Central Region

Director's Quarterly

Alaska Department of Transportation and Public Facilities

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DIRECTOR'S MESSAGE

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Central Region Director, is a life-long Alaskan. He has a Bachelor's degree in Civil Engineering from Oregon State University, and a Master's degree in Engineering Management from the University of Alaska, Anchorage. He has worked at DOT&PF for more than 30 years.

I have a fairly complicated (but interesting) discussion below of how we are striving to communicate road conditions to travelers, leading to the concept of a traffic operations center.

Also, we spotlight a state funded project in the Kenai / Soldotna area and the great success we had in defining the scope of the project.

Both of these stories focus on the emphasis the Department places on communication and our continuing efforts to improve. I hope you enjoy this edition of the newsletter, and, as always, drop me a line if you have suggestions for future editions.

Comments on the Newsletter
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STATEWIDE TRAFFIC OPERATIONS CENTER

In this world of ever increasing urgency and decreasing patience for less than real time information, how can we keep up with public expectations of instant roadway information? Maybe it's a crash on the Glenn Highway near Birchwood or a snowstorm looming in Turnagain Pass; in both cases travelers are now expecting rapid, accurate, and actionable information in a format accessible anywhere. While Central Region has by far the largest traffic volumes, all areas of the State face similar issues.

Our conundrum and challenge then is how best to gather the information, analyze it properly, and disseminate it rapidly, accurately, and efficiently across several agency lines, updating the information as conditions change.

Let me first define and then quantify the two most obvious types of information requested and discuss the handling of each. (Let us recognize that construction activity notification is handled by the project managers and posted on a site named "Navigator" (http://www.alaskanavigator.org/). This type of information is not part of this discussion.)

The first type of information requested can be categorized as "passive system" information. Many drivers are interested in checking driving conditions before embarking on trips they are planning to take: Is the road icy? How is the visibility? Is it snowing or raining? This type of information can be generated with passive systems such as roadside cameras and automated weather stations that can be telephone or web-accessed. This type of information is relatively inexpensive to generate once the capital costs of purchase and installation are paid. Of course there are ongoing maintenance and operation costs, costs for upgrading to new generation technology, and data costs to link to the web, but there are not many people involved, and the beginning capital costs associated with the passive systems are relatively minimal. We currently have these systems in place and continue to expand and improve the amount of road coverage. You can learn about accessing these systems on our 511web site at http://511.alaska.gov/alaska511/mappingcomponent/index.

The second type of information is what I call "active system" information. This type of information is loosely associated with a one-time incident. Say, a vehicle accident occurs on the Seward Highway during the summer fishing season. This information will not be well captured and disseminated by a camera or a weather station – a person needs to analyze the situation, report on the current condition and expected outcome, and provide the information to the traveling public in a readily accessible format. Of course this type of information is much more expensive as staff must gather and assess the information, analyze it, and communicate it through various channels. While this in itself is a large task, it is further complicated by the many different agencies who may be involved besides DOT&PF – Alaska State Troopers, local police, fire and rescue; all may have some role to play depending on the incident.

"Passive System" cameras can be found at: http://www.dot.state.ak.us/iways/roadweather/forms/AreaSelectForm.html.

One way to meet this challenge may be the establishment of a Statewide Traffic Operations Center (STOC). This is not a new idea; many States have established Traffic Operations Centers that pool participants from various agencies to promote better coordination of disseminating information about real time incidents. To this end, DOT&PF has engaged a consultant to study our State's current condition and recommend a reasonable path forward for our unique conditions. Preliminary analysis has already identified many benefits to such a center, but the full benefits and cost must be completely understood prior to any definitive action. In this vein, our consultant will continue to refine the STOC concept, and ultimately come to a recommendation that fits within our needs and budget. Coordination with other stakeholder agencies is an active part of the study, enabling all interested groups the chance to participate in its creation and operation.

In the meantime, we continue to look at incremental solutions for some of our busiest highways and increase our "passive system" network. Educating the public on the use of our 511 program, streamlining the flow of information into one easy access point, median cross overs, utilizing portable message signs, and better use of public "reporting" are all ideas that can provide better response to the public without large investments of resources.

In summary, we continue to strive to provide more and better information to our travelers, while respecting our mandate to be cost effective in providing services. A Statewide Traffic Operation Center may be the best next tool in achieving this goal.

LOCALLY DRIVEN SCOPING PROCESS A SUCCESS

Most Department projects are driven by an identified need: safety, capacity, surface condition, etc. Recently, a $20 million state appropriation was dedicated to the Kenai Spur Highway. With no preconceived scope, the Department launched an aggressive campaign to help the community decide what should be done to improve the road. After several meetings with the public, legislators, and city and borough officials, both the City of Kenai and the Kenai Peninsula Borough supported an option to widen the highway to five lanes. While the current funding will not construct the entire length, part can be built, right-of-way purchased and utilities relocated for the remainder of the segment. The process was an example of great communication and coordination between the Department and local stakeholders on a state-funded project.

Kenai Spur Highway

BUSY UPCOMING CONSTRUCTION SEASON SUMMER 2014

Rehabilitation Projects

- **Ninilchik Village Bridge Replacement**
  The existing bridge will be removed and replaced with a new bridge. A detour bridge will provide 2 lane through traffic. All construction will be completed by October.
- **East End Road MP 3.75-MP 5.5**
  This project will begin this Spring and involves building shoulders, a separated pathway, providing drainage improvements and reconstructing the roadbed and pavement. Pilot cars/flaggers and single lane traffic will be present during parts of construction

Pavement Preservation Projects

- **Seward Highway Pavement Preservation MP 54.5-67.5 & MP 69-75**
  This project will mill, fill and restripe the pavement. Project is expected to begin in June. Efforts will be made to minimize travel disruption.
- **Sterling Highway MP 45- MP 58**
  This project will begin this summer but there will be no construction or traffic interruption during July, out of consideration for the fishing season.
- **Sterling Highway MP 79-MP 82.5**
  This project should be completed by August 2014. There will be lane closures but 2-way through traffic will be maintained during construction.
- **East End Road MP 12.5- end of pavement & Old East End Road**
  There will be no morning lane restrictions driving towards Homer but there may be flaggers or pilot cars for outbound evening traffic.

navigator
STATE of ALASKA DEPARTMENT of TRANSPORTATION & PUBLIC FACILITIES

Always look for updates on the Navigator website at http://alaskanavigator.org/.

STERLING HIGHWAY SLOW VEHICLE TURNOUT AND EROSION PROJECTS

There will be 22 slow vehicle turnouts built between MP 102.5 and MP 160.3 beginning this spring and continuing throughout the summer. The purpose of this project is to mitigate and lessen the number of head-on and rear end crashes that occur on or near the selected turnout sites. The Alaska law for "delay of 5 or more vehicles must pull over…" is difficult to follow or enforce when there are no available passing lanes or pull outs. This project will improve compliance with the law along this stretch of the Sterling Highway and make for safer travelling. For more detailed information visit http://sterlinghwysvt.com/

Watch for a project this summer tackling an unusual problem along the base of the bluff near the Sterling Highway at MP 153. This project is singularly unique in its size and scope, giving DOT&PF the opportunity to design a cutting edge approach to a long term problem.

DOT&PF is addressing this spectacular erosion feature that has appeared due to ground water seeking its way to the sea by digging out unstable material, filling and creating a stable slope for drainage, and reinforcing the slope with multiple layers of geotechnical material and rip rap. Finally, re-vegetation will further stabilize the slope.

The project is slated to begin late this summer. Minimal traffic impacts are anticipated with no road closures.

The Kenai Peninsula Borough and DOT&PF continually monitor erosion along the bluffs and near the highway corridor. Each erosion occurrence is different in cause and effect; run-off, lack of vegetation, groundwater, coastal retraction, septic systems, and winter storms are all examples of causes and challenges to our sensitive coastal bluffs.

FLASHING YELLOW ARROW SIGNALS

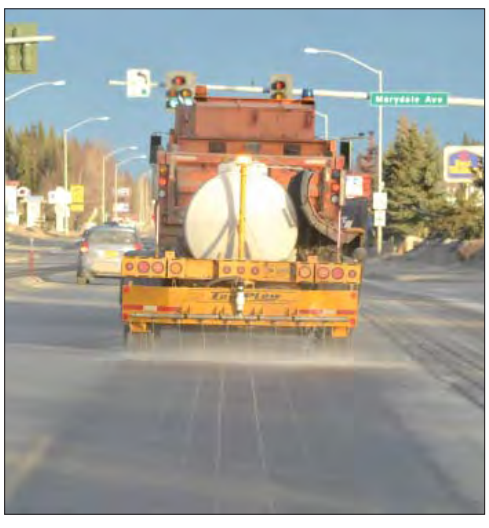
A new style of left turn signal is popping up across the Lower 48, as well as here in Alaska. A national study demonstrated that flashing yellow arrows are more intuitive and safer than the solid green lights that these signals are replacing for motorists turning left.

The flashing yellow arrow indicates that a left turn is allowed, but drivers must yield to pedestrians and oncoming traffic, as oncoming traffic has a green light and the right of way.

Just remember, a flashing yellow arrow means yield to oncoming traffic and pedestrians. For more on flashing yellow arrows click here: http://www.dot.alaska.gov/stwddes/dcstraffic/fya/index.shtml.

BRINE FACTS

DOT&PF is using brine on the Kenai Peninsula roads before major storms as an anti-icing agent. This treatment results in using much less salt and sand after the storm has begun. The snow and ice that would normally develop is reduced and bonding between the snow and asphalt is minimized, making the packed snow and ice much easier to remove. Using brine leads to approximately 60% less sodium chloride (salt) use and has not been observed to be attractive to wildlife.



Using brine means less sand and salt on the roads, which equals less wear and tear on roads and vehicles, producing longer lasting road surfaces and better air quality when the roads are cleaned for summer. Brining before sanding is an effective, environmentally friendly treatment that is cost effective and safe to use.

OTHER IMPORTANT LINKS

Where can I go to....

- Find a previous Central Region newsletter? http://dot.alaska.gov/creg/newsletter.shtml
- Find websites for Central Region projects? http://dot.alaska.gov/creg/project_info/
- Find project advertising dates, contract status/award information, or capital projects out for bid? http://www.dot.state.ak.us/procurement/index.shtml
- Locate the Central Region Public Involvement Calendar? http://dot.alaska.gov/creg/calendar.shtml