

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

#### Winter 2009 Volume 34, Number 1

#### In this issue . . .

- Crafting a New National Transportation Policy
- Construction Career Day
- Succession Planning:
- a Case Study
- GIS Database Expands
- All Season, Studless, or Studded Tires?
- Partnership for Progress Video

Training and Meeting Calendar

# Crafting a New National Transportation Policy

#### Why Vision and Boldness are in the National Interest

Jeff Ottesen, director for Statewide Planning, Alaska DOT&PF

The United States' surface transportation history has been episodic, with each major time interval requiring a bold and courageous leader to show the way. This short paper explores the role of visionary leadership in our transportation history, and how important it is to moving the nation forward. Of special note, these transportation episodes seem to occur about every half-century and the last major episode was in 1955, or 53 years ago. When and will an American leader come forward with the next major transportation innovation in order to propel our economy forward?

(continued on page 5)

### First Alaska Construction Career Day Success Leads to More Events in 2009 by Dave Waldo



With the prospect of a new gas line, Alaska will face a shortage of resident workers in the construction fields. Those who were here for the first pipeline will recall the number of jobs filled from the Lower 48: some people stayed but most left.

With the Baby Boomers retired or retiring, Generation X and Millennials will be called upon to fill these skilled positions. The problem facing many states, including Alaska, is that not enough kids are entering the construction fields. When they do, it's usually not their career of choice.

(continued on page 2)

#### Construction Career Day (continued from page 1)

Alaska DOT&PF Research & T2 and the Civil Rights Office partnered with other government agencies, Anchorage and Mat-Su school districts, labor unions, professional organizations, and trade associations to host the first Alaska Construction Career Day on Wednesday, April 30, 2008. This event was a workforce development tool to introduce high school students to careers in the transportation and construction industry.

#### The Kids Dig It

Logan Grothe, a senior at Mat-Su Career and Technical High School, said "I see myself either driving one of those big trucks out there like an excavator or bulldozer or any number of things. I can even imagine myself welding on the Slope or something, making thirty-five dollars an hour."

Even those who are planning on college recognize the opportunities construction industries present to help them in their careers. Briana Shaw, a senior at

(continued on page 4)





#### What are the Components of Construction Career Day?

- Expo: A construction trade/educational trade show where students can learn about construction career opportunities from vocational schools, four- and two-year colleges, state and local governments, contractors, and the trades.
- Hands-on: Students can try their hand at welding, tying rebar, surveying, using an excavator simulator, and small tools.
- Equipment: Students run backhoe loaders, skid steers, and mini excavators with one-onone adult supervision. Also there is a display of static equipment, such as drill rigs, pavers, a crane, large excavators, rollers, etc.

#### **Upcoming Events**

The success of Construction Career Day in 2008 has led Alaska DOT&PF and its partners to schedule two events in the spring of 2009. One event will occur in Mat-Su on April 21, 2009, and another in Fairbanks on April 28, 2009.

More information will be posted at the following site:

http://www.uritc.org/nccdc/content\_template.asp?incomingcontent=statedetail.asp&state=AK

South High School, commented, "I'm looking forward to working this summer. Since I'm graduating, it's a great way to have money to help you with college. You get to be outside, and get paid to be outside."

All of the hands-on events were popular with the students, specifically those events that allow them to get a taste for the industry. Welding, drywall, nailing, climbing on the heavy equipment, or operating the equipment simulators—all were rated as fun by attendees.









Port of Oswego, New York, 1941

#### Erie Canal

The first major event of importance in U.S. transportation history was the building of canals, such as the Erie Canal, Louisville and Portland Canal, and many others, which allowed goods to move far more efficiently than by wagon or even train. The Erie Canal in New York was one of the first, and after several false starts, it was eventually completed with \$7 million in capital from the New York legislature. Begun in 1817, it had the eventual goal of achieving 360 miles of canal, rising nearly 600 feet and involving 34 locks. Its very undertaking resulted in several engineering, land clearing, and earthmoving innovations that were then applied to pioneering in many other endeavors. It was considered so implausible by some that Thomas Jefferson called it "a little short of madness" and later the New York Governor DeWitt Clinton who sponsored it was scorned in the day with snide reference to "Clinton's Ditch."

Yet it was achieved and it went on to significantly change the economic fortune of New York State and New York City, perhaps leading to the prominent role they hold even today. By 1852 it carried 13 times more tonnage than all the railroads in New York State and had reduced shipping costs by nearly 95%. It made possible the export of significant tonnage of Midwest corn to Great Britian, which led to a free trade agreement between the two countries. Many other canals then followed, linking such rivers and lakes as the Ohio, Mississippi, and the Great Lakes.

#### **Transcontinental Railroad**

Authorized in 1862, under President Abraham Lincoln, the Pacific Railway Act prompted the construction of the first railroad to the Pacific from Omaha, Nebraska, to Alameda, California. Though privately constructed, it was the innovative use of government bonds for financing that ensured it's success. The bonds were issued at 6% interest with a 30-year repayment schedule backed by the U.S. Treasury. The railroad owners had to put up their assets as collateral and later all bonds were paid in full. The amount of funds made available varied with the terrain difficulty, with mountainous sections garnering three times the initial funding that was made available for crossing prairies. The railroad companies were also deeded considerable land to encourage settlement along the line, involving acreage that was larger in total than the state of Texas. The construction of the railroad was considered the engineering feat of the century and did much to ensure that the union did not further rupture. That this railroad was constructed during the Civil War and in part to help link the country because of the war makes its accomplishment even more significant.



The Denver Flyer at full speed, c. 1900

### 2009



Drilling in cut at Bas Obispo, Panama, c. 1911

#### Panama Canal

The U.S. work on the Panama Canal began in 1904 after President Theodore Roosevelt authorized the purchase of French equipment and excavations from their failed attempt to build a sea-level canal in Panama that began in 1880. Blessed with a more practical engineering approach and the advance of medical knowledge on how to control malaria and yellow fever, the project succeeded. The French had lost prestige and suffered the death of more than 22,000 workers, most to jungle diseases. The canal has played a significant role in the advancement of the United States, proving that the country was not just a distant colony of Europe. It played a pivotal role in World War II, and some historians say may have made victory possible as the U.S. fought a two-front war involving two oceans.

Today the Panama Canal carries more than 14,000 vessels each year and nearly 300 million tons, far more than originally envisaged. It is so important in the marine shipping world that ships are now designed with the size limitations of the canal's locks as a limiting factor. Of special note, the canal builders opted for lock dimensions that were far bigger than the largest ships in 1904, having the vision to realize that ships would likely grow and the locks needed to accommodate ships that may have seemed impossibly large in that era. Now, nearly a century later, the canal is being enlarged to accommodate the even larger ships that are now in service that can no longer transit the Panama Canal.

# Dwight D. Eisenhower National System of Interstate and Defense Highways

Started in 1956, this 47,000-mile network of highways was championed by President Dwight Eisenhower. The distribution of nearly all goods and services in the United States now relies on this system at some point. The interstate system has led to the retail malls, rise of suburbs and exurbs, and in general propelled the U.S. economy to new heights and made possible such innovations as "just in time" shipping, and point-to-point shipping via long-haul trucking. The economic benefits of this new class of roadway are validated by the recent efforts in other major economies to build similar highway networks, such as Canada, Brazil, China, India and smaller nations too. In some ways, the Interstate has been too successful, for many of the routes have not been enlarged to meet current demand, resulting in ever-growing congestion that limits freight carriers, commuters, and inter-city travelers alike. Another benefit was much reduced traffic collisions, due to the strict design standards that generally offered a safer roadway environment despite the higher travel speeds made possible.



The Marquam Bridge crosses the Willamette River on Interstate Highway 5, in Portland, Oregon, 1962. It was the first span constructed in Portland on the interstate freeway system.

#### What's Next for America?

The clock is ticking, as the half-century cycle between major innovations suggests. All four examples cited required government sponsorship, and all required a courageous leader who brought forth the necessary vision and championed the vision into a reality. These innovations continue to pay major dividends. Rather than representing just a tax, or government expense, each has paid handsome dividends in the form of increased economic activity. That they continue to pay significant economic dividends more than 160 years after their inception, illustrates how the benefits continue long after the costs are covered.

Looking globally, the United States is languish-

ing, falling far behind other major world economies in the level of investment in transportation infrastructure measured as a percentage of GDP. Europe and Asian nations are investing far more in new bridges, tunnels, freight facilities, highways and high-speed intercity trains. More

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than a dozen nations now boast of high-speed rail, while the U.S. has none yet started. Numerous reports speak to the gridlock now an everyday experience in most major U.S. cities. Freight from Asia is stranded at west coast ports, unable to move efficiently through the first 50 miles due to urban congestion. The nation's rail corridors are also reaching capacity despite significant modernization and capacity increases in recent decades.

These shortcomings are leading to innovation outside our borders. Canada has built a new container terminal in British Columbia, which will allow shipping from Asia to bypass American ports while still reaching eastward into U.S. markets. Mexico is also providing some relief to the west coast freight dilemma. Yet, the freight moving across our ports is predicted to continue to rise dramatically, with foreign trade growing from about 25% of GDP this decade to more than 35% of GDP by 2020.

Urban congestion will require bold vision as well. Major transit improvements are needed, including commuter and light rail, bus rapid transit, and conventional transit. Both the need to address greenhouse gases and the simple economics of fuel costs will drive the need for this transformation as well. Safety is another metric where the U.S. has seriously declined. Once the world leader in lowering the rate of major injuries and fatalities from collisions, the nation now lags far behind other leading nations. The two deadweight costs of safety and congestion, entirely avoidable if we elected to address them, add a trillion dollars in costs to the U.S. economy.

Technology-based innovations in transportation continue to mount. Here too, the U.S. is following

in implementation, not leading, even though much of the technology and ideas originated here first. The next big wave is coupling the vehicle and roadway electronically, which will bring about numerous benefits in terms of greater efficiency, improved safety, and greater convenience.

Some would argue that the roadway is no longer needed; it is simply an artifact of a bygone era. Nothing is farther from the truth. Transit and rail simply cannot replace all uses of the highways system, nor will the public tolerate such

a radical change. Personal freedom of mobility is a hallmark of the American experience. But the use of the highway must become smarter, less polluting, even as we expand options for nonvehicular travel.

The use of the highway system now costs users a trillion dollars, in addition to the trillion dollars estimated earlier for safety and congestion costs. This means we as a nation of highway users are spending about two trillion dollars per year in our use of the highways. Yet the national highway system investment strategy is less than \$50 billion per year, or about 2.5%. It is not even keeping up with wear and tear, let alone making improvements. Clearly, higher investments could lower these costs and thus cost the users nothing, if the right link between payments and benefits can be achieved. Greater efficiencies unleash the hidden potential of the economy, further amplifying the argument that increased investment.



## **Succession Planning: A Case Study**

William A. Sterling, P.E., Director of Public Works (Ret.) City of Greeley, Colorado Member, APWA Leadership and Management Committee Reprinted with permission from the *APWA Reporter*, December 2008 issue.

"If you want to be a master, study what the masters have done before you. Learn what they have done have the guts to do it—and you will become a master too."—Jos. J Charbonneau

George Haines, in his article, "Succession Planning for Our Next-generation Leaders," stressed the need for succession planning at all levels in any organization. The article, published in the September 2006 issue of the *APWA Reporter*, recommended four steps in the process: Recruit and hire good people, train your people well, develop leaders, and mentor the leaders you develop. George also points out, "If you are just now thinking about succession planning, you are already behind the curve."

Jennifer L. Adams, in her article, "Succession Planning in Tempe," described the succession plan adopted by the City of Tempe, Arizona, Department of Public Works. The article, published in the May 2006 issue of the *APWA Reporter*, describes the seven steps the agency used in their succession planning program: Recognition and Support by Management, Organize, Research, Budget, Define Next Generation, Military Partnerships, and Recruiting for the Future. While this program stressed diversity, the program is adaptable to any situation in succession planning.

This article relates the succession plan the City of Greeley, Colorado, used to fill the director of public works vacant position. The article describes the process our agency set up to mentor an in-house individual for the position after all other "standard" procedures (i.e., succession and recruitment) were not successful.

In organizational development, succession planning is the process of identifying and preparing suitable employees, through mentoring, training, and job rotation, to replace key employees. In public works there is a concern that there may be no successor to take over upon the retirement or voluntary separation (or even involuntary separation). It is people, or more aptly, the right people who make things happen or carry on the mission of the agency. A careful and considered plan of action ensures the least possible disruption to the organization. What is likely to happen to the organization when a key employee leaves without succession planning in place? First, there would be either no able successor, or where there is, the successor might be either unprepared to handle the heavy responsibilities placed on them or might not have the ability to manage the organization in the way it used to be. It is difficult enough to run an organization with experience and ability; lack of either makes it that much harder.

There are two main models that agencies can use to implement succession planning:

- Short-term or emergency replacement
- Long-term planning or managing talent

Unfortunately, the most common model is the short-term planning. The person in the key position leaves; the agency recruits and tries to fill the position. There is usually no opportunity to pass on the institutional knowledge or train the replacement. Short-term planning is focused on an urgent need caused by the sudden departure of a key individual. If agencies wish to grow leaders from within their existing talent pool and have the time and resources to develop a useful program, the agency can better prepare for the future by using the long-term model.

The Department of Public Works for the City of Greeley used both of the models. Unfortunately the first model, the short-term, didn't work out very well when the director retired, even though he gave three months' notice. However, the city was fortunate in that they were able to regroup and use the long-term model to replace its director when the retired director was able to return for a period of time.

The current housing market situation, the shortage of qualified candidates, shrinking resources, the shortage of the workforce, and the retirement of the "Baby Boomers" all led to the need for a paradigm shift in recruiting for this key position. This paradigm shift played out in the development of an internal succession plan that provided for a concentrated mentorship program. The City of Greeley developed a formal mentoring plan that was geared to the development of a qualified individual to succeed in the vacant position. While other agencies may have plans for the orderly replacement of their key staff, Greeley went one step further by identifying an individual and mentoring the employee over a period of time, and was able to replace the retired director with little or no disruption of continuity while breathing new life into the organization. Fortunately for the city, the retired director

was able to return to the organization to mentor the replacement. You might say that the agency had a second chance to "do the right thing" this time around.

The formal mentoring program consisted of five key parts:

- mission statement,
- work plan outline,
- implementation plan,
- progress reviews, and
- appointment goal.

Each of the above parts contained specific steps. For example, the work plan outline had five steps: identification of a suitable in-house candidate, an orientation/training schedule, a mentoring/coaching plan, an implementation plan, and a transition plan.

A mission statement was developed: Develop a program to identify, train, mentor, and prepare an inhouse candidate to move into the vacant public works director position.

The work plan was an outline of the activities used to develop a more detailed implementation program.

The identification of a suitable in-house candidate or candidates was accomplished by announcements and the review of suitable candidates. You can post the position or, working through Human Resources (and the city manager), simply identify a single individual. Things that were considered included: Did the individual have basic related qualifications (i.e., current management responsibilities, public/private development involvement, an engineering background) and a desire to take on this responsibility; and when was this individual available to begin the training, keeping in mind that the candidate had other responsibilities within the organization? In Greeley's case, a new position, titled assistant public works director, was developed. We transferred the candidate and began the mentoring program within three weeks. Many agencies have a position of assistant public works director; the City of Greeley did not. While many agencies have an assistant who can step into the role of acting or interim director, most individuals have not been properly prepared to take the permanent position. The identification process took two weeks.

Some points to look for in the selection process include ability, initiative, responsibility, commitment, flexibility, and being a team player. The selection has to be for the right reason and not just to fill the position. Some other things to look for include experience in operations/management, budgeting, people skills, and related education and experience in supervision.

The orientation and training phase took three months to complete, although the training and mentoring continued after the appointment was made. The length of this phase depends on the experience and availability of the candidate. Our candidate had some background in public works in some areas, but did not presently work in public works and did not have the overall experience or knowledge of most of the responsibilities of the department or in the area of management.

The steps in this phase included orientation of the individual to the responsibilities of the department and included such components as attending all division one-on-one meetings with the director, attending the weekly staff meeting of the division heads, reviewing all of the division Operations Manuals (which we had for each division as part of our APWA Accreditation program), spending time with each division (a minimum of two days each, the goal of which was to get the individual a hands-on feel of each operating division); reviewing the current operating budget (we were in the development of the 2009/2010 budget and prepped this individual to present the budget to the City Council).

The mentor also developed a reading list and training schedule for the candidate to accomplish. The reading list included such titles as:

- *Manager's Question and Answers* by Florence M. Stone
- Leader/Manager by William D. Hitt
- The Effective Public Manager by Steven Cohen
- Core Competencies for Public Works Managers by the APWA Leadership/Management Committee
- Developing Operations Manuals by William A. Sterling
- *It's Your Move: Strategic Planning* by William A. Sterling
- Survive and Thrive by John Ostrowski
- Everything You Need to be a Public Works Director by John Ostrowski
- Working 101 by Mike Jacobs
- *Public Works Administration* (APWA) Many of these publications are available through

the APWA Bookstore (www.apwa.net/bookstore). The orientation phase continued with the protégé

"shadowing" the director a minimum of four hours

each day. At first the director set the weekly goals for the protégé; after two months the goals were jointly set, and after three months, the goals were set by the protégé with oversight by the director. Weekly progress reports were completed and shared with the city manager.

This phase may not take as much concentration if the individual is already working within the department; knowledge of the department may already be present.

The mentoring/coaching phase took two months. While there was some mentoring taking place during the orientation phase, mentoring began in earnest during this phase. It is during this phase that the mentor shares the information about the organization and how public works really works. This phase provided specific training (i.e., writing skills, speaking skills, personal productivity, management skills). The mentor began to give the protégé more assignments and a greater decision-making role. The protégé was asked, "How would you handle this situation?" Many times, the mentor would gently coach the protégé about how to go about decision-making or share approach options.

More reading was assigned during this phase. It's almost like cramming for a master's megree in public works, but in a concentrated period of time. More sharing of the mentor's knowledge and leadership and management skills took place. The mentor began to share the experience gained in the general field of public works as well as being the former director of the department. It is at this time that the mentor must share everything and the protégé must take this information in the growth of the individual. Again, specific goals were set for this period.

During this period, two very specific goals were set for the protégé: The protégé had to attend the 2008 APWA Congress in New Orleans (as a first-time attendee) and apply for the Emerging Leaders Academy (he was subsequently accepted into the program).

As in the orientation phase, weekly progress reports were made and shared with the protégé and the city manager. The purpose of these reports was twofold: (1) to give the protégé a report card on progress and any course changes that were needed, and (2) to give the city manager an assessment of the candidate for the director's position.

The implementation phase was much more detailed than the work plan outline and was a road map to success. Space doesn't allow describing the detail that the implementation plan covered. Your agency may have different circumstances and needs. A copy of the detailed implementation plan is available upon request and could be used as a guide.

And finally, we get to the transition plan. This phase took one month. During this phase the mentor began to reduce the time in the position as the protégé was appointed and began to take charge. Decision-making was turned over to the new director; the mentor was able to reduce the time with the protégé and acted as a "security blanket" for an additional two months. During that time the outgoing director worked on special projects part-time and continued to mentor the new director, after which the "retired" director was able to retire again.

In summary, the agency must identify in-house replacements and give them the tools and the opportunity to move into key positions. Mentoring is one method to accomplish that goal. Things to keep in mind are: identification is important; patience is critical; the mentor must share everything; the protégé must be engaged; the mentor must recognize when the protégé is ready; and the mentor must be ready to back off.

"Tell me and I'll forget; show me and I may remember; involve me and I'll understand."—Chinese proverb

William A. Sterling, P.E., is a former director of public works for the City of Greeley, Colorado. A past APWA Top Ten recipient and former member of the Committee on Bylaws and Rules, he can be reached at sterling@publicworksmanagement.com.



# **GIS Database Expands**

by Patrick Cotter, DOT&PF Northern Region Planning.

The Northern Region GIS database continues to expand through the acquisition of new data sets. All of these new data sets can be found on the Planning Large Storage server.

The most notable addition to the database is the environmental database assembled by college intern Nick Faree. Nick spent the summer collecting and organizing project-related documentation and geospatial data that were incorporated into an Access database. Nick also developed a base map linking these documents to real-world geography that could be queried and analyzed through ArcGIS.

ESRI released ArcGIS 9.3 in July. Installation disks are available through Patrick Cotter in Planning. Service Pack 1 is scheduled to come out in November.

Alaska Coastal Zone data sets are now available on the server in shapefile format.

QuickBird satellite imagery from 2007 covering the greater Fairbanks area is now available. In addition to being housed locally, they are also being served by the Geographic Information Network of Alaska. For information on connecting to the GINA server, contact Patrick Cotter at ext. 5307. Additional 2008 imagery will be available in spring 2009.

High-resolution aerial imagery for the Bentley Trust area is now available. This imagery was collected in May 2008 and has one-foot pixel resolution. At this time, the images are not georeferenced.

A proposal was submitted to the UAF Computer Science department outlining the need for custom programming of a data query tool. The tool would be based on Google Earth technology and allow users to locate GIS data sets geographically. This would make finding data much easier and efficient.

The BLM Spatial Data Management System is now available via WMS. This allows connections to the latest BLM data, including Native allotments, directly through ArcMap and AutoCAD. Visit http://sdms. ak.blm.gov/sdms/wms.html for more info.

#### Calendar

Now's the time to make plans for the 43rd Alaska Surveying and Mapping Conference. The conference has been scheduled for February 23–27, 2009, at the Anchorage Sheraton.

Be sure to check out the ESRI training website for free on-line training opportunities.

For more information on Northern Region GIS issues, contact Patrick Cotter at 451.5307 or patrick.cotter@alaska.gov

This screenshot shows high-resolution aerial imagery now available.



# All-Season, Studless, or Studded Tires? You Decide!

technical translation by Dave Waldo

Studded tire use continues to be a controversial topic. Many states have banned studded tires and still others have restricted the kind of studs that can be used. Advocates of studded tires argue they improve winter driving through increased vehicle traction. Opponents say they accelerate pavement wear such as rutting, costing taxpayers millions, and believe any traction benefits over newer tire technologies are largely perceived.

In a report completed for the Washington State Transportation Center entitled An Overview of Studded and Studless Tire Traction and Safety, Robert Scheibe provided a brief history of studded tires, studless winter tires, and traction performance characteristics. We've summarized some of those characteristics by tire type and then listed pros and cons.

#### **All-Season Tires**

All-season tires can provide acceptable traction for winter snow and ice driving conditions, without excessively compromising dry and wet traction. Performance on ice and snow will depend on tread configuration and the materials used in their construction. They are available in many different configurations.

#### Pros

- No swapping out tires summer to winter.
- The most reasonably priced tire, available in a wide range of sizes, treads, and produced by virtually all tire manufacturers.
- Perform well on packed snow surfaces.

#### Cons

• Not good performers on icy roads, especially near the freezing mark.

#### **Studless Winter Tires**

Studless tires contain millions of uniformly distributed microscopic pores constantly being exposed as the tread surface wears and gripping like suction cups. In addition to providing thousands of miniature biting edges, these pores help wick away the thin layer of water that often develops on top of snow-packed and icy roads, allowing the biting edges to better adhere to the surface for more traction. Virtually all tire manufacturers now make studless tires—Bridgestone Blizzaks are one such tire popular in Alaska.

#### Pros

- Approach studded tire performance without the damaging characteristics of studs.
- Tests conducted in Alaska showed studless tire performance equal to studded tires on snow.
- During cornering on packed snow, studless tires performed better than studded tires. Performance was nearly identical on icy corners.
- Due to their softer composition, studless tires wear faster than regular tires but maintain their effectiveness much longer than studs.

#### Cons

- On ice near the freezing mark, studless tires are slightly less effective than studs; however, this represents 6% of the winter in Alaska.
- Studless tires are more expensive. In Fairbanks, a set of four studless tires is about 30 to 40% more expensive than a set of studded tires by the same manufacturer.
- Require regular swap out.

#### **Studded Tires**

Studded tires were introduced in the U.S. in the early 1960s. Studded tires rely on the studs' contact with the snow and ice surface for traction. Most studs are applied to winter or all-season tire tread at an additional cost.

#### Pros

- On ice near the freezing mark studded tires perform better than any other tire; however, this represents 6% of the winter in Alaska.
- Less expensive than studless tires.

#### Cons

- Studs wear quickly on bare pavement—a common occurrence during Alaska winters. Once a stud is worn, the effectiveness on snow or ice is greatly diminished.
- Offer no advantage on snow-covered roads.

- Create costly ruts in pavement, generating dangerous driving conditions such as tramlining (disruption of directional control because of the vehicle's tendency to follow ruts).
- Heavy-weight studs, where allowed, create even greater road damage, costing taxpayers millions of dollars every year.
- Suspend particulate matter from pavement dust created from the stud.
- Require regular swap out.

#### Conclusion

The precise environmental conditions under which studded tires provide a traction benefit are rare. On smooth ice near the freezing mark they are great. As the temperature drops, so does the effectiveness of studded tires.

Studless snow tires seem to offer an excellent alternative. They are good on ice, great on snow, but definitely more expensive.

All-season tires can provide good traction on snow and ice. However, on ice near the freezing mark they perform poorly when compared to studded tires or studless winter tires.

Ultimately, the most important factor on ice and snow is you, the driver! Control on ice and snow are related more to how you drive than to tire performance. There is no substitute for knowing the capabilities of your tires or vehicle and reducing speed accordingly.



Traction performance can be characterized in many ways, including braking, acceleration, cornering, controllability, and grade climbing. Although all factors are important, the single best indicator of tire performance is braking distance and deceleration.

The chart shows stopping distances at 25 mph. They are the average of a front-wheel drive car, a rear-wheel-drive pickup, and a rear-wheel-drive car. The test was conducted in Fairbanks at near-freezing temperatures.

All three tire types performed well on packed snow surfaces. On ice, studded tires performed only slightly better than Blizzaks. On bare pavement, studded tires performed the worst.

### Alaska DOT&PF Video *Building Rural Alaska: Partnership for Progress* Receives FHWA Exemplary Human Environment Award

by Shannon McCarthy, McCarthy Consulting Inc.

Alaska Department of Transportation and Public Facilities strives to bring transportation improvements to communities throughout the state. When large scale construction projects are brought to Alaska's smallest communities, the unique challenges can't always be addressed using urban solutions. Alaska's small rural communities, over 200 statewide, aren't always connected to the road system; they're remote, and the people often speak traditional Native languages and practice a subsistence lifestyle. Communication and cultural differences can leave the contractor and community **Building Rural Alaska** frustrated and create a negative consequence in what would ND otherwise be considered a great improvement for the residents.

In 2004, Northern Region DOT&PF or-

ganized a multiagency safety audit to explore options for enhancing safety and reducing impacts to construction projects in rural Alaska. During the audit, Shirley Sam, a tribal administrator from Koyukuk, suggested that a video could address traffic safety issues for rural residents well in advance of turning the first shovel. We continued discussing the concept during the 2004 Joint Traffic Safety Review in Fairbanks. Subsequently, we brought the idea to the Tanana Chiefs Conference (TCC) and DOT&PF's Disadvantaged Business Enterprise (DBE) program.

Through these conversations, the video concept was expanded to demonstrate DOT&PF's ongoing commitment to work directly with tribes and other local governments as partners in the planning and construction process and to incorporate local knowledge to promote safety, reduce impacts, and increase opportunities for local hire.

While enthusiasm for the concept was high, funding was not readily available. Securing the

capital took another full year. In 2005, DOT&PF's DBE program was the first to commit, followed by the Alaska Highway Safety Office. The Federal Highway Administration, Northern Region DOT&PF Construction and Planning, and Statewide Research & Technology Transfer helped fill out the fund-

ing necessary to create a professional video production. In 2006 we drafted a script

> and hired a professional production company. Filming began in earnest in the fall of 2006, but the majority of filming had to wait until the following summer in order to capture the impact of full-scale construction in Alaska's smallest communities.

An early version of the video debuted to convention participants of the Alaska Federation of Natives in fall 2007. Once this initial cut was reviewed within DOT&PF and by outside interests,

DOT&PF leadership felt the video could help continue fostering positive relationships with tribal governments. To really make this happen, we made some additional edits and included an introduction from the DOT&PF Commissioner Leo von Scheben. Once again, DOT&PF's DBE gave us additional dollars, and with the help of Nancy Slagle, we were able to complete the project. We distributed the final cut of *Partnerships for Progres* in spring 2008 and the final version was shown publicly at the 2008 Alaska Tribal Transportation Symposium.

In August 2008, *Partners in Progress* received the "Exemplary Human Environment Award" from the FHWA for using a collaborative approach to develop public service announcements to help citizens improve safety and protect environmental resources. This was one of only a few projects recognized for such an award throughout the United States. Specifically, the production was recognized for:

### Training and Meeting Calendar

Society C	hapter	Meeting Days	Location & Contact		
ASCE	Anchorage Fairbanks Juneau	Monthly, 3rd Tues., noon Monthly, 3rd Wed., noon* Monthly, 2nd Wed., noon*	Moose Lodge Westmark Hotel Breakwater Resturant	* except Sept. and Feb. * except June–Aug.	
ASPE	Anchorage Fairbanks Juneau	Monthly, 2nd Thurs., noon* Monthly, 1st Mon., noon Monthly, 2nd Wed., noon**	Coast International Inn Regency Hotel Westmark Hotel	Jennifer Gibson, 343-8130 * except summer ** except June–Aug.	
ASPLS	Anchorage Fairbanks Mat-Su Valley	Monthly, 3rd Tues., noon Monthly, 4th Tues., noon Monthly, last Wed., noon	Sourdough Mining Co. 5200 Westmark Hotel Windbreak Cafe	) Juneau st. George Strother, 745-9810	
AWRA	Northern Region	Monthly, 3rd Wed., noon	Rm 531 Duckering Bldg., University of Alaska Fairban	Larry Hinzman, ks 474-7331	
ICBO	Northern Chapter	Monthly, 1st Wed., noon except July and August	Zach's Sophie Station	Tom Marsh, 451-9353	
ITE	Anchorage	Monthly, 4th Tues., noon**	Golden Lion Hotel	Anne Brooks, 272-1877 ** except July, Nov., & Dec.	
IRWA	Sourdough Ch. 49 Arctic Trails Ch. 71	Monthly, 3rd Thurs., noon** Monthly, 2nd Thurs., noon**	West Coast International Inr Zach's Sophie Station	** except July & Dec.	
Asphalt Pavemer Alliance	nt Alaska	3rd Wednesday of every other month	varies	John Lambert 267-5294	
PE in Governme	nt Anchorage	Monthly, last Fri., 7 a.m.	Elmer's Restaurant		
Society of Wome Engineers	n Anchorage	Monthly, 1st Wed. 5:30 p.m. except July and August	DOWL Engineers	Julie Gaken, 269-0634	



#### February

#### Construction Management Series: **Magnetic Particle Testing** New Technology for Construction Feb. 2–4 in Juneau every Tues. and Thurs., Mar. 3-19 Modern Roundabouts: The Safer How to Write a Construction SWPPP **Intersection Choice** Mar. 5–6 in Anchorage 10:30 to 12:00 AKST, Feb. 4 on the Web **Context Sensitive Solutions** NHI 134068: Addressing Uncertainty in Mar. 18-19 in Anchorage **Cost Estimating** Feb. 9–10 in Juneau Revegetation Mar. 23 in Fairbanks, Mar. 24 in Anchorage, NHI 142036: Public Involvement in the and Mar. 26 in Juneau **Transportation Decisionmaking Process** Writing Skills Workshop "Writing That Works" Feb. 10-12 in Anchorage Mar. 24–25 in Fairbanks **Construction Management Series: Negotiation** Tu & Th, Feb. 10–26 RSAP

#### Feb. 17–18 in Fairbanks

Section 4(f),

Feb. 23–24 in Fairbanks and Feb. 25–26 in Anchorage

### Writing Skills Workshop "Writing That Works"

Feb. 23–24 in Anchorage

# For information about T2-sponsored training, contact:

March

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

#### A Partnership for Progress (continued from page 14)

- Enhancing the human environment by addressing and communicating the unique conditions in rural Alaska that affect safety during a large-scale transportation project.
- Creating process improvements by educating DOT&PF contractors on the importance of working closely with rural and tribal governments to increase the success of the project.
- Creating a culturally sensitive educational outreach effort specifically to assist Alaska Native communities, which tend to be economically disadvantaged and speak languages other than English.

Copies of *Building Rural Alaska: A Partnership for Progress* are available on DVD from Research & T2. Please contact suzanne.boyer@ alaska.gov or call 451-5320.





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

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