

Department of Transportation and Public Facilities

OFFICE OF THE COMMISSIONER John MacKinnon, Commissioner

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February 7, 2019

The Honorable Shelley Hughes Alaska State Senate State Capitol Building, Rm 30 Juneau, Alaska 99801

Dear Senator Hughes:

Thank you for the opportunity to present the Glenn Highway Integrated Corridor Management Study to the Senate Transportation Committee on January 31, 2019. In response to questions posed by committee members, I offer the following information:

Does the 35,000 vehicles referenced on slide 7 represent 1-way or 2-way traffic?

The 35,000 vehicles per day refers to both directions of travel. This is for the segment just south of the Old Glenn Highway to Highland. From Highland to Airport Heights, there are 55,000 to 60,000 vehicles a day.

Does the Department have seasonal data that would speak to the economic costs and crash costs of delays on the Glenn Hwy?

Combined Annual Crash Cost and Delay Cost

Summer (May thru Oct)	\$22,410,000 per year
Winter (Nov thru Apr)	\$21,430,000 per year
Annual	\$43,840,000 per year

The source and modeling method for delays are described in the Phase 1 report, section 2.3, beginning at page 38: http://dot.alaska.gov/creg/glennhighwayicmstudy/docs/Ch2-Existing-Operational-Characteristics-and-Public-Outreach.pdf

Can the Department calculate the dollar amount of 1 hour of delay on the Glenn Hwy?

The cost for an hour of delay on the Glenn Highway would vary greatly depending on when that delay occurs. In summertime in the AM and PM peak periods, 3,000 to 4,000 vehicles per hour travel in the peak direction. If all of these vehicles experienced 1 hour of delay, the total value would be \$98,000 to \$131,000.

The US Department of Transportation (USDOT) has a method for calculating the value of delay, published as, "Revised Departmental Guidance on Valuation of Travel Time in Economic Analysis." Using this methodology, the value of one hour of delay for the Glenn Highway is \$32.68 per vehicle.

Can the Department provide its source and modeling for the data this report projects for cost of delays and crashes?

The crash cost data comes from the US DOT Value of a Statistical Life, which defines the cost of a crash by severity. (\$8,080 for a property damage only crash, \$106,050 for a minor injury crash, \$707,000 for a major injury crash, and \$10.2 million for a fatal crash.)

The value of time/delay (hourly) was estimated using the US DOT "Revised Departmental Guidance on Valuation of Travel Time in Economic Analysis." The guidance considers local median income, trip purpose, vehicle occupancy rate and number of work hours in a year.

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How many public outreach meetings were held in the Mat-Su in relation to this study?

Because the project funding was provided by Anchorage Metropolitan Area Transportation Solutions (AMATS), meetings were not held in the Mat-Su. However, the following outreach was done to ensure Mat-Su residents were included in data collections:

- A stakeholder survey was sent to the Mat-Su Planning and Land Use Department
- The project was presented at the 2017 & 2018 Mat-Su Transportation Fair:
 - o 482 people signed in at the 2017 Fair.
 - o 485 people signed in at the 2018 Fair.
- An open house was held in Eagle River on November 10, 2018.
- 1,648 respondents to an online survey reported living in the Mat-Su.
- Over 4,000 data points/comments were received by people who list themselves at Mat-Su residents.

For each of the traffic control plans (TCP) being proposed in the study, can the Department report how long it would take to set up each TCP?

There is a general process that would be applicable to each of the TCP's. That general process/timeframe for managing an incident and setting up traffic control is as follows:

- Under 60 minutes Anchorage Police Department (APD) arrives on scene and uses flashing lights to divert traffic. Most incidents fall into this category.
- 1 hour to 4 hours DOT&PF crews take the place of APD. Detour routes are needed. DOT&PF may be called in sooner if there is infrastructure damage, hazardous materials, and /or needs for heavy equipment.
- 1 hour to 4 hours APD also has the option of using a standing contract the DOT&PF has in place to establish signs/detours/traffic management
- 8 hours Incident command is in place and coordinating between agencies and contractors

If there were multiple incidents occurring simultaneously, this timeframe would be affected. APD is able to respond to an incident 24 hours a day as they are staffed with three shifts. DOT&PF has limited ability to respond during the night with current staffing. Most incidents are managed by APD.

Regarding the 11 technology-based strategy options reflected on slide 11, does one of the strategies recommend the use of computer apps? If so, please list which one/s.

The only app included in the current list of strategies is the integration of 511 with additional environmental sensors to provide more detailed, real-time weather and road condition data. In general, projects that are already in the works were not included in this list of strategies. For example, expansions to the 511 app are planned. This federally funded app currently incorporates Nixle traffic alerts to alert drivers of traffic conditions. Future improvements to 511 could include using information from third-party vendors to provide real-time travel time estimates.

If you or your committee members have further questions, please feel free to contact Mike Lesmann at (907)465-4772.

Sincerely,

John MacKinnon Commissioner

Cc: Suzanne Cunningham, Legislative Director, Office of the Governor

Mike Lesmann, Legislative Liaison, DOT&PF