



Facilities Construction & Maintenance Infrastructure Workshop Presentation February 16, 2016





Overview

- **Part I:** Facility Condition Assessment (FCA)
- **Part II:** Capital Project Perspective
Break for Questions
- **Part III:** Master Space Plan
Break for Questions
- **Part IV:** Facilities Master Plan
- **Part V:** 20-year Vision
- **Future Considerations**
Break for Questions



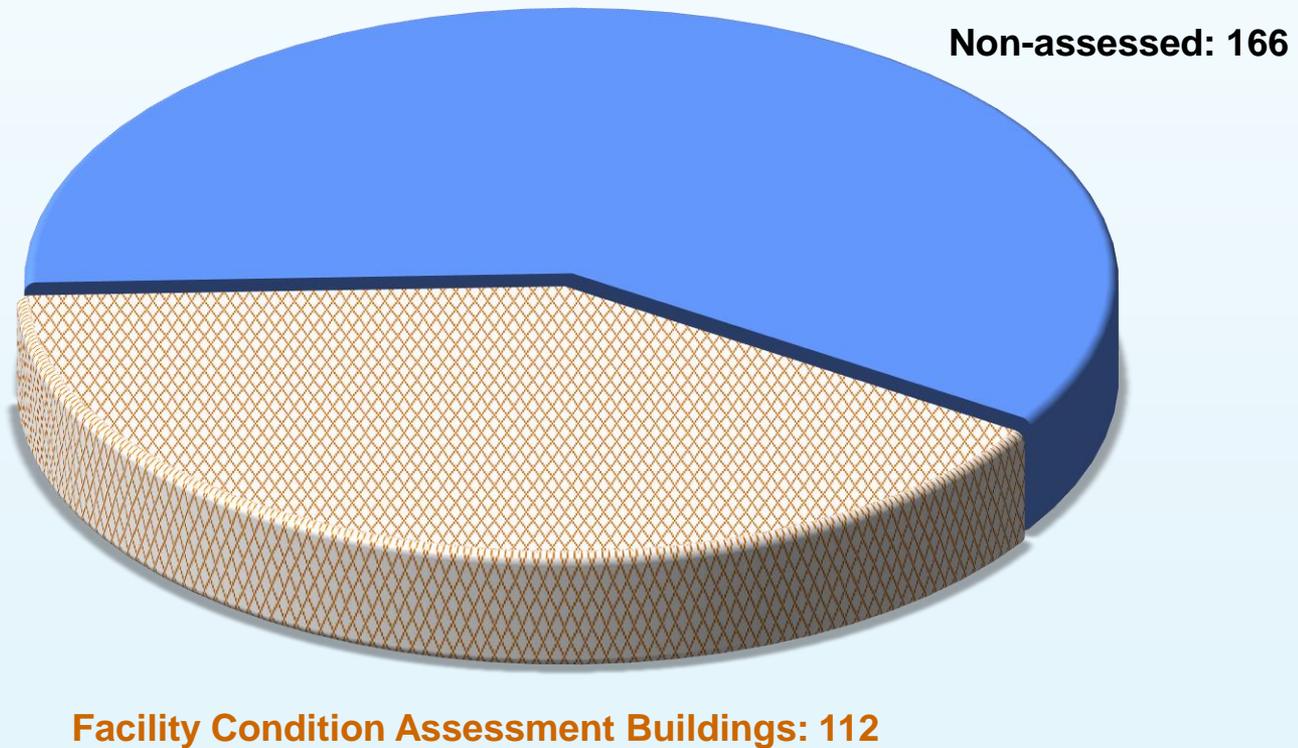
Part I: Facility Condition Assessment (FCA)

- Purpose:
 - The strategic, prudent, and necessary improvements protecting and ensuring the long term stability of facilities
- Facility Condition Assessment identifies:
 - What is the facility's condition
 - What are the remedial actions and priorities
 - Estimated remediation costs
- What the system doesn't measure?
 - Operational Maintenance
 - Appearance
 - Normal wear & tear
- How the buildings were selected?
 - Air conditioned
 - Major assets housing staff or critical infrastructure



County Facility Inventory

278 Structures in Inventory





General Facilities Information

- Total Facilities Evaluated = 112 facilities
- Total Area = 1,765,593 square feet



Jail
276,815 SF



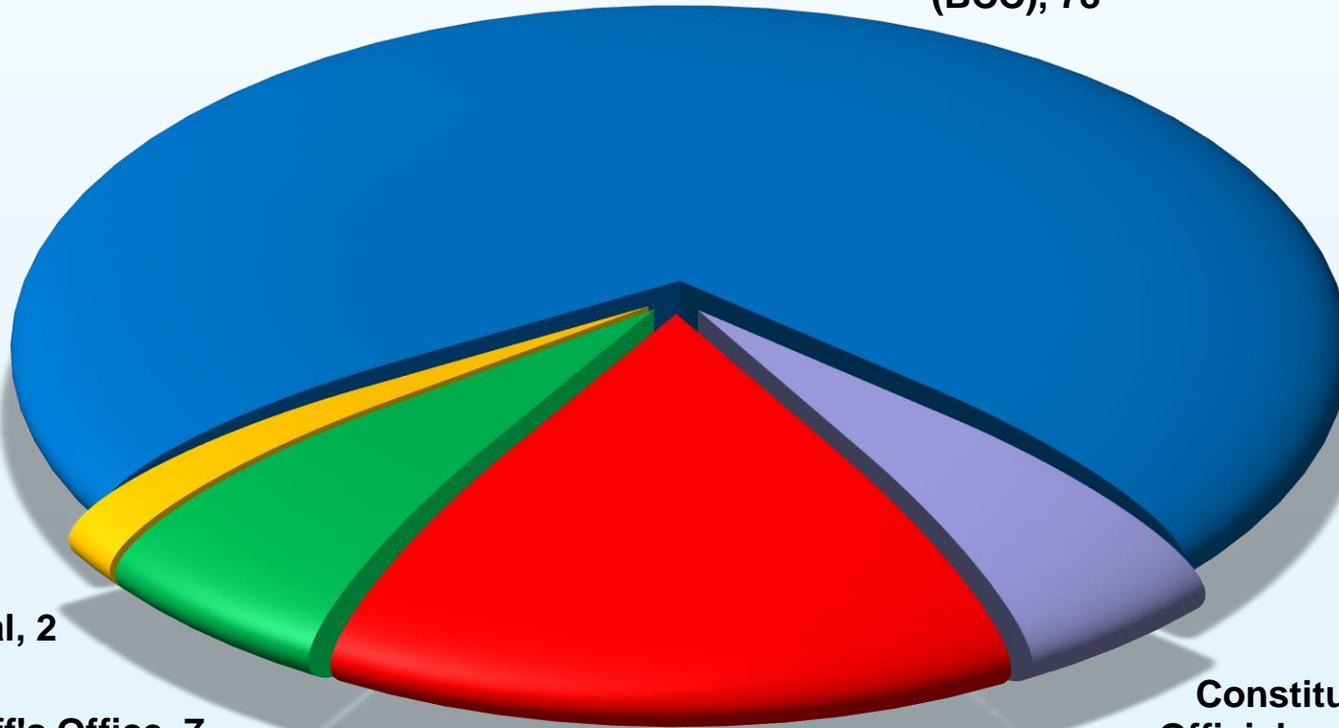
**Walenda Reclaimed
Water Control Building**
247 SF



Number of Buildings

Primary Function

General
Government
(BCC), 78



Judicial, 2

Sheriff's Office, 7

Public Safety, 19

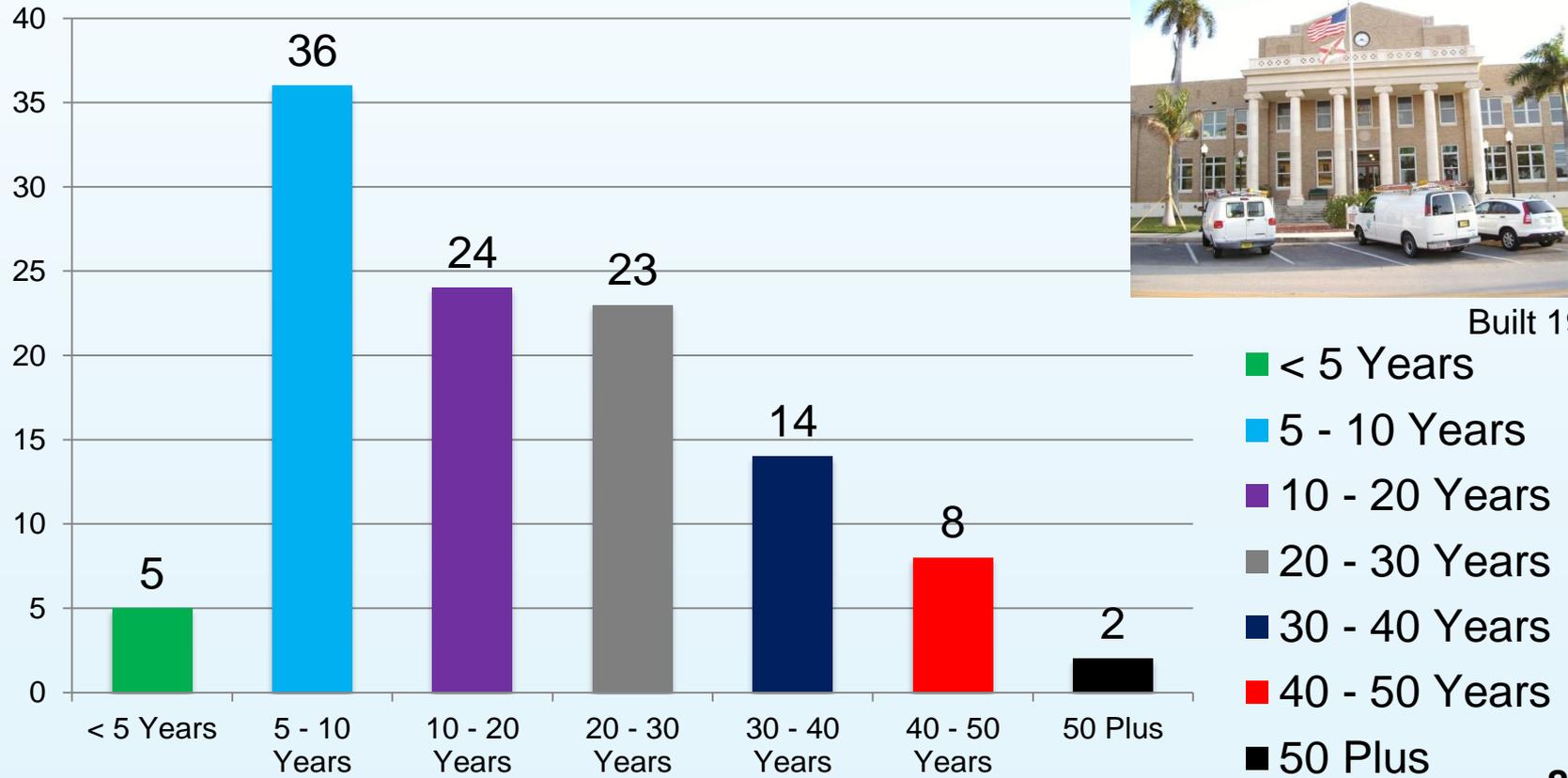
Constitutional
Officials and State
Agencies, 6



Age of Facilities



Built 1928





Current Replacement Value (CRV)

- Total Current Replacement Value (CRV) required to replace the building excluding design, code upgrades, general conditions, and contractor overhead and profit = \$398,000,000



**Walenda Reclaimed Water
Booster Pump Building
\$22,000**



**Jail
\$57,000,000**



Facility Condition Index (FCI)

Facility Condition Index (FCI)

$$\text{FCI} = \frac{\text{Deferred Maintenance Deficiencies (DMD)}}{\text{Current Replacement Value (CRV)}}$$



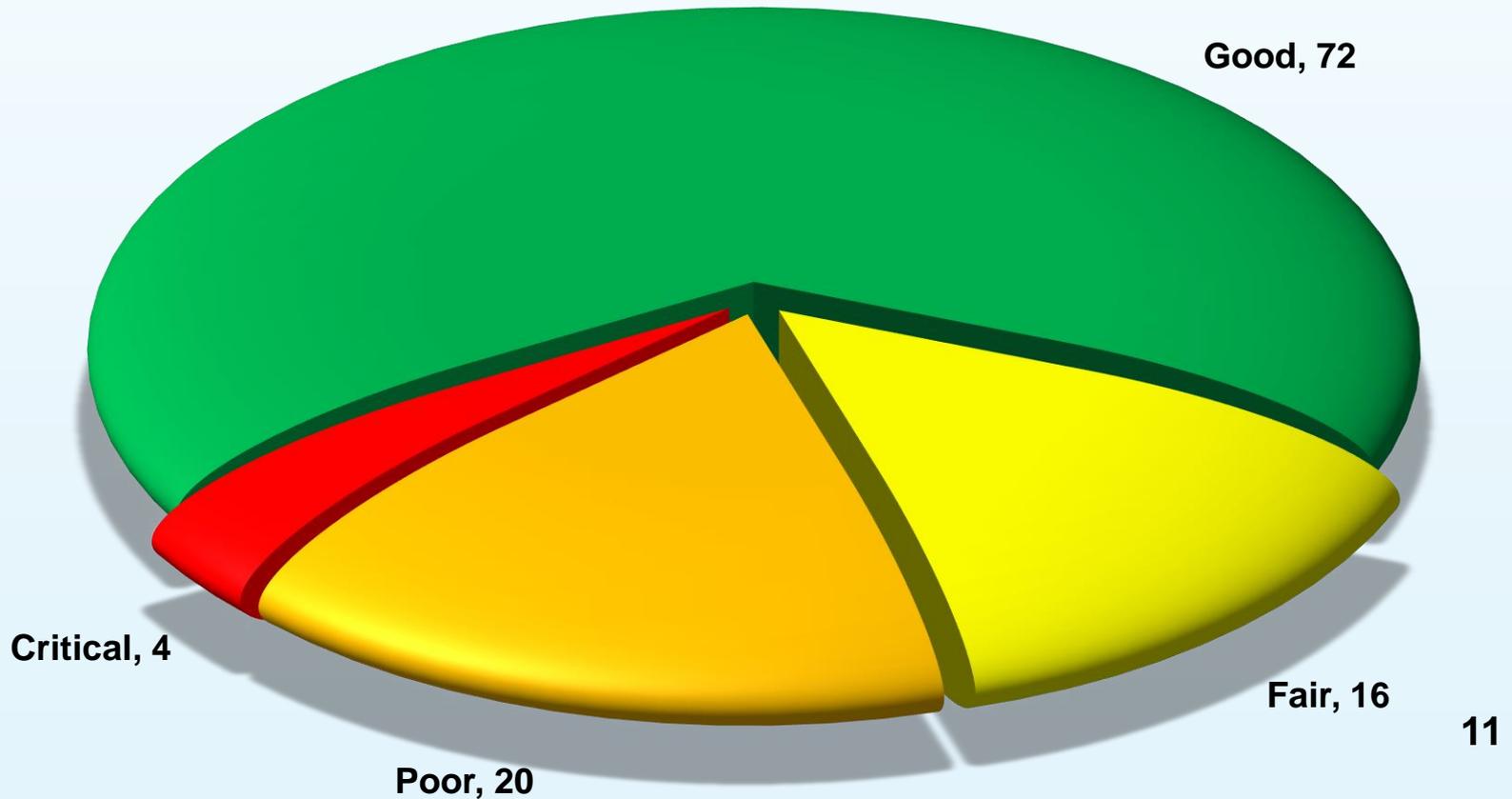
Deferred Maintenance (DM) is “Maintenance that was not performed when it should have been or when it was scheduled and which, therefore, was put off or delayed for a future period”



Asset Portfolio Summary

5-year FCI

112 Facilities Assessed





System Condition Index (SCI)

- Industry-standard index that objectively measures the current condition of a building system assembly or service system within an asset



$$\text{SCI} = \frac{\text{Deferred Maintenance Deficiencies}}{\text{System's Current Replacement Value (CRV)}}$$



UniFormat II Classification Code

- Classification system providing a unique number for all building system assemblies and service systems
- Categories:
 - Substructure (A): foundation; slab
 - Shell or Envelope (B): roof; exterior walls & doors; windows
 - Interiors (C): interior walls & doors; ceiling tile; flooring
 - Services (D): domestic water, & sanitation piping; plumbing fixtures; electrical service & panels; HVAC
 - Equipment (E): parking garage access gate; laundry; audio-visual, kitchen; detention; library
 - Special Construction (F): pre-engineered structure; aquatic facility
 - Building Site Work (G): site lighting, transformer, paving, storm water



System Condition Index Report Example

Medical Examiner Building

Division	Description	CRV	5-Yr Deficiencies	SCI	10-Yr Deficiencies	SCI
B2010	Exterior Walls	\$260,850	\$0	0.00	\$13,043	0.05
B2020.10 .085113	Aluminum Windows (operable)	\$25,469	\$0	0.00	\$25,469	1.00
B2050.10 .084226	All-Glass Entrance Doors (6x7)	\$15,660	\$0	0.00	\$0	0.00
B2050.20 .081000	Exterior Utility Doors	\$5,877	\$0	0.00	\$0	0.00
B2050.30 .083300	Exterior Coiling Doors	\$34,230	\$0	0.00	\$0	0.00
B3010.10 .076100	Roofing - Sheet Metal	\$255,372	\$12,769	0.05	\$12,769	0.05
B3080.10 .092000	Plaster and GWB Ceilings	\$3,233	\$0	0.00	\$323	0.10



Prioritization

- **Priority 1: Currently Critical (0 – 12 Months)**

These items require immediate action.

- Life-safety hazard
- Current building code violations
- Return a building system assembly or service system to operation



Gas-fired
Water Heaters:
WH-1 Not functioning
WH-2 Out of Service



Cracked Air Handling Unit Fan Coil



Prioritization

- **Priority 2: Potentially Critical (13 – 24 Months)**

If these items are not corrected expeditiously, they will become critical within a year.

- Potential life-safety hazard
- Accessibility to buildings and areas within building workspaces
- Rapid deterioration, which will lead to loss of facility operation



Electrical Lighting circuit breaker panel: No deficiencies or critical issues observed, however the asset has reached the end of its useful life cycle and could be a potential life-safety hazard. Recommend replace before failure.



Prioritization

- **Priority 3: Necessary, But Not Yet Critical (25 – 60 Months)**

These are repairs that would provide a rapid return on investment, including energy-efficiency projects.

- Building or site improvement uncompleted, due to inadequate funding or other reasons
- Repairs that preclude predictable deterioration, potential downtime, and/or higher short-term maintenance costs
- Replacement of building assembly or service system components that have exceeded their predicted use



- **Priority 4: Recommended (61 – 120 Months)**

These items represent sensible improvements to existing conditions. Although these are not required for the facility to generally function, Priority 4 projects improve overall usability and/or reduce long-term maintenance costs.

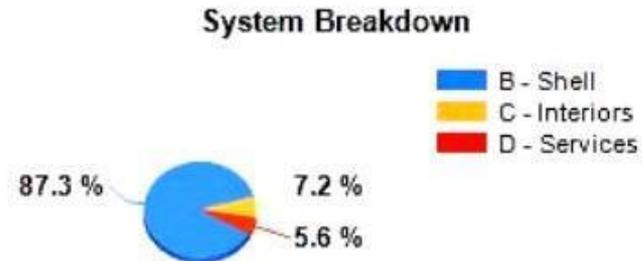
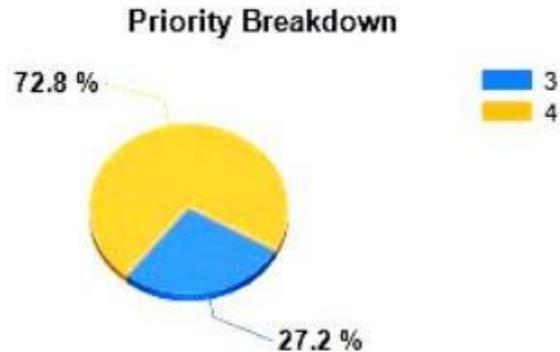


System Condition Index Report

Funding Needs and Systems List Example

Medical Examiner Building

System	Critical 1 Year (pri-1)	Potentially Critical 2-3 Years (pri-2)	Necessary 3-5 Years (pri-3)	Recommend 6-10 Years (pri-4)	Grand- fathered (pri-5)	Total
B - Shell	\$0	\$0	\$12,769	\$0	\$0	\$12,769
B - Shell	\$0	\$0	\$0	\$38,835	\$0	\$38,835
C - Interiors	\$0	\$0	\$0	\$4,234	\$0	\$4,234
D - Services	\$0	\$0	\$3,300	\$0	\$0	\$3,300
Total	\$0	\$0	\$16,069	\$43,069	\$0	\$59,138





FCI and SCI Assessment Example

Site	Building Name	Building Use	Build Year	Size	CRV Needs	5 Yr..	5 Yr. FCI
Fire Station # 01	Fire Station 01	Fire Station	2005	8,408	\$1,682,288	\$57,040	0.03
Fire Station # 02	Fire Station 02	Fire Station	1985	6,078	\$1,419,714	\$176,130	0.12
Fire Station # 03	Fire Station 03	Fire Station	1978	4,600	\$958,484	\$369,551	0.39
Fire Station # 10	Fire Station 10	Fire Station	1991	3,218	\$833,219	\$407,286	0.49
Fire Station # 11	Fire Station 11	Fire Station	2008	4,896	\$1,384,347	\$4,856	0.00



System Assessment Example

Fire Station 01

Item ID	Uniformat	Category	Description	Critical Issue	Recommendation	PRI	Act Time	Life Cycle	Estimated Cost
5314	B2050 Exterior Doors And Grilles	Operations - Security	Non-insulated, pre-finished sectional over-head doors with lights at Apparatus bay.	Doors are not functioning properly, many reported problems.	Replace doors- 600 SF	1	1	15	\$15,000
5312	B1030 Steel Building Structure	Building Integrity - Reliability	Pre-Engineered Building structure including portal bay structure, roof girt system, fibrous roof insulation system with interior liner, standing seam roof system and other miscellaneous items forming a complete system. Veneer CMU exterior walls (see ext. walls).	Roof leaks at various areas as reported.	Extensive roof inspection within 1 year to evaluate integrity of seams and flashing. Repair/replace panels as determined by above inspection.	2	2	10	\$42,040





Condition by Disciplines

County-wide Rating

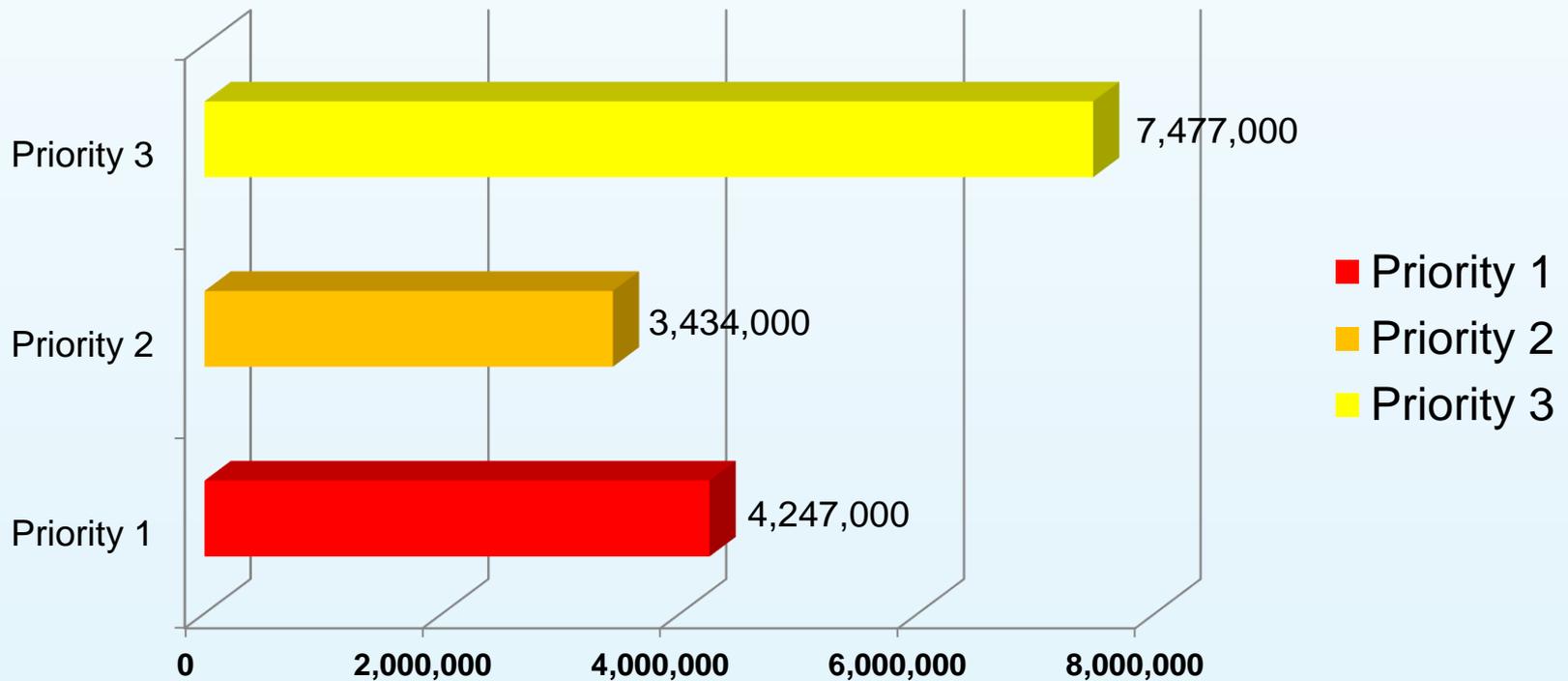
County Buildings	
Title	Condition
Architectural	Good
Civil	Good
Communications	Good
Electrical	Good
Fire Protection	Good
Mechanical	Fair
Other items	Good
Plumbing	Good
Structural	Good

This chart lists the county-wide building condition by discipline based on the five-year FCI.



Five-Year Deferred Maintenance Cost by Priority

Total Cost – \$15,158,000





Five-Year Deferred Maintenance Cost and Annual Life Cycle Replacement Cost

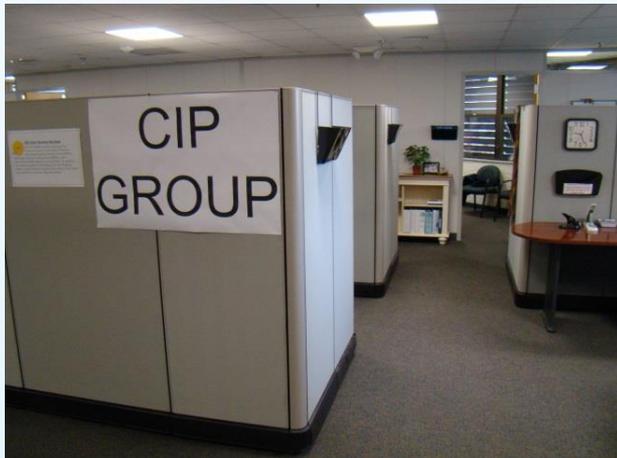


Note: Life cycle cost based on evaluated FCA facilities



Part II: Capital Project Perspective

- Remodel: Involves changing the use of a space when the structure and style of a space is completely transformed. If you want to change the layout of a room and re-configure the floor plan



- Deferred Maintenance: Maintenance that was not performed when it should have been or when it was scheduled and which, therefore, was put off or delayed for a future period



Capital Project Perspective

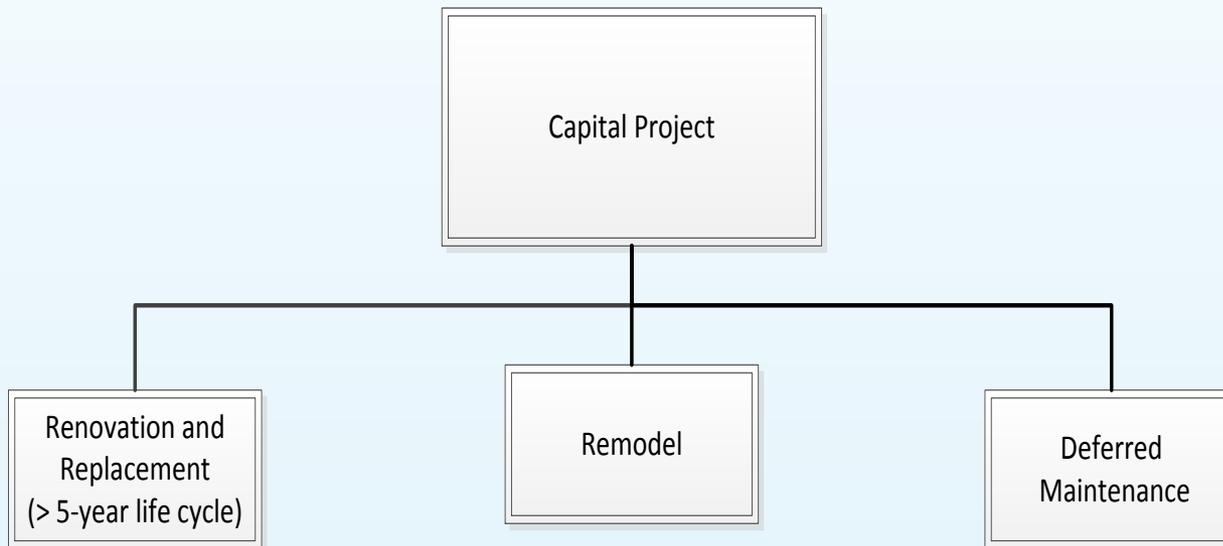
- Replacement: One existing asset component exchanged for another having the same performance, capacity, and function with an interval greater than 5 years



- Renovation: Restore to good condition making as if new again; repair, refresh, or invigorate to extend the life of the asset greater than 5 years



Capital Project Perspective





QUESTIONS



BREAK



Part III: Master Space Plan

- 1999 Plan
 - Performed by Carter Goble with the study's primary objective to meet county space needs through year 2013
 - Key recommendations were completed:
 - New Library (Mid-County: 2006)
 - One-Stop Permitting Center (Building C: 2006)
 - New Utilities Facility (Harborview Campus: 2001)
 - Parks and Recreation
 - North County Regional (O'Donnell Park: 2006)
 - Ann Dever Park (Oyster Creek: 2007)
 - South County Regional Park (2005)
 - Fire EMS Administration (Public Safety: 2007)
 - Social/Senior Services (Human Services Building: 2011)



Master Space Plan 2016

- Phase I
 - In-house data collection (completed)
- Phase II
 - Existing spatial and organizational assessment (completed)
 - 45 buildings selected
 - Selection criteria
 - Staff occupied and public assembly facilities
 - Excluded Fire Stations and Sheriff's facilities
- Phase III
 - Full study and projections



Master Space Plan Phase II

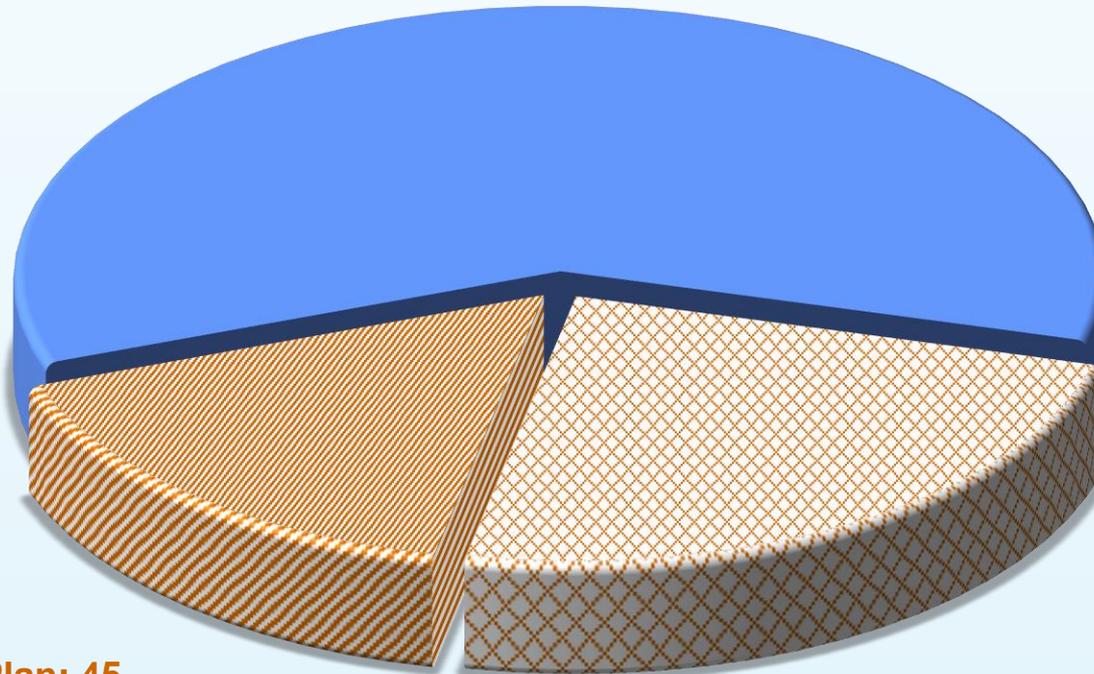
- Summary of Results/Conclusions
 - Spatial Inventory
 - Gross square feet, departmental gross square feet, and department net square feet
 - Functional use such as: office, circulation, storage, etc.
 - Organizational Use of Space
 - Occupants of space
 - Agency/constitutional users identified
 - Reports developed with charts, graphs, and floorplans



County Facility Inventory

278 Structures

Non-assessed: 166



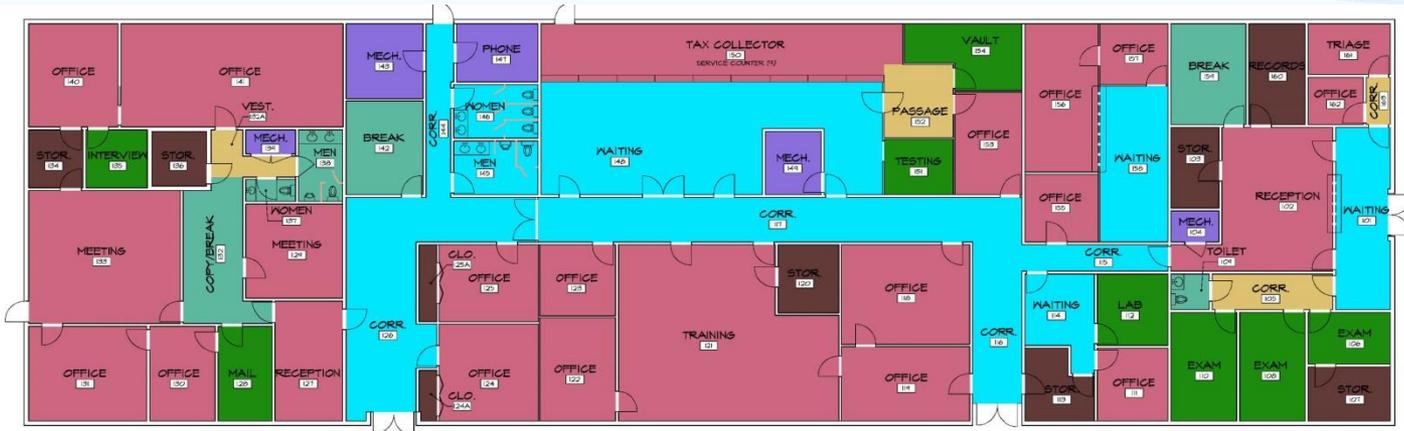
Master Space Plan: 45

Facility Condition Assessment Buildings: 112



Spatial Inventory Floor Plan

West County Annex



FLOOR PLAN

PLAN LEGEND :

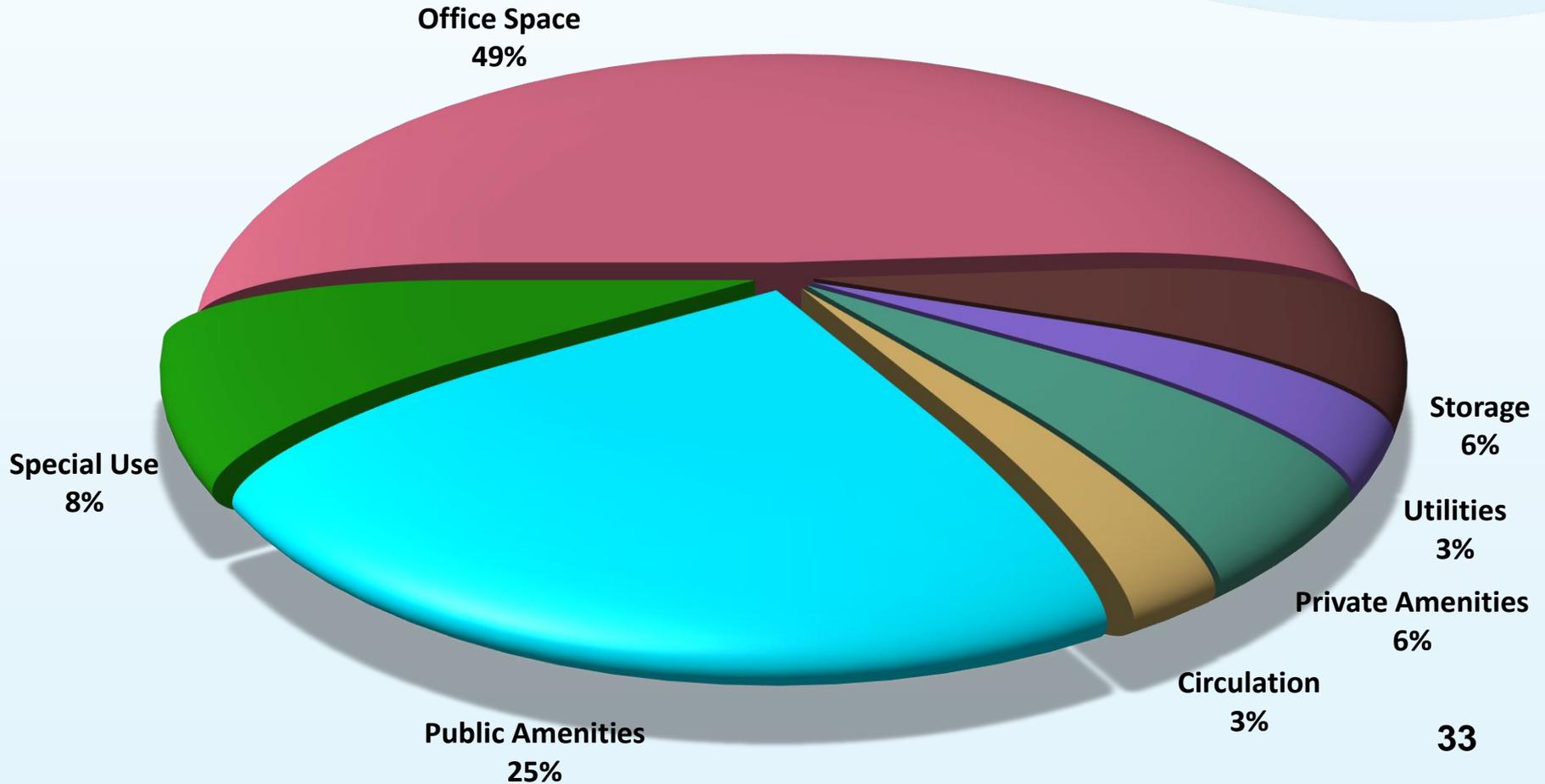
- ① OFFICE
- ② STORAGE
- ③ UTILITIES
- ④ PRIVATE AMENITIES
- ⑤ CIRCULATION
- ⑥ ASSEMBLY
- ⑦ PUBLIC AMENITIES
- ⑧ VEHICLE MAINTENANCE
- ⑨ SPECIAL USE
- ⑩ EXTERIOR COVERED AREA
- ⑪ VACANT SPACE





Spatial Chart

West County Annex





Spatial Summary Table

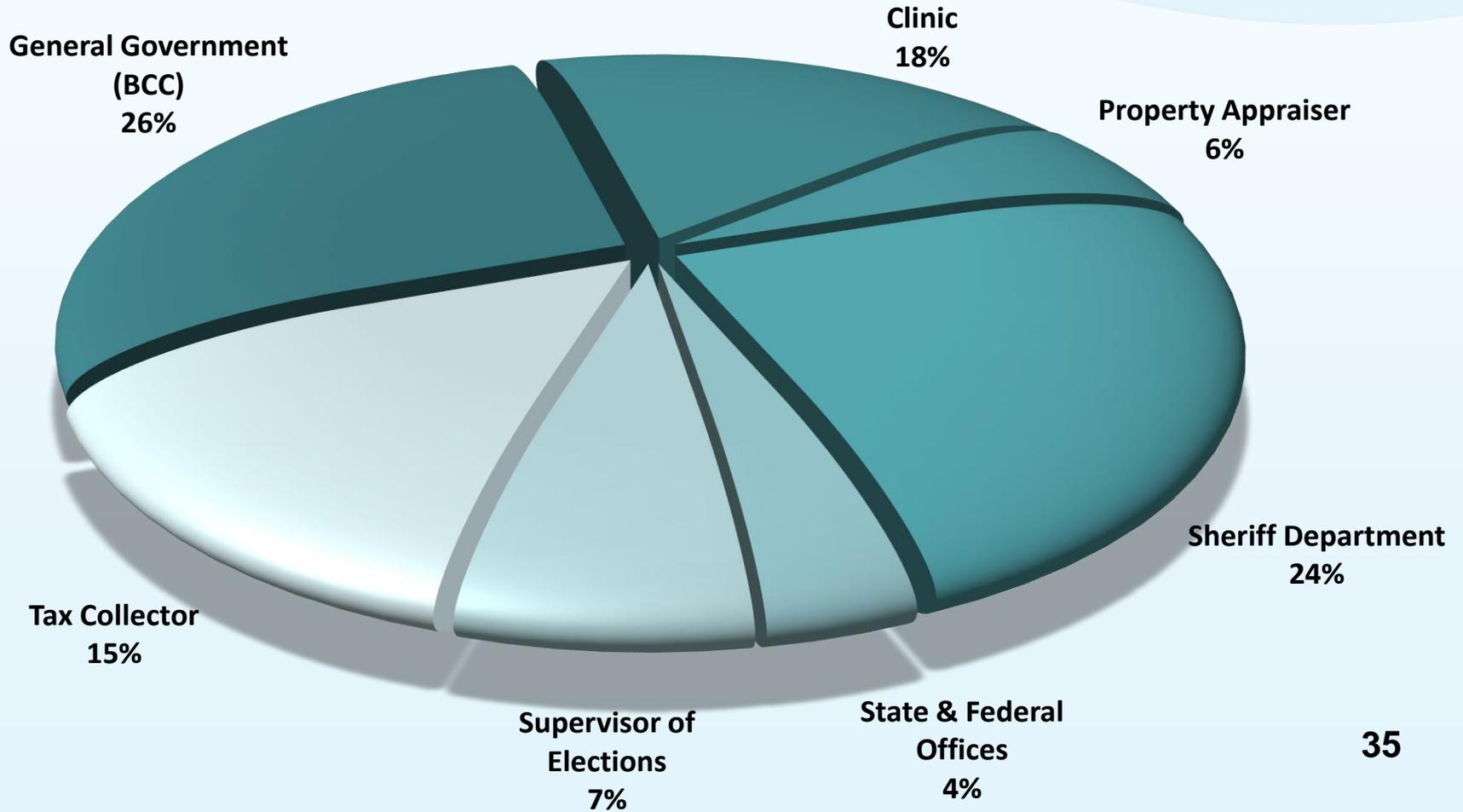
West County Annex

Group	Category Name	Total Area	Percent
1	Office Space	5,406	49%
2	Storage	665	6%
3	Utilities	360	3%
4	Private Amenities	634	6%
5	Circulation	283	3%
6	Assembly		
7	Public Amenities	2,782	25%
8	Vehicle Maintenance		
9	Special Use	917	8%
10	Exterior Covered Areas		
11	Vacant Space		
Total Interior Area		11,048	
Walls		916	
Building Gross Area		11,963	



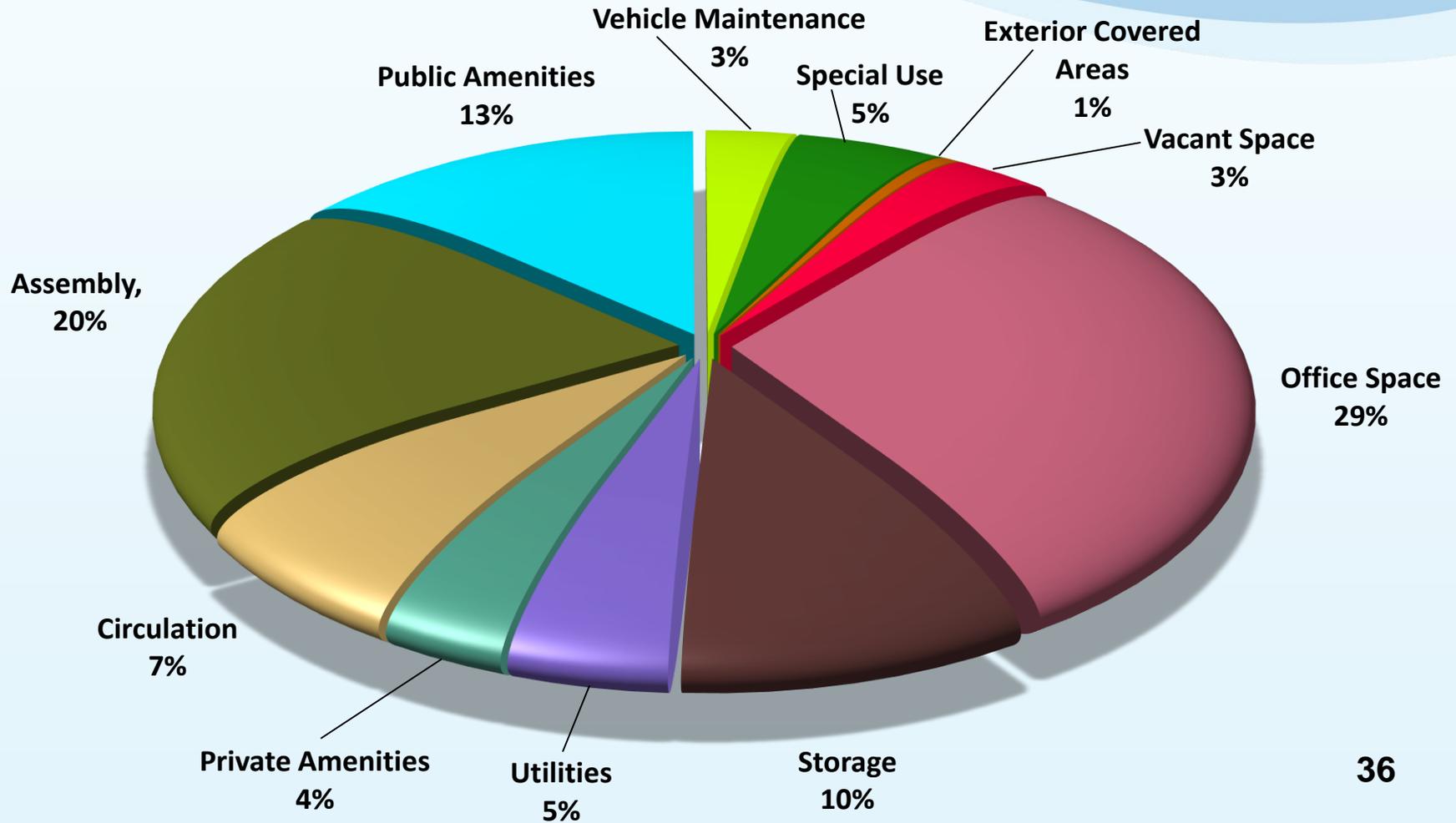
Organizational Use Chart

West County Annex





County-wide Spatial Chart



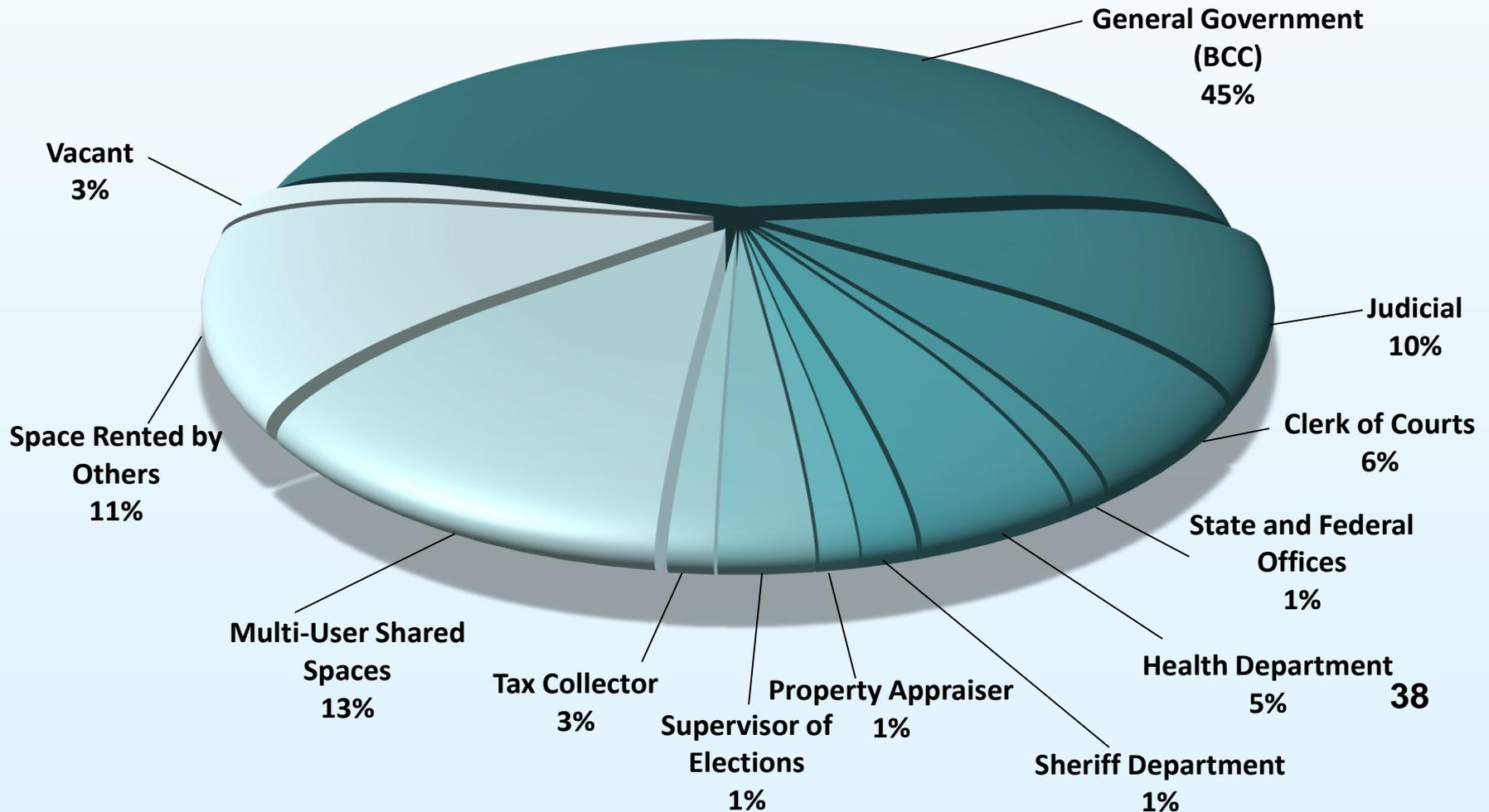


County-wide Spatial Summary Table

Group	Category Name	Total Area	Percent
1	Office Space	248,469	29%
2	Storage	88,453	10%
3	Utilities	40,401	5%
4	Private Amenities	32,101	4%
5	Circulation	61,870	7%
6	Assembly	165,993	20%
7	Public Amenities	114,621	13%
8	Vehicle Maintenance	24,890	3%
9	Special Use	40,984	5%
10	Exterior Covered Areas	5,091	1%
11	Vacant Space	23,573	3%
Total Interior Area - All Buildings		841,356	
Total Gross Area - All Buildings		928,050	



County-wide Organizational Use Chart





Strategic Master Space Plan Phase III

- Strategic Master Space Plan Steps
 - Document current practices by profiling existing departments
 - Benchmark industry standards to develop uniform space standards and guidelines
 - Forecast future staff requirements utilizing growth projections
 - Validate departmental and agency plans
 - Project future space needs developing a strategic space plan
 - Service demand forecast both operationally/geographically
 - Develop alternatives to meet needs with funding strategy
 - Space needs (gap) analysis
 - Prioritization of needs
 - Technological advancements



QUESTIONS



BREAK



Part IV: Facilities Master Plan

- 20-year Vision (5/10/15/20 horizons)
- County Governmental Needs at Large
- Categories
 - Public Safety
 - Sheriff's Office
 - Public Safety
 - Jail
 - Judicial
 - General Government (BCC)
 - Constitutional Officials and State Agencies
 - Community Services



Public Safety

1 – 5 year Horizon

- Firing Range
- Sheriff's Office District 4 with Forensics, Impound yard, and Evidence **
- Fire Station 10 replacement (101 Gasparilla Way)
- New Fire Station Babcock 1, replacing station 9
- Fire Station 5 replacement (26287 Notre Dame Blvd)
- County Radio Management Warehouse
- Fire Station 2 replacement (1493 Collingswood Blvd)

** - Sheriff's 10 Year Facility Needs Forecast dated February 17, 2015



Public Safety

6 – 10 year Horizon

- Sheriff Training Complex with District 3 **
- Jail Housing Tower Expansion
- Sheriff HQ with District 2 **
- Emergency Vehicle Maintenance Warehouse
- Fire Station 3 replacement (4322 El Jobean Rd)
- Babcock Sheriff's District 5

11 – 15 year Horizon

- Jail Administration, Kitchen & Laundry Renovation
- Hardened 911 building at Public Safety **

** - Sheriff's 10 Year Facility Needs Forecast dated February 17, 2015



Public Safety and Judicial

16 – 20 year Horizon

- Fire Station 6 replacement (27287 Disston Ave)
- Fire Station 4 replacement (13600 Marathon Blvd)
- New Burnt Store Area Fire Station
- New South Gulf Cove Area Fire Station
- Babcock Fire Station 2

Judicial

1 – 5 year Horizon

- Justice Center Expansion



General Government (BCC)

1 – 5 year Horizon

- Transit Facility (JB Yard)

6 – 10 year Horizon

- New Murdock Administration Building II
- Loveland Campus
 - Facilities
 - Utilities – Administration & Operations
 - Public Works with fuel depot
 - Community Services M&O
- Babcock Mosquito Control Building
- Cultural Center Replacement



General Government (BCC)

11 – 15 year Horizon

- Murdock Administration Parking Garage
- Grace St. Annex Renovation
- West County Utilities Staging

16 – 20 year Horizon

- Remodel Murdock Administration 5-Story
- Tourism and Economic Development Building



Constitutional Officials and State Agencies

1 – 5 year Horizon

- Clerk Archive Center

6 – 10 year Horizon

- Supervisor of Elections Warehouse

16 – 20 year Horizon

- South County Annex Replacement
- Babcock Government Annex



Community Services

1 – 5 year Horizon

- Ann Dever Football Concession Stand Replacement
- Bunk House Restoration

6 – 10 year Horizon

- North County Regional Park Aquatic Center
- Port Charlotte Beach Community Center Replacement
- Punta Gorda Library Renovation



Community Services

11 – 15 year Horizon

- Sports Park Renovation
- Babcock Regional Park Recreation Center
- Stockade Restoration

16 – 20 year Horizon

- Tringali Community Center Replacement
- Babcock Library



Part V: 20-year Vision

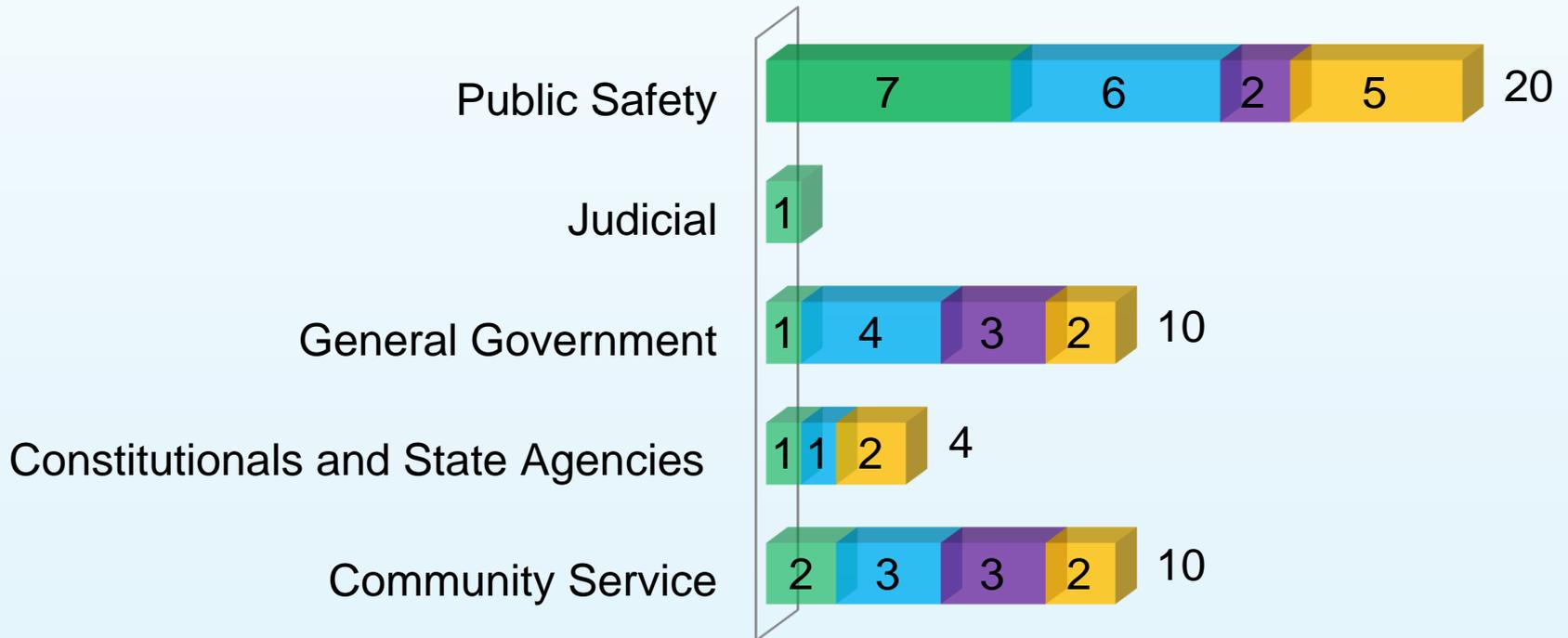
- Real Estate Opportunities
 - Three county owned areas available for expansion
 - JB Yard
 - Transit Facility
 - Murdock Village
 - Sheriff's Headquarters with District 2
 - Fire Station 2
 - Loveland Utilities Property
 - Sheriff's Office District 4 with evidence/impound yard
 - Facilities
 - Public Works
 - Utilities (Administration and Warehouse)
 - Community Service Maintenance & Operations
 - Six (6) Fire Stations properties required (approx. 2 ac. each)



20-Year Vision

Numbers of Facilities by Horizon

■ 1 - 5 Yrs ■ 6 - 10 Yrs ■ 11 - 15 Yrs ■ 16 - 20 Yrs





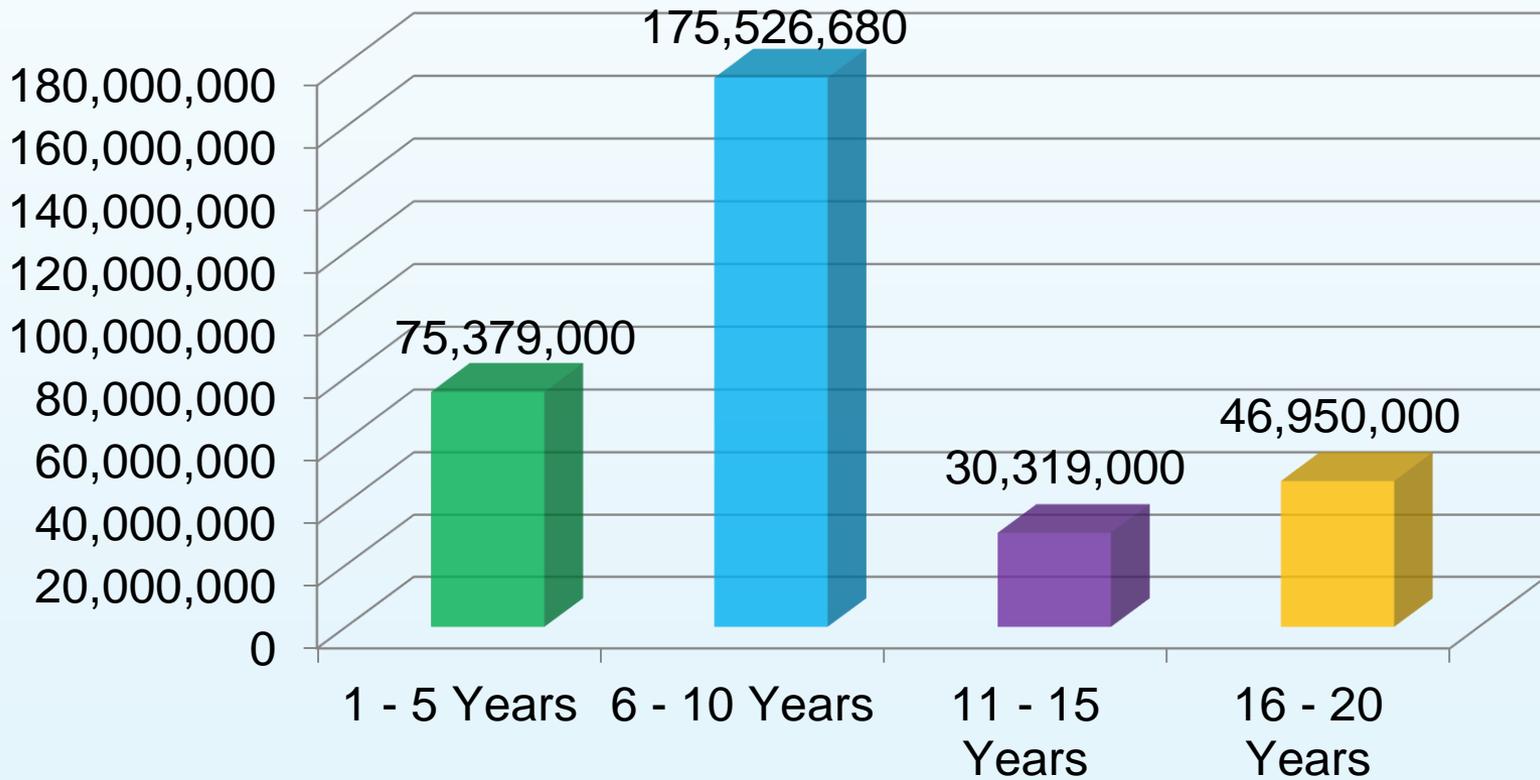
Vision Timeline List

1 – 5 Year Horizon	6 – 10 Year Horizon	11 – 15 Year Horizon	16 – 20 Year Horizon
Firing Range	Sheriff Training Complex w/ District 3	Jail Administration Support Renovation	Fire Station 6 Replacement
Sheriff's Office District 4 w/ Forensics, Impound and Evidence	Jail Housing Tower Expansion	Hardened 911 Building at Public Safety Site	Fire Station 4 Replacement
Fire Station 10 Replacement	Sheriff's HQ w/ District 2	Murdock Administration Parking Garage	New Burnt Store Area Fire Station
New Fire Station Babcock 1	Emergency Vehicle Maintenance Warehouse	Grace Street Annex Renovation	New South Gulf Cove Area Fire Station
Fire Station 5 Replacement	Fire Station 3 Replacement	West County Utilities Staging	Babcock Fire Station 2
County-wide Radio Management Warehouse	Babcock Sheriff Office District 5	Sports Park Renovations	Remodel Murdock Administration 5-story
Fire Station 2 Replacement	New Murdock Administration Building II	Babcock Regional Park Recreation Center	Tourism and Economic Development Building
Justice Center Expansion	Loveland Campus	Stockade Restoration	South County Annex Replacement
Transit Facility	Babcock Mosquito Control Building		Babcock Government Annex
Clerk Archive Center	Cultural Center Replacement		Tringali Community Center Replacement
Ann Dever Football Concession Stand	Supervisor of Elections Warehouse		Babcock Library
Bunk House Restoration	North County Regional Park Aquatic Center		
	Port Charlotte Beach Community Center Replacement		
	Punta Gorda Library Renovation		



Vision Cost by Horizon

Unfunded

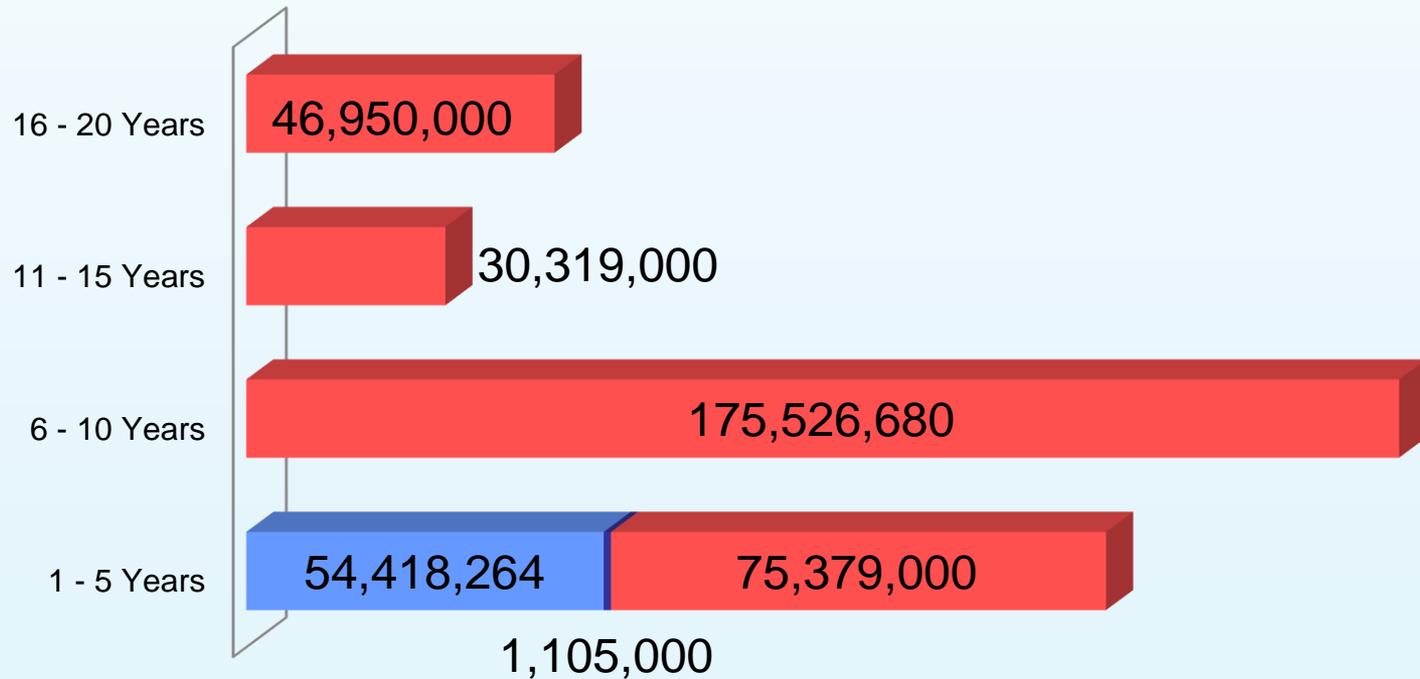




Horizon Cost Breakdown

Funded/Unfunded

■ Sales Tax ■ CIP Funded ■ Unfunded



Funded = \$55,523,264

Unfunded Total = \$328,174,680



Project Triggers

- Data-driven Measures
 - On-going maintenance costs exceed building effectiveness
 - Facility Condition Index
 - Programing needs exceed facility capability
 - Companion Studies
 - Parks Master Plan
 - Library Master Plan
 - Master Space Plan
 - Public Safety dispatch increases
 - Population increase driving level of service



Future Considerations

- Sustainability / Energy Efficiency
- Building Automation
- Security Posture



Future Direction

- Achieve “Good” Facility Condition Index (FCI) for each building
- Increase Preventive Maintenance to extend building and system life cycles
- Implement consolidation of building automation
- Continue aggressive energy efficiency measures
- Enhanced security posture
- Complete Master Space Plan (Phase III)
- Resolve Property Needs
 - Acquire Real Estate for Fire Stations
 - Confirm Real Estate opportunities



Summary

- Facility Condition Assessment (FCA)
- Capital Project Perspective
- Master Space Plan
- Facilities Master Plan
- 20-year Vision
- Future Considerations



QUESTIONS



BREAK