My name is Rich Moniak. I live at 1900 Fritz Cove Rd in Juneau.

I just retired from a 35 year career as a civil engineer. I worked for a state highway department for 5 years and for the federal government in Juneau for 24 years. I know how public agencies underestimate costs and overstate need to justify projects.

DOT constantly tells us that roads are less expensive than ferries. For this project that's not true. Their own supplemental EIS projects the road will cost the state \$5 million a year more than operating the new Alaska Class ferries in Lynn Canal. And that gets worse if costs are higher than projected.

I believe the three big bridges, snow sheds, and tunnels are all complex structures have a high risk for changes in either the final design or during construction and their costs will increase dramatically. The same is true for crossing avalanche zones, talus slopes and rock cuts that will be as high as 150 feet. I believe the site development at the Katzehin Ferry Terminal will need to be much bigger to the handle serious traffic congestion that will occur if DOT operates as planned without a reservation system.

I do not believe the Alaska Class Ferries being built in Ketchikan are ideally suited to be short distance shuttle ferries. They were designed to operate efficiently at 15 knots for four hours, not 15 minutes. The passenger capacity and amenities they'll have make no sense for the way DOT expects to operate them. After the road is built DOT may come back to the legislature for funds to build the right shuttles, just like the \$11 million more DOT requested six years after spending \$17 million to raise the Million Dollar Bridge near Cordova. A bridge that goes nowhere.

On the need side I believe DOT has overstated traffic demand. It's almost double their two previous estimates. Almost all of the increase is from traffic originating in Juneau. It's based on household traffic surveys from Anchorage and the rest of the country that already have roads extending in every compass direction. In developing this estimate DOT opted not to follow FHWA's Interim Guidance on the Application of Travel and Land Use Forecasting in NEPA. That guidance is supposed to **QUTOE** assist agencies in creating better and more legally defensible forecasting applications **END QUOTE**. It recommends a collaborative scoping process involving the public at the start of the NEPA work. That never happened.

I believe this project constitutes an unwise use of money at a time when budgets everywhere are shrinking. Juneau residents will be the prime beneficiary of this expensive road. If you want to measure its real value, ask Juneauites to tax themselves to pay for it. I assure you the demand will disappear.



My Turn: How ADOT ignored best practices for Juneau Acess

Posted: November 7, 2014 - 12:08am

By Rich Monink

On Tuesday the Alaska State Department of Transportation extended the public comment period for the Juneau Access Draft Supplemental Environmental Impact Statement to Nov. 25. That's two extra weeks for concerned residents to wade through the 650-page document and 2,400 pages of attached appendixes. My own effort has left me wondering who is responsible for quality control. While further investigating that question, I've discovered that ADOT failed to follow best management practices developed to help them avoid costly litigation.

"The comments that are most helpful to us is constructive," ADOT project manager Gary Hogins said at the start of public hearing in Juneau last month. "Did we make a mistake? Is there a gap in our information?"

The level of review necessary to discover significant errors should not be the public's responsibility. Even with the extension of the comment period, there's insufficient time for people working their own jobs and raising families to perform that role. Most don't have the technical expertise to critically examine the work, and environmental organizations shouldn't be expected to hire specialists to ensure every analysis is properly done.

ADOT is the lead agency ultimately responsible for the quality of its product. Before a document reaches the public's hands, they should engage independent experts to ensure there are no serious errors or bad assumptions leading to faulty conclusions. In the engineering profession, this work is known as a peer review.

I've spent hours examining the Traffic Forecast Report and sections of the Marine Segments Technical Report related to flow of traffic. Although I'm not an expert, my engineering experience tells me that an independent peer review wasn't performed in these areas.

What's more disturbing is that the year before Gov. Sean Parnell directed ADOT to prepare the supplemental EIS, the Federal Highway Administration published a document titled "Interim Guidance on the Application of Travel and Land Use Forecasting in NEPA." It's "based on lessons learned and best practices" and recognizes the critical nature of travel forecasting as the "foundations for determining purpose and need."

Compliance with the guide by highway departments is voluntary, but if ADOT had elected to follow it, the department would have performed a collaborative scoping process "to provide an opportunity for agencies and the public to raise critical issues and concerns early" in the study. The objectives include reaching consensus on the travel models used in the forecast and validating that the model "supports reliable forecasts and output indicators."

The guide also advises DOTs to consider peer reviews because "substantive and procedural benefits" are gained "from leveraging outside expert opinion," adding that it's "critical to engage in a peer review at a stage in the study where the findings of the review can still be taken into account when conducting the analysis." Given that McDowell's prior reports and the current one done by Fehr and Peers each acknowledge the "complexity and uncertainty associated with predicting traffic in Lynn Canal," there's no excuse for ADOT not to have followed FHWA's guide for determining travel demand. Had they done so, it would have prolonged completion of the DSEIS. But the public would not be seeing the revised traffic projections for the first time. And an early peer review would have uncovered serious mistakes and lent significant credibility to the final forecast.

This raises another serious question. If accurate traffic demand is indeed the foundation for defining project purpose and need, then the collaborative effort to define it should have also been used to develop of the 2014 Southeast Alaska Transportation Plan. As a statewide policy that, document prescribes applying "best management practices to preserve the existing transportation system." Not following its own policy on the planning side means every road-building project recommendation the department has made may be based on disputed traffic models and demand.

Instead of following best practices intended to "assist agencies in creating better and more legally defensible forecasting applications," the kings of Alaska's public highways want the Juneau Access construction to start as early as 2016. The shortcut they've taken will more than likely contribute to the litigation they hoped to avoid. Before it reaches that point, all work should stop until ADOT reexamines the project purpose and need in a transparent, collaborative process involving the public.

• Rich Moniak is a Juneau resident and retired civil engineer with more than 35 years of experience working in the public sector.

Comment

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My Turn: Spending half a billion dollars is always a political decision

Posted: October 23, 2014 - 11:05pm

By Rich Manada

The expression "money is politics" succinctly describes the new era of campaign spending, particularly when looking at the role money plays when federal, state and local governments establish capital and operating budgets. This is why Gov. Sean Parnell believes spending more than half a billion dollars to build the Juneau Access Project is his decision alone to make. It's also why opponents of the road have the right to challenge the project, even if that means taking the state to court.

Let me be clear: I'm not speaking as a member of the Southeast Alaska Conservation Council. I have never been a member and have not donated any money to them during my 28 years as a resident of Southeast Alaska. Although I believe they provide an important service to the many residents who value our natural environment, I don't always agree with their positions.

Going back to the 2006 Environmental Impact Statement for the Juneau Access Project, it should be very obvious that SEACC's lawsuit was well justified. They prevailed in court because the Alaska Department of Transportation refused to consider marine highway alternatives. Quite simply, DOT wasn't responsive to valid public comments.

Among other shortcomings in the 2006 EIS was the \$270 million construction cost estimate. Inflation isn't the reason it's more than doubled over eight years, nor is it increase as a result of delays caused by SEACC's lawsuit.

Without delving into the details of both estimates, a significant factor in the revised cost is new "field reconnaissance and data on debris flows, avalanche areas, talus fields and wildlife undercrossings," which resulted in the addition of avalanche sheds and increased the number and complexity of bridges. Had the project moved forward eight years ago, we'd either have gotten a substandard and unsafe highway, or the costs would have skyrocketed during final design and/or construction. Either scenario would have caused a public uproar.

Even if the 2014 supplemental EIS is more defensible, I don't believe it should preclude anyone's right to sue the state. Sure, it would be seen by many as environmental obstructionism, but building the road isn't an engineering decision. It's being made on the slippery slopes of politics which, in any arena, isn't conducive to fostering public trust.

It was politicians who decided to build the two new ferries at the Ketchikan Shipyard. They went that route for the sake of Ketchikan's economy, but that decision will take more dollars directly out of the state treasury because it means passing up federal transportation funds and forgoing competitive bids. A related political maneuver was the state's decision to make these two boats the future Katzehin shuttle ferries. The ferries were designed primarily to run from Auke Bay to Haines and Skagway.

In two prior columns I've challenged the state on the shuttle ferry design and traffic projections. The numbers simply don't add up.

DOT's latest traffic projections have doubled since 2006. By their figures, the Katzehin ferries will have to move 848 vehicles each summer day traveling to and from Haines, or 424 each way. To make this happen, they plan to operate ferries 16 hours per day, and envision the vehicle load/unload sequence to take 20 minutes or less. That leaves little room for unexpected problems and means every driver must behave in an orderly fashion.

Now, 424 vehicles a day is just an average, and remember, they're not taking reservations. So, how many people will be stuck in Haines on a Sunday night when more traffic than the average arrives on their way home to Juneau after a weekend getaway?

Engineers don't design this way. They allow for ample margins of error to offset the unknowns they can't precisely quantify. It suggests politics are driving the project managers to make the numbers fit.

Of course, the biggest political decision is spending \$574 million of taxpayer money that could instead be spread around the state on other pressing needs. It exposes a glaring hypocrisy in Parnell's governing philosophies of fiscal responsibility and accepting handouts from what he believes is a badly managed and bankrupt federal government.

Under his leadership, we will have politics to blame if DOT refuses to make corrections or address valid public complaints about the supplemental EIS. If concerns brought to DOT are ignored, then SEACC certainly should consider, as a last resort, the merits of taking the State of Alaska back to court.



My Turn: If we build it, almost no one will come

Posted: October 2, 2014 - 11:03pm

By Rich Monink

FOR THE JUNEAU EMPIRE

When the Alaska Department of Transportation tried to sell the Juneau Access project in 2006, the price tag was \$252 million. Now the anticipated construction cost has skyrocketed to \$574 million.

Not so coincidentally, a new DOT-commissioned study determined the traffic demand in the Lynn Canal corridor has also doubled since 2006. But it's not a matter of if we build it, more will come to the capital city. Based on the new but seriously flawed analysis, the entire increase in projected highway use is from Juneau residents.

One of the criticisms about the 2006 Environmental Impact Statement was that DOT dramatically overstated demand for travel in Lynn Canal. Their figures came from a study performed by the Juneau-based McDowell Group. Relying heavily on household surveys of residents in Juneau, Haines, Skagway and Whitehorse, the McDowell Group estimated daily traffic of 500 vehicles per day; Juneau residents accounted for half of that.

The traffic demand is defined as how many vehicles would use the highway from one end to the other if it connected Juneau directly to Skagway. The figures the McDowell Group came up with were closely aligned with a study they did in 1990 and were loosely validated by comparisons with similar highway links from coastal communities.

The supplemental EIS, released in September, doesn't explain why DOT decided it needed a new traffic analysis. This time turned to Fehr & Peers, a Seattle-based consulting firm. That should be strike one in the eyes of our governor and every state legislator who thinks Alaskans know our state best.

Fehr and Peers dropped McDowell's approach in favor of data collected from the 2009 National Household Travel Survey and the 2002 Anchorage Household Travel Survey.

Strike two.

Alaskans aren't like our down south cousins and residents in the Lynn Canal corridor bear little resemblance to the urban characters in Anchorage.

Using this model, Fehr and Peers determined that by 2020 daily traffic would increase to 1,113 vehicles daily. That includes 994 Juneau residents, almost 700 more than McDowell estimated, while the figures from the other three affected communities remained essentially the same.

But Fehr and Peers weren't satisfied with this answer, so they recalculated it by imagining Juneau's traffic demand would be the same as in Whitehorse and compared that to measured traffic on major Alaskan highways.

Why Whitehorse? Because it's "approximately the same size as Juneau and located approximately the same distance away from Skagway." Using this hardly relevant correlation increased their estimate of Juneau-based traffic by another 12 percent.

This wasn't good enough either. Fehr and Peers cited national data collected by the U.S. Federal Highway Administration and their Canadian counterpart, which reveals Americans travel 50 percent more than Canadians. Because of this they bumped up their figures again and ultimately came up with a final daily traffic total of 1,240. McDowell Group's projection for the same year was only 630.

In their multiple analyses, Fehr and Peers failed to consider at least one obvious fact. The Juneau Access project offers capital city residents just one compass point — north to Haines, Skagway and the Yukon. Anchorage, Whitehorse and the vast majority of the road-connected world can also go south, east, west and everywhere in between. This error suggests the comparative data they used was a bad fit for this project. Strike three.

User demand is a critical factor for convincing lawmakers to fund this mega-construction project. DOT's new traffic analysis isn't just bad science; it seems like they cooked the books to get the outcome they needed. They also buried it in a 30-page technical document that includes another 65 pages in six equally technical appendixes. It's a mountain of paper intended to impress, or possibly intimidate, legislators and the general public.

One result that shouldn't impress anyone is that the estimated life cycle costs to build and maintain the road are higher than the enhanced ferry system alternative analyzed in the supplemental EIS. So, DOT can no longer tell us that the Juneau Access is about saving money. That means Gov. Sean Parnell and state legislators shouldn't be using federal and state taxpayer dollars to fund construction of a highway predominantly for the benefit of Juneau residents.



My Turn: The Katzehin ferries - design by politics

Posted: August 16, 2014 - 11:10pm

By Rich Monink

FOR THE JUNEAU EMPIRE

Judging by the way the Alaska Department of Transportation is moving full steam ahead with the Juneau Access and construction of two Alaska Class Ferry day boats, one would expect the agency would have been prepared to defend both projects when they presented the Draft Southeast Alaska Transportation Plan (SATP) in Juneau last week. That wasn't the case though. Many questions were left unanswered. And that may be because an engineer was on the stage and the momentum pushing these is all politics.

To be fair to Andy Hughes, DOT's planning chief for Southeast Alaska, he prefaced his presentation by saying the meeting wasn't intended to take comments on the Juneau Access project. He said that opportunity would come when the Supplemental Environmental Impact Statement (SEIS) is released. And like most engineers I know, Hughes probably prefers to leave controversial issues to his bosses and politicians higher up in the agency.

We know that no matter what option is chosen, operation of Lynn Canal and all other Alaska Marine Highway ferries will remain dependent on state subsidies. Unlike the state's roads though, which are fully subsidized by taxpayers, ferry costs are partially offset by fares collected from users. But the SATP doesn't even discuss the revenue side of the equation in its cost comparisons of the different alternatives.

For running shuttle ferries coming and going from Katzehin at the end of the Juneau Access road, the revenue picture would be nothing more than an educated guess. DOT may be able to tell us the capacity they're designing for, but that doesn't translate to fares collected. What matters is how many people actually board the boats. Ultimately, that won't be known until the highway has been open for several years.

If they've overestimated shuttle ferry traffic as many people believe, then the Katzehin ferries will wind up running well below capacity most of the time. Either that or the frequency of sailings will be reduced, meaning the boat and crew will have a lot of down time during the day. In both scenarios, either revenue will be less or the state will raise fares to offset higher than expected operating costs.

This leads to another question. Should they even be designing the ferry itself without knowing what the real demand will be?

The Alaska Class dayboat design is already completed though. The state has asked Vigor Industrial to provide a price proposal for building one at their Ketchikan Shipyard. And unless they've been drastically changed from the design that was made public in January, these boats don't look like economical shuttle ferries.

For starters, there's no need for the 68-seat food court on trips less than an hour long. That's like a flight from Juneau to Ketchikan in which Alaska Airlines provides nothing more than a complimentary half ounce bag of pretzels and a cup of juice of water. The 46-seat library/quiet area and the children's play area aren't essential either. And there's certainly not going to be enough time to show movies in the 40-seat lounge on the upper deck.

If these ferries are primarily intended to be shuttles from Katzehin to Haines and Skagway, then it would seem logical to save money by eliminating such user amenities. But the more important questions are about the hull and engine designs.

In the Draft Design Concept Report prepared for DOT, Coastwise Corporation examined 13 day boat routes with the highest priority being Auke Bay/Lynn Canal. They explained that fuel efficiency was critical for the longer routes, so they focused on vessels with displacement hulls which are most efficient at normal service speeds.

But if the Katzehin/Haines shuttle was the focus instead of being the third priority route, would they have found catamaran hulls to be the better design option? And given that the Katzehin/Haines shuttle will spend less time running at design speed than idling while moored, different engines might be more appropriate too.

If the primary purpose of these boats are to be the shuttles from Katzehin, then they should be designed to be economically efficient on those routes. That would mean plugging those costs into the Juneau Access road analysis. And for politicians arguing that building a half billion dollar road makes good economic sense it will be harder to sell, especially to the majority of Alaskans who live outside the Lynn Canal corridor.

· Rich Moniak is a Juneau resident.



Opinion: Measuring 'the road's' value without subsidies

By Rich Moniak

Welcome back to the great road debate. This time, it's no longer about keeping the capital in Juneau. That issue has been dormant for more than a decade, leaving supporters of a road to Haines arguing solely on the grounds of long-term economic savings. What they won't say is whether or not they'd support it without the massive subsidy of federal taxpayer dollars.

Officials at the Alaska Department of Transportation and Public Facilities say the Juneau Access project fulfills the agency's mission of connecting people and communities. That's part of the function of roads everywhere, but few highways, if any, have been built for that reason alone. The Interstate Highway System, which moves a quarter of all vehicle traffic today, was conceived as a network for rapid military mobilization. Interstates have become the primary commuter routes between suburbs and cities as well as a main artery for everyday commerce.

The Juneau Access highway won't serve any of those functions. Even so, AKDOTPF estimates that almost 1,500 vehicles a day could use the road. Who are these likely users?

I can't imagine many people will routinely travel from Haines or Skagway just to shop at Costco, Walmart or Fred Meyer. Nor do I think there'll be a significant increase in Juneauites traveling all the way to Whitehorse, Fairbanks or Anchorage. It's not going to become the Lynn Canal commuter corridor. Trucking won't replace tugs and barges for delivering essential goods and general merchandise to Juneau. And I wouldn't expect a flood of tourist-driven RVs either.

So aside from some Kensington Mine workers who may drive a quarter of the road back and forth to town, the only other highway purpose seems to be seasonal recreational access to relatively untouched areas of the Tongass National Forest. And as a state that's always disparaging our federal government for spending taxpayer money on the social welfare of other people, there's a bit of hypocrisy building a half-billion-dollar highway for the luxury of driving to new playgrounds.

We also have to recognize that Alaskans can't choose to put money slated for this project toward other needs like schools or social services. That's because the vast majority is expected to come from the Federal Highway Trust Fund, including \$30 million of the \$35 million proposed in this year's state budget. Those funds are essentially dedicated to roads.

The main source of revenue for the Trust Fund is the 18.4 cents per-gallon tax we pay at the gas pump. But a little more research into this reveals again just how much Alaskans prefer to spend other people's money. At eight cents per gallon, our state motor fuel tax is the lowest in the country and only a quarter of the national average. Californians pay almost seven times as much as we do. That means we rely on federal funds for our roads more than anyone else.

It's not as if the Highway Trust Fund itself is a solvent cash cow. Between 2008 and 2010, Congress had to recharge it with \$35 billion from the general treasury. The situation isn't much better today. That's why the U.S. Chamber of Commerce is calling for a 15-cent per gallon gas hike over three years. Just imagine the public outcry if President Obama signed such a tax increase.

Remember too that we Juneauites voted against taxing ourselves by increasing our sales tax to fund a new \$50 million capitol building in 1993. And just four years ago we rejected doing the same for the proposed \$80 million second crossing to Douglas Island. So how would this issue fare in a public vote that would essentially ask each taxpaying Juneauite to cough up \$30,000 for building the road and two new day ferries?

If this is a valid argument against the road, opponents like me need to ask ourselves a similar question. How much more are we willing to pay for ferry fares between Juneau and Haines to eliminate the state subsidy we're benefiting from right now? And increasing those ticket prices should be part of the analysis before our tax-anxious legislators reverse their normal meaning of overreach by siphoning off federal funds for the Juneau Access project.

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Opinion: DOT's highways to nowhere

By Rich Montak

FOR THE JUNEAU EMPRIE

"To nowhere."

That's the politically charged label being harnessed to the Juneau Access Project by opponents of the road up Lynn Canal. Even though a ferry terminal across from Haines isn't nowhere, there are at least two past projects in Alaska that truly fit that storyline, and a short study of both suggests the Alaska Department of Transportation and Public Facilities is a bureaucracy that tends to exaggerate highway needs and embellish its accomplishments to keep taxpayer dollars rolling in.

When it comes to road and bridge construction, one of the most egregious examples of waste is the Gravina Island Access project. It's only accessible if you take a ferry to Ketchikan's airport.

Completed in 2008, the 3.2 mile, gravel road was designed and built by Kiewit Pacific Co. for \$25.7 million. It traverses a landscape that's mostly muskeg and serves not a single business and few, if any, permanent residences. The road ends at the \$360 million "Bridge to Nowhere" that will probably never be built.

What makes this project even more of an embarrassment is that it was selected for a Globe Award by the American Road and Transportation Builders Association. Those are supposed to be for recognition of highway "improvement projects ... that have contributed to environmental protection and mitigation." And in nominating themselves for the award, Kiewit wrote that the project enhanced aesthetic values and public safety. Only engineers could imagine that replacing the natural landscape with a road protects the environment, improves its visual quality and reduces accidents.

Another project where DOT has poured money down the drain is the Copper River Highway out of Cordova. It's a gravel road that runs along the Copper River Delta for about 40 miles beyond the city's airport. It ends just after the historic Million Dollar Bridge. Built in 1910 to haul copper by rail from Kennicott to Cordova, it was converted to a highway bridge in 1958. One of the four steel truss spans collapsed during the Good Friday Earthquake of 1964. The road up the Copper River to Chitina, where it was supposed to connect to the state highway system, was never finished.

The only vehicle access to Cordova is via ferry, and like Juneau, about half the town doesn't want to see the road built. That didn't stop the DOT from trying to reconstruct it.

In 1991, the state spent almost \$700,000 on a section that's never been open to vehicle traffic. They called it maintenance. It was done without legislative approval and without the permits required by the Alaska Department of Fish and Game and U.S. Army Corps of Engineers.

In 2005, the Million Dollar Bridge was repaired at a cost of \$17 million. DOT justified the expense by claiming it was cheaper than demolishing the structure. That's hard to believe, especially considering that six years later they sought another \$11.5 million for seismic upgrades.

In 2011, Copper River floods forced DOT to close Bridge 339 about 12 miles before the end of road. Now the Million Dollar Bridge is in the middle of nowhere, and replacing Bridge 339 will cost \$29 million. All this for a road that's closed half the year and offers little more than opportunities for glacier viewing, fishing, hunting and camping.

It may well have been that DOT elected to repair the Million Dollar Bridge because removing it would have likely ended all hopes of ever building the road to Chitina. From that perspective it might be considered a down payment on future construction, just like the Gravina Access was for Ketchikan's "Bridge to Nowhere."

The Juneau Access road is no different. DOT has already spent \$30 million reconstructing and extending the highway from Eagle Beach to Cascade Point.

Considering the natural hazards along the route, a road up Lynn Canal could turn into a multimillion-dollar headache like the Copper River Highway. Or, if the Federal Highway Administration refuses to fund it, we'll have nothing more than a dead end like the Gravina Island road.

We can be sure of two things. Building it won't protect the environment, enhance aesthetics or improve public safety. And AKDOTPF will continue to exaggerate its benefits because it needs taxpayer cash to sustain its bureaucratic empire.

Moniak is a Juneau resident.