

# City of Chula Vista

## Asset Management Program Advisory Committee

**July 24<sup>th</sup>, 2014**



“above, below, and all around you”



***“INFRASTRUCTURE IS  
THE FOUNDATION FOR  
A SUSTAINABLE  
QUALITY OF LIFE.”***

# 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 ownership while delivering the service level at an acceptable level of risk

***Optimized Stewardship***

# Goal of Asset Management



## ● Reactive

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

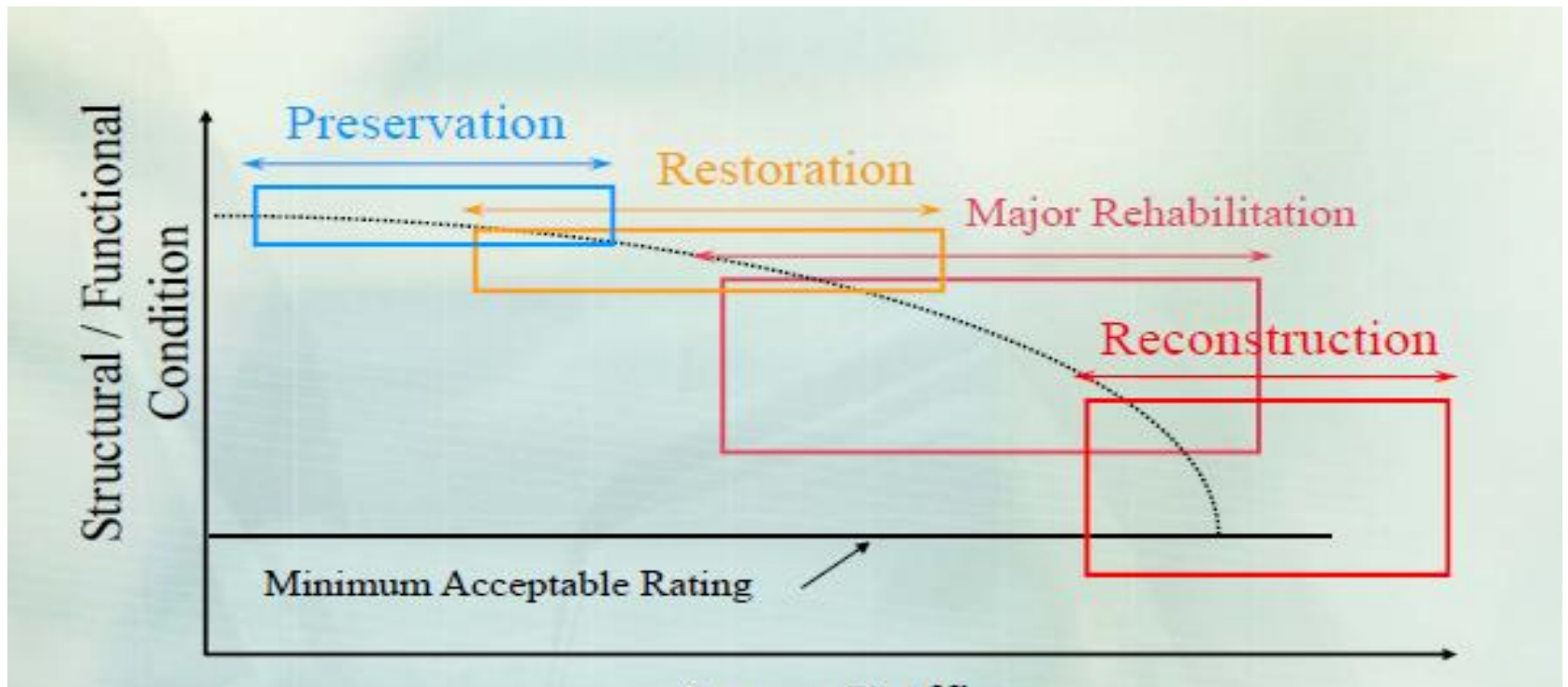
## ● Proactive

- 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 is about...

- **Establishing an appropriate Level of Service:**
  - **Community Priorities**
    - ◆ Public Surveys
    - ◆ AMP Advisory Committee
    - ◆ Current and forecasted demands
  - **Consequence of Failure**
    - ◆ Risk to health and safety
    - ◆ Risk of liability
    - ◆ Impacts to other services

# ASSET MANAGEMENT PERFORMANCE CURVE



# BUILDING MAINTENANCE AND REPAIR CHALLENGES





# ENERGY MANAGEMENT UPDATE

## Completed

- Third-party energy audits at over 30 municipal sites
- HVAC System upgrades at Norman Park Center
- LED messaging signs installed at Library Energy Lounges
- Tariff switches to more favorable rates (21 sites - \$95k in annual savings)
- Renegotiated direct access contract (4 sites - \$50k in annual savings)
- Intervention in SDG&E Rate Case at CPUC

## In Progress

- Over 3,700 street lights being converted to LED (arterial roads)
- Adaptive control study with SDG&E for street lights
- Additional solar installations at up to 5 facilities
- EV charging stations at 5 municipal sites (no cost)
- "Revolving Conservation Fund" to support energy & water upgrades

**Estimated annual utility savings of over \$455,000**





---

# Asset Management Resources

---



- Catching Up
- Keeping Up
- Moving Forward

Confronting Risks & Prioritizing Probabilities

# BMS ASSET MANAGEMENT FUNDING AND CRITICAL NEEDS

***Inventory and Condition Assessment*** **\$150,000**

## **Critical Replacement and Repair Needs**

- Inspection of Fire Risers \$110,000
- Repairs at Recreation Facilities and Pools \$150,000
- HVAC Replacement/Repairs (various facilities) \$190,000
- Roof Replacement/Repairs (various facilities) \$110,000
- Emergency Generator \$65,000

## **Annual Service Level Deficiency**

- Facilities Structural Repair – C&R Position \$90,000
- Citywide Minor Capital Repair Budget \$200,000

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

# FLEET MANAGEMENT SYSTEM (FMS)

- Police Dept. – 177 vehicles
- Fire Dept. – 47 vehicles
- Other Depts. – 312 vehicles



# PREVENTATIVE VEHICLE MAINTENANCE

|         | <b>PM'S COMPLETED</b> | <b>PM'S COMPLETED ON SCHEDULE (%) <sup>(1)</sup></b> |
|---------|-----------------------|--|
| 2013-14 | 805                   | 65% <sup>(2)</sup>                                   |
| 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) Increase due to addition of one mechanic in May 2014

# VEHICLE REPLACEMENT

| <b>FISCAL YEAR</b> | <b>NON-SAFETY VEHICLES<sup>(1) (2)</sup></b> | <b>PATROL CARS <sup>(2)</sup></b> |
|--------------------|--|-----------------------------------|
| 2013-14            | 8 of 8 <sup>(3)</sup>                        | 0 of 0 <sup>(4)</sup>             |
| 2012-13            | 5 of 5 <sup>(3)</sup>                        | 7 of 7 <sup>(4)</sup>             |
| 2011-12            | 0 of 24 <sup>(3)</sup>                       | 0 of 6 <sup>(4)</sup>             |
| 2010-11            | 0 of 19 <sup>(3)</sup>                       | 10 of 10 <sup>(4)</sup>           |
| 2009-10            | 0 of 12 <sup>(3)</sup>                       | 14 of 19 <sup>(4)</sup>           |
| 2008-09            | 0 of 10 <sup>(3)</sup>                       | 10 of 19 <sup>(4)</sup>           |

(1) Excludes Sewer funded vehicles.

(2) No. vehicles scheduled to be replaced.

(3) Reflects extended replacement intervals.

(4) Replaced at 100,000 miles vs. 80,000 miles.

# FMS CRITICAL VEHICLE REPLACEMENT NEEDS

| <b>Department</b>             | <b># of Vehicles</b> | <b>Replacement Amount</b> |
|-------------------------------|----------------------|---------------------------|
| Animal Care Services          | 1                    | \$65,000                  |
| Community Patrol              | 14                   | 476,000                   |
| Traffic Enforcement           | 1                    | 34,000                    |
| Police Administration         | 1                    | 28,000                    |
| Fire Administration           | 2                    | 120,000                   |
| Fire Suppression              | 2                    | 120,000                   |
| Public Works                  | 9                    | 747,000                   |
| Outfitting Police Patrol Cars |                      | 150,000                   |
| Emergency Vehicle Purchases   |                      | 70,000                    |
| <b>TOTAL</b>                  |                      | <b>\$1,810,000</b>        |

# ASSET MANAGEMENT PROGRAM (AMP)

| 2012           | →   | 2013   |                                      |      |
|----------------|-----|--------|--------------------------------------|------|
| GREEN          |     | GREEN  | Wastewater Management System         | WMS  |
| YELLOW         |     | YELLOW | Parks Management System              | PMS  |
| YELLOW         |     | YELLOW | General Government Management System | GGMS |
| YELLOW         |     | RED    | Building Management System           | BMS  |
| YELLOW         |     | RED    | Fleet Management System              | FMS  |
| RED            |     | RED    | Drainage Management System           | DMS  |
| RED            |     | RED    | Roadway Management System            | RMS  |
| YELLOW<br>OSMS | →   | GREEN  | Open Space Management System         | OSMS |
|                | New | RED    | Urban Forestry Management System     | UFMS |

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



# AMPAC NEXT STEPS...

- 9/11/14 Wastewater Management System
- 10/23/14 Parks Management System

Complete Asset Management Condition Assessments for Fleet, Drainage, Urban Forestry, Parks, Buildings, General Government, Wastewater and Roadway

- 12/11/14 Confront risks and consequences of failures and contemplate probabilities
- March 2015-Infrastructure Workshop w/ City Council