

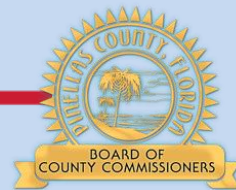


# Doing Things!

**ISO 55000 Asset Management Program**

**June 12, 2018**





# What is the issue?

- Asset preservation is a core function of government.
- The total value of County assets exceeds \$4B.
- Five operating departments independently manage assets, under their purview.
- The technology solutions supporting asset management are disparate and in some cases, unsupported.

# What is the problem to be solved?

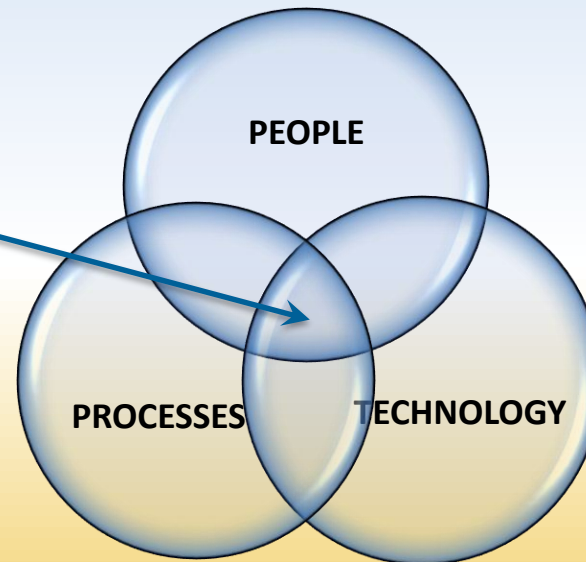
- Improve effectiveness and efficiency as to how assets are managed during their entire life cycle



## What is Board being requested to consider?

- Consider the staffing compliment required to fully implement the ISO 55000 Asset Management Program

“The integration of people, processes, and technology to achieve optimum outcomes”



# Pinellas County's Strategic Plan: *Doing Things to Serve the Public*

**Mission:** Pinellas County Government is committed to progressive public policy, superior public service, courteous public contact, judicious exercise of authority, and responsible management of public resources to meet the needs and concerns of our citizens today and tomorrow.

## Deliver First Class Services to the Public and Our Customers



- 5.1 Maximize partner relationships and public outreach
- 5.2 Be responsible stewards of the public's resources
- 5.3 Ensure effective and efficient delivery of county services and support
- 5.4 Strive to exceed customer expectations



## Ensure Public Health, Safety, and Welfare

- 2.1 Provide planning, coordination, prevention, and protective services to ensure a safe and secure community
- 2.2 Be a facilitator, convener, and purchaser of services for those in need
- 2.3 Provide comprehensive services to connect our veterans and dependents to the benefits they have earned
- 2.4 Support programs that seek to prevent and remedy the causes of homelessness and move individuals and families from homelessness to permanent housing
- 2.5 Enhance pedestrian and bicycle safety



## Practice Superior Environmental Stewardship

- 3.1 Implement green technologies and practices where practical
- 3.2 Preserve and manage environmental lands, beaches, parks, and historical assets
- 3.3 Protect and improve the quality of our water, air, and other natural resources
- 3.4 Reduce/reuse/recycle resources including energy, water, and solid waste



## Foster Continual Economic Growth and Vitality

- 4.1 Proactively attract and retain businesses with targeted jobs to the county and the region
- 4.2 Invest in communities that need the most
- 4.3 Catalyze redevelopment through planning and regulatory programs
- 4.4 Invest in infrastructure to meet current and future needs
- 4.5 Provide safe and effective transportation systems to support the efficient flow of motorists, commerce, and regional connectivity
- 4.6 Support a vibrant community with recreation, arts, and culture to attract residents and visitors

## Create a Quality Workforce in a Positive, Supportive Organization



- 1.1 Recruit, select, and retain the most diverse and talented workforce
- 1.2 Leverage, promote, and expand opportunities for workforce growth and development
- 1.3 Make workforce safety and wellness a priority
- 1.4 Maintain a fair and competitive compensation package



# Benefits of an Asset Management Program

- Extended asset life and performance at the lowest life-cycle cost
- Continuous and consistent delivery of established levels of service
- Informed decision making that balances risk and cost
- Data driven results to perform planned maintenance or replacement right before failure

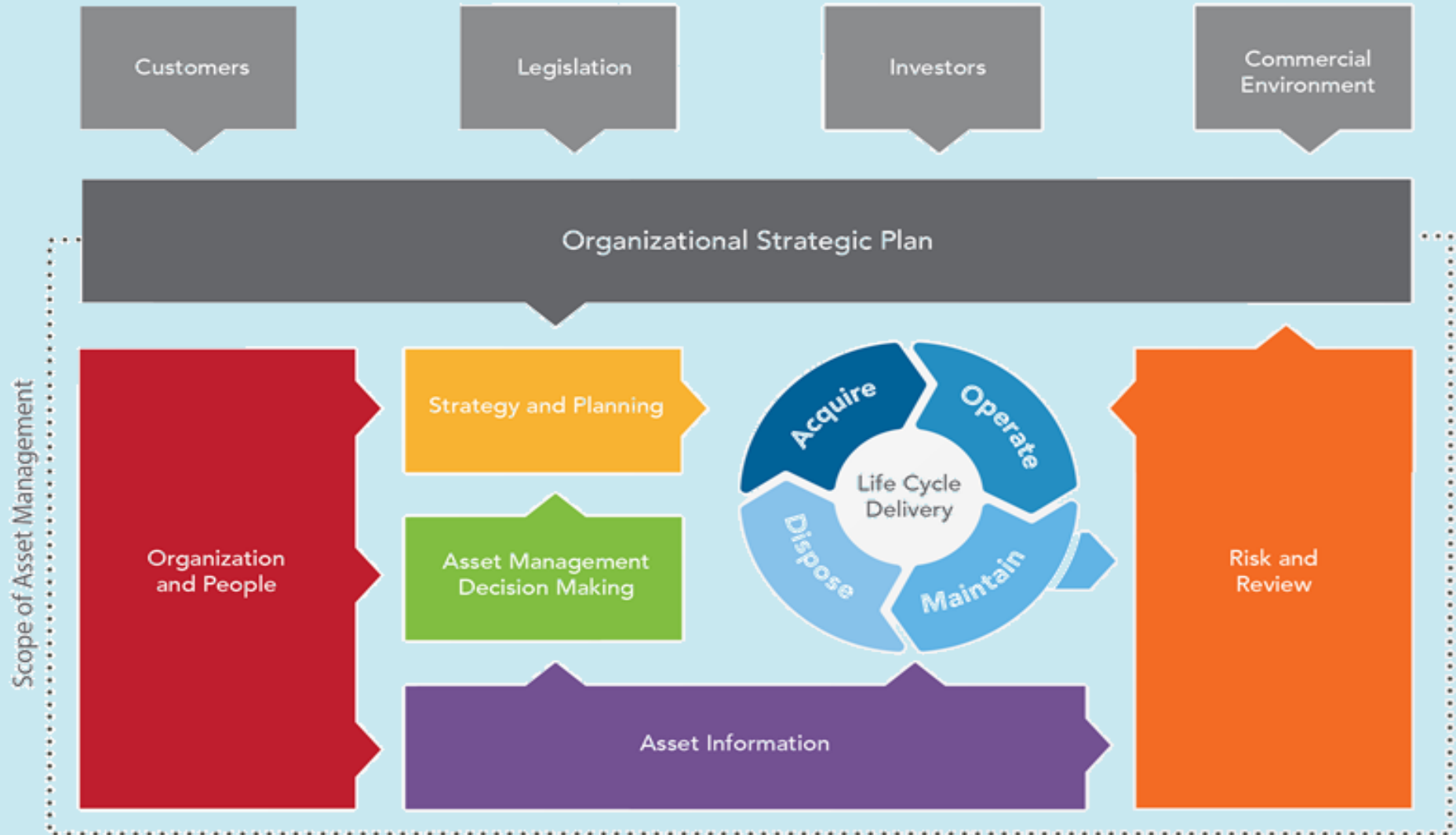


# Benefits of an Asset Management Program

- Long term planning and funding forecasting to replace assets
- Capturing of institutional legacy knowledge
- Increased transparency around expenditure and investment decisions
- Consistent management processes and practices across the enterprise
- Creation of an easily conveyed story about the organization's assets



# ISO 55000 Framework





# Asset Management Categories

## Group A: Strategy & Planning

1. Asset Management Policy
2. Asset Management Strategy & Objectives
3. Demand Analysis
4. Strategic Planning
5. Asset Management Planning

## Group B: Asset Management Decision-Making

6. Capital Investment Decision-Making
7. Operations & Maintenance Decision-Making
8. Life-Cycle Value Realization
9. Resourcing Strategy
10. Shutdowns & Outage Strategy

## Group C: Life-Cycle Activities

11. Technical Standards & Legislation
12. Asset Creation & Acquisition
13. Systems Engineering
14. Configuration Management
15. Maintenance Delivery
16. Reliability Engineering
17. Asset Operations
18. Resource Management
19. Shutdown & Outage Management
20. Fault & Incident Response
21. Asset Decommissioning & Disposal

## Group D: Asset Information

22. Asset Information Strategy
23. Asset Information Standards
24. Asset Information Systems
25. Data & Information Management

## Group E: Organization & People

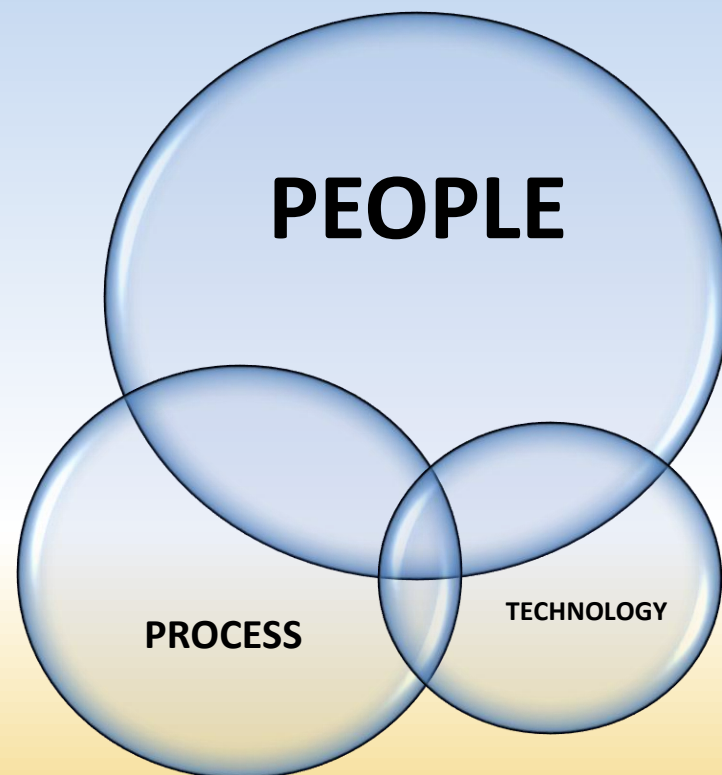
26. Procurement & Supply Chain Management
27. Asset Management Leadership
28. Organizational Structure
29. Organizational Culture
30. Competence Management

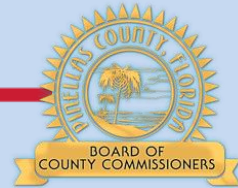
## Group F: Risk & Review

31. Risk Assessment & Management
32. Contingency Planning & Resilience Analysis
33. Sustainable Development
34. Change Management
35. Asset Performance & Health Management
36. Asset Management System Monitoring
37. Management Review, Audit, Assurance
38. Asset Costing & Valuation
39. Stakeholder Engagement

# Critical Success Factors

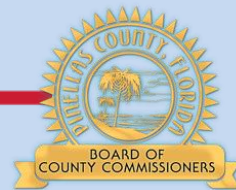
- **People**
  - Asset Management Organization
  - Asset Management Culture
  - Organizational Change
- **Processes**
  - ISO 55000
  - Continuous Improvement
- **Technology**
  - Cityworks AMS
  - Enterprise Integrations





# Best Practices - People

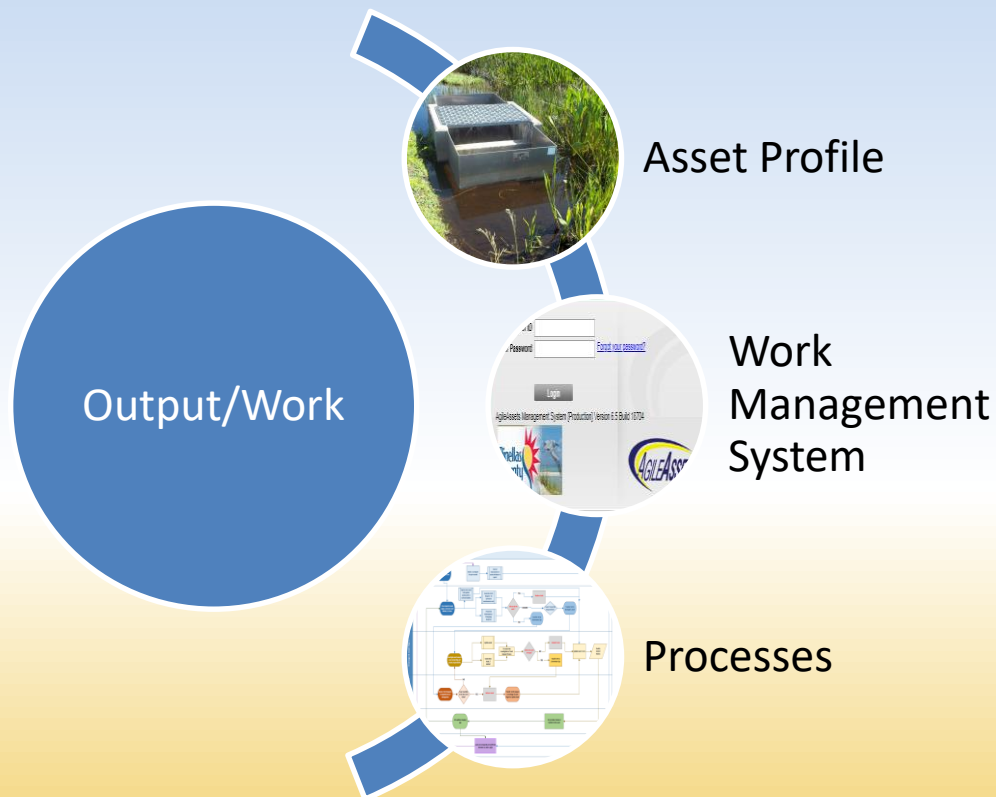
- **Adopt ISO 55000 best practices**
  - Asset Management Framework
- **Transform culture**
  - Consistency
  - Empowerment
  - Accountability
  - Transparency
  - Responsiveness
  - Collaboration
  - Continuous Improvement
- **Optimized Approaches**
  - Decision-making
  - Whole-life cost
- **Organization and People**
  - “All In”
  - The right people, in the right places, doing the right things
  - Leadership alignment (Line-of-Sight)

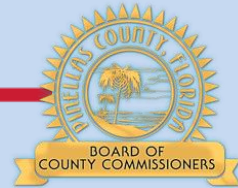


# Technology Refresh – Cityworks AMS

- **Replace disparate legacy systems**
  - Maximo (multiple versions)
  - Agile Assets
  - Maximus
  - VCMS
  - Pro Lease
- **Integration with other supporting information systems**
  - Oracle
  - SAP
  - Pavement Management
  - CCTV
  - SCADA
  - See Click Fix

# Departments Overview





# Departments' Current State

- Asset specific information varies from none to very detailed data
- Work currently performed varies:
  - Maintain a condition index
  - % of inventory inspected and maintained per year
  - Cycles
  - Reactive (Corrective Maintenance)
  - Manage to failure
- Funding driven performance with varying levels of data to identify needs
- Varying types of work management systems
- Few processes are documented
- Some performance/accomplishment analysis performed
- Global workflows have been developed during the EAM Project, but not yet fully implemented.

# Program Targeted Outcomes

- Shared asset inventory platform
- Shared work management system
- Consistent global workflows
- Asset Management Plans
  - State of the assets
  - Levels of service
  - Growth and demand
  - Life cycle analysis
  - Financial strategies
- Portfolio approach to CIP and O&M
- Data driven approach to funding and infrastructure decisions





# How We Define Success

- Consistency – GIS, Cityworks, processes, analysis: **Enterprise Asset Management**
- Asset Management Plans
  - State of the assets: **what, where, condition, etc.**
  - Levels of service: **defined standards**
  - Growth and demand: **future conditions**
  - Life cycle analysis
    - **Costs at all phases – asset level tracking**
    - **Criticality – likelihood and consequence**
    - **Asset specific cost and accomplishments**
  - Financial strategies **to ALL meet needs**
- **Enhanced** portfolio approach to CIP and O&M
- **Enhanced** data driven approach to funding and infrastructure decisions



# The Decision Package – ISO 55000 – Asset Management Program

- Organization and Staffing
- Requested Funding
- Impact to General Fund

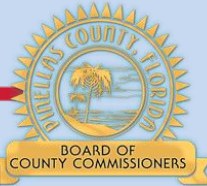




# Decision Package – Requested Funding

Department	Existing	Total Program New	Total	FY19 New	FY19 (\$)
Public Works	26	7	33	7	792,970
Utilities	20	8	28	5	465,960
Real Estate Management	18	2	20	1	105,210
Parks & Conservation Resources	0	4	4	1	104,640
Solid Waste	4	4	8	0	64,580
BTS/OTI*	6	1	7	1	105,300
<b>Office of Asset Management</b>	0	14	14	9	1,134,480
<b>TOTALS</b>	<b>74</b>	<b>40</b>	<b>114</b>	<b>24</b>	<b>2,773,140</b>

\* Position not included in Asset Management Functional Support Matrix



# Decision Package – Organization and Staffing

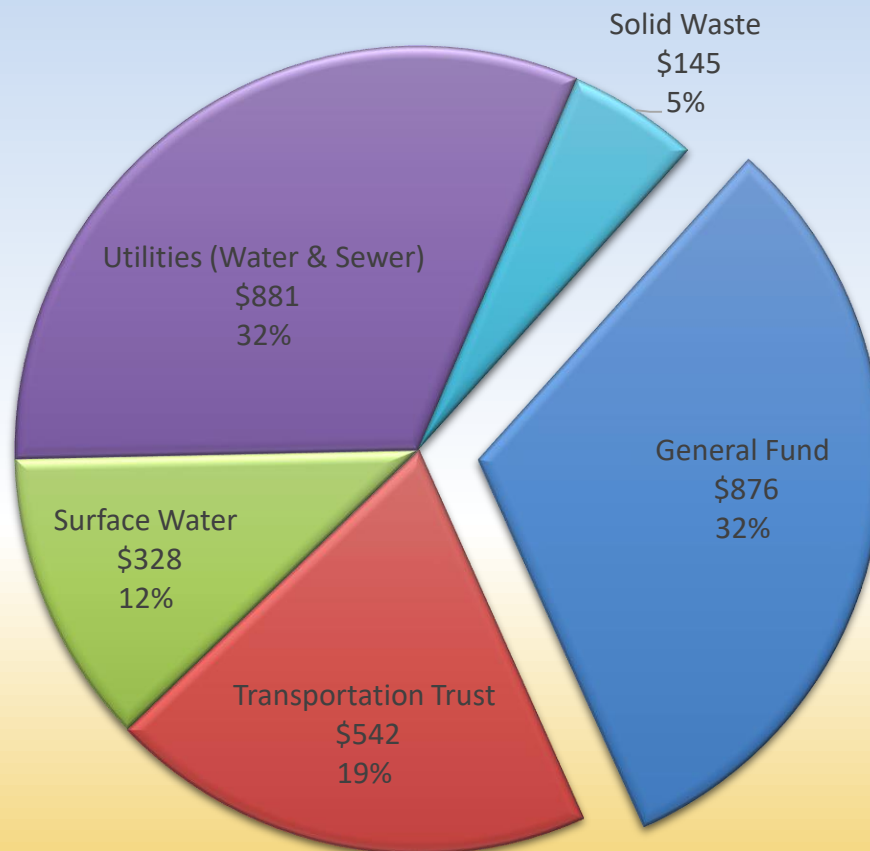
ASSET MANAGEMENT FUNCTIONAL SUPPORT RESOURCES PLANNING																			
Identified New FTE's Required to Implement and Sustain a ISO55000-Driven/Designed Asset Management PROGRAM																			
Function Area	Function Role	FY19						FY21						FY23					
		OAM	PW	UTL	REM	SW	PCR	OAM	PW	UTL	REM	SW	PCR	OAM	PW	UTL	REM	SW	PCR
Technical Support	Cityworks Database Administration																		
	GIS Database Administration																		
	Architecture																		
	Hardware Support																		
	Cityworks System Administration	1.0						1.0						1.0					
	Cityworks Domain Administration						1.0				1.0	1.0							
	GIS System Analytics				1.0							1.0							
Program Administration	GIS Data Stewardship			1.0						1.0									
	Department Director	1.0																	
	Policy Development																		
	Procedure Development	1.0											1.00						
	Process Analytics																		
	Process Modeling/Improvement																		
	Training and Development	2.0						1.0											
Business Support	Program Management (ISO55K)	1.0												1.0					
	Business Relationship Management																		
	Business Analytics	1.0	5.0					1.0				1.0	1.0						
	Data Analytics																		
Asset Portfolio Management (Operations)	Data Reporting																		
	Data Collection												1.0						
	Asset Lifecycle Management		2.0	1.0						1.0									
	Reliability Engineering			1.0															
	Energy Management Engineering	1.0																	
	Work Planning/Scheduling																		
	CIP Development																		
	Procurement			1.0															
	Inventory Management			1.0						1.0									
	Data QA/QC	1.0										1.0							
	Budget Analytics																		
	Asset Portfolio Coordinator																		

Required New FTE's totals

9.0 7.0 5.0 1.0 0.0 1.0 3.0 0.0 3.0 1.0 4.0 3.0 2.0 0.0 0.0 0.0 0.0 0.0

OAM	PW	UTL	REM	SW	PCR	OAM	PW	UTL	REM	SW	PCR	OAM	PW	UTL	REM	SW	PCR
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## Decision Package Funding Sources (\$K)

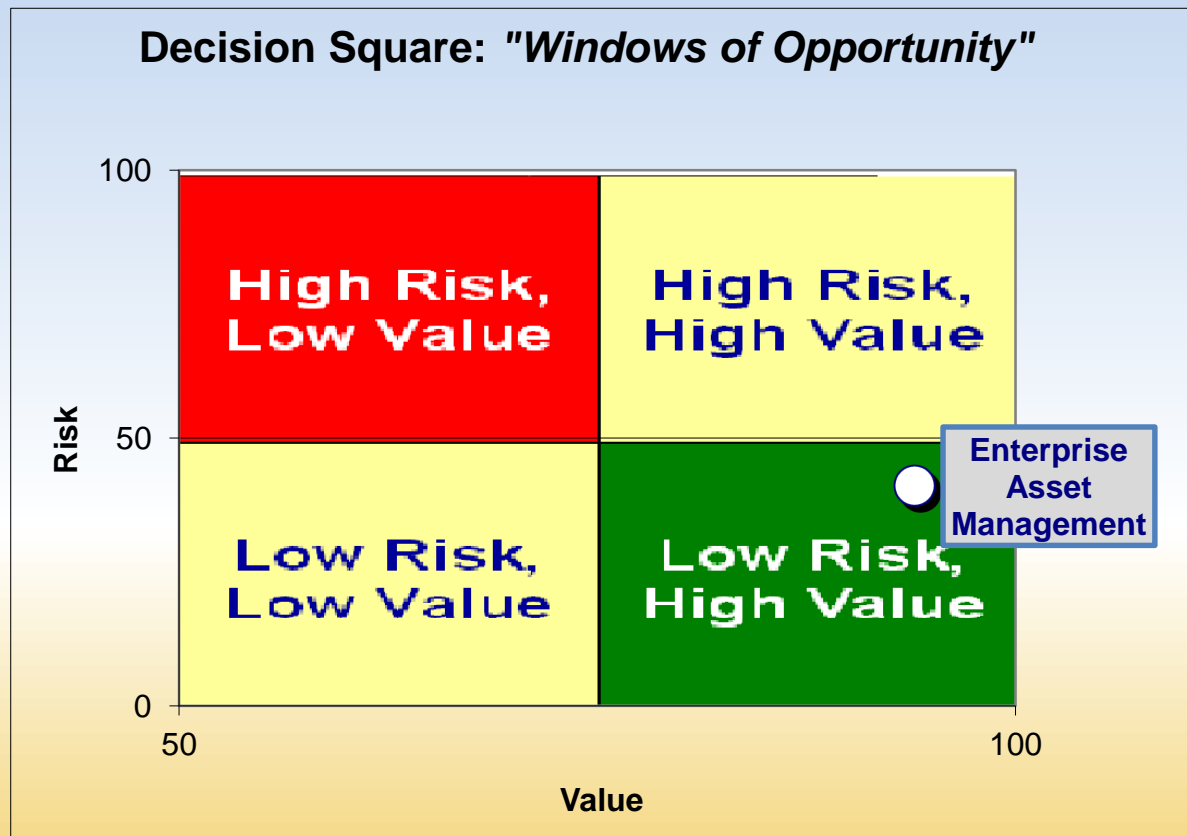


# Business Case

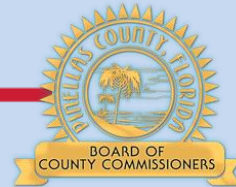
- Total Cost of Ownership (one-time and recurring)
  - Asset Management Program (ISO 55000)
  - Software
  - Hardware
  - Implementation services
  - OTI and BTS services and support
  - BCC organization staffing
  - Mobile devices
  - Business continuity and disaster recovery
  - Enterprise service bus



# Business Case





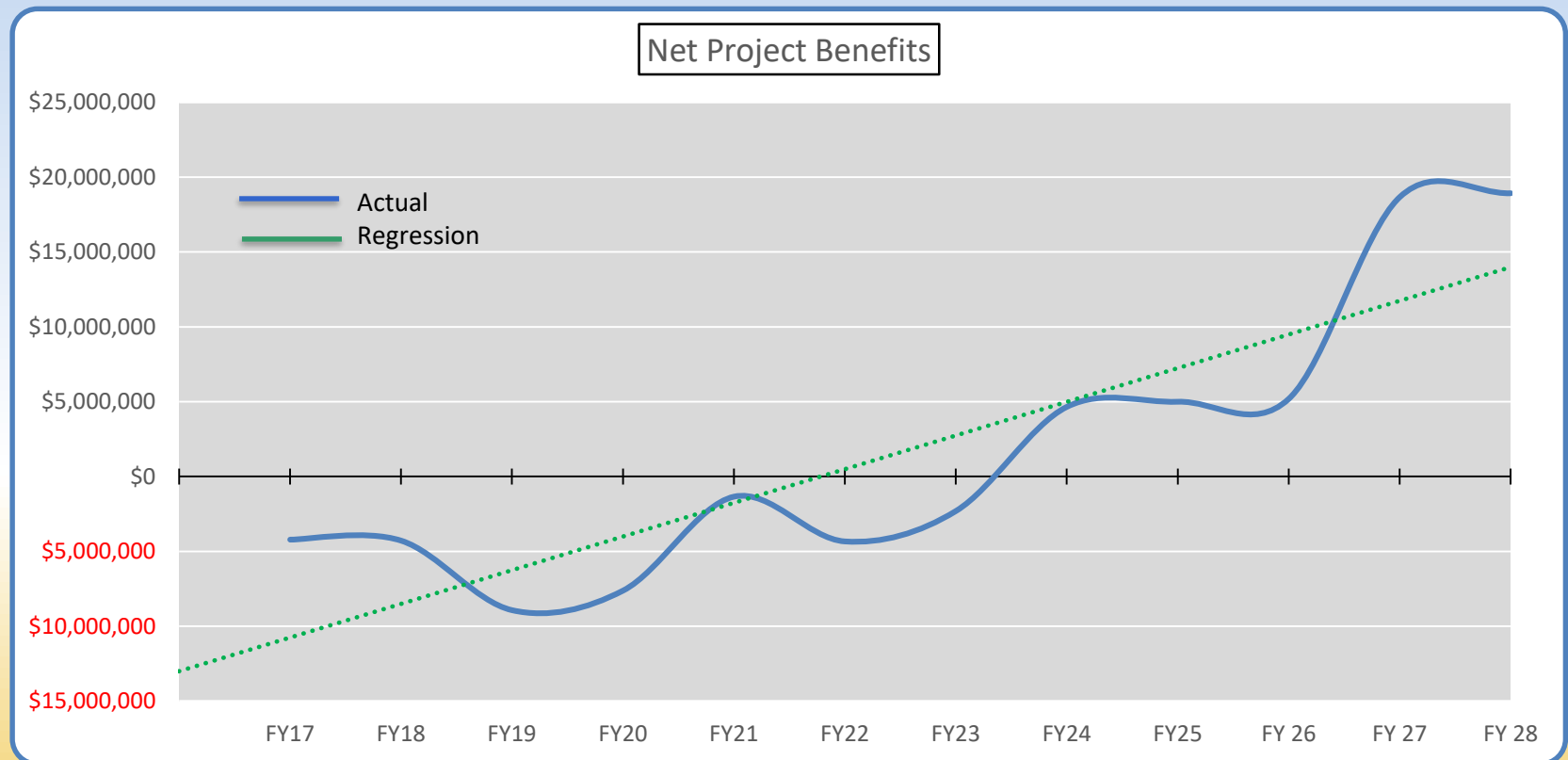


# Business Case

Cost - Benefit Summary

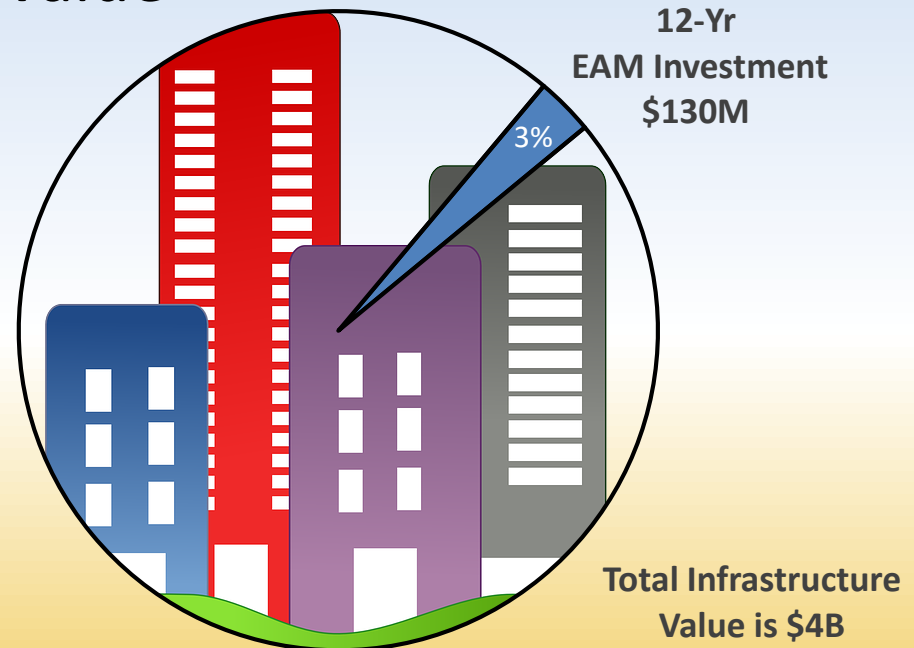
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY 26	FY 27	FY 28	Total
Total BTS Costs (One-Time)	2,423,703	1,865,624	3,873,319	3,227,710	1,753,4788	1,132,203	478,144	544,374	488,528	372,485	372,485	496,719	17,317,117
Total BTS Costs (Recurring)	1,058,991	1,663,074	3,729,448	4,762,063	6,411,306	6,591,087	5,927,206	6,111,221	6,119,552	6,326,094	6,524,152	6,728,940	62,033,104
Total Business Costs (One-Time)	734,992	757,042	2,852,251	3,845,146	5,212,0170	5,478,567	0	0	0	0	0	0	18,880,014
Total Business Costs (Recurring)	0	0	0	0	0	0	5,007,883	5,024,710	5,285,641	5,430,800	5,460,314	5,734,313	31,943,661
<b>Total Project Costs</b>	<b>4,217,686</b>	<b>4,285,740</b>	<b>10,455,017</b>	<b>11,834,919</b>	<b>13,376,800</b>	<b>13,201,857</b>	<b>11,413,233</b>	<b>11,856,304</b>	<b>11,969,993</b>	<b>12,245,423</b>	<b>12,356,951</b>	<b>12,959,973</b>	<b>130,173,896</b>
Total Project Benefits	0	0	1,522,512	4,211,189	12,031,756	8,863,911	9,107,595	16,512,548	16,967,598	17,437,727	31,031,703	31,892,173	149,578,712
Total Project Costs	4,217,686	4,285,740	10,455,017	11,834,919	13,376,800	13,201,857	11,413,233	11,856,304	11,969,993	12,245,423	12,356,951	12,959,973	130,173,896
Net Project Benefits	-4,217,686	-4,285,740	-8,932,506	-7,623,730	-1,345,044	-4,337,946	-2,305,638	4,656,244	4,997,605	5,192,3045	18,674,752	18,932,2003	19,404,816

# Business Case



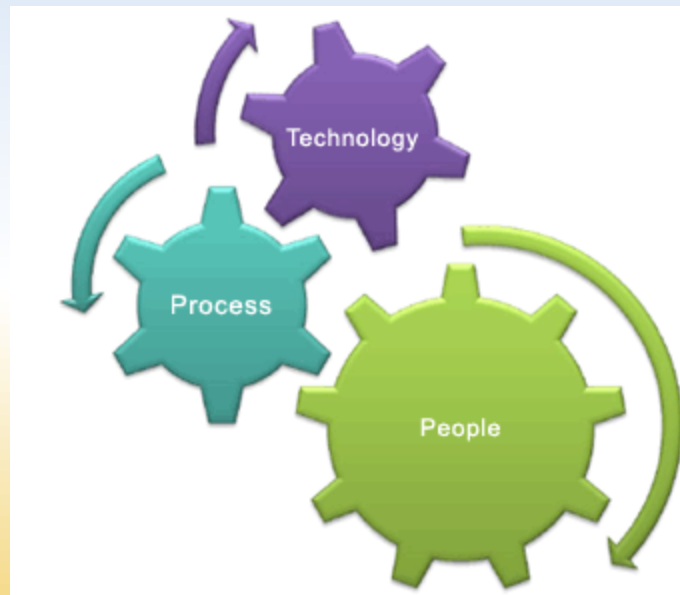
# Keeping it in Perspective

- A 12-year investment totaling \$130M is 3% of the current \$4B in total asset value
- Break even point is in Year 6
- *Setting the Standard for Public Service in America*

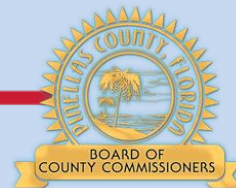


## What is Board being requested to consider?

- Consider the staffing compliment required to fully implement the ISO 55000 Asset Management Program



# Thank you!



*Our Vision: To Be the Standard for Public Service in America*