

**ALASKA STATE LEGISLATURE  
HOUSE TRANSPORTATION STANDING COMMITTEE**

February 19, 2008  
1:04 p.m.

**MEMBERS PRESENT**

Representative Kyle Johansen, Chair  
Representative Anna Fairclough  
Representative Craig Johnson  
Representative Mike Doogan

**MEMBERS ABSENT**

Representative Mark Neuman, Vice Chair  
Representative Wes Keller  
Representative Woodie Salmon

**COMMITTEE CALENDAR**

OVERVIEW(S): NORTHERN REGION

- HEARD

**PREVIOUS COMMITTEE ACTION**

No previous action to report

**WITNESS REGISTER**

STEVE TITUS, Director  
Northern Region  
Department of Transportation & Public Facilities  
Fairbanks, Alaska

HOWARD THIES, Director  
Northern Region Maintenance & Operations  
Department of Transportation & Public Facilities  
Fairbanks, Alaska

**ACTION NARRATIVE**

**CHAIR KYLE JOHANSEN** called the House Transportation Standing Committee meeting to order at [1:04:46 PM](#). Representatives Fairclough, Johnson, Doogan, and Johansen were present at the call to order.

OVERVIEW: NORTHERN REGION

1:04:56 PM

CHAIR JOHANSEN announced that the presentation today would be the last Department of Transportation overview. The committee would not be meeting next Thursday or possibly Tuesday. At the following meeting, it would hear from Alaska Marine Highway System staff.

1:05:25 PM

STEVE TITUS, Northern Regional Director, Department of Transportation & Public Facilities (DOT&PF), introduced Howard Thies, the Northern Region Director of Maintenance and Operations. He thanked members for the opportunity to speak to the committee and said his goal is to inform members of who does what in the Northern Region and to describe some of the challenges faced by those employees.

1:06:05 PM

MR. TITUS told members the following:

I am a registered professional civil engineer. I have over 30 years of experience in engineering in Alaska. My folks brought me to Alaska in 1959 as a ten-year old kid - I didn't have much choice, one of the best things they probably ever did for me. I am a Lathrop High School graduate, a [University of Alaska Fairbanks] UAF graduate, a Vietnam veteran, and I've worked as a consultant, for a consultant. I've been a general contractor and worked for general contractors and I've also worked for a number of different public agencies. That brings a full circle of experience of being self employed, private sector and public sector experience to the table as the regional director.

I hope all of you have some of the handouts that we've provided. I hope - I would encourage you to keep them. It's good reference material. If you ever need any updates to any of that information, please get a hold of us and we'll be glad to supplement what you have. There's a color presentation, a PowerPoint presentation. I'm not going to read from it. I'm just going to go through it, use it as a backdrop for the discussion today and there will probably be some

slides in there that you've seen previously through the other presentations but I thought they were important to make a point.

[1:08:16 PM](#)

MR. TITUS continued:

But I think there is one thing that I think summarizes our vision and what we do at the DOT and that's on slide 2 and I will read that and it's vision: the department that plans, designs, constructs, operates and maintains quality, safe, efficient sustainable transportation and public facilities that meet the needs of Alaska's diverse population, geography, and growing economy. I think that sets a tone for our role as DOT to identify transportation projects, needs, priorities, make investment decisions in the different types of projects that we're going to have. We have challenges, lots of challenges. We have limited resources, both in people and in funding. We have expanding responsibilities. The roads and airports are becoming more complex, that sort of thing. We have more and more regulations to deal with as it relates to storm water, pollution and air quality. You probably have all seen that slide of the curve that goes almost vertically after a certain point in time.

Inflation, the environment is a challenge and one of the challenges that I'm working on with our folks, I'm challenging them to take more control of their scopes of the projects, design and schedule and budget, so we're going to be more conscious of that than maybe before. I don't want to say that other folks weren't but it's one of the thrusts of my tenure.

The next slide, you've probably seen this one before but, again, it's an interesting slide. It puts into perspective the size of the Northern Region. I like to say that the size of the Northern Region is larger than Texas. I think we pick on Texas because Texas picked on Alaska when they were here during the pipeline. Anyway, it is a large area. It is diverse in its geography and demography and natural resources. We listed a few of the things that happen in the way of resources and geography and different elements like

tourism, etcetera, in the region. So we're large, we're diverse in population and we are diverse in what goes on.

[1:11:08 PM](#)

MR. TITUS continued:

The next slide ... more specifics about the Northern Region. We're the largest region in the state. We have the lowest population, the low population, not the lowest population. We have more...road miles than any other region and we have lots of rural airports, mostly gravel airports. We have six certified airports: Nome, Kotzebue, Barrow, Valdez, Cordova, Deadhorse. Those are scattered throughout the region. Our low population and diverse area make for long driving distances. We don't have the ADT that Central Region has, therefore we don't have the same accident rate, that sort of thing that the other regions have and that reflects in some of the funding that we get.

The rural roads are needed to support economic development, not only just for the communities they serve but for people like Anchorage, I mean the ports of Anchorage and Valdez and Cordova has Fairbanks as a hub. They are served by these rural roads. We've got to get goods and services from and to these communities. So there's a lot going on.

The Northern Region's strategy - and everybody wants to know about a plan. You know, we always have a plan for doing stuff and, of course, this list of strategies is used as a backdrop for the planning and the programming for projects that we work on given the different types and amounts of funding sources. So there's how the different projects fit into the different categories of what we're trying to accomplish. You've heard in other presentations weight restriction issues on the Parks Highway. That's one of the areas that we're working on in projects. Pavement preservation - we're working on that in ... the Parks Highway and the Alaska Highway area. Of course bridges are a big thing. We've got a current big project in the Tanana River bridge, replacing that. We just finished the Washington Creek Bridge outside of town and we're hoping to get funded

for the Snake River Bridge in Nome for fixing that as well. We've got some congestion issues in the Fairbanks area and some facility upgrades with our [snow removal equipment building] srebs and Jim River - we're looking for capital funding for that. It looks like it's in the budget. We have some srebs and I was out to a rural airport where one of these srebs, and that's a snow removal equipment building, it was actually just sinking into the ground so that's a deferred maintenance issue and there are some problems there that we're trying to work on.

We do realize that the [indisc.] public is our client and that we do the best that we can to serve those folks and meet their needs. Sometimes you read in the paper, we don't necessarily get there but I can tell you it's not for lack of trying.

[1:14:39 PM](#)

MR. TITUS continued:

Northern Region challenges and severe climate impacts. In the Northern Region we go from no permafrost areas to discontinuous permafrost areas to continuous permafrost areas. We've got a lot of lane miles of roads in those types of areas and they all come with different engineering challenges, construction challenges and there's a few examples of some highway stress and ... typical settlement things. And we also have some environmental challenges, extreme weather challenges.

This winter we experienced a little cold weather, which was a little more like Fairbanks of older - Interior of older. It was 60 plus below in Tok, I think, and so we can go from 60 below to 90 above, not in the same day but winter, summer, potentially. Those all impact the roads and airports in that specific locale. Some of the results of those climate changes are high construction and maintenance costs. When you have subsidence in your roads you have to get out and fix them.

A few more examples of climate impacts, we've got the climate, we've got permafrost, we've got dust control, we've got snow removal, which is avalanche areas in

Thompson Pass and Atigun Pass on the Dalton Highway. We get wildfires. I don't know if any other regions get that many wildfires but we get fires that come right up to our roads and a few years ago they were pretty close to town and that caused some people some stress. That's for sure and what happens with wildfires, you have a fire then you have a rain event, you have erosion and so we have some problems with our embankments and that sort of thing. I wasn't as aware of natural disasters to the transportation infrastructure until I came to the DOT about storm events on the coast, out in western Alaska, rain events in our southern southeastern part of our district and the Valdez area and we've got a couple of pictures in the presentation about them but they all cause some problems and the potential damage to airports and sanitation roads and EVAC roads in some of our remote areas is concerning. River communities are subject to floods and their transportation infrastructures are impacted. The ability to get to an airport is a problem.

Dust control. Dust is a health issue in many of the communities. It's becoming more and more of a problem. EPA is getting involved in it and a number of folks are working that issue to include the Denali Commission and the DOT as well. We've included a lot of dust control in our current projects. We do it on the Dalton Highway all of the time, not the entire highway but segments. We're constantly trying to control the dust with it in cooperation with the communities.

[1:19:07 PM](#)

MR. TITUS continued:

The next slide kind of gives you a little more perspective. I know last week that the [Alaska Trucking Association, Inc.] ATA and Mr. Reeves were here and the ATA talked a bit about the Dalton Highway and how important it was. Mr. Reeves spoke to the importance and the economic importance of the Dalton Highway as it relates to a gas pipeline. Well, it's our job to maintain the Dalton Highway and we do that and it's a large task. It's a large part of the budget. It's a large part of what we do. The Dalton

Highway was completed in 1975 and the state took over in 1978 and I think most of us understand that it was built to support the pipeline. It was built to secondary road standards, which meant slower speeds, narrower driving surfaces, narrower shoulders and could have steeper hills. The grade could be steeper than your primary road standards. It goes through varied geographical conditions, I mean from Livengood country all the way to Deadhorse. You go through mountains, you go through coastal plains and river plains, river areas where you have lots of gravel and, of course, it crosses the Arctic Circle. Now you get into continuous permafrost. That causes some problems. We maintain that through workforces that are stationed in seven maintenance camps and you can see them on the diagram from Livengood to Deadhorse.

A few more things about the Dalton Highway, it's a little over 400 miles long. It has very heavy truck traffic. It is open to the public and the trips I've been on on the Dalton I've seen bikers, I've seen runners, I've seen - bikers meaning bicycles and motorcycles. You get all kinds of different kinds of traffic on that. If you ever have the opportunity to make the trip down the Dalton Highway, I would recommend it. It's very interesting. And the recreational travel of just [recreational vehicles] RVs and people out sightseeing has increased substantially over time.

Now, there's the projection of a gas line impact. It will be the transportation route to get materials and people and pipe up the North Slope. We estimate there is going to be about 34,000 one-way loads so that's a pipe going up, maybe an empty truck going back so there's going to be at least 34,000 one-way trips just for the pieces of pipe. There should be in the neighborhood of 200 plus just loads in support so you can imagine that's a lot of traffic that goes over the Haul Road.

The legislature has provided capital appropriations in prior years to do widening and resurfacing. I want to thank you folks for that and hope that you continue doing that because we continue to have resurfacing and culvert issues and that sort of thing.

[1:23:00 PM](#)

MR. TITUS continued:

The pipeline traffic with the load counts that we're projecting is going to have a huge effect and impact on the road and our ability to maintain it. So, right now, it's about 70 percent of the road is about 28 foot wide and the bullet over here is 30 percent and it is reconstructed to 32 foot wide so that is in our strategies of trying to increase our road standards. And we talked about 14 million cubic yards of resurfacing ... required over the next 50 years so that kind of intrigued me being an engineer. I want to give you - how big a pile is 14 million cubic yards? Well, if you imagine a rubrics cube that is 720 feet, 25 feet in each direction, that box encompasses about 14 million cubic yards and if that doesn't do it, it's about 2.5 football fields going each way so that's a pretty good pile of material, which we have to buy, put down, blade and compact. So that gives you a little idea of some of the issues we run into and it's in the annual operating budget for the Haul Road, not including the capital appropriation we get for resurfacing is in the \$10 to \$12 million a year.

[1:24:23 PM](#)

MR. TITUS continued:

So, issues. I mentioned a number of them already. With heavy truck traffic we lose the trucks, you know, dust control. We do dust control on the Dalton but as they travel the road we lose dust. It's a fine material that blows away. The surface then becomes like marbles. It doesn't bind; it doesn't tighten up and rolls off into the ditches so we have some problems there.

Just getting material source sites is an issue. We have some problems in that area but with the funding we hope to get through capital and maybe through the general obligation bond. We can do some stockpiling of materials so we have that material when we need it to be more efficient in our maintenance of the highway.

Needs - I think you heard that there are lots of needs through Mr. Reeves but just some of the issues that we've had. In 2005, general fund appropriation from the legislature we rebuilt the Chandalar maintenance camp. It is a nice addition. Like I said, we received capital appropriations for repair and in '05, '06, and '07. Currently, there's a general obligation bond. There's \$14 million for improvements - Dalton resurfacing and Jim River maintenance shop to replace that maintenance station, which is having some real problems with its foundation and that sort of thing. And of course I believe you folks have been talked to about the Rise (ph) report. It has lots of future needs for the gas pipeline but projects currently in the funding program are listed there. The Yukon River Bridge redecking and Dalton 3749 both were completed last summer so those are two projects that were completed and this intermodal project will be worked on this coming summer.

[1:26:58 PM](#)

MR. TITUS continued:

Funding and needs. It's no secret you folks know costs and needs are increasing. Our funding is not keeping up with that so there is a funding gap. How do you reconcile that? The lower cartoon just is provided for information that many of the other states, like 78 percent of them, are having a general fund program so they don't rely so much on the federal dollars. I know Jeff Ottesen has been here to give you information about [Statewide Transportation Improvement Plan] STIP and that sort of thing to show that it's a declining trust fund - declining revenue. Less funding results in fewer projects and splitting projects up so that they can - into smaller projects, phasing them so we can get to them. This horizontal work of airports, roads and bridges is just expensive work. It's just very expensive work. It takes some money.

Next, general funds. I wanted to provide a slide that showed you that this is a trend of the general fund that we've gotten in the past. You can see that it's - the slope is declining. Very hopeful that we'll be successful in the capital appropriation [general

obligation] GO process this year and this next slide is, I think you've probably all seen this too but I just wanted to put it in to show that general fund dollars, we can cut the life and tenure of a project in half, just about, because we can do many of the tasks and design in parallel and that's what you see in the red. The blue is the events and tasks we have to do under a federal project and they become series events so that it does save us time. We can get the project on the street quicker and it saves in the budget because we're not losing inflation on a yearly basis.

1:29:40 PM

MR. TITUS continued:

There's a needs list that was started about 15 years ago and so we'll display the needs as we see that, and this list that we keep track of and of the different needs in the region and there's a slide there that says we're up in the, you know, funded all the needs and that probably includes the wants too. There's a difference, of course, between the needs and wants but that's in the \$4, \$4.7 billion range. Obviously with the amount of capital funding we're getting, we're not eating it, eroding that list real fast. Here's some information about - the next slide is about construction, costs of construction. There are some graphs there that talk about asphalt and indicate how we compare to national highway construction and we're almost twice as much as the national average. Our asphalt is a petroleum product. Petroleum products aren't cheap and I don't know that they are going to get a whole lot cheaper.

1:31:02 PM

REPRESENTATIVE JOHNSON asked whether the federal pipeline coordinator has been contacted for assistance in gaining access to potential materials on federal land along the highway. He assumed it is part of that office's job to expedite.

MR. TITUS said to his knowledge no contact has been made. The pipeline and corridor has been coming on fast but DOT&PF can and will do that as the project begins to develop.

[1:32:12 PM](#)

REPRESENTATIVE JOHNSON said the state has needs now and one of those needs is to upgrade the Dalton Highway. He asked whether the materials on federal lands have been inventoried.

MR. TITUS deferred to Mr. Thies to answer.

[1:32:34 PM](#)

HOWARD THIES, Director of Northern Region Maintenance and Operations, Department of Transportation & Public Facilities (DOT&PF), said DOT&PF has been working on some of those sites with the [Bureau of Land Management] BLM and the U.S. Army Corps of Engineers.

REPRESENTATIVE JOHNSON said a phone call to the federal pipeline coordinator might be appropriate to help get access to some of the other inventoried sites along the highway on federal lands.

[1:33:12 PM](#)

MR. TITUS continued his presentation:

Airports - way back on a previous slide we talked about we have about 103 airports in the region. Most of them are rural airports. We've got six certificated airports. I mentioned that. Airports are like roads. They have all the same problems with the geography and the freeze-thaw issues, the dust issues and resurfacing issues so they're not invincible to the environment and they are the lifeline for a lot of all those communities for medivacs and by-pass mail and just transportation in and out. It is their transportation corridor to the hubs.

We have approximately - 60 percent of those airports are under contract for snow removal and minor maintenance by people within the communities. The others are maintained by DOT. They are closer to the road system so we can get to them. Often we contract with folks with very little experience. They are the only ones there. On heavy equipment we have training programs to try and get them involved and to train

them up. We do have a need for training in the villages for those folks on heavy equipment.

Of course skyrocketing fuel and electric costs are always a problem and when you start doing maintenance you are running equipment and you are needing fuel. So those things, and we're not without security issues at our certificated airports, as well as some other areas.

[1:35:24 PM](#)

MR. TITUS continued:

Moving on to maintenance and operation. There's a number of folks - there are some stats there about the number of employees and seasonal employees and number of maintenance districts, etcetera, and there's a slide that shows you the type of operating dollars we get compared to what the need would be. There's a difference. We're still trying to - we're doing the very best we can and, as I say, with the money that we're getting - the folks in maintenance are unsung heroes I think of our business and organization. As an example, a couple of weeks ago we had about 50 below and 60 mile an hour winds up on Eagle Summit country. Our guys closed the road down and then the next morning - and that was starting to be in conflict with the Quest. That was a bit of a problem because the dogs couldn't get around so the next morning they showed up at 6:00 a.m. and worked, I think, until 6:00 p.m. that night to open it up and make sure that all the folks got through, the dogs and their [indisc.] and that sort of thing.

I don't have my wind chill chart handy but I did go out and look it up. At 50 degrees Fahrenheit, minus 50, and 60 mile per hour wind, it's about 120 below. So we had our guys out there working in that and, at 120 below, exposed flesh will frostbite in 5 minutes or less. So, they went out and did their job. They deal with earthquakes, floods, fires, avalanches and normal maintenance and I know when they're out there doing maintenance and crack seal and overlays they are dealing with a lot of mosquitoes as well out there on the roads in rural areas.

[1:37:11 PM](#)

MR. TITUS continued:

Here's a graphic to show what the Northern Region proposed GO bonds - the three projects that are in the general obligation bond are shown there. I talked a bit about most of those already.

Significant projects and accomplishments - a few nice pictures to show. These are some of the things that we do with the money that we're given. Actually at North Pole there's one more roundabout that didn't quite get in the picture but there's three of them in a row there. The city is really pleased with those. We even had candy stripe street light poles to meet the theme of the city.

So lastly, what can you do for us? I think the transportation infrastructure is in need of a general fund transportation plan. How to get there is up to you folks. I would solicit your support in a program of that nature and I know if it's being talked about in other areas.

Increased [maintenance & operating] M&O budgets. We're having - our budgets for operating budgets aren't quite enough to do what we need to do so when you have an opportunity to help us in that area that would be appreciated.

And, of course, support of the CIP projects that we have as well as projects that would potentially support the gas - the transportation infrastructure that would support the pipeline.

And, of course, last is some contact information and here's one of those M&O guys that I was talking about. October '06 we had a flood down by Valdez. That was before I was the regional director. They worked up - Mike Coffee testified before you folks before but he was heavily involved in that at that time and it was quite impressive to see what those folks got done. If you go to the very beginning of our presentation, there is a picture of the same slide 2 paving at zero. That's also in the Keystone Canyon where they were finishing up and they were putting down pavement in

zero degrees. They tell me that that piece of pavement is still in pretty good shape.

[1:40:05 PM](#)

REPRESENTATIVE DOOGAN said several people have testified to the need for work on the Dalton Highway. He asked whether that need is exclusive to the official Dalton Highway or whether work needs to be done on the entire highway north of Fairbanks.

MR. TITUS said the Dalton Highway is represented in red on slide 8, but DOT&PF is responsible for the road from Fairbanks from Mile 163 on the Parks Highway all the way to Deadhorse. A load coming from Anchorage has to go all the way up the highway so the area between Fairbanks and Livengood is DOT&PF's responsibility. Most of that area does not have the maintenance need that the Dalton Highway has.

[1:41:04 PM](#)

REPRESENTATIVE DOOGAN asked if that part of the highway is up to standard.

MR. TITUS said not all of it.

REPRESENTATIVE DOOGAN surmised that part of the highway will need work in conjunction with the natural gas pipeline.

MR. TITUS said that question is interesting because the start time of pipeline construction is undetermined but the section from Livengood to Fairbanks needs work. The worst part of the road is from Livengood to mile 37.

[1:42:08 PM](#)

REPRESENTATIVE FAIRCLOUGH asked whether the Northern Region is responsible for any ports.

MR. TITUS said DOT&PF has facilities in Valdez and Cordova, but no ports per se. He specified the Northern Region has highways, aviation and facilities.

REPRESENTATIVE DOOGAN noted his relationship with Mr. Titus goes back to playing Little League baseball together. He advised Mr. Titus to hunker down behind Marine Highways.

[1:43:25 PM](#)

REPRESENTATIVE FAIRCLOUGH noted the committee has considered looking into a river ferry system and asked Mr. Titus if he could comment on how he would prioritize such a system and how that would address transportation needs to river communities.

MR. TITUS said he tried to research a river ferry system. A small study was done years ago on that, but it dropped off the radar. He said he couldn't offer any new information at this time but could provide copies of that study.

REPRESENTATIVE FAIRCLOUGH pointed out the committee already heard legislation on that issue. She suggested Mr. Titus look at Representative Salmon's proposal.

[1:45:21 PM](#)

CHAIR JOHANSEN thanked Mr. Titus for his presentation. He noted that the committee appreciates the challenges faced by the Northern Region and the work he and his crews do in that climate.

#### **ADJOURNMENT**

There being no further business before the committee, the House Transportation Standing Committee meeting was adjourned at 1:47 p.m.