

BALANCING SERVICE LEVELS WITH ASSET MAINTENANCE AND MANAGEMENT STRATEGIES

- Presented to the Rochester Hills City Council
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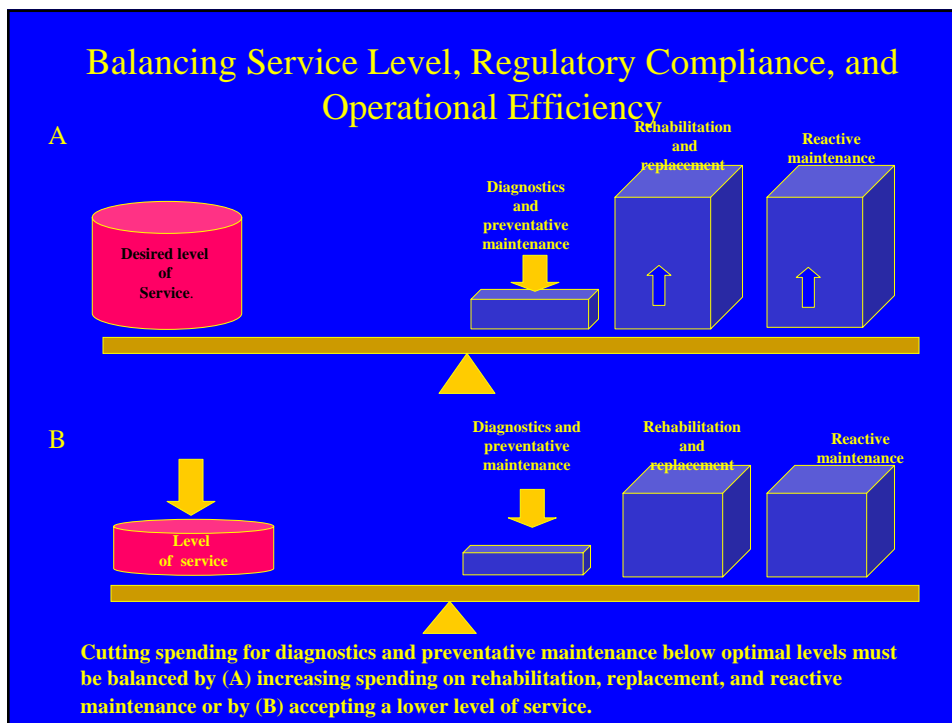
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WHAT IS AN ASSET MANAGEMENT PROGRAM?

- Interpreted broadly, an asset management is an ongoing process for extending infrastructure life at the lowest possible costs.
- More specifically, asset management software is a combination of tools and procedures to enhance the inventory, management and maintenance responsibilities.

GOALS AND OBJECTIVES

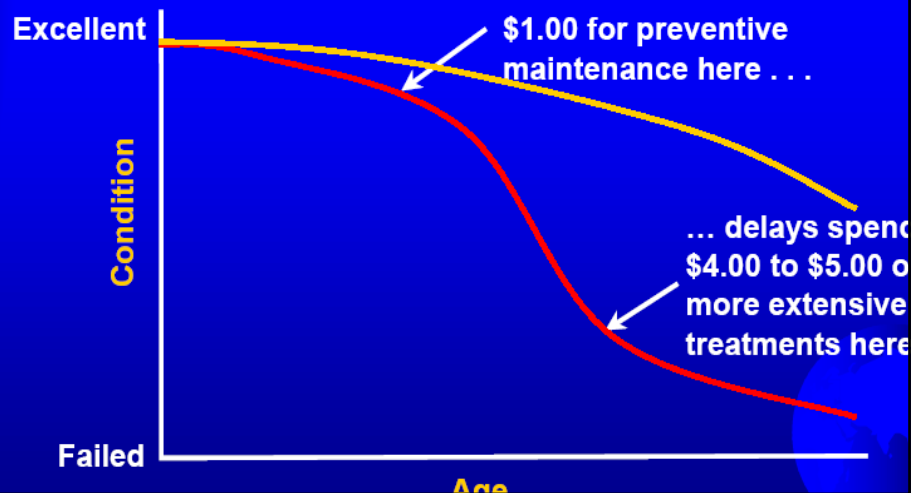
- Provide data to predict asset performance.
- Track estimated and actual costs.
- Generate government required reports.
- Reduce cost, make better capital replacement decisions, lengthen asset life.
- Bring together intellectual assets for strategic decision making.
- Set priorities on service levels.
- Reduce liability and exposure.
- Provide information for disaster relief.
- Improve community safety.
- Improve communication between public agencies.



ASSUMPTIONS

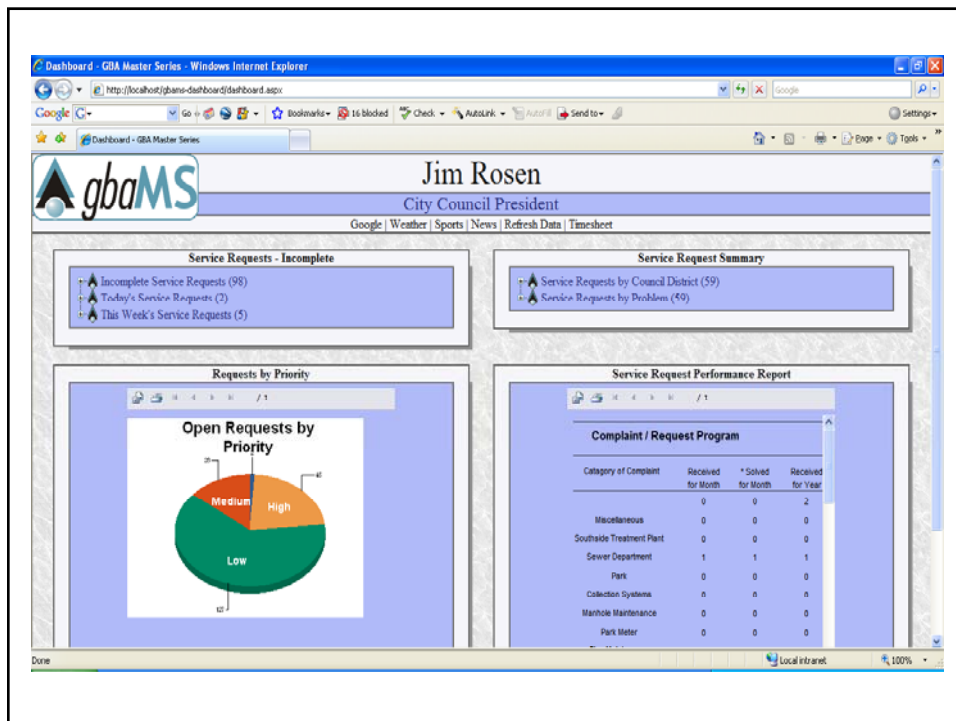
- The City is in a state of transition from a construction mode into a maintenance mode.
- There will not be enough funding to perform all the needed work.
- The ability to adjust rates is limited.
- Work needs to be prioritized including capital replacement and renewal strategies.
- We can no longer rely on the intuitive skills of the staff, many of which will be leaving the workforce in the next 10 years.
- Advanced financial planning saves the added cost of emergency repairs.

The Concept of Preventive Maintenance



APPLICATIONS

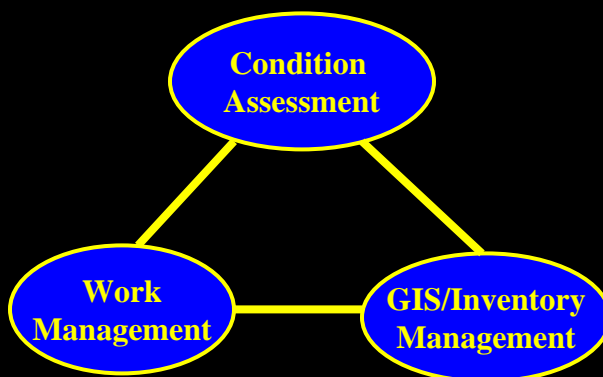
- Citizen Service request (Complaint System)
- Tree manager
- Street maintenance and replacement
- Water and Sewer maintenance and renewal
- Street sign maintenance and replacement
- Facilities maintenance and rehabilitation
- Equipment maintenance
- Right of Way inventory and protection.



BENEFITS

- Improved access to the facts.
- Provides data to predict asset performance.
- Enhanced customer request and work order tracking.
- Improved maintenance productivity.
- Improved response times.
- Updated communication regarding system needs.
- Better coordination between departments.
- Helps achieve government reporting mandates.
- Maximizes existing budget dollars and helps plan future budgets.
- Reduces liability and exposure.

PUBLIC WORKS ASSET MANAGEMENT



SUPPORTING AGENCIES

- Governmental Accounting and Standards Board
- American Public Works Association
- American Water Works Association
- Institute of Transportation Engineers
- National Rural Water Association
- Water Environment Federation
- Urban and Regional Information Systems Association
- Environmental Protection Agency, National Pollution Discharge Elimination System
- Michigan Asset Management Council, Public Act 499 created in 2002
- Michigan Department of Transportation

WHO NEEDS INFORMATION

- City Council, Mayor, Commissions, Boards
- Engineers
- Planning and Risk Managers
- Public Works Officials
- Bond Rating Agencies
- Inspectors
- Auditors
- Finance and Accounting
- Outside Agencies (EPA, MDOT, FEMA, MDEQ)
- Maintenance Operators
- Citizens

INFRASTRUCTURE

- 343 miles of sewer pipe, 8142 manholes.
- 400 miles of water main, 4200 valves.
- 262 miles of major and local roads.
- 82 miles of pathways
- 46 parcels of city owned land.

OTHER CONSIDERATIONS

- The value of City infrastructure is estimated at over 200 million.
- Implementation of an asset management program will not require additional employees.
- No additional hardware is required.
- An asset management program permits a condition based depreciation format.
- An asset management system provides predictive failure analysis.

LOCAL COMMUNITIES UTILIZING AN ASSET MANAGEMENT PROGRAM

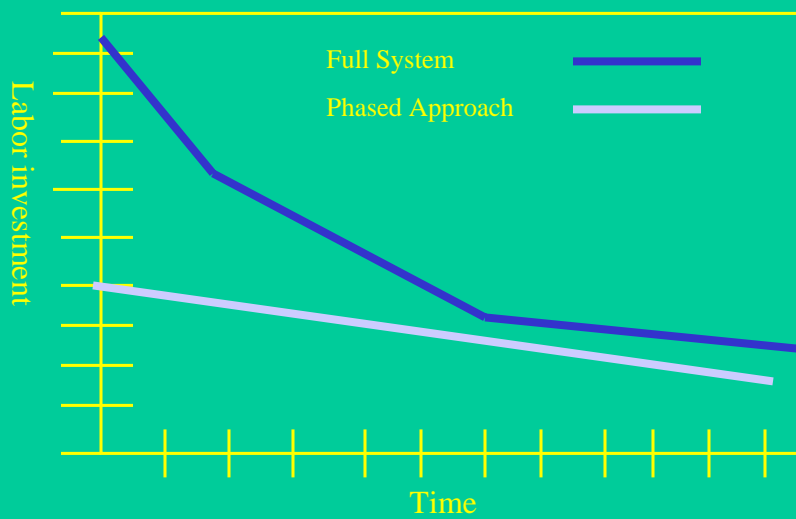
- Ann Arbor
- Grand Blanc
- Grand Rapids
- Holland
- Westland
- Madison Heights
- Fenton Township
- Pittsfield Township
- Waterford Township
- Genesee County
- Livonia
- Auburn Hills
- Wixom
- Troy
- Southfield
- Kalamazoo

COSTS

• Software purchase	\$143,300
• Implementation Service	+ 155,700
• Total	= 299,000
• Budgeted amount	314,000
• Requested amount	\$300,000
• Future maintenance cost after 2 years approximately	\$40,000

IMPLEMENTATION STRATEGY

Implementing a system in phases requires less of an initial labor investment than implementing an entire system.



CONCLUSION

- Asset management brings together intellectual and physical assets.
- Maximizes return on plant and equipment by extending life cycle and minimizing costs.
- Provides costing options for officials to balance service levels and service rates.
- Places an emphasis on citizens request for service.
- Asset Management is the most advanced model available for government efficiency in the 21st century.

QUESTIONS ?