Asset Management
2013 YEAR-IN-REVIEW

Highlights

- Asset Management Team Structure created
- Consultants brought on board for Enterprise Synthesis & Work Plan (Paul Thompson) and for Transportation Asset Management Information Systems (TAMIS) (Cambridge Systematics)
- 2013 March TAM Kick-Off meetings (Juneau)
- Enterprise Synthesis & Work Plan (Paul Thompson) Completed & Approved
- TAM Implementation Plan Complete & Approved (updated quarterly)
- TAMIS Kick-Off Workshop/Meeting
- Internal Communications Plan Approved
- TAMP Outline Approved
- TAMIS Asset Management Decisions Created & Approved by Steering Committee
- Master Facilities List Completed & Posted
- TAMIS Stakeholder workshop & Evaluation of 'Proof of Concept'

AMHS Asset Management

AMHS has been maintaining the existing Fleet Condition Survey that is used to prioritize work and design both State funded Overhaul CIPs and Federally funded refurbishment and upgrades of both our shoreside terminal facilities and vessel fleet. Before the close of FFY13 we obligated federal project 70054 to develop a comprehensive asset management system upgrade that will include the inventory, location, age/lifecycle and condition of each asset to set a base level measurement. This project will also upgrade our existing maintenance management system with the end data integration to the statewide enterprise system.

AMHS has just advertised (expected to award in May) a state funded project to review our shoreside maintenance inventory and reporting. We anticipate working with State Aviation as they have worked to implement a standardized field survey with a handheld device reporting format. It is the AMHS goal to emulate their best practices as they translate to AMHS shoreside facilities.

Planning and Programming Team

The planning and programming team has had a productive first year. During the fall of 2013, several meetings were held to discuss and develop a list of project selection data to be used in the development of a quantitative and qualitative performance-driven project prioritization criterion to aid decision-makers in the selection, planning and programming of our limited capital investment funds.

Those recommendations were forwarded to the Transportation Assent Management Information System team in December of 2013 to identify data elements that are readily available to support asset management decisions – particularly project prioritization and selection.

The focus of the Planning and Programming Team shifted in the spring of 2014 from identification of project prioritization and selection data elements to the development of a 10-year investment plan for both the National Highway Performance Program (NHPP) and the Surface Transportation Program (STP) projects that ultimately will be incorporated into the new Long Range Transportation Plan (LRTP). Work continues on the 10-year investment and prioritization plans.

Members of the Planning and Programming team have recently embarked on an effort to define, categorize and align projects identified in our tentative 10-year capital improvement program with the Department's Strategic Plan, LRTP and state and federal performance measures. This effort will result in the LRTP including both near-term (10 year) and future (20 year) transportation needs, policy issues, funding opportunities, and prioritized projects, with a target outlook through 2035.

Finally, the Transportation Geographic Information Section (TGIS) within DOT&PF has successfully geospatially mapped our Surface Transportation Improvement Program (STIP) projects and provided tools needed to retrieve, display and analyze spatial information for the evaluation, selection and programming of capital improvement projects.

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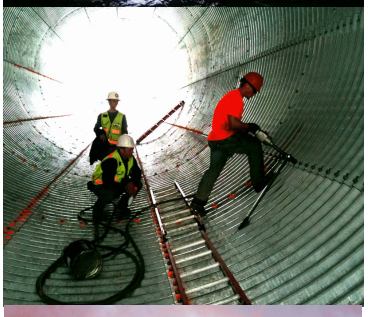
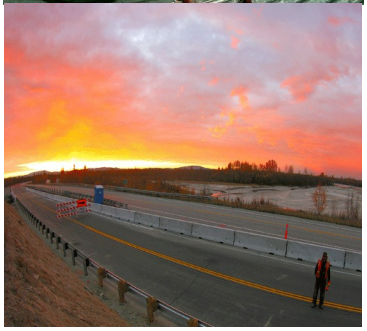
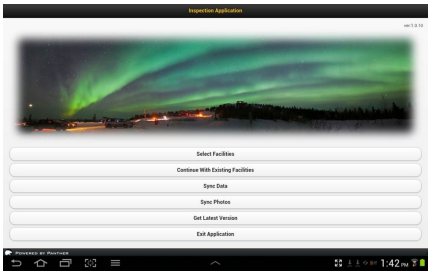




Aviation Asset Management

Just as the TAM committees and teams were forming up last year, the first phase of the Alaska Aviation System Plan (AASP) project was coming to a close. One of the tasks that had been completed included the development of a new approach to inspecting airports. The result is a tablet application that enables an inspector to identify features – culverts, pavement, markings, lights, et al. – score their conditions on a predetermined scale, take geo-referenced photographs, and upload the resulting data into a database. Based on field tests last year, some adjustments were made to the application. The new and improved version was sent back out for winter inspections on a few airports in Northern and Central Regions. We'll be using it this summer on airports around the state. Inspection information will be available through a web-based interface. This data repository is currently being improved to include data queries and reporting features so that the inspection data can be used to report on the state of individual or groups of airports and to assist with planning and programming decisions.



The AASP, being a continuous planning process, will continue to support and complement TAM efforts. DOT&F aviation staff and the consultant team will help deploy the airport inspection process by providing training and support to DOT&PF staff once the tablet application and website are ready statewide release. As the inspections are completed, the airport infrastructure condition inventory will be populated. The AASP consultant will explore the option of including Airport Master Record (Form 5010) inspections in the tablet application and will make recommendations on how to do so.

Geotechnical Asset Management (GAM)

The GAM program within Statewide Materials showed a substantial amount of progress and momentum. Dave Stanley initiated five research projects, to be completed by three consultant contractors by end of 2015. These projects are:

GAM Plan Development — develop and make recommendations for implementing a GAM Plan for AKDOT&PF. Contractor has recently delivered recommendations for Policy and Procedures.

Risk Management Framework for GAM — develop a risk management framework for the GAM program within AKDOT&PF. Preliminary risk register has been prepared that assigns a risk score rating and cost estimates for hazards at unstable slope sites. The scope includes development of a risk analysis software tool that incorporates analysis and assessment methods.

Research, Development, and Implementation of GAM and Unstable Slope Management — research to support the above two projects, and particularly with application on a highway corridor basis. Current task is to develop service level classifications, asset condition indices, and performance measures for our geotechnical assets.

Haines Highway Debris Flow Corridor Inventory, Assessment and Design Concepts — this project highlights the extremely dangerous and active debris flows that inflict the Haines Highway between about MP 16 to 24. The project scope includes the migration of the Unstable Slope Management Program (USMP) database to a department server, a concerted step towards enabling broader access to geotechnical asset data within AKDOT&PF.

Ketchikan North/South Tongass Highway Stability Reconnaissance Project – this intensive GAM pilot study will inventory slopes, retaining walls and other assets, and result in calculated condition indices applied to the assets within the corridor.

The statewide Material Site Inventory (MSI) has classified over 2,600 material sites to date, over 1,000 site profile reports are currently available. Also, 641 site inspections have been conducted in the inventory project, and about 200 are sched-