BALANCING SERVICE LEVELS WITH ASSET MAINTENANCE AND MANAGEMENT STRATEGIES

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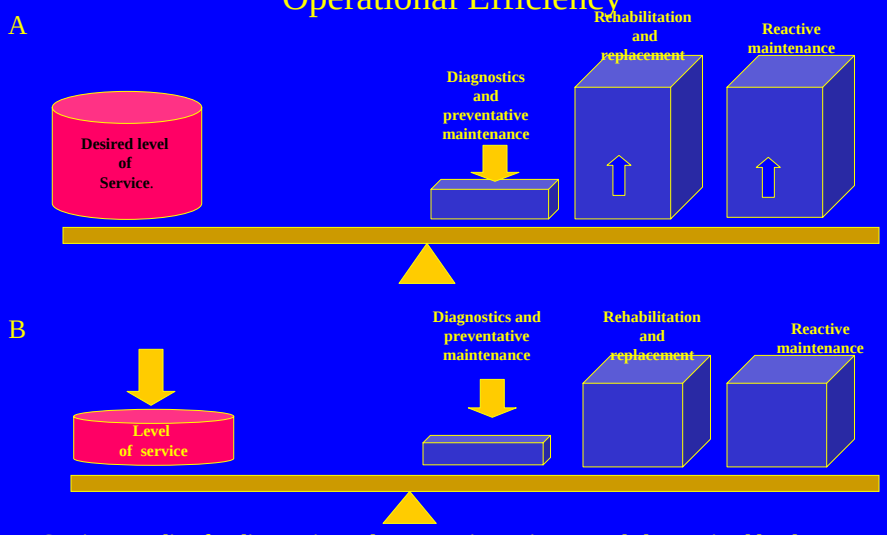
WHAT IS AN ASSET MANAGEMENT PROGRAM?

- 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.

Balancing Service Level, Regulatory Compliance, and Operational Efficiency

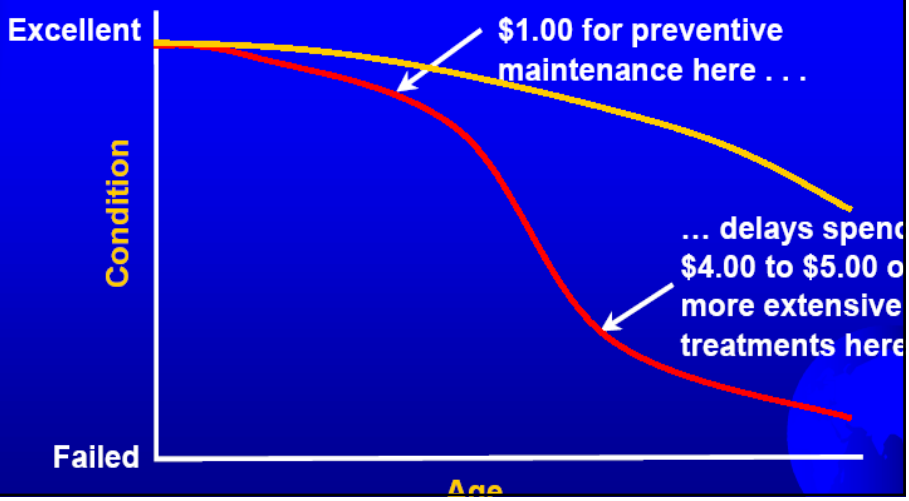


Cutting spending for diagnostics and preventative maintenance below optimal levels must be balanced by (A) increasing spending on rehabilitation, replacement, and reactive maintenance or by (B) accepting a lower level of service.

ASSUMPTIONS

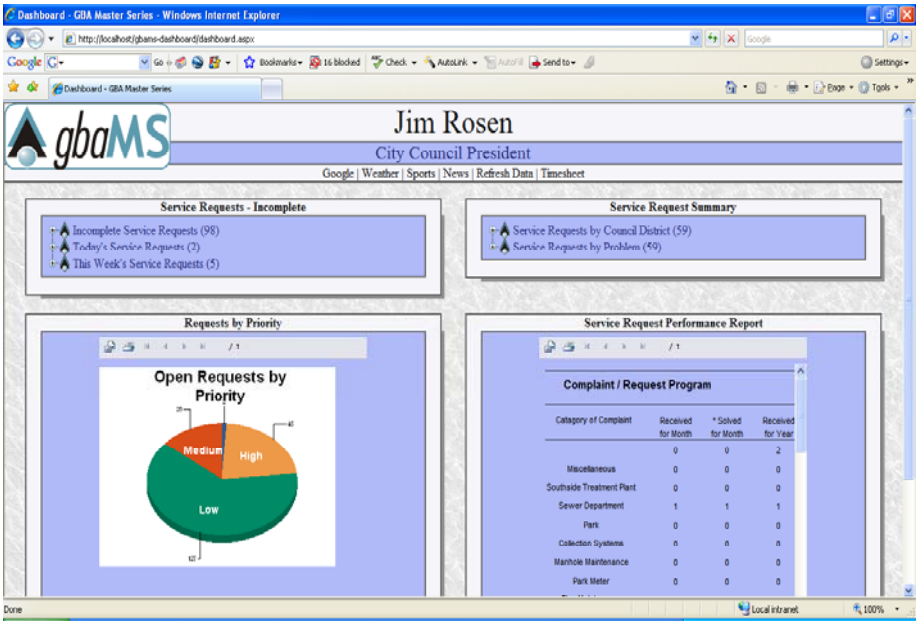
- The City is in a state of transition from a construction mode into a maintenance mode.
- There will not be enough funding to perform all the needed work.
- The ability to adjust rates is limited.
- Work needs to be prioritized including capital replacement and renewal strategies.
- We can no longer 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

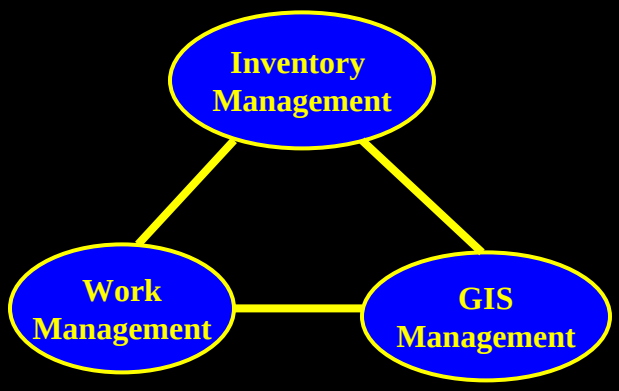
- Citizen Service request (Complaint System)
- Tree manager
- Street maintenance and replacement
- Water and Sewer maintenance and renewal
- Street sign maintenance and replacement
- Facilities maintenance and rehabilitation
- Street light maintenance
- Equipment maintenance
- Right of Way inventory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



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.

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)
- 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.

LOCAL COMMUNITIES UTILIZING AN ASSET MANAGEMENT PROGRAM

OTHER CONSIDERATIONS

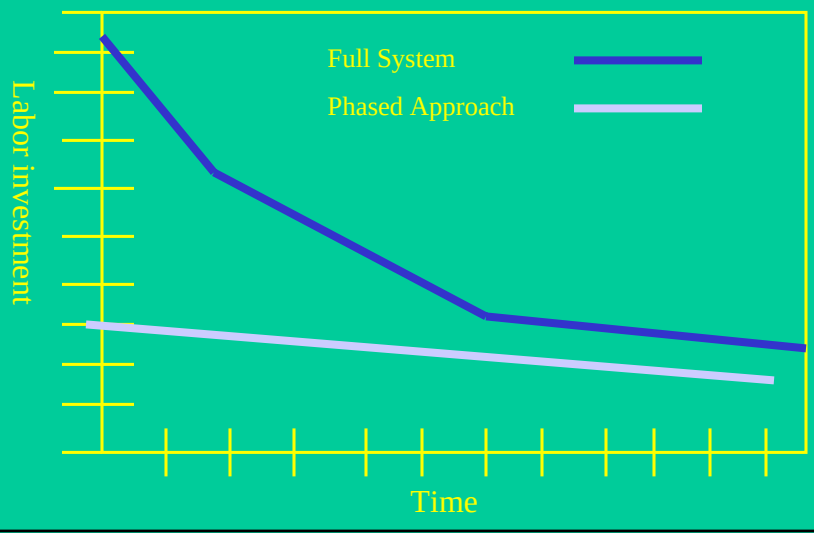
- The value of City infrastructure is estimated at over 200 million.
- Implementation of an asset management program will not require additional employees.
- No additional hardware is required.
- An asset management program permits a condition based depreciation format.
- An asset management system provides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

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.
  20% of current purchase price = $38,000

IMPLEMENTATION STRATEGY

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



CONCLUSION

- Asset Management is the most advanced model available for government efficiency in the 21st century.
- 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 elected officials to balance service levels and service rates.
- Places an emphasis on citizens request for service

QUESTIONS ?