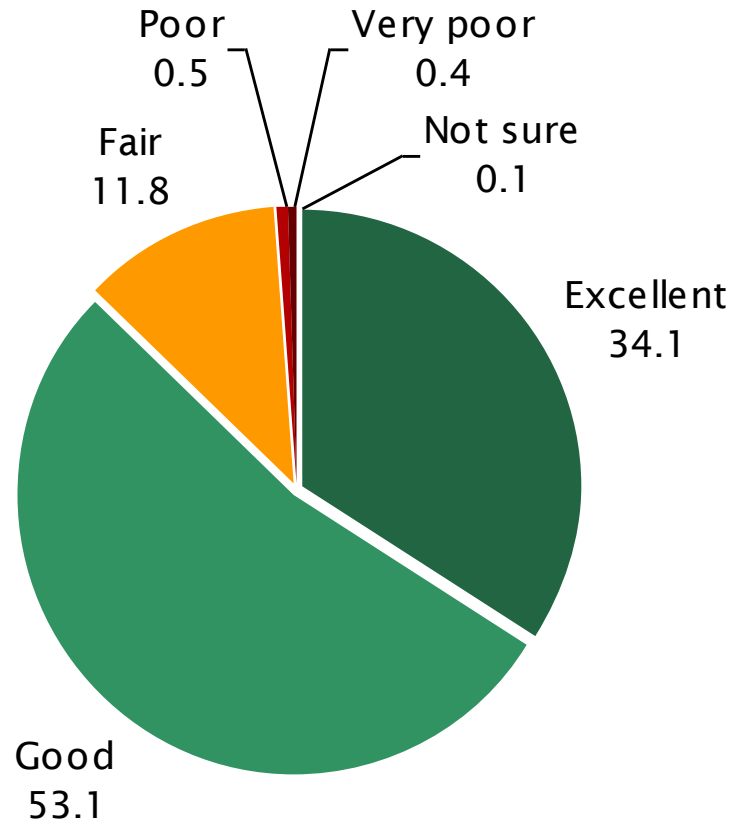
- ◆ Assess perceptions of quality of life in Chula Vista
- ◆ Identify importance of local issues
- ◆ Measure resident satisfaction with City's performance in providing municipal services and facilities
- ◆ Profile the priority residents place on funding capital projects and services in the future
- ◆ Evaluate city-resident communication

# METHODOLOGY OF STUDY

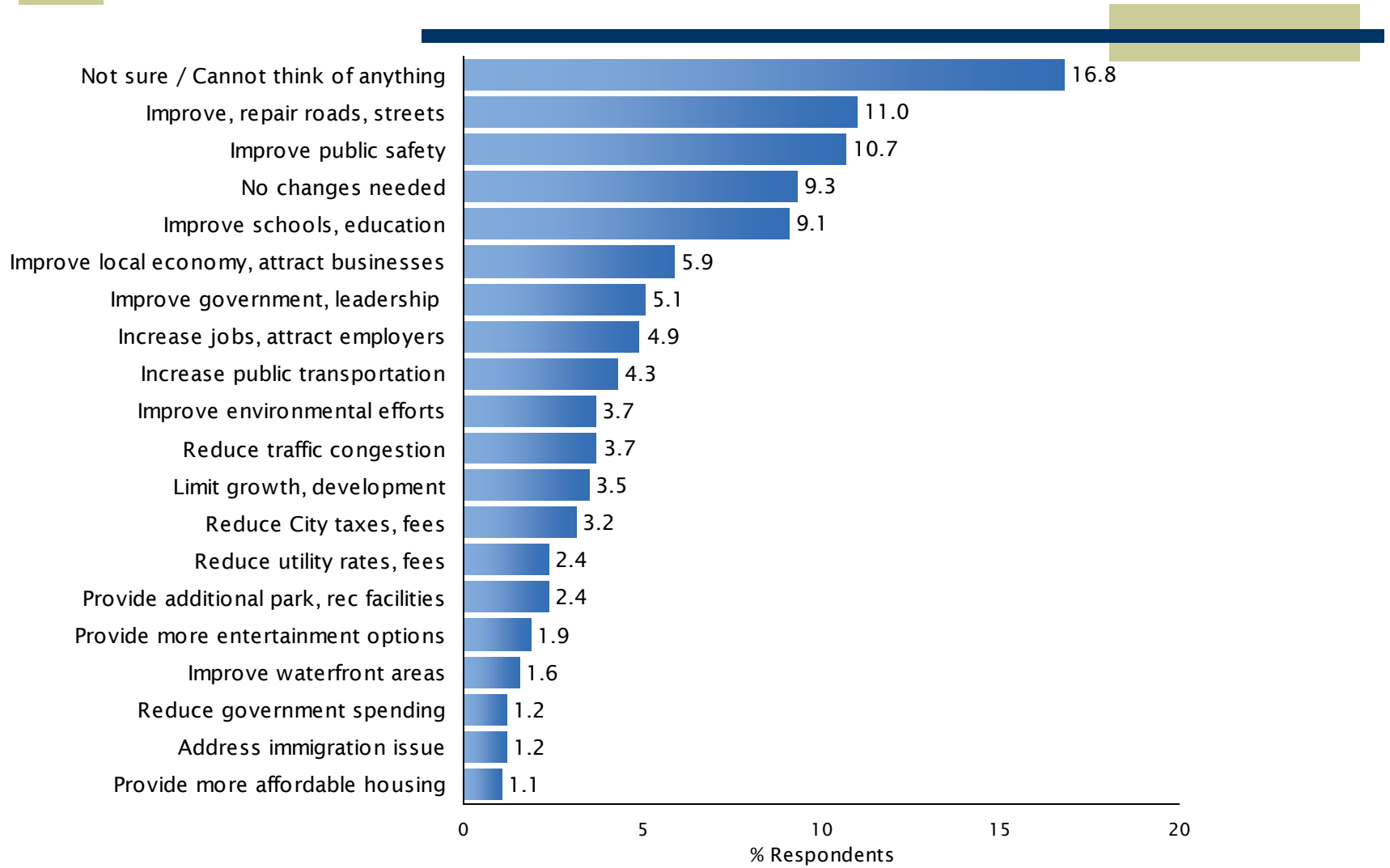
- ◆ Telephone survey
  - ◆ English & Spanish
  - ◆ 15 minutes
- ◆ Conducted Feb 5th to Feb 12th, 2014
- ◆ 400 adult residents who are registered to vote in the City of Chula Vista
- ◆ Overall margin of error of  $\pm 4.89\%$



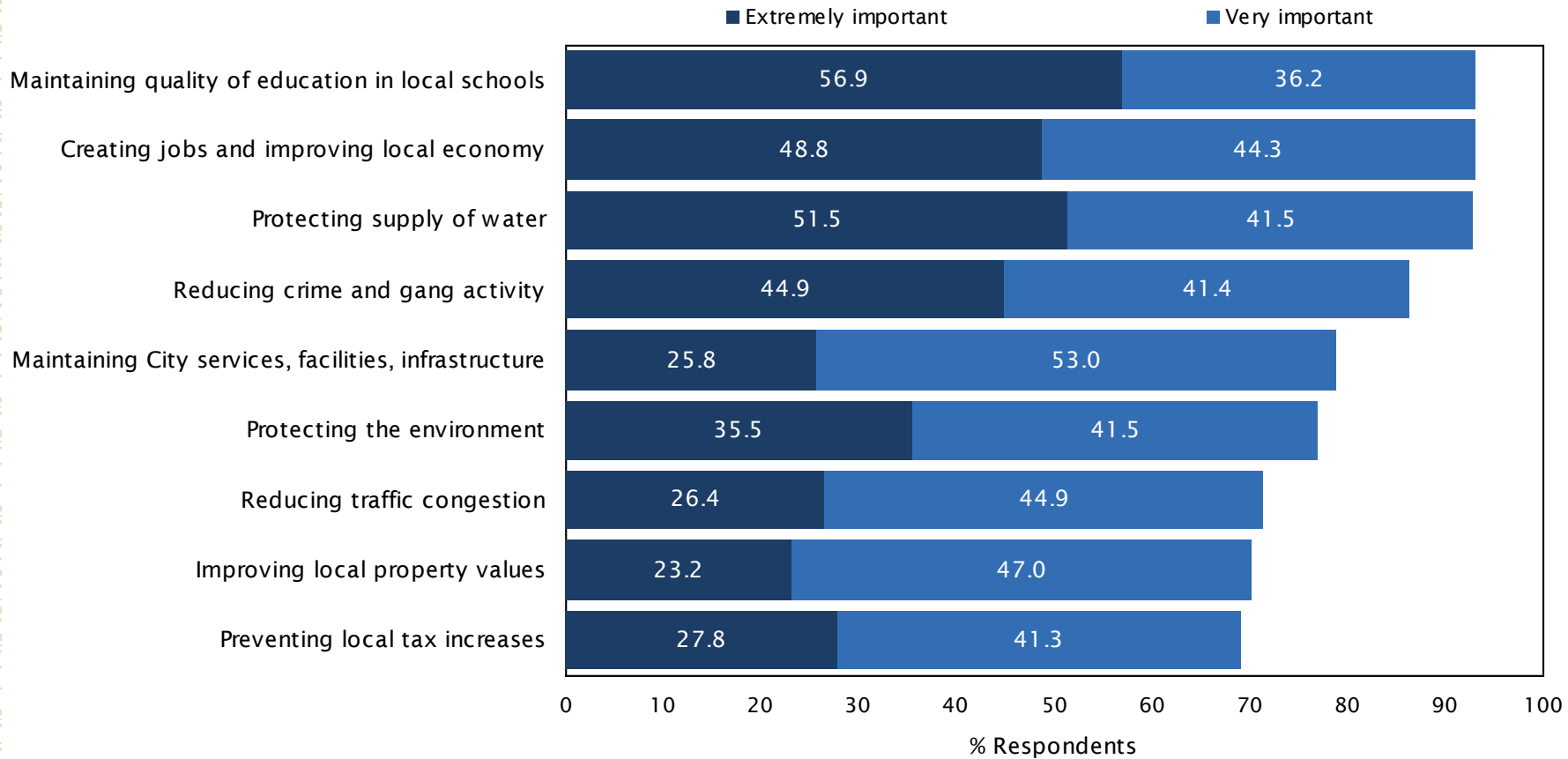
# QUALITY OF LIFE



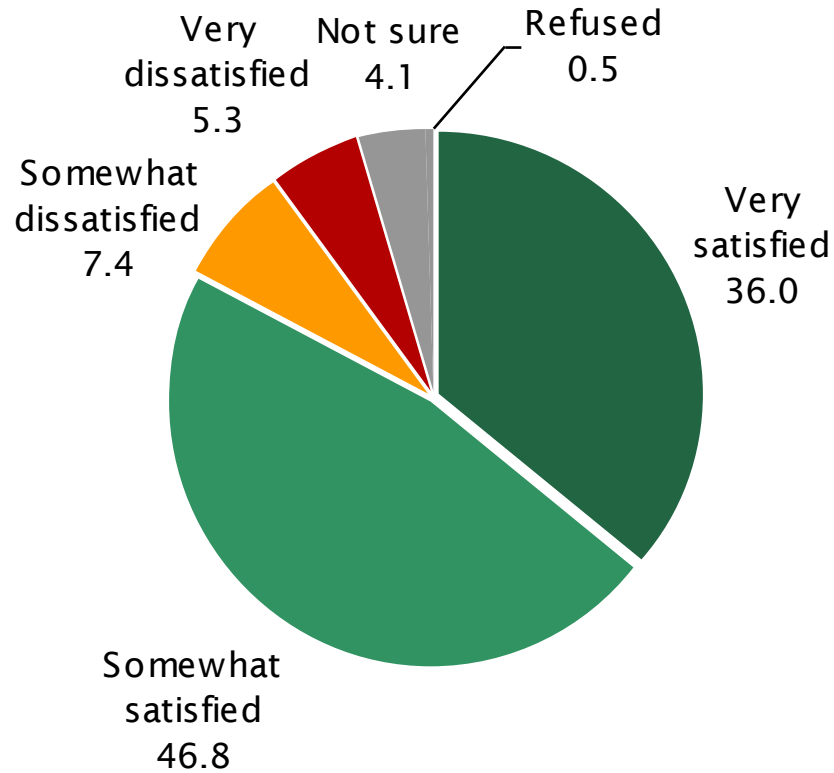
# CHANGES TO IMPROVE CHULA VISTA



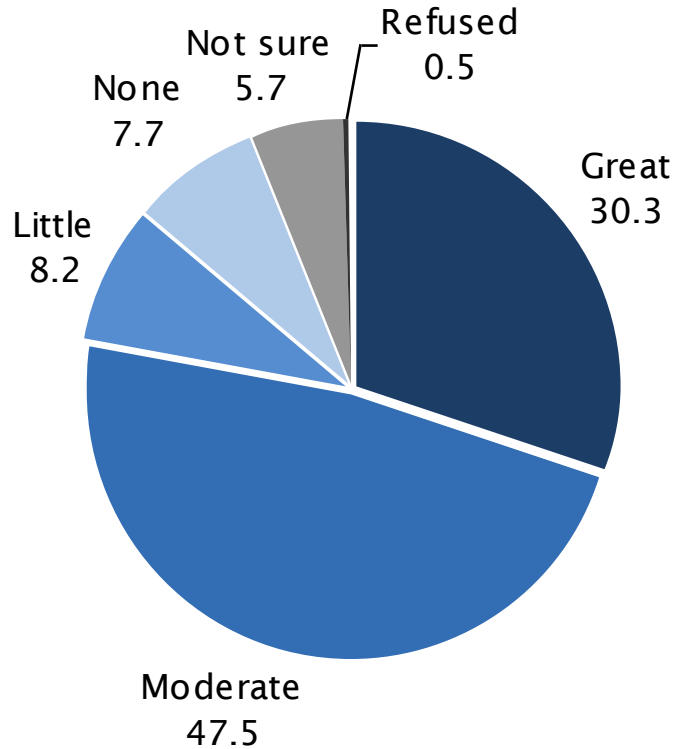
# IMPORTANCE OF ISSUES



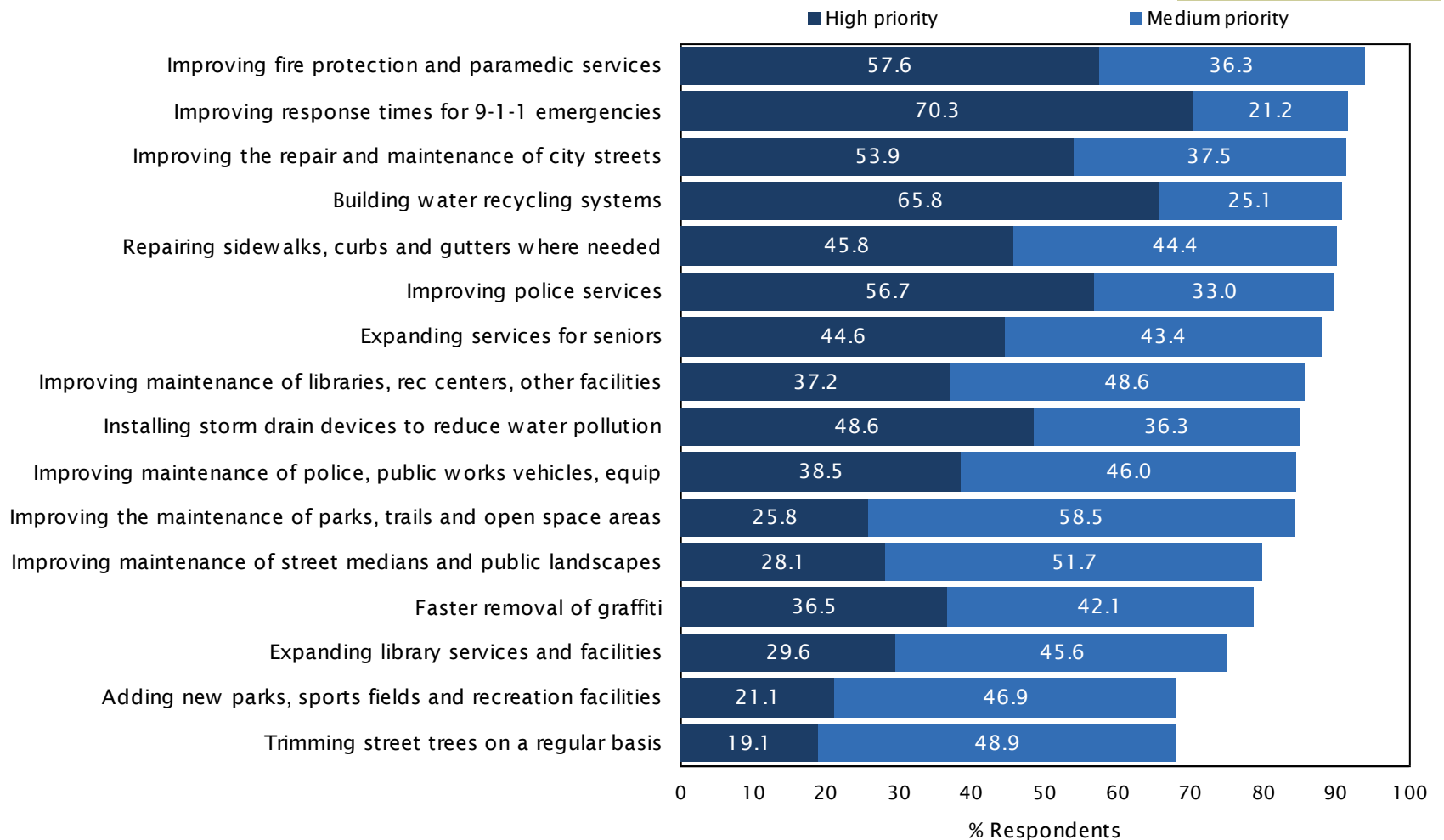
# OVERALL SATISFACTION



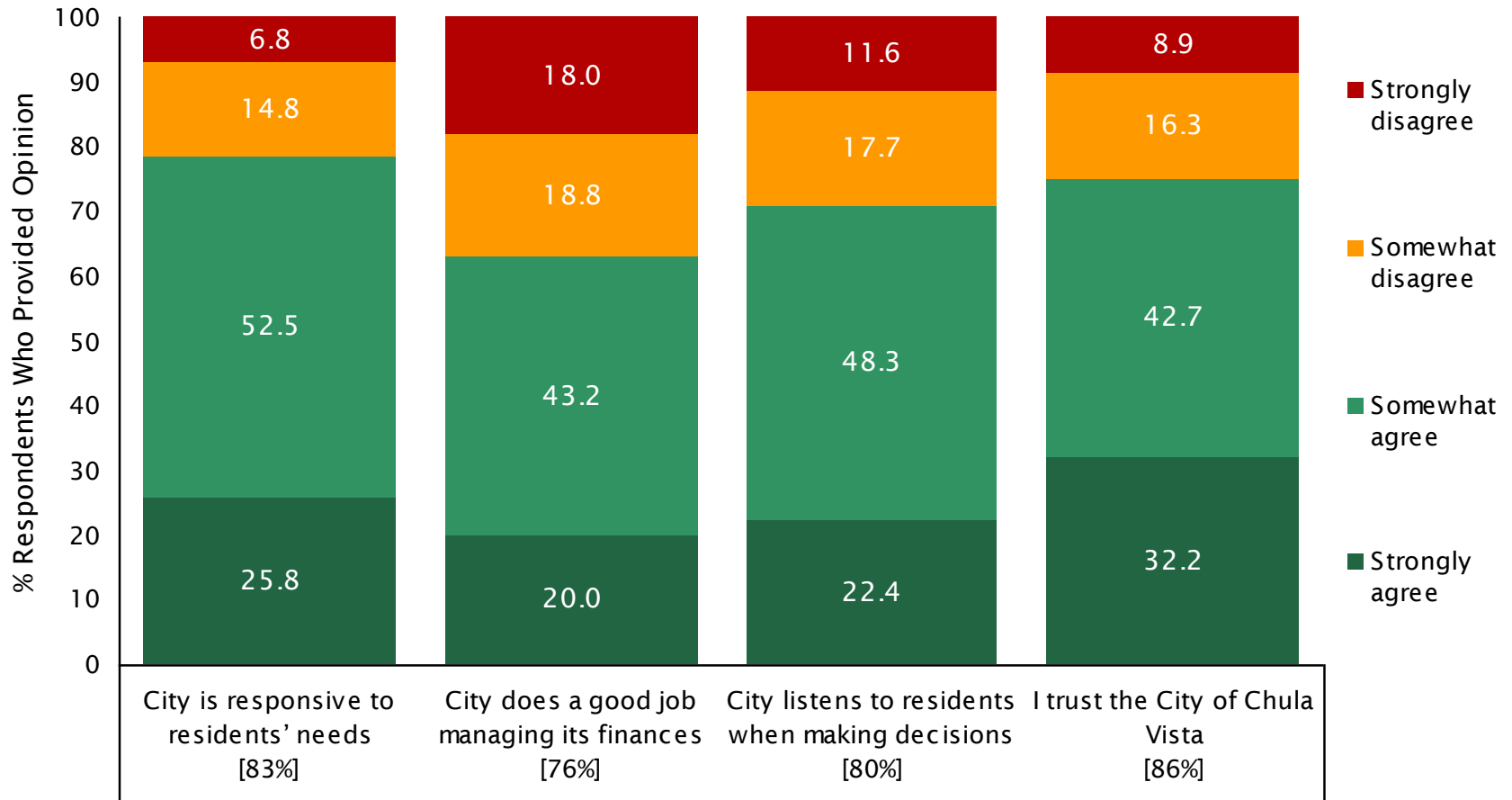
# CITY'S NEED FOR ADDITIONAL MONEY



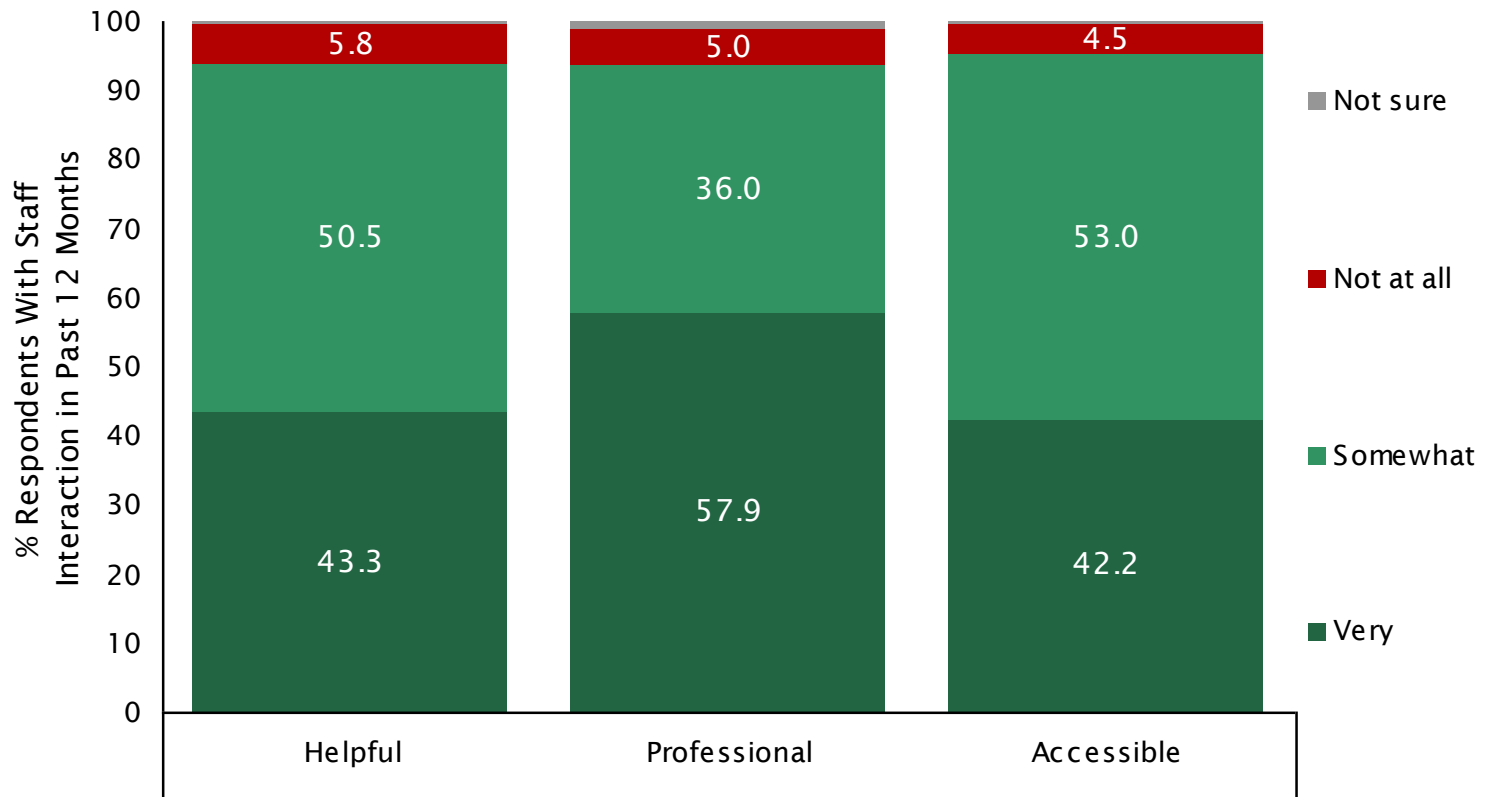
# SPENDING PRIORITIES



# AGREEMENT WITH STATEMENTS ABOUT CHULA VISTA

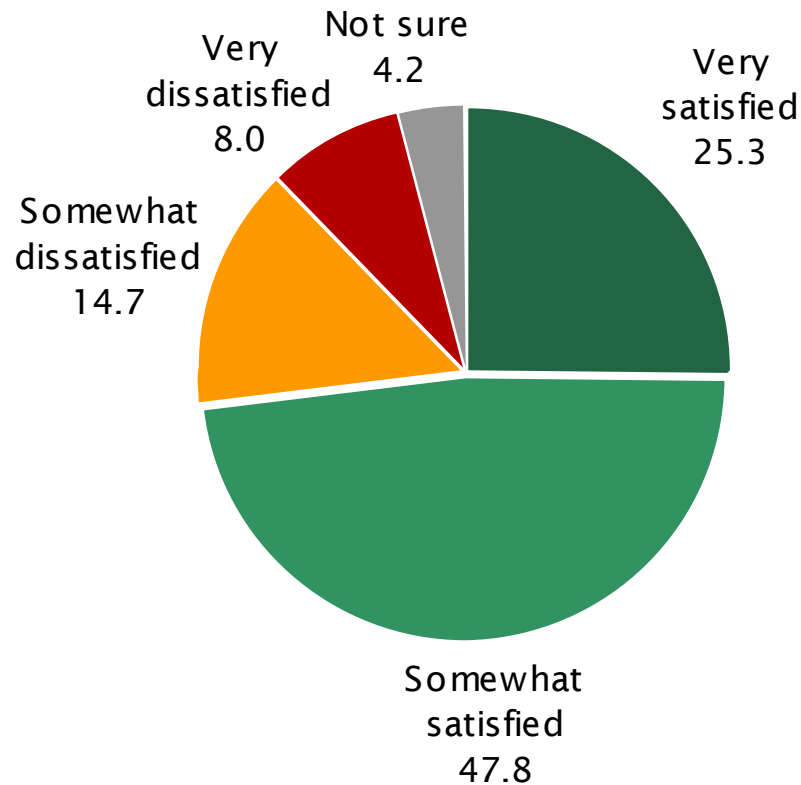


# PERCEPTION OF CITY STAFF

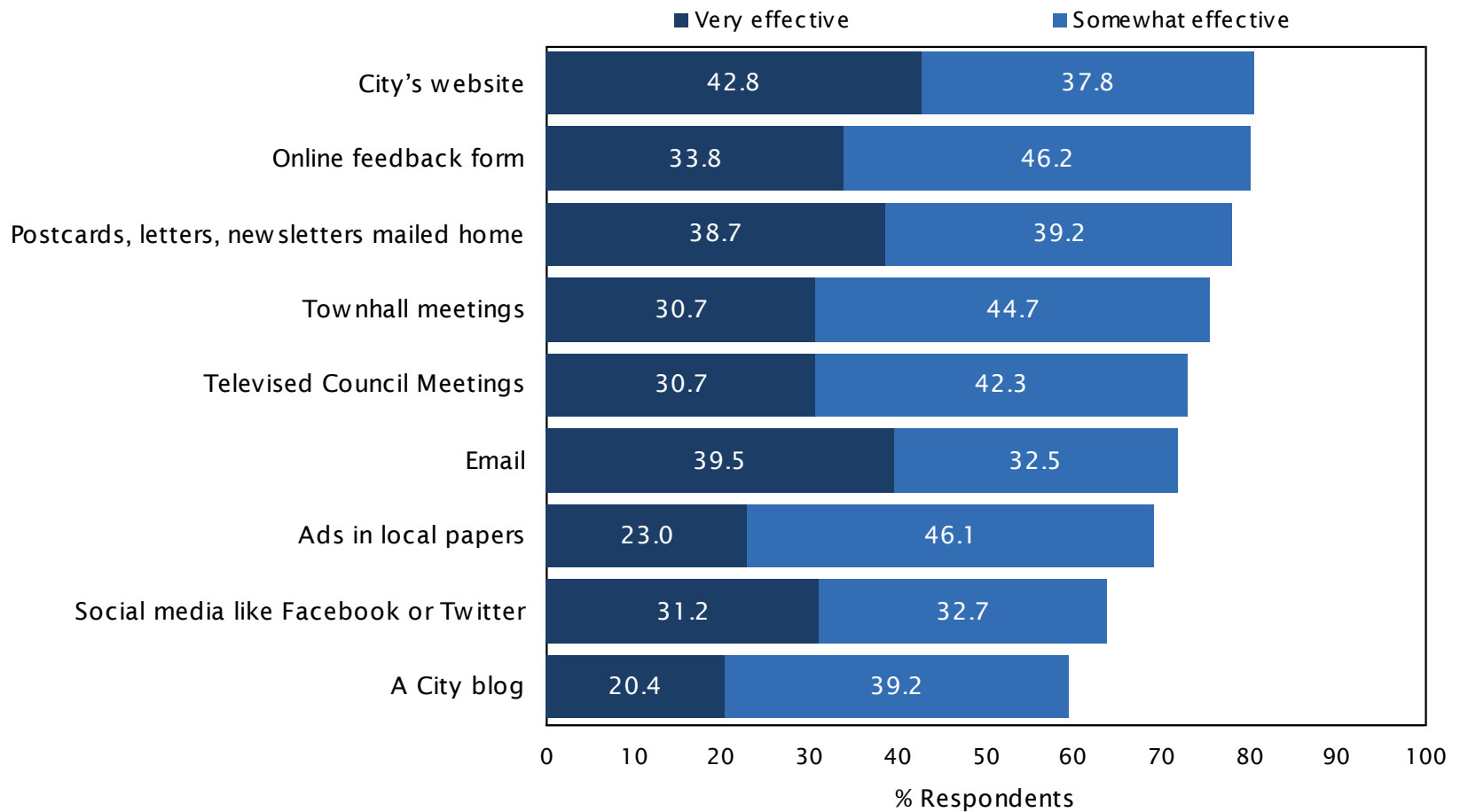




# SATISFACTION WITH COMMUNICATION



# EFFECTIVENESS OF COMMUNICATION METHODS



# KEY CONCLUSIONS

- ◆ Residents are generally satisfied with the City of Chula Vista
  - Overall Quality of Life
  - City's Performance in Providing Municipal Services
  - Customer Service
  - Communications
- ◆ There are opportunities to improve city-resident communication through increasing use of city-sponsored sites and publications
- ◆ Residents prioritize a mix of public safety, public works, and resource management projects, as well as economic development



# NEXT STEPS...



- Complete Asset Management Condition Assessments for Fleet, Drainage, Urban Forestry, Parks, Buildings, General Government, and Roadway (other than pavement)
- Report to Council with recommended prioritization protocols for spreading the limited resources over the most critical assets and levels of service.
- Report to Council the preventative maintenance and rehabilitation schedules for delivery of the expected “levels of services” for the various assets and their associated costs.



# NEXT STEPS...



- CIP and Budget Workshop in April/May
- Final CIP and Budget adoption in June
- Work with the AMP Advisory Committee to develop/confirm levels of service targets and risk assessment for each asset management system
- Develop financing strategies

# INFRASTRUCTURE WORKSHOP

*April 10, 2014*



“above, below, and all around you”