TECHNOLOGY FOR
Alaskan Transportation
DOT Statewide Research, Development, & Technology Transfer
Local Technical Assistance Program

"Improving Alaska's quality of transportation through technology application, training, and information exchange."

Summer 2012, No. 87

In this issue . . .

Fugitive-Dust Research Team Returns to Rural Airports, Roads

by James Harper, Alaska DOT&PF

In early June, a research team departed on yet another season of remote field work testing dust-reducing palliatives at rural runways and roads across Alaska. Using a unique portable instrument and a variety of dust-control palliatives, they are helping Alaska DOT&PF compare which dust treatments are the best for specific unpaved road and runway locations throughout the state.

As many Alaska DOT&PF staff know, roughly 60% of the state's roads are unpaved and about 82 percent of Alaska's communities are without connected road service. They instead rely on more than 250 state-owned rural airports for the movement of people and goods. And because many of these communities utilize local roads and runways that are unpaved, dust has become a significant issue.

For rural people who rely on salmon and locally grown fruits as dietary staples, activities like drying fish near their homes means they run the risk of ingesting dust or

(continued on page 2)

Ten Years Making the Grade

by Dave Waldo, Alaska DOT&PF

The road grader is the most difficult piece of heavy equipment to master. An operator can run a grader for his/her whole career and still have things to learn. Grading techniques are often passed down from old hands to new. This is both good and bad. Sometimes the things that get passed on are not necessarily best practices. The real trick is to teach old operators new tricks.

Driving rain in Kodiak, howling wind in Nome, intense Fairbanks heat, or swarms of North Slope mosquitos: Dee Hadfield of the Utah Local Technical Assistance Program (LTAP) has endured it all, returning to Alaska every year for the past ten years to deliver grader training to Alaska's operators.

Beginning in 2003, Alaska LTAP partnered with Utah LTAP to establish a grader operator program to focus on safety, nomenclature, and the fundamentals of road grading. The operational emphasis is on positioning the grader and windrow, proper wheel lean, how to use articulation, and establishing crown. The final part of the week, students work on building a road with ditches and proper 4% grade.

Cantwell grader training, 2012.

(continued on page 3)

(continued from page 1)

calcium chloride from airborne particles. Costs are also an issue: Alaska DOT&PF found that fugitive dust can remove as much as one inch of surface each year from unpaved roads, which must be replaced to maintain a road or runway's service life.

In partnership between Alaska DOT&PF Statewide Research, Development, and Technology Transfer and the Alaska University Transportation Center, a multiproject research program is addressing the dust problem. Led by AUTC researcher Dr. David Barnes, professor of civil and environmental engineering at the University of Alaska Fairbanks, and Clark Milne, Alaska DOT&PF, Northern Region maintenance engineer, this research is testing different dust reduction palliatives to help the state fill a major information gap on road dust.

The study results will help Alaska DOT&PF create mandatory dust-reduction performance requirements for palliative product procurement on FAA-funded surface maintenance programs. ADOT&PF is already using this data to draft specifications used for runway bidding processes and other construction projects.

To date, the team created and deployed a unique portable dust measuring instrument, the DUSTM, to monitor palliatives on gravel airports and roads in over thirty remote Alaska communities. It compared statistically significant dust release results from both palliative-treated and untreated surfaces and then calculated dust reduction percentage values for individual palliatives. Results show various palliatives reduced dust from 65% to 99%. Results also indicate at least a 90% reduction rate for one and sometimes two years with most modern chemical palliatives.

DUSTM in action on Interior Alaska gravel road.

Earlier this month, the team set off on a trip that will include more rural airports than during any previous summer. They will begin in Summit and continue product testing all summer to evaluate the impacts of water and precipitation on fugitive dust on both treated and untreated roads.

Although highly dependent upon weather and other logistical challenges, their work site location itinerary includes road and runway locations in Central, Circle, Kotzebue, Shungnak, Buckland, Noatak, Noorvik, Kaltag, Summit, Kantishna, Tetlin, Eagle, Hughes, Coldfoot, Kotlik, Golovin, White Mountain, Wales, and St. Michael.

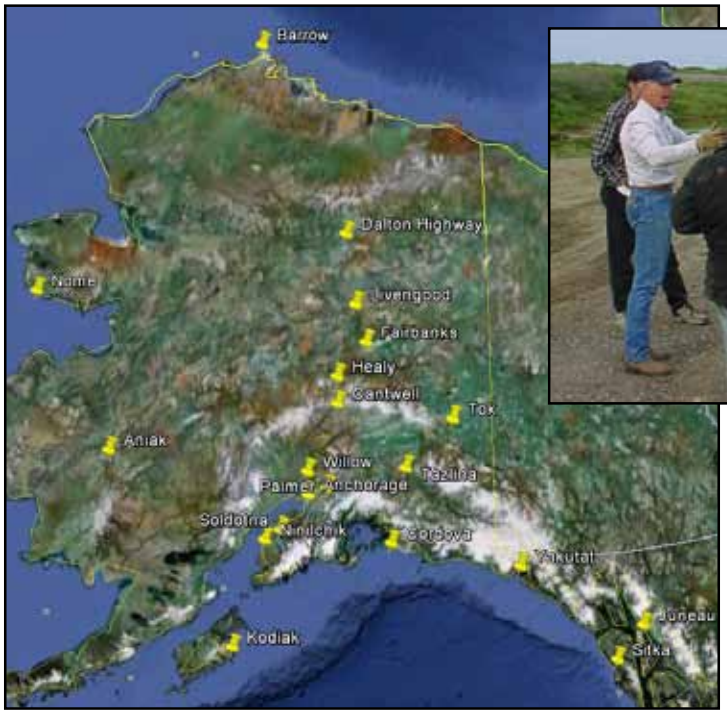
The DUSTM portable dust measuring instrument mounted on a four-wheeler ATV. The DUSTM is versatile, portable, and precise. The instrument easily fits in the back of a truck or small airplane for transport to remote locations. When deployed, it mounts to the rear of an ATV to measure loftable dust levels (defined by the EPA as PM-10). An air intake extends from the unit off the back of an ATV and pulls a continuous air stream as the ATV drives at specific speeds over a surface. As dust emerges, the air stream is pulled through a tube and passes by a laser, which measures the opacity of the airstream. This data is then recorded in an on-board datalogger box, which can be analyzed later.

(continued from page 1)

In large part, the program's success has been Dee's ability to relate to the students. He talks the talk and walks the walk, quickly gaining respect through his knowledge of the grader and his skill as a grader operator.

Dee has spent many evenings working with students after hours without compensation other than the satisfaction that feeds his passion for "being pro." It's what Dee tells his students to strive towards as operators. Dee has often mentioned, "Alaskan operators have some of the best attitudes and the best maintained equipment of anywhere I take the program." He says it makes his job easier and is another reason why he loves to come to Alaska.

Dee spent 34 years in maintenance in Logan City Utah, including 21 years as manager. He now works for the Utah LTAP center, delivering heavy equipment training to state and local governments across the country. He has extensive knowledge and practical experience with the operation of heavy equipment and gravel roads maintenance.



Dee has traveled to over 20 locations to provide over 50 weeks of grader training throughout Alaska.

Nome operators get instruction from Dee on proper grader articulation in 2003.

On sunny June day in Cantwell, almost ten years later, Dee is still providing quality instruction to Alaska operators.

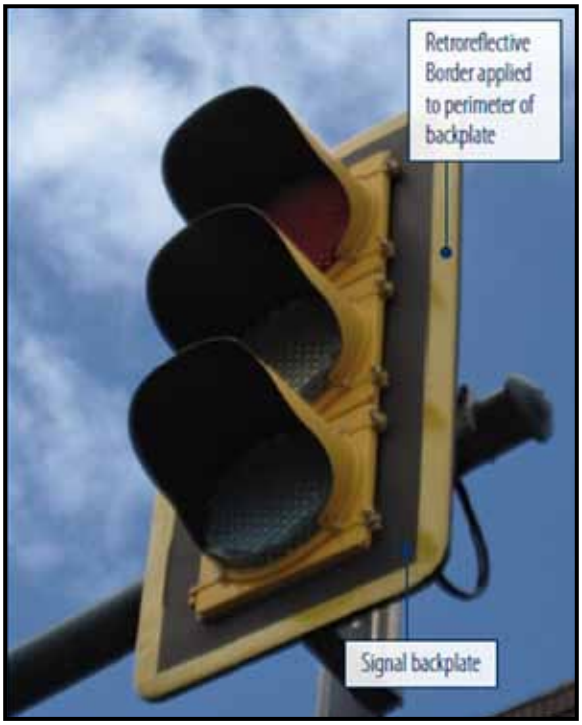
"The grader is the primary piece of equipment we use to maintain roughly 4,000 lane miles of gravel roads across the state. Proper application of the grader can make or break a gravel road system. Because of its complexity, it's critical our operators receive exceptional, professional instruction. Dee has been providing exceptional training for the last 10 years and we hope for the next 10 years."—Mike Coffey, Chief, Statewide Maintenance and Operations

Three Proven Safety Measures

The following three safety measures are from the U.S. Department of Transportation Federal Highway Administration For a list of key resources about these and others go to: http://safety.fhwa.dot.gov/provencountermeasures/index.htm

Backplates with Retroreflective Borders

Backplates are added to a traffic signal indicator in order to improve the visibility of the illuminated face of the signal by introducing a controlled-contrast background. The improved visibility of a signal head with a backplate is then made more conspicuous by framing the backplate with a retroreflective border. Taken together, a signal head equipped with a backplate with retroreflective border is made more visible and conspicuous in both daytime and nighttime conditions, which is intended to reduce unintentional red-light running crashes.



Background

A project initiated in 1998 by the Insurance Corporation of British Columbia and the Canadian National Committee on Uniform Traffic Control investigated the effectiveness of applying retroreflective tape around the borders of traffic signal backplates. A small number of signalized intersections were treated and followed up with a simple before/after study, which concluded that the enhancement was effective at reducing crashes. A larger number of sites were subsequently treated and a more robust statistical study was performed.

Since their initial introduction in Canada, several U.S. state highway departments and local road agencies have adopted practices and policies concerning this countermeasure. The FHWA has encouraged this treatment as a human factors enhancement of traffic signal visibility and conspicuousness for older and colorblind drivers. Adding retroreflective borders is also advantageous during power outages when the signals would otherwise be dark. The retroreflective sheeting continues to provide a visible cue for travelers to take note of the dark signal and adjust their actions accordingly. The study included in the Crash Modification Factor Clearinghouse concluded that the use of backplates with retroreflective borders may result in a 15 percent reduction in all crashes at urban, signalized intersections.

Guidance

Backplates with retroreflective borders should be considered as part of efforts to systemically improve safety at signalized intersections. Adding a retroreflective border to an existing signal backplate can be a very low-cost safety treatment, as the materials are simple strips of retroreflective sheeting. For existing traffic signals that lack even standard backplates, the addition of backplates with a retroreflective border can often be accommodated on existing mast arm and span wire assemblies, but the structural capacity of the supports must be properly evaluated. The most effective means of implementing this proven safety countermeasure is to adopt it as a standard treatment for signalized intersections across a jurisdiction so that it is consistently included with all new construction and modernization projects, as well as being a worthy retrofit project for existing signals at intersections with red-light running crash histories. It is important to note that the Manual on Uniform Traffic Control Devices (MUTCD) specifically allows this treatment as an option that is discussed in Part 4. In terms of color and size, implementation of backplates and retroreflective borders must be consistent with the latest edition of the MUTCD.

"Road Diet" (Roadway Reconfiguration)

The classic roadway reconfiguration, commonly referred to as a "road diet," involves converting an undivided four lane roadway into three lanes made up of two through lanes and a center two-way left turn lane. The reduction of lanes allows the roadway to be reallocated for other uses such as bike lanes, pedestrian crossing islands, and/or parking. Road diets have multiple safety and operational benefits for vehicles as well as pedestrians, such as (1) decreasing vehicle travel lanes for pedestrians to cross, therefore reducing the multiple-threat crash (when one vehicle stops for a pedestrian in a travel lane on a multilane road, but the motorist in the next lane does not, resulting in a crash) for pedestrians; (2) providing room for a pedestrian crossing island, Improving safety for bicyclists when bike lanes are added (such lanes also create a buffer space between pedestrians and vehicles); (3) providing the opportunity for on-street parking (also a buffer between pedestrians and vehicles); (4) reducing rear-end and side-swipe crashes; and (6) improving speed limit compliance and decreasing crash severity when crashes do occur.

Background

Midblock locations tend to experience higher travel speeds, contributing to increased injury and fatality rates. More than 80 percent of pedestrians hit by vehicles traveling at 40 mph or faster will die, while less than 10 percent will die when hit at 20 mph or less. When appropriately applied, road diets have generated benefits to users of all modes of transportation, including bicyclists, pedestrians, and motorists. The resulting benefits include reduced vehicle speeds, improved mobility and access, reduced collisions and injuries, and improved livability and quality of life. When modified from four travel lanes to two travel lanes with a two-way left-turn lane, roadways have experienced a 29 percent reduction in all roadway crashes. The benefits to pedestrians include reduced crossing distance and fewer midblock crossing locations, which account for more than 70 percent of pedestrian fatalities.

Guidance

Road diets can be low cost if planned in conjunction with reconstruction or simple overlay projects, since a road diet mostly consists of restriping. Roadways with average daily traffic (ADT) of 20,000 or less may be good candidates for a road diet and should be evaluated for feasibility. It has been shown that roads with 15,000 ADT or less had very good results in the areas of safety, operations, and livability. Driveway density, transit routes, the number and design of intersections along the corridor, and operational characteristics are some considerations to be evaluated before deciding to implement a road diet.

It is a good practice for someone in an agency to know well in advance of when road reconstruction and overlay projects will be initiated so an evaluation can be conducted. It is important to analyze and understand the effects of the proposed change, obtain input from the community stakeholders, and ensure the appropriate elements are included in the project. Improvements to intersection turn lanes, signing, pavement markings, traffic control devices, transit stops, and pedestrian and bicyclist facilities may be needed to support this concept. It should be noted that the classic four-to-three-lane road diet is very compatible with single-lane roundabouts.

A four-lane roadway before a reconfiguration (left) and then after a "diet" to two travel lanes, a two-way left-turn lane, and bike lanes on both sides of the road (right).

Enhanced Delineation and Friction for Horizontal Curves

Low-cost safety treatments vary by the severity of the curvature and the operating speed. Low-cost treatments typically include methods for warning the driver in advance of the curve, but treatments will vary by intensity of the warning. Implementing the recently published curve treatments included in the Manual on Uniform Traffic Control Devices (MUTCD) should improve curve safety over past practices by providing consistency. However, additional enhancements can be made with post-mounted delineation in the curve or an enhanced signing treatment that may include larger chevron signs with enhanced retroreflectivity. For more challenging curves, dual indicated advanced signs with constant flashing beacons may be effective. Pavement markings are also an effective communication tool to indicate the alignment change. Pavement friction is critical for changing vehicle direction and ensuring the vehicle remains in its lane. Traditional friction courses or high friction surface treatments should be considered for curves with numerous wet weather crashes or severe curves with higher operating speeds.

Background

Horizontal curves are a change in roadway alignment that creates a more demanding environment for the driver, vehicle, and pavement. The challenges associated with safe navigation of curves compound with the addition of nighttime driving or inclement weather. Recent data analysis shows that 28 percent of all fatal crashes occur on curves. Furthermore, about three times as many crashes occur on curves as on tangential sections of roadways. These statistics make curves prime sites for safety improvements.

Early driver perception and appropriate reaction to changes in the roadway greatly improve the safety of the curve. Inconsistent use of warning signs has been identified as an important factor contributing to the high incidence of crashes on curves. The MUTCD was recently revised to attempt to provide a more uniform application across the United States. Other recent research on signing practices in curves has shown great potential for improving safety with low-cost options. In addition to these treatments, new technologies are being evaluated for challenging curves, such as dynamic advanced curve warning signs and dynamic sequential light-emitting diodes (LED lights) on chevrons.

There are a variety of high-friction surface treatments available. While they typically have a higher

unit cost than traditional friction courses, they can often be applied at the specific curve location for a relatively low cost. Additionally, where cross-section problems such as lack of appropriate superelevation exist, this can be a low-cost alternative to address a problem in the short term until further improvements can be made.

Crash modification factors are available from the FHWA Clearinghouse and present effectiveness levels for various horizontal curve treatments. For example:

- Installing chevron signs, curve warning signs, and/or sequential flashing beacons can result in a 38–43 percent reduction in all fatal and injury crashes.
- Installing chevron signs on horizontal curves can produce a 16 percent reduction in non-intersection fatal and injury crashes.
- Installing new fluorescent curve signs or upgrading existing curve signs to fluorescent sheeting can result in a 25 percent reduction in nonintersection fatal and injury crashes.
- Providing static combination horizontal alignment/advisory speed signs can generate a 13 percent reduction in all injury crashes.
- Refinishing pavement with microsurfacing treatment can bring about a 43 percent reduction in all fatal and serious injury crashes.

Guidance

Each state with any curve locations with known problems should review them in light of the guidance provided in Section 2C.05 of the 2009 MUTCD to improve consistency within and across jurisdictions. Additionally, states should review signing practices and policies to ensure they comply with the intent of the new guidance.

Each state should also develop a process for identifying and treating problem curves. This process should consider the full range of available treatments described here and use the appropriate application for the identified problem(s), as noted in the countermeasure description above.

FHWA Introduces New Asset Management Web Site

Take a fresh look at transportation asset management with the Federal Highway Administration's (FHWA) new and improved Asset Management web site (www.fhwa.dot.gov/asset).

Asset management provides a framework to improve performance on a long-term basis. It also enables transportation agencies to preserve their assets, minimize their whole-life costs, and operate in a financially sustainable manner.

The new site features the information you need to make asset management a reality for your organization, with sections on everything from publications and training to resources and useful contacts. Also highlighted are current FHWA asset management projects.

Publication categories include general asset management, bridges, pavements, safety, operations, management systems, and case studies. Among the newly added publications are Bridge Management Practices in Idaho, Michigan, and Virginia (Pub. No. FHWA-IF-12-029) and Executive Brief: Advancing a Transportation Asset Management Approach (Pub. No. FHWA-IF-12-034).

Training options include a list of courses and workshops offered by FHWA and the FHWA National Highway Institute (NHI), including Transportation Asset Management (NHI Course No. 131106), Economic Analysis for Highway Decision Makers Workshop, Pavement Management Systems: Characteristics of an Effective Program (NHI Course No. 131116), and Fundamentals of Life-Cycle Cost Analysis. Also listed are upcoming conferences and other events.

Visitors to the Resources section can find guidance documents, recordings and presentations from asset management Webinars, videos, details on software programs, information on transportation asset management plans, and a list of frequently asked questions. Links to other useful information include Web sites for the American Association of State Highway and Transportation Officials (AASHTO) Subcommittee on Asset Management, the Transportation Research Board Asset Management Committee, and state transportation agencies.

Updates on current FHWA asset management projects are posted on the site. These initiatives include establishing the Transportation Asset Management Expert Task Group as a forum to discuss changes in the way highway agencies are managing assets and identify strategies to advance asset management. Also in development are plans for FHWA and the AASHTO Subcommittee on Asset Management to conduct Webinars on asset management topics beginning in summer 2012, with more details to be posted as they become available.

FHWA is also preparing the first of five planned reports on risk-based transportation asset management. Expected to be released in fall 2012, the first report will provide an overview of risk management as applied to managing physical assets. Additional FHWA initiatives include enhancing the Pavement Health Track Analysis Tool, which agencies can use to determine the health of a road network in terms of remaining service life.

To use the many asset management tools and resources available, visit www.fhwa.dot.gov/asset. For more information on asset management, contact Steve Gaj at FHWA, phone 202-366-1336 (email: stephen.gaj@dot.gov).

FHWA Offers Online Training on Chip Seal Best Practices

Find the guidance you need to make chip seals part of your pavement preservation program with a free online course from the Federal Highway Administration.

The three-hour Chip Seal Best Practices course (Course No. FHWA-NHI-131132) is an on-demand training that can be scheduled at your convenience. Developed by the Transportation Curriculum Coordination Council (TCCC), the course is offered through FHWA's National Highway Institute (NHI).

Six modules cover introductory information, designing chip seal mixes, selecting the proper materials for the chip seal mix, using the right equipment, following proper construction practices, and incorporating performance measures. Topics also include common chip seal distresses.

The course will benefit entry-level construction inspectors, maintenance employees, and contractor personnel, as well as provide refresher training for more experienced staff.

Launched in 2000, the TCCC is a partnership that includes representatives from FHWA, NHI, regional state training and certification groups, several American Association of State Highway and Transportation Officials subcommittees, and industry associations. More than 70 online training courses developed by the TCCC are available from NHI. All TCCC courses are reviewed every two years and updated if needed. If there is a change in a specification or method used in a course, that course is updated as soon as possible.

For more information on the course content, contact Jason Harrington at FHWA, phone 202-366-1576 (email: jason.harrington@dot.gov). To take the Chip Seal Best Practices course, visit www.nhi.fhwa.dot.gov. Details on other online TCCC training opportunities can be found at www.nhi.fhwa.dot.gov/training/course_search.aspx (click on "View All Available Web-Based Training Courses"). For more information on the TCCC, visit www.tccc.gov.

Meetings and Training Around Alaska

Society	Chapter	Meeting Days	Location	Contact
ASCE	Anchorage	Monthly, 3rd Tues., noon	Moose Lodge	
	Fairbanks	Monthly, 3rd Wed., noon except Sept. and Feb.	Westmark Hotel	
	Juneau	Monthly, 2nd Wed., noon except June–Aug	2nd Fl. Conf. Rm at AEL&P	
ASPE	Anchorage	Monthly, 2nd Thurs., noon except summer	Coast International Inn	Jennifer Gibson, 343-8130
	Fairbanks	Monthly, 1st Mon., noon	Regency Hotel	
	Juneau	Monthly, 2nd Wed., noon except June–Aug.	2nd Fl. Conf. Rm at AEL&P	
ASPLS	Anchorage	Monthly, 3rd Tues., noon	Sourdough Mining Co.	George Strother, 745-9810
	Fairbanks	Monthly, 4th Tues., noon	Westmark Hotel	
	Mat-Su Valley	Monthly, last Wed., noon	Windbreak Cafe	
AWRA	Northern Region	Monthly, 3rd Wed., noon	Rm 531 Duckering Bldg., UAF	Katrina Bennett, 474-1939
ICBO	Northern Chapter	Monthly, 1st Wed., noon except July and Aug.	Zach's Sophie Station	Tom Marsh, 451-9353
ITE	Anchorage	Monthly, 1st Tues., noon except July and Aug.	Ak. Aviation Heritage Museum	Karthik Murugesan, 272-1877
IRWA	Sourdough Ch. 49	Monthly, 3rd Thurs., noon except July & Dec.	West Coast International Inn	
	Arctic Trails Ch. 71	Monthly, 2nd Thurs., noon except July & Dec.	Zach's Sophie Station	
Asphalt Pavement Alliance	Alaska	3rd Wednesday of every other month	varies	John Lambert 267-5294
PE in Government	Anchorage	Monthly, last Fri., 7 a.m.	Elmer's Restaurant	
Soc. of Women Eng.	Anchorage	Monthly, 2nd Wednesday at 5:30pm.	DOWL HKM	Stephanie Mormilo at 562-2000 Virginia Groeschel at 562-2000

Upcoming Training

October 2012

NHI 133078: Access Management, Location, and Design

Oct. 9–11 in Anchorage

NHI 134077: Contract Administration Core Curriculum

Oct. 24–25 in Juneau

November 2012

NHI 134037A: Highway Contract Claims: Analysis & Avoidance

Nov. 6–8 in Juneau

For information about T2-sponsored training, contact:

Dave Waldo at 907-451-5323, david.waldo@alaska.gov

or

Simon Howell at 907-451-5482, simon.howell@alaska.gov

or go to: www.dot.state.ak.us

Parks Highway Corridor Management Demonstration Project Showing the Benefits of TAM

by James Harper, Alaska DOT&PF

"The improvements that we construct today and plan for tomorrow must be managed as assets and preserved for future generations. We must become as skilled at optimizing the lifecycle costs and overall performance of our transportation assets as we have traditionally been at engineering and building them." –Commissioner Marc Luiken, 2012 STIP Introduction Letter.

As multiple asset management (AM) initiatives are underway within Alaska DOT&PF, a new demonstration project aims to illustrate the benefits of managing assets within a specific transportation corridor. Across the department, we are advancing our understanding of how a statewide transportation system can function more efficiently and effectively through asset management and performance management (PM).

As implementation of AM and PM continues, we will begin to rely more on life-cycle cost analysis and performance measures to guide and monitor outcomes of critical decisions regarding our transportation corridors. In Alaska's Parks Highway transportation corridor, a demonstration project is helping us to show the benefits of AM and PM concepts.

Led by Asset Management Engineer Vic Winters, Chief Engineering Geologist Dave Stanley, and assisted by consultant Paul Thompson, a leading international asset management expert, the Parks Highway Corridor Management demonstration project is moving forward with a wide-ranging data collection and integration project. Including a significant GIS and database development component, it will demonstrate the streamlined information sharing and enhanced decision-making capabilities that have become the hallmarks of asset management.

Corridor Asset Management

Transportation anagement (TAM) is a framework for managing physical assets to meet a required level of service in the most cost-effective manner for present and future customers.

Supporting decision making about project selection, extent, scope, timing, maintenance, and other factors, this project aims to transfer this framework on one single transportation corridor, including all its essential assets, such as pavement, bridges, embankments, slopes, materials sites, rights-of-way, culverts, signs, etc.

Asset management is not new for Alaska DOT&PF. To varying degrees, the department already has management programs in place for bridges, pavement, material sites, maintenance, and unstable slopes. For culverts and signs, it has begun an inventory and condition assessment—the foundation of asset management implementation. The inventory develops reports on asset conditions throughout the corridor. Preliminary work is underway to initiate both a retaining wall management program and an unstable embankment management program.

The Parks Corridor project entails data collection, developing asset knowledge and understanding, analysis, and decision-making support. In Alaska, geotechnical asset management is a key component to this program as well, in which assets like slopes, embankments, retaining walls, and materials sites are just as important as road sections, light posts, and signage. A variety of condition indices are under consideration for use in rating and communicating the condition of a particular asset on a comparative scale.

For the Parks Corridor project, this process is in the second of four phases identified so far:

- Phase I: Project Scoping and Development
- Phase II: Data Collection and Integration
- Phase III: Database Development
- Phase IV: Corridor Asset Management Plan

Currently in phase II, the project is centered on an extensive data collection effort in which multiple types of existing data are being collected into a GIS-based webpage with map display and links to data. This will evolve into an integrated database that will provide a location for collection of and access to future data in phase III and beyond.

Stakeholder Communication and Data Integration

Stanley is working with regional stakeholders to identify data that will be essential for developing and managing the Parks Highway corridor. He is demonstrating a version of the webpage that has already been created and gathering stakeholder and staff input to see what types of data are most useful for staff, supervisors, and regional directors both for engineering business and for asset management purposes.

Stanley will work with divisions and units to establish data access through various databases and display them on the GIS-based web page. This page will serve as a one-stop-shop for the department, allowing everyone from the field to the management level to access data on specific locations and assets. It will include, among other things, location and condition ratings of material sites and unstable slopes, access to geotechnical reports, pavement conditions, sign and culvert inventories, and other new data sources.

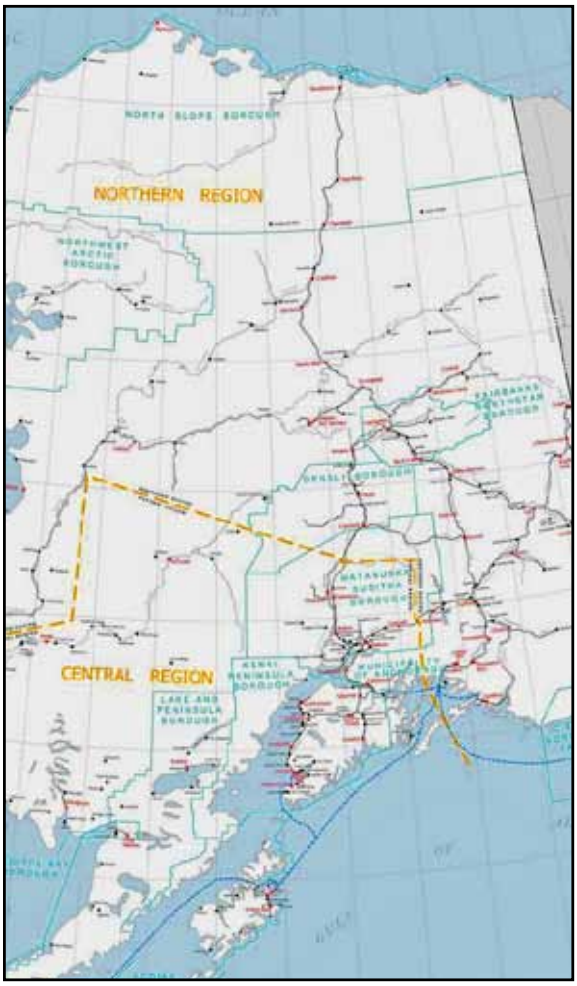
A major piece of this data collection and integration involves communicating with department stakeholders at all levels. Staff, supervisors, and management have provided insightful feedback and advice on what data is most useful for them and how it can be used toward performance management.

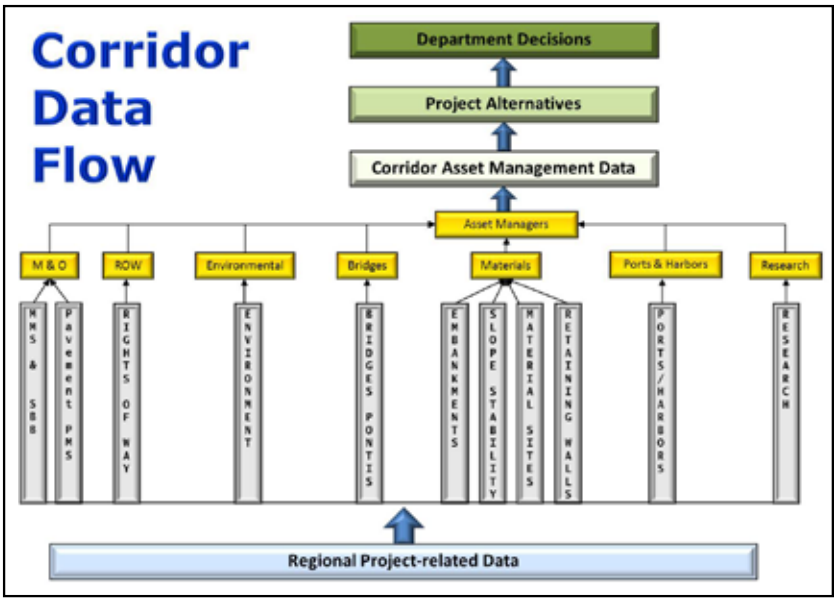
Data sharing has become a helpful byproduct of this effort. As it progresses, a variety of information on specific assets will become available—allowing individuals from different units and divisions to see a wider collection of information not previously accessible in a centralized location. Consolidating the most useful asset information removes institutional barriers to engineering work and to asset management that previously existed between regions and functional groups. To manage corridors effectively, functional groups must collect, manage, and preserve data. Then they can use it to streamline their operations—from maintenance to budgeting.

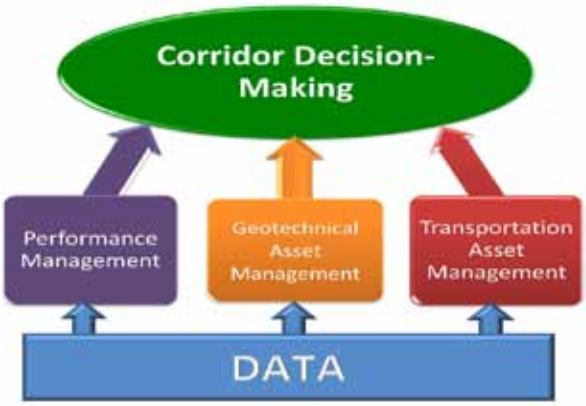
Because data is so central to asset management, the corridor study will bring fresh project-level data to bear as design and construction projects evolve. The ultimate aim is to get the right information to the right people in the right place at the right time. This will entail new methods of allowing contractors to provide inventory and condition surveys for assets in the project closeout period.

By integrating this variety of old, existing, and new data, the corridor project will benefit the overall TAM implementation effort across the department by highlighting important data management and governance issues.

(continued)







ALASKA TRANSPORTATION
TECHNOLOGY TRANSFER
Local Technical Assistance Program
Department of Transportation and Public Facilities
2301 Peger Road M/S 2550
Fairbanks, AK 99709-5399

Return Service Requested

PRESORTED STANDARD
U.S. Postage PAID
Fairbanks, AK
Permit No. 87

Corridor Management (continued from page 11)

Assisting this effort, Paul D. Thompson is an internationally recognized expert in management systems and engineering economics, including research, design, and development of analytical processes for managing transportation assets. He has served as a consultant in this area to transportation agencies at the local, state, and national levels worldwide for 30 years and has authored many of the major AASHTO and international guidebooks on asset management implementation. He was also manager and principal architect of the multicontract implementation program for Pontis, a bridge management system that became the most successful transportation software joint development project ever undertaken—eventually supported by 46 states. He recently toured the Parks corridor and joined discussions with regional personnel to hear feedback on data collection, sharing, and implementation.

Next Steps

The next steps for the project are lots of listening and lots of discussion. Atop this list is completing a current listening tour among the Northern and Central regions stakeholders and other professional groups. Stanley, Thompson, and other counterparts are travelling to meet with staff, supervisors, and regional directors to get their direction on data collection and integration work. To date, they have made multiple trips to Fairbanks and Juneau, and will soon visit the quarterly design meeting in July in Central Region.

T^2 Center Staff

Dave Waldo, Manager & Editor,
907/451-5323, david.waldo@alaska.gov
Simon Howell, Training Specialist,
907/451-5482, simon.howell@alaska.gov
Rosemary Bierfreund, Administrative Assistant I,
907/451-5320, rosemary.bierfreund@alaska.gov

Research & Development Staff

Clint Adler, P.E., Chief of Research & T2
907/ 451-5321 clint.adler@alaska.gov
Jim Sweeney, P.E., Research Engineer
907/ 451-5322 jim.sweeney@alaska.gov
Angela Parsons, P.E. Research Engineer
907/ 269-6208 angela.parsons@alaska.gov
Rob Harper, Communication Specialist,
907/451-2990 james.harper@alaska.gov
Rosemary Bierfreund, Administrative Assistant I,
907/451-5320, rosemary.bierfreund@alaska.gov
http://www.dot.state.ak.us
- select "Inside DOT&PF"
- select "Research & Technology"

This newsletter is funded by the Federal Highway Administration and the Alaska Department of Transportation and Public Facilities. The material contained herein does not necessarily reflect the views of the Alaska Department of Transportation, Federal Highway Administration, or the T^2 staff. Any reference to a commercial product or organization in this newsletter is only for informational purposes and is not intended as an endorsement.