



# Alaska Department of Transportation & Public Facilities

## AMATS: Glenn Highway Integrated Corridor Management (ICM) Study

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*Keep Alaska Moving* through service and infrastructure



# Integrated Corridor Management (ICM)

- Developing corridors that are
  - Actively managed
    - Operational approach changes in real time in response to events
  - Integrated
    - Institutional (responsibility and control are defined and shared across institutional boundaries)
    - Operational (coordination and information sharing to manage total capacity and demand)
    - Technical (communication links, system interfaces, common standards to allow real time evaluation of impacts of changes)



# Non-recurring Events

- Crashes/spills on Freeway
- Crashes/spills on Arterials
- Special Events (Alaska State Fair, Airshow)
- Transit incident
- Weather conditions
- Disaster response



# Glenn Highway ICM



# Purpose of this ICM Study

- Improve efficiency through
  - Institutional collaboration
  - Proactive integration
- Identify ways to reduce
  - Delays
  - Fuel consumption
  - Emissions
  - Incidents (Crashes)

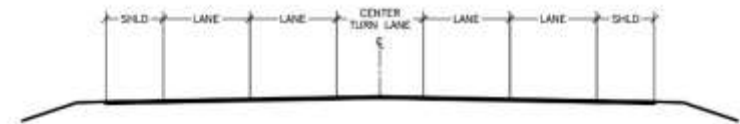
# Existing Infrastructure



- Glenn Highway
  - 6-lane divided from Airport Heights to Highland Rd (SB) / Artillery Rd (NB) with 58,000 AADT
  - 4-lane divided to Knik River Bridge with 33,000 AADT
- Through Anchorage, JBER, Eagle River, Chugiak
- 16 interchanges

# Existing Infrastructure

- Parallel Routes
  - Old Glenn Highway in Eagle River
  - 4-lane divided with center TWLTL
  - Several signals

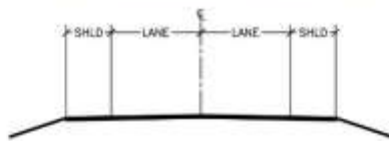


**FOUR LANE ROAD  
WITH CENTER TURN LANE**

# Existing Infrastructure



- Parallel Routes
  - Birchwood Loop Road
  - Old Glenn Highway
  - 2-lane, some turn lanes
  - Sometimes minimal shoulders
  - Many turns
  - No signals

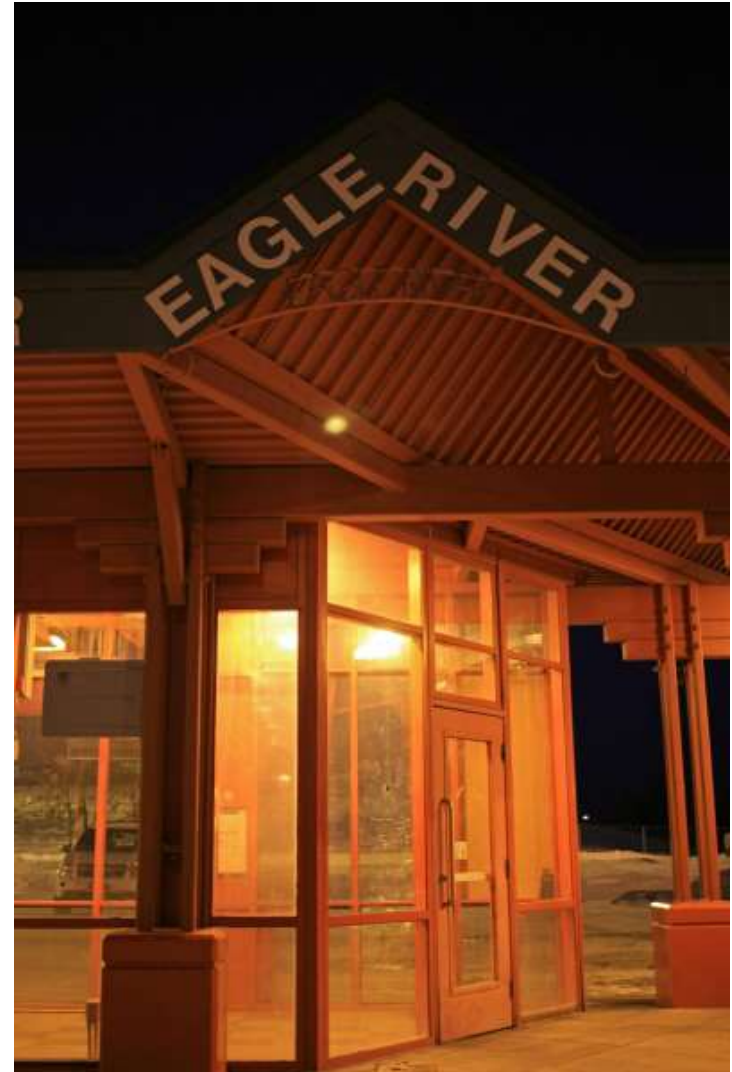


TWO LANE ROAD



# Existing Infrastructure

- People Mover Transit
  - New routes/timing begins October 23
  - Route 92
  - 6 trips Eagle River to Downtown in the morning
  - 6 trips Downtown to Eagle River in the evening



# Existing Infrastructure



- Valley Transit
  - Recent merge between Valley Mover and MASCOT
  - Buses carry passengers in both directions all day

# Existing Infrastructure

- Alaska Railroad
  - No commuter service YET
  - Commuter service has been studied
  - Incremental changes with goal of commuter service in mind
  - Event service – Alaska State Fair



# Traffic Control Elements

- 511 System

The screenshot displays the Alaska Department of Transportation & Public Facilities 511 website. The header includes the state logo and navigation links. The main content area features a map of the Anchorage area with a popup window titled "Road construction" for Glenn Highway. The popup provides details on lane restrictions, reduced speed limits, and contact information for Granite Construction. A "Map Legend" on the right side of the map lists various traffic control elements such as Alerts, Driving Conditions, Weather Watches, and Planned Events.

State of Alaska myAlaska My Government Resident Business in Alaska Visiting Alaska State Employees

Traveler 511into AK Alaska Department of Transportation & Public Facilities KNOW B4 U GO search

Home Other Info Help TIP! Location Glenn Highway

**Map Legend**

- Alerts
- Driving Conditions
  - Red: Hazardous
  - Purple: Very Difficult
  - Orange: Difficult
  - Yellow: Fair
  - Green: Good
  - Blue: Mountain Pass
- Weather Watches
- Cameras
- Weather
  - Green: Live
- Planned Events
- Future Planned Events
- Message Boards
- Travel Not Advised
  - No Winter Maintenance
- Mile Markers

**Road construction**

Glenn Highway from HILAND DRIVE OVERCROSSING to Eklutna On Ramp

Restrictions: Lane restrictions - Reduced speed limits

Times: until further notice Monday thru Friday, from 7:00 PM to 6:00 AM

Weblink: <http://alaskadot.gov/projects/glenn-highway-hiland-road-to-eklutna-road-pavement-preservation>

Notes: Be alert to LANE RESTRICTIONS and reduced speeds, Monday through Friday, from 7:00pm to 6:00am for southbound traffic, and from 8:00pm to 6:00am for northbound traffic. LANE RESTRICTIONS will be in effect weekends, 24 hours a day.

Contact: Contractor: Granite Construction

Agency POC: Theron Willard 622-0616  
Work: DOT Hotline: 622-0814

Last updated: Sep 5, 2017 4:40 PM

Driving Conditions Definitions Winter Driving Tips Route Summary Report Text View Alaska Route #'s Alaska Mileposts

# Traffic Control Elements

- Weather stations



# Traffic Control Elements

- Dynamic message signs



# Traffic Control Elements



- Emergency Crossover Points



# Stakeholders

- DOT&PF
  - Traffic
  - M&O
  - Planning
  - Commercial Vehicle Enforcement
- MOA
  - Traffic
  - PM&E
  - Planning
  - M&O
  - People Mover
- MSB
  - Land Use & Planning
  - Valley Transit
- JBER
- Alaska Railroad
- Chugiak/Birchwood/  
Eagle River Rural Road  
Service Area
- Police, Fire, Emergency  
Responders
- Eagle River Chamber
- Native Village of Eklutna





# Previous Studies

- Glenn Freeway Incident Management Construction Investment Options, Sep 2013
- Real-time System Management Information Plan (DRAFT), Jan 2012
- ITS Project Implementation Plan for the Glenn Highway Commuter Corridor, Nov 2008
- Glenn Corridor Commuters-Rail Option, Memo
- Matanuska-Susitna Borough LRTP 2035 (DRAFT)
- 2040 MTP for Anchorage Bowl and Chugiak-Eagle River
- UAA median crossover study, Jun 2017



# Tasks

- Gather Data
  - Stakeholder survey (one-on-one meetings)
  - Summarize previous studies
  - Public involvement: online survey
- Summarize Existing Corridor Operations
  - Safety (UAA Crossover Study)
  - Emergency management
  - Quantify the effect of non-recurring congestion on delay



# Tasks (continued)

- Develop Operational Concept
  - Create Scenarios
  - Identify shortcomings
  - Propose solutions
    - Reduce incident response and clearance times
    - Increased/Improved transit services
    - Ride sharing
    - ITS solutions
      - ◆ Commercial Vehicle Intelligent System Network
      - ◆ Real-time commuter information



# Tasks (continued)

- Integrated Corridor Management Study Report
  - Existing Conditions and **Associated Costs**
  - Proposed Solutions
  - Benefit and Cost of Solutions (Planning-level)



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