Highway Asset Management System Study

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Presentation Outline

- Background
- Existing Process and Systems
- Highway Asset Management System Study
 - Goals and Objectives
 - Deliverables
 - Current Status and Schedule



Background

 MIT's water control, drainage and transportation infrastructure management duties cover the construction, maintenance, and operation of 19,000 km of all weather roads, 2,200 kilometres of winter roads, over 21,000 bridges and culverts, 4,700 kilometres of drains, 75 dams, 61 reservoirs, 41 pumping stations, 24 northern airports, and many other components.



Existing Process

- MIT Contract Services Programming Section is responsible for developing the Multiyear Highway Capital Program and the current budget is \$366 Million per year (includes roads and bridges/structures on the highway network)
- Projects are proposed based on engineering needs



Examples of Existing Systems

- Pavement Management System and Maintenance Management System (Vemax)
- Water Control and Structures is in the process of implementing a bridge management system (Pontis)
- Construction Management System (Upside)
- Highway Inventory System



Goals and Objectives

- Overarching Asset Management System
- Tradeoff Analyses
- Improve our processes and decision making
- Investment themes/Strategic Capital Planning
- Report on different funding scenarios



Goals and Objectives

 The focus will be on roads and bridges with the possibility of expansion of the asset management processes/software, etc. to other assets in the future.







Work Completed to Date

- A cross-section of staff from different areas of the Department were chosen to:
 - provide information on existing systems, databases, and sources of information related to the Study (June),
 - participate in meetings (late May),
 - respond to an asset management self assessment questionnaire (June/July)



Work Completed to Date

- Other jurisdictions were surveyed to obtain information on their highway capital planning and asset management processes. (July/August)
- A preliminary review of available asset management software systems was conducted to determine systems that could meet our needs. (August/September)
- Environmental Scan and Initial Gap Analysis report (September/October)



Future Tasks/Deliverables

- Continuous Improvement Strategy that aligns with MIT's business requirements.
- Recommendation on an asset management software that would meet MIT's needs.
- Build on the successful processes, systems, and practices we already have.



Project Completion

- The Highway Asset Management Study is expected to be completed by the end of 2011/12 Fiscal Year.
- Future steps:
 - Implementation of improvements/established best practices
 - Obtaining funding and purchasing an asset management system
 - Populating the system with required data



Questions ??

