Executive Summary

This Integrated Corridor Management Study focuses on the Glenn Highway within the Municipality of Anchorage, from the Airport Heights Road intersection at MP 0 to the Old Glenn Highway interchange just before the Knik River Bridge. The purpose of an Integrated Corridor Management Study is to identify methods to improve efficiency of the movement of people and goods in the corridor through institutional collaboration and proactive integration of existing and future infrastructure along the corridor.

The Existing Conditions Analysis reviewed data available from DOT&PF, as well as from project stakeholders, and identified the following concerns:

- There are no parallel routes of similar capacity to the Glenn Highway. Moreover, in many segments of the Glenn Highway in the study area, there are either no parallel routes of any kind, or the available parallel routes are local, residential roadways and therefore not suitable for use as bypass or detour routes during an incident that closes portions of the highway.
- Eighteen fatal crashes occurred in the study area between 2005 and 2014. Higher severity crashes tend to occur in the summer, while there are overall more crashes in the winter months. The total value of the crashes that occurred on the Glenn Highway from 2005 to 2014 is approximately $421.5 million, or $42.1 million per year.
- The available data for travel times and travel speeds on the Glenn Highway was not sufficient to estimate traveler delay as a result of incidents (crashes, weather events, etc.) in the study area. Instead, a deterministic approach was used to estimate the cost of delay due to the crashes that occurred from 2010 to 2014. Using this method, the annual cost of delay due to crashes on the Glenn Highway was estimated at $1.7 million per year.

Public and stakeholder involvement was critical to the understanding of current incident management practices and communication between stakeholders and the public. As such, public outreach included the following activities.

General Public:

- Online interactive survey (4,891 participants)
- Presentations at Community Council meetings in Eagle River, Chugiak, Peters Creek, etc.
- Presentations at the Matanuska-Susitna Borough Transportation Fair and at the Anchorage Transportation Fair
- Presentations at the Anchorage Metropolitan Area Transportation Solutions (AMATS) Technical Advisory Committee, Policy Committee, and Freight Advisory Committee Meetings

Stakeholder Agencies:

- Stakeholder meeting
- One-on-one interviews

Communication with these sources revealed the following information about current incident management practices:

- The Anchorage Police Department (APD) is the agency responsible for primary response to incidents on the highway. APD calls out the Anchorage Fire Department or Chugiak Volunteer Fire Department to help out for all injury crashes. APD notifies DOT&PF if infrastructure is damaged and will need to be repaired. The MOA traffic department is notified if detour routes will likely affect the operation of the signal system in Eagle River. Communications between these groups occurs in an ad hoc way.
- DOT&PF and the MOA traffic department both have access to components of a Virtual Traffic Management Center (VTMC). They are able to remotely view and change the operations of signals throughout the municipality, and can view real-time data from cameras and other sensors. However, neither group has a dedicated operator that regularly monitors the Glenn Highway.
- The primary method of official communication to the public regarding incidents on the highways is through the Nixle app, which is handled by APD. The DOT&PF 511 system also issues alerts, but the majority come directly from the Nixle alerts sent out by the police. APD also puts messages on a changeable message sign located south of the JBER exit, at approximately MP 7.
- The public has additional methods to learn about conditions on the Glenn Highway, including word of mouth, social media (specifically, a Facebook page devoted to travelers on the Glenn Highway), radio, and television.

Based on the collected data and the information gathered from the public and the stakeholders, as well as previous planning studies regarding the Glenn Highway, the following vision statement, goals, and objectives were identified.

The vision for the Glenn Highway ICM project was adapted from existing regional and statewide plans. The vision statement is as follows:

> *Implement an integrated, multimodal system on the Glenn Highway corridor that improves safety and mobility, enhances efficiency and convenience of travel and supports local, regional, and state transportation objectives.*

Goal A – Improve Safety

- Reduce the occurrence of vehicular crashes
- Reduce secondary crashes
- Reduce vulnerability and increase resiliency of transportation infrastructure from natural hazards and disasters

Goal B – Improve Mobility and Multimodalism

- Reduce travel times and delays

- Improve travel time reliability
- Reduce delays due to work-zones and planned special events
- Promote transit use
- Promote environmentally friendly, affordable transportation solutions

Goal C – Improve Incident and Emergency Management

- Reduce incident response and clearance times
- Improve communication and coordination among agencies and stakeholders
- Enhance coordination of regional emergency management

Goal D – Improve Information Data Collection and Sharing

- Expand collection of real-time traffic and weather data
- Improve day-to-day information exchange with regional operations partners
- Provide proactive, timely, and accurate information to travelers
- Make traveler information widely available

Based on these goals and objectives, 26 strategies that could be used to improve in the area of these goals were identified. Many of these strategies have been presented previously. These were updated, to include new cost estimates and new features as needed to meet the proposed goals and objectives, and to incorporate input from the public and from stakeholders.

A comparison of all of the strategies is included in Section 4.3 on page 186.