



# Infrastructure Workshop

April 7<sup>th</sup>, 2016



The Asset Management  
Program Journey

“above, below, and all around you”



# A Stronger, Safer Chula Vista

“The Natural and Built Environment is the Foundation for a Sustainable Quality of Life”





# Asset Management Program

- Catching Up \$\$
- Keeping Up \$\$
- Moving Forward \$\$





# Asset Management Program



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



# Asset Management Methodology

## Develop Asset Database

- **Document asset owned and managed**

- Asset Inventory
- Condition Assessment
- Asset Valuation
- Asset Hierarchy

## Understand Which Assets are Critical

- **Prioritize the need**

- Criticality Ranking
- Asset Risk

## Life Cycle Cost Assessment

- **Determine what it will take to sustain the delivery of service**

- Catch Up
- Keep Up
- Moving Forward

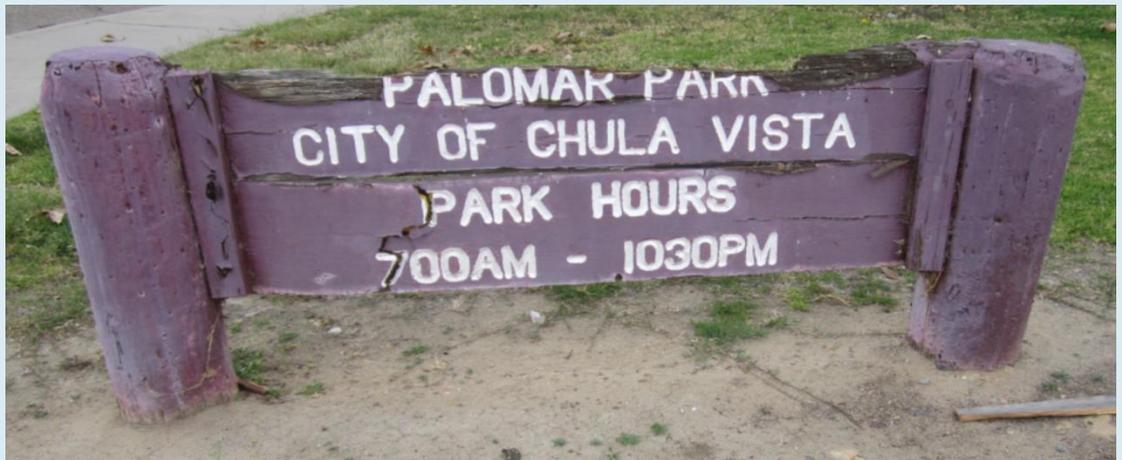


# Inventory / Data Collection





# Condition Assessment





# Assets are Mapped





# Document and Organize

Asset Hierarchy ✕ | Asset Dashboard | Asset Valuation | Install / Consumption Profile | R & R | Risk Matrix | Work Backlog | **Asset Register** ✕

Main Hierarchy

City of Chula Vista

- Drainage Management
  - Annual Inspection
  - Box Culvert
    - Box Culvert
  - Channel
    - Brow Ditch
    - Channel
    - River
    - Stream
  - Detention Basin
    - Channel
    - Dam
    - Detention Basin
    - Filtration Pond
  - Junction
    - Catch Basin
    - CDS
    - CleanoutAccess
    - CMP Riser
    - Concrete Riser
    - Curb Outlet
    - Dissipater

Search

Drag a column header here to group by that column

ID	Name	System	Type	Material	Install Year	Size 1	Unit 1	Size 2	Unit 2	Value	PoF	CoF
Mn4050	Box Culvert 4050	Drainage	Box Culvert	CMPA	1976	207	LF	31	IN	\$517,500.00	0.39	3.8
Mn4052	Box Culvert 4052	Drainage	Box Culvert	CMPA	1974	33	LF	31	IN	\$82,500.00	0.41	3.8
Mn4053	Box Culvert 4053	Drainage	Box Culvert	CMPA	1976	150	LF	31	IN	\$375,000.00	0.39	3.8
Mn10717	Box Culvert 10717	Drainage	Box Culvert	CMPA	1962	86	LF	16	IN	\$215,000.00	0.53	3
Mn18023	Box Culvert 18023	Drainage	Box Culvert	CMPA	1962	75	LF	18	IN	\$187,500.00	0.53	3.5
Mn18063	Box Culvert 18063	Drainage	Box Culvert	SBC	2001	142	LF	18	IN	\$355,000.00	0.14	4.1
Mn18064	Box Culvert 18064	Drainage	Box Culvert	SBC	2001	61	LF	18	IN	\$152,500.00	0.14	4.1
Mn21330	Box Culvert 21330	Drainage	Box Culvert	SBC	2001	20	LF	18	IN	\$50,000.00	0.14	4.1
Mn22680	Box Culvert 22680	Drainage	Box Culvert	Sidewalk Underdrain	2005	19	LF	3	IN	\$47,500.00	0.1	3.8
Mn23151	Box Culvert 23151	Drainage	Box Culvert	Sidewalk Underdrain	2005	11	LF	18	IN	\$27,500.00	0.1	3.5
Mn23152	Box Culvert 23152	Drainage	Box Culvert	Sidewalk Underdrain	2005	8	LF	18	IN	\$20,000.00	0.1	3.5
Mn23657	Box Culvert 23657	Drainage	Box Culvert	Sidewalk Underdrain	1977	10	LF	4	IN	\$25,000.00	0.38	2.9
Mn23773	Box Culvert 23773	Drainage	Box Culvert	Sidewalk Underdrain	1981	16	LF	4	IN	\$40,000.00	0.34	3.8
Mn4104	Box Culvert 4104	Drainage	Box Culvert	CMPA	1977	55	LF	24	IN	\$137,500.00	0.38	3.65
Mn10724	Box Culvert 10724	Drainage	Box Culvert	CMPA	1977	49	LF	24	IN	\$122,500.00	0.38	3.65
Mn19551	Box Culvert 19551	Drainage	Box Culvert	CMPA	1977	7	LF	24	IN	\$17,500.00	0.38	3.35
Mn19552	Box Culvert 19552	Drainage	Box Culvert	CMPA	1977	32	LF	24	IN	\$80,000.00	0.38	3.65
Mn4164	Box Culvert 4164	Drainage	Box Culvert	DBC	1963	45	LF	48	IN	\$112,500.00	0.52	4.5
Mn4165	Box Culvert 4165	Drainage	Box Culvert	DBC	1965	368	LF	96	IN	\$920,000.00	0.5	4.5
Mn4207	Box Culvert 4207	Drainage	Box Culvert	SBC	1957	315	LF	18	IN	\$787,500.00	0.58	3.5

Count=21051



# Prioritize by Risk Assessment



**Probability of Failure**

Timing to Failure

**Consequence of Failure**

Impact of a failure

- Economic
- Environment
- Social

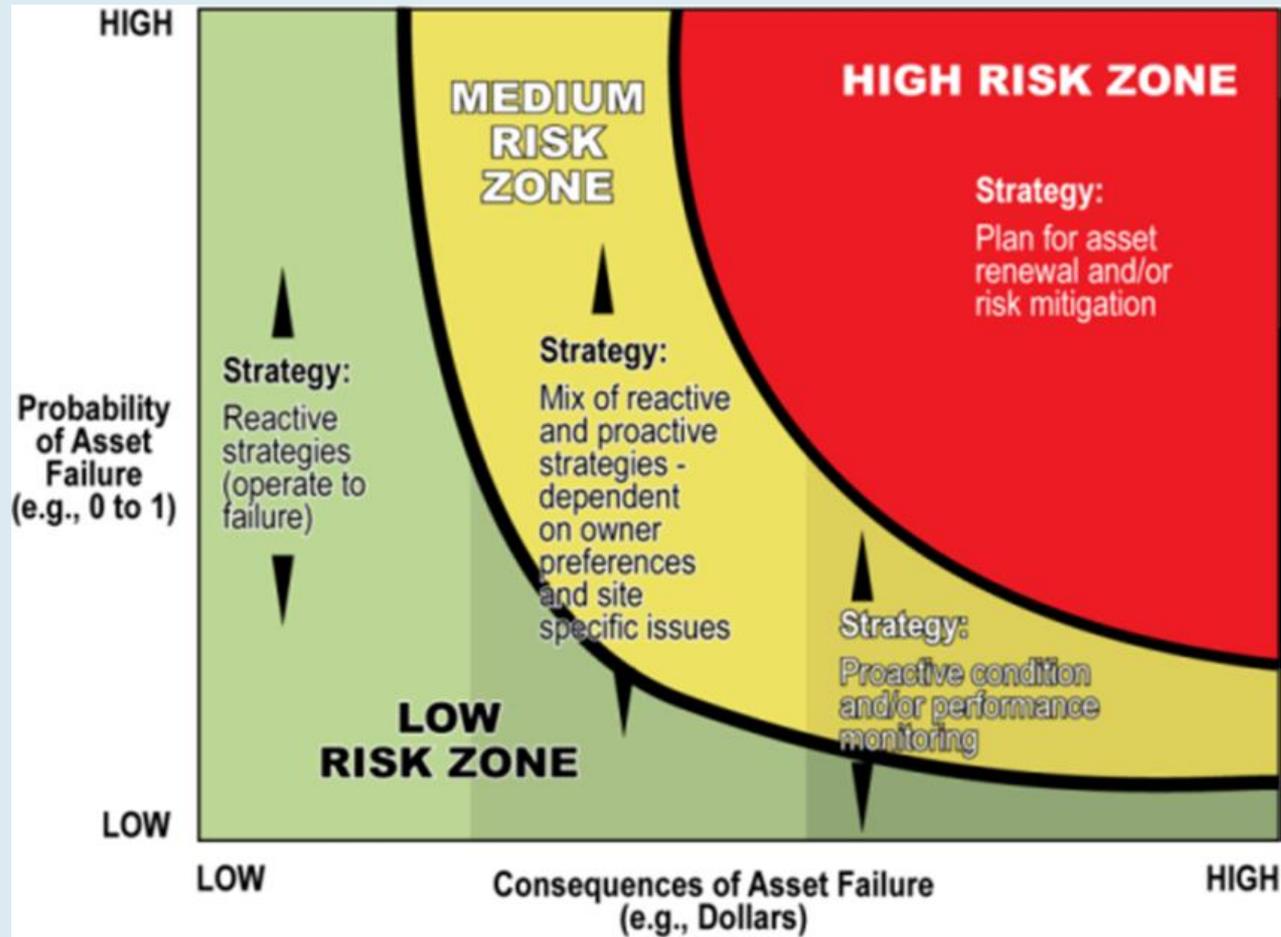


# Sink Hole in a School Zone



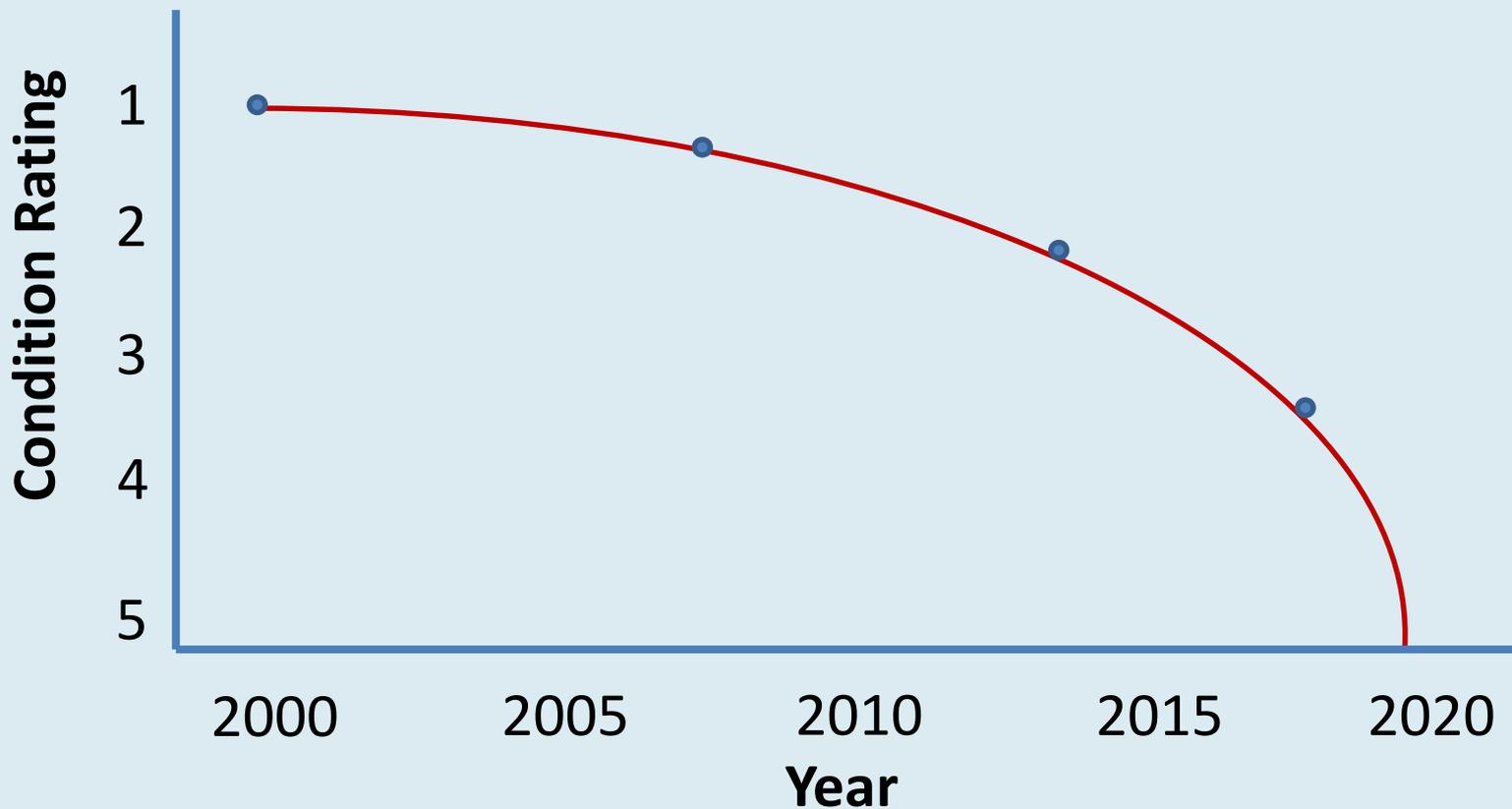


# Risk-Based Management Strategy



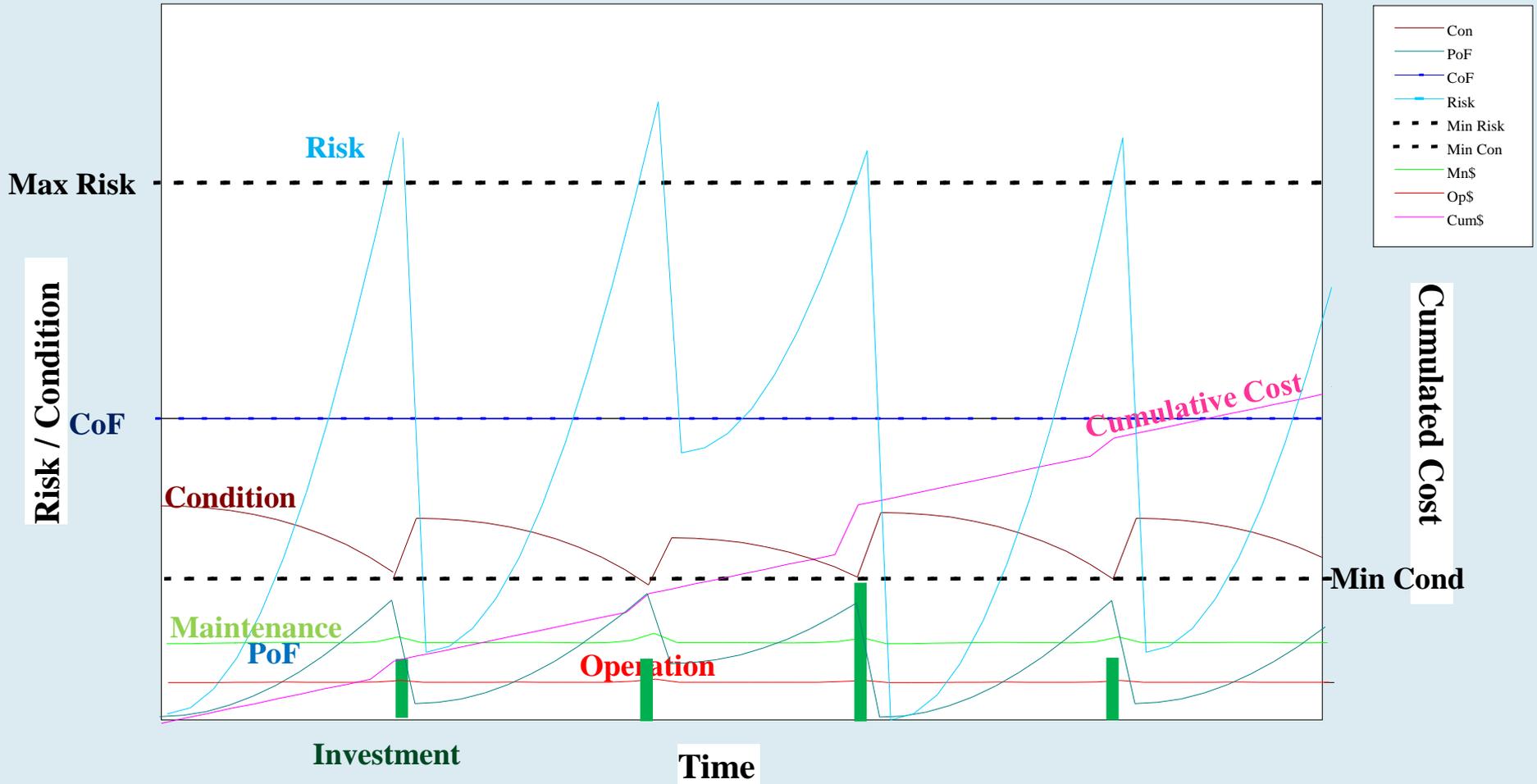


# Calculating Timing to Failure





# Life Cycle Investment Logic





# Asset Management Systems Update

- 2007 Initiated efforts with the Pavement Management System using Transnet funds
- 2010 Initiated efforts with the Wastewater Management System using Sewer funds
- 2011 Expanded efforts to other Management Systems using in-house staff
- 2013 Accelerated efforts using consultants and general funds
- 2016 Continuing management systems efforts along with initiation of OSMS and GGMS



# Roadway Critical Needs

## Roadway Management System

Install Range

1945 - 2014

Total Annualized R&R

\$13,431,422

Total Valuation

\$665,965,973

Average % Consumed

42 %

Total Replacement Cost

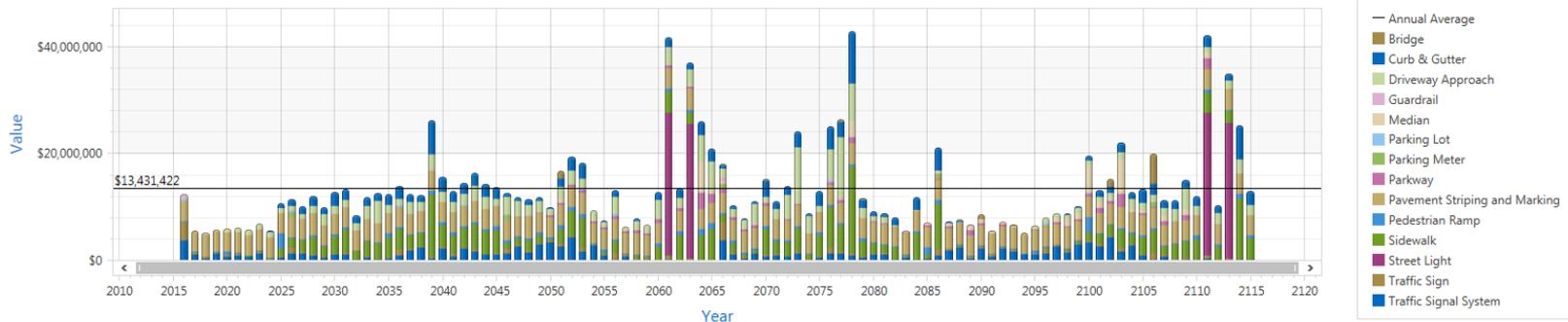
\$665,965,973

Total Assets

142,853



## Replacement & Rehabilitation

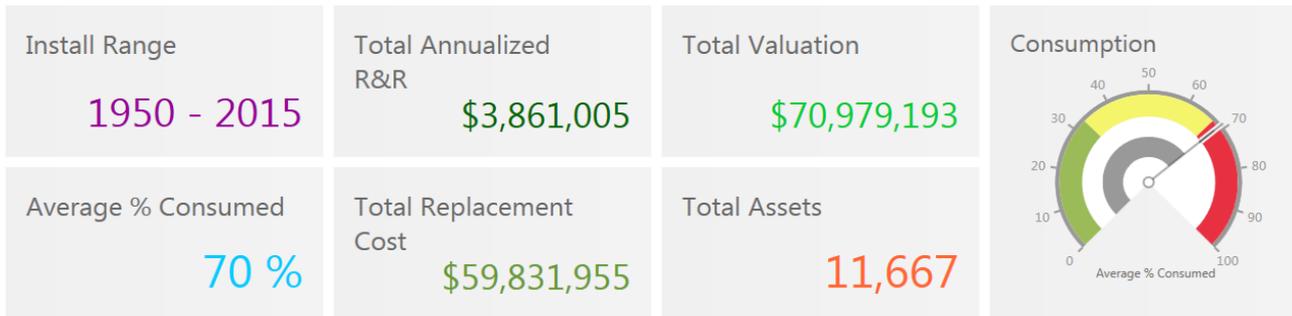


- Critical Needs \$13.2
- Medium Needs \$95.9

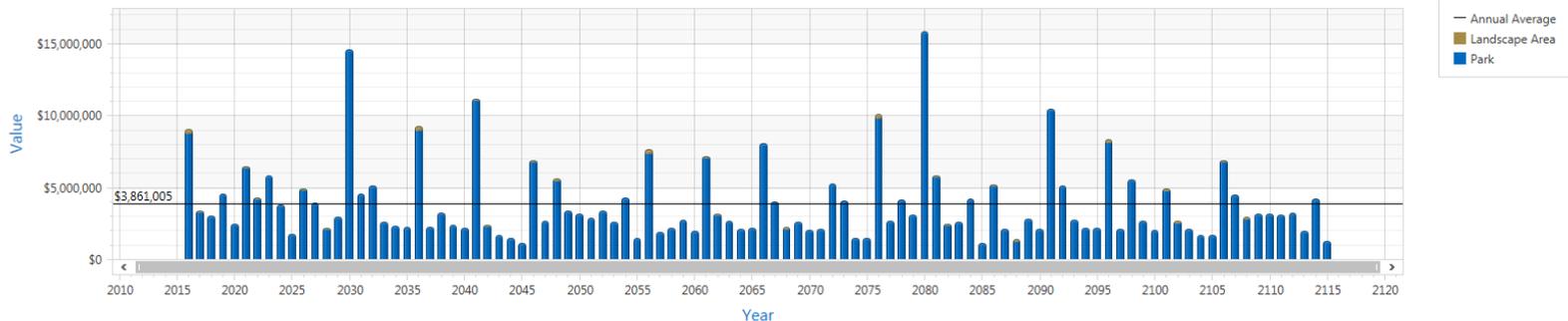


# Parks Critical Needs

## Park Management System



## Replacement & Rehabilitation



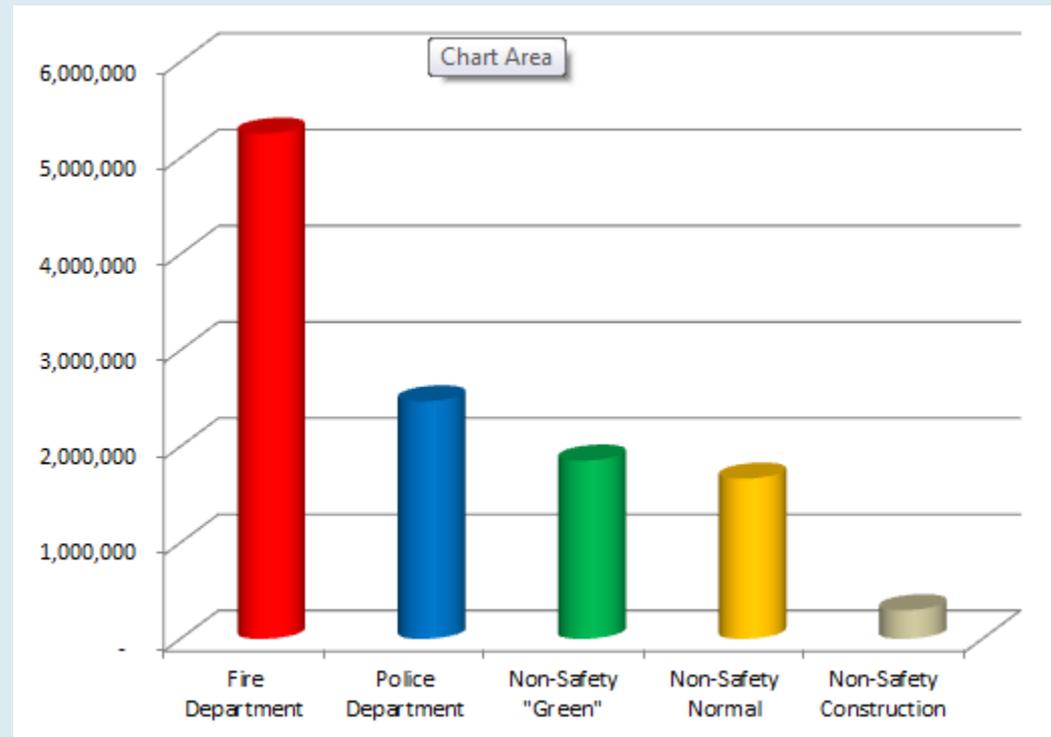
- Critical Needs \$16.2M
- Medium Needs \$21.4M



# Fleet Critical Needs

Projected fleet critical replacement needs for Fiscal Year 2017 by department.

- \$11.7M total
  - Fire \$5.3
  - Police \$2.5
  - Non-Safety "Green" \$1.9
  - Non-Safety Normal \$1.7
  - Non-Safety Construction 0.3





# Asset Overview

Asset	RED (5-3.5)	YELLOW (3.4-2)
Drainage	\$6.4	\$35.1
Buildings	\$21.5	\$60.0
Fleet	\$11.7 <sup>1</sup>	\$21.5 <sup>2</sup>
General Government	Under Study	
Open Space	Under study	
Parks	\$16.2	\$21.4
Roadway/Pavement	\$18.2	\$140.1
Urban Forestry	\$0.7	\$1.0
Wastewater <small>(non-general fund)</small>	\$0.0	\$0.0
<b>Total</b>	<b>\$71.7 M</b>	<b>\$279.1 M</b>

1) Safety and Non-safety fleets, FY17 projected replacement

2) Safety and Non-safety fleets, FY18/FY 21 projected replacement



# Asset Management Program Advisory Committee

## Civic Engagement



*reaching consensus*



# Exploring the City's Infrastructure





# Exploring the City's Infrastructure





# Asset Management Program Advisory Committee

## Civic Engagement



*reaching consensus*



# Public Outreach

- Simple, summary materials
  - Informational flyer
  - FAQ
  - Web page
- Resident engagement and feedback
  - Mailer with tear-off reply card
  - Online survey form
  - Link to existing City communications
- Public Opinion Survey



**A STRONGER, SAFER CHULA VISTA**

Chula Vista is a great place to live. The City of Chula Vista has been identifying urgent needs that must be met to help make our city even better. You can learn more about the process, and add your voice as well by visiting [www.chulavista.gov/infrastructure](http://www.chulavista.gov/infrastructure).

**REPAIRING AND MAINTAINING NECESSARIOUS STREETS**  
Improving our local streets, sidewalks, and essential infrastructure will help improve the local economy and attract new businesses and jobs to Chula Vista. If we don't take care of it now, it will be a lot more expensive to repair in the future.

**PUBLIC SAFETY VEHICLES AND EQUIPMENT**  
When you have an emergency you need help fast. Chula Vista police and firefighters must have the vehicles and life-saving equipment they need to respond quickly to 911 emergencies.

**AGING STORM DRAINS NEED REPAIRS**  
Much of the City's storm drain system is more than 30 years old. We need to start replacing and repairing the system before pipes collapse, causing soil holes, flooding, pollution and property damage.

**UPGRADING WATER SYSTEMS TO COMBAT THE DROUGHT**  
We are facing the worst drought in California history, and the price of water is going to keep going up. Chula Vista can save money and conserve water by upgrading irrigation and drainage systems.

**KEEPING RIDES ON THE RIGHT TRACK**  
Improved public safety is critical for maintaining the quality of life in Chula Vista. Parks and recreation centers help keep kids healthy, active, and away from drugs, gangs and crime.

Chula Vista is considering potential funding options to address critical needs:

- Pave, maintain and repair city streets and fix potholes
- Upgrade aging police, fire and 911 emergency response facilities, equipment and communications to ensure reliable response
- Retrofit storm drains to capture trash and reduce water pollution
- Upgrade the City's irrigation and drainage systems to conserve drinking water
- Make essential repairs to older libraries and recreation centers

**WE WANT TO HEAR FROM YOU**  
The City of Chula Vista values your input as it considers its options to address these critical needs. If you have questions or comments, please email [infrastructure@chulavista.gov](mailto:infrastructure@chulavista.gov).

**CITY OF CHULA VISTA**

**WE WANT TO HEAR FROM YOU**

The City of Chula Vista is considering how to maintain vital assets and our high quality of life. Add your voice to the conversation by filling out this survey or going online at: [www.chulavista.gov/infrastructure](http://www.chulavista.gov/infrastructure)

Please rate the importance of the following priorities:

	LOW	MEDIUM	HIGH
Pave, maintain and repair city streets and fix potholes		<input type="checkbox"/>	<input type="checkbox"/>
Upgrade aging police and fire facilities and equipment		<input type="checkbox"/>	<input type="checkbox"/>
Upgrade irrigation and drainage systems to conserve water & energy		<input type="checkbox"/>	<input type="checkbox"/>
Retrofit storm drains to reduce water pollution		<input type="checkbox"/>	<input type="checkbox"/>
Improve wildfire response and prevention		<input type="checkbox"/>	<input type="checkbox"/>
Repair or replace failing storm drain pipes that create sink holes		<input type="checkbox"/>	<input type="checkbox"/>
Repair broken sidewalks, curbs and gutters		<input type="checkbox"/>	<input type="checkbox"/>
Maintain parks and recreation facilities		<input type="checkbox"/>	<input type="checkbox"/>
Make essential repairs to older libraries and recreation centers		<input type="checkbox"/>	<input type="checkbox"/>



# Outreach Efforts

- Albondigas South County
- *Chula Vista Chamber of Commerce*
- Chula Vista Elementary School District
- Chula Vista GMOC
- Chula Vista Kiwanis
- Chula Vista Parks & Recreation Commission
- Chula Vista Police Officers' Association
- District 1 Community Meeting
- HarborFest
- International Association of Firefighters
- Let's Connect Expo
- Rancho del Rey Community Group
- Rotary Club of Chula Vista
- SANDAG
- San Diego County Taxpayers Association
- South County EDC
- Southwest Civic Association
- Third Avenue Village Association



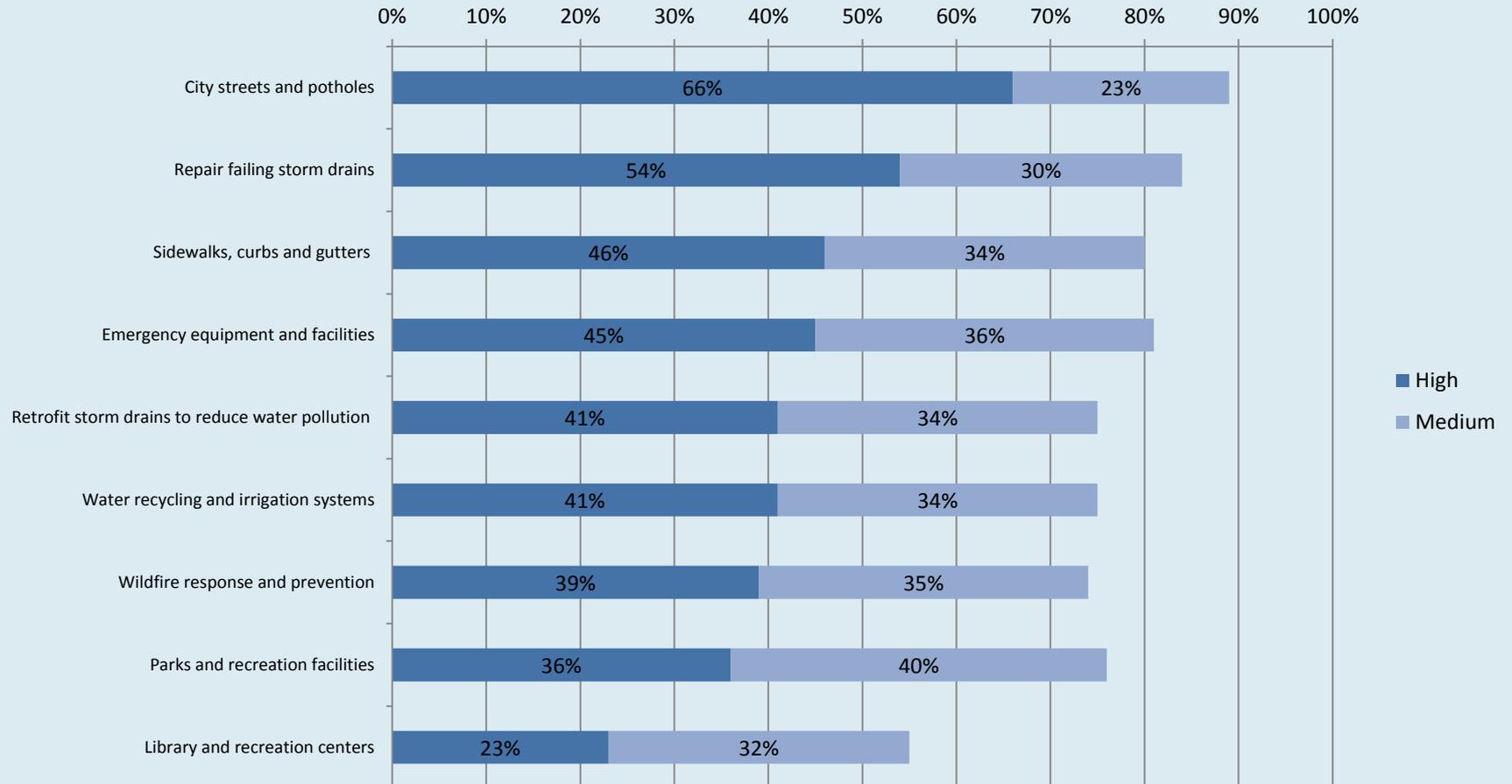
# Community Needs Assessment

- Soliciting broad-based citizen input
- Community group meetings confirm our community agrees there are significant needs that must be addressed
- Continuum of opinion about support for revenue measure
- Identifying priority needs





# Public Input



# Initial Survey

- Gauge the feasibility of an infrastructure revenue measure
- Identify how an infrastructure measure could be best aligned with community priorities & preferences
- Telephone survey
  - English & Spanish
- Random sample
  - 800 likely November 2016 voters
  - Split Sample: 400 received sales tax, 400 received bond
- Overall margin of error  $\pm 3.5\%$ ,  $\pm 4.9\%$  per version

# Initial Survey Conclusions

- It is feasible to move forward with a revenue measure
- Voters perceive that maintaining the quality of city facilities, services and infrastructure are among the most important issues facing the community
- Strong natural support for recommended uses of funds
- Steady support for sales tax, whereas support drops for bond
- Effective public outreach and an independent campaign would help sustain support for the measure

# Sales Tax Support

- ½ cent sales tax  
**69.3%** definitely or probably yes
- ¼ cent sales tax  
**67.6%** definitely or probably yes
- After hearing more about it  
**69%** definitely or probably yes
- After hearing negative arguments  
**67.4%** definitely or probably yes

# Bond Support

- Initial question for \$200 million Bond  
**71.1%** definitely or probably yes
- When told it would be \$57 per \$100,000 AV  
**33.7%** definitely or probably yes
- When dropped to \$28 per \$100,000 AV  
**49.7%** definitely or probably yes
- After hearing more about it  
**64.1%** definitely or probably yes
- After hearing negative arguments  
**59.5%** definitely or probably yes



# Local Funding Measure Options

## Sales Tax Measure

- Can be used for facility repairs, upgrades and services
- ½ cent sales tax would bring in approximately \$15 million per year
  - approximately \$78m over 5 yrs
  - approximately \$166m over 10 yrs
- For every \$100 in taxable items the increase in sales tax would be 50¢

## Bond Measure

- Provides local funding for facility repairs and upgrades
- \$200 million infrastructure bond
- A typical home owner in Chula Vista could see an increase in property tax of less than \$200 per year for 30 years



# Sales Tax

- Paid at the time of sale of goods
- Sales tax is not charged for groceries and prescription medicine
- Vehicle sales attributed to the address of purchaser
- Can consider any rate increase up to 1%
- Can consider any sunset period (including no sunset)
- Can include fiscal accountability provisions - oversight
- General revenue that is allocated annually requires a simple majority (50%+1)
- Dedicated revenue requires a super majority (66.67%)



# Sales Tax Pros & Cons

## Sales Tax Pros

- Cost sharing beyond property owners (all residents, visitors, and tourists)
- Voter Survey shows support for sales tax

## Sales Tax Cons

- Business community must be comfortable
- Sales tax can be seen as regressive for low income residents
- Sales tax for a dedicated use has to be approved by a super majority of voters (66.67%)



# Bond

- Bond reimbursed by an increase in local property tax on all taxable property (including residential and commercial)
- Added to property tax bill as additional tax rate on assessed valuation
- Can consider what dollar amount
- Can consider what projects to include in the Bond
- Can include fiscal accountability provisions - oversight
- Requires a super majority of voters (66.67%)



# Bond Pros & Cons

## Bond Pros

- Provides upfront funding to allow the City to immediately begin projects and upgrades

## Bond Cons

- Financing costs eat into some of the revenue received
- 30 year repayment period
- Capital expenditures only
- Less support for bond
- Super majority required



# Local Revenue Measures

Jurisdiction	Revenue Source	Year	% Required	% Achieved
<b>SANDAG</b>	0.5% sales tax extension for transportation	2004	67%	67.01%
<b>El Cajon</b>	0.5% sales tax increase for general use (20 years)	2008	50% +1	51.77%
<b>La Mesa</b>	0.75% sales tax increase for general use (20 years)	2008	50% +1	55.51%
<b>National City</b>	1.0% sales tax increase for general use (10 years)	2006/ 2014	50% +1	59.01%
<b>Vista</b>	0.5% sales tax increase for general use (30 years)	2006	50% +1	53.97%
<b>Santa Monica</b>	0.5% sales tax increase for general use (no sunset)	2010	50% +1	60.87%
<b>Los Angeles</b>	0.1% property tax increase for storm water projects	2004	67%	76.30%



# Other Measures

- SANDAG (sales tax)
- Southwestern College (bond)
- Sweetwater Union High School (bond)



# Conclusion & Recommendation

- Ten years of increased sales tax revenue addresses most of the critical infrastructure needs
- Staff Recommendation
  - Return to the City Council in June with proposed ballot language for a ½ cent sales tax for 10 years
- Staff seeking feedback from Council on staff recommendation