

# Asset Management System

Originally Prepared for  
Charlotte County Board of County Commissioners  
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*Updated September 19, 2023*  
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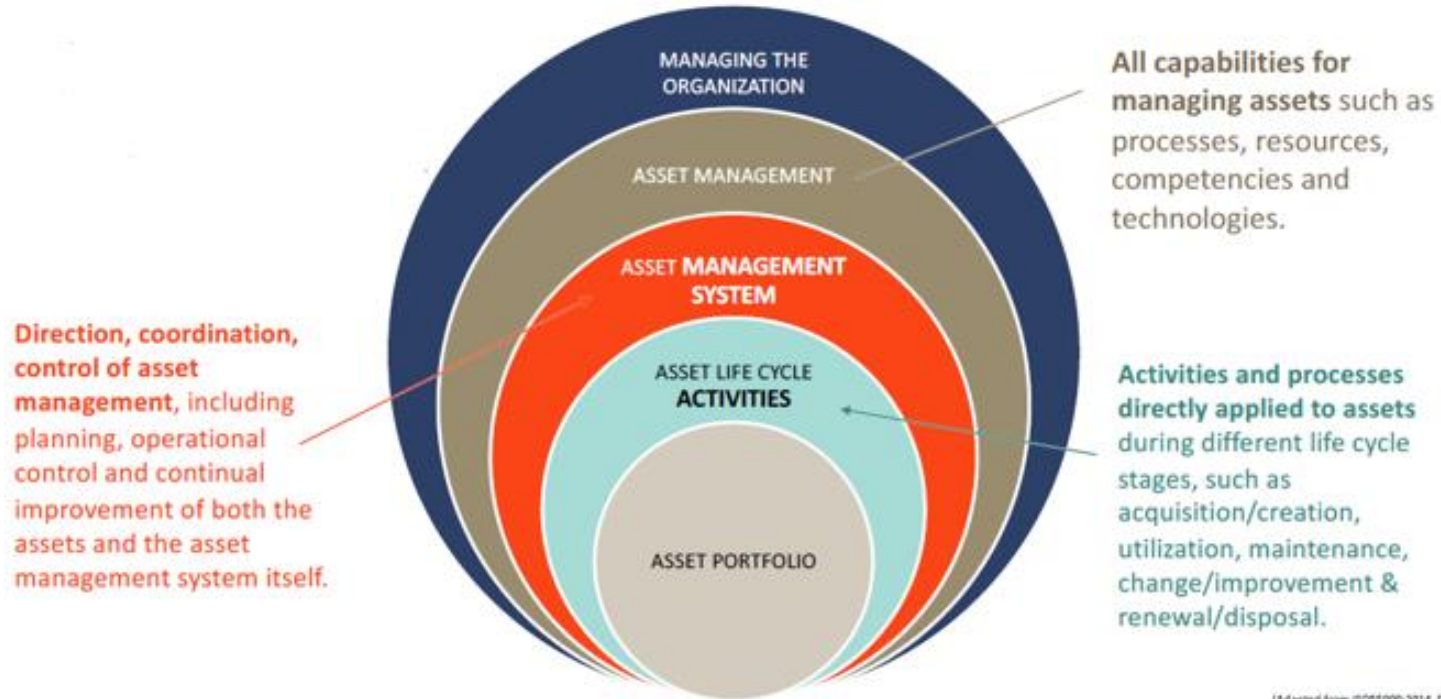
# Topic Overview

- Define Asset Management System
- State of the Art / State of the Practice
- Realistic Needs – current and future
- Current efforts
- Plan of Action and Milestones

# Asset Management System

- Asset Management defined:
  - Systematic process of cost effectively maintaining, upgrading, and operating physical assets (infrastructure)
  - Uses integrated, multidisciplinary strategies to develop tools, performance management and capital investment decision making.
  - Software is not the AMS, but a *tool* in AMS

# Asset Management System



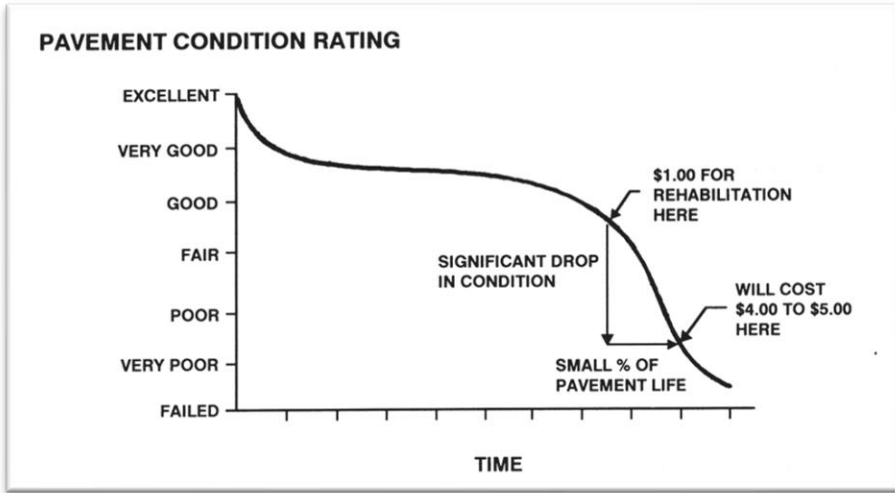
(Adapted from ISO55000:2014 Fig 1)

# Benefits of Asset Management

- Asset Management System:
  - Allows leadership and public to have documented info on needs and priorities
  - Identification of county-owned assets
  - Prioritization of limited resources
  - Guide to reduce life cycle costs
  - Establishes accountability
  - Strategic tool to rehab & capital planning
  - Leads to better decisions
    - Reduced risks/claims, optimize operating costs, schedule work efforts

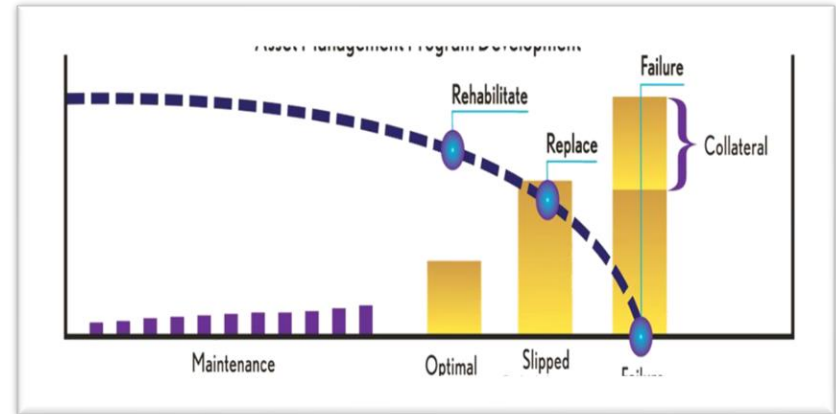


# Benefits of Asset Management



From "Pavement Management for Airports, Roads, and Parking Lots", M. Y. Shahin

**Pay now or pay more later.**



# Asset Management System

- Asset Management Process
  - 1) Establish Objectives: Define service levels
  - 2) Inventory: Size it up and quantify
  - 3) Determine Condition: Field assessment
  - 4) Short and long term plans
  - 5) Alternatives Analysis, model & identify priorities w/ life expectancy
  - 6) Implement with evaluation tools in place
  - 7) Monitor results

# Benefits of Strategic Asset Management Plan





# Asset Management Software

- State of the Art
  - Robust database, advanced algorithms, powerful computing (toward A.I.)
  - GIS based
  - Integrates across multiple platforms
    - Call center, Service requests, Work orders, including cyclical work, inspections, tests, etc.
    - Resources, storerooms, projects, and contracts
    - Reports and dashboards, mobile workforce
    - Other systems: Accounting, billing, compliance

# Asset Management Needs

## – Assets we Own and Maintain

- Streets and Roads
- Bridges and Culverts
- Wastewater Systems
- Storm Drains
- Trees, monuments, ROW...



**We have 2,200 + miles of roads alone.**



**CHARLOTTE COUNTY**  
FLORIDA

- Assets (continued)
  - Buildings and Grounds
  - Sidewalks and Trails
  - Parks/ Playgrounds/ Beaches
  - Street Lights, Signals, Signs
  - Waterways
  - Docks, Ramps



**Operational footprint 2.3M+ square feet**



# Apply BMP's

- Best Management Practices (BMP's)
- Asset Management Plans: Strategic & Proactive
  - Asset Value
  - Life Cycle Management
  - Sustainability
  - Risk Assessment
  - Performance Management

# Charlotte County AMS

- Considerations
  - Process education – takes time
  - Collect & maintain data – is a cost
  - Have technology to manage – is a cost
  - Condition assessment – is a cost
  - Standardization & uniformity of systems – is an effort in coordination
  - Have an ability to project needs based on asset type – requires automated system

# Current Efforts

*Updated September 19, 2023*

- Public Works has been live with new Asset Management Software system since Oct. 2022
- Asset Management Charter has been adopted
- Asset Management Policy has been adopted
- Utilities went live on September 11, 2023
- Final configuration of Facilities
- First training session in Asset Management held for 20 staff members. Second session planned for end of this year

# Plan of Action & Milestones

- Create and Implement Strategic Asset Management Plan
- Draft RFP for phase 2 of Software Implementation to include: Community Services, Mosquito/Aquatic Control, Public Safety and various additional integrations ie 811.
- Continue with training staff on Asset Management
- Facilities “go-live” with software system during first quarter.
- Come back to Board in February with final Strategic Asset Management Plan for review and adoption and Software implementation status.
- Review staffing levels
- 15• Monitor, measure, and report

# Conclusion

- Asset Management System
  - All depts. currently have *some form* of AMS
  - County-wide integration yields
    - Cross-system modelling and scenario analysis (ie, weigh impacts of road vs. utility investment)
    - Will develop breadth/depth of *useful* data
    - Better “capture” of condition, performance, risks, and investment opportunities
  - Will require long range commitment of time, planning, and resources to implement



A stylized graphic featuring a yellow sun with white rays, a green leaf with a white vein, and a teal wave-like shape at the bottom. The text is overlaid on this graphic.

Thank you

Questions and Discussion

