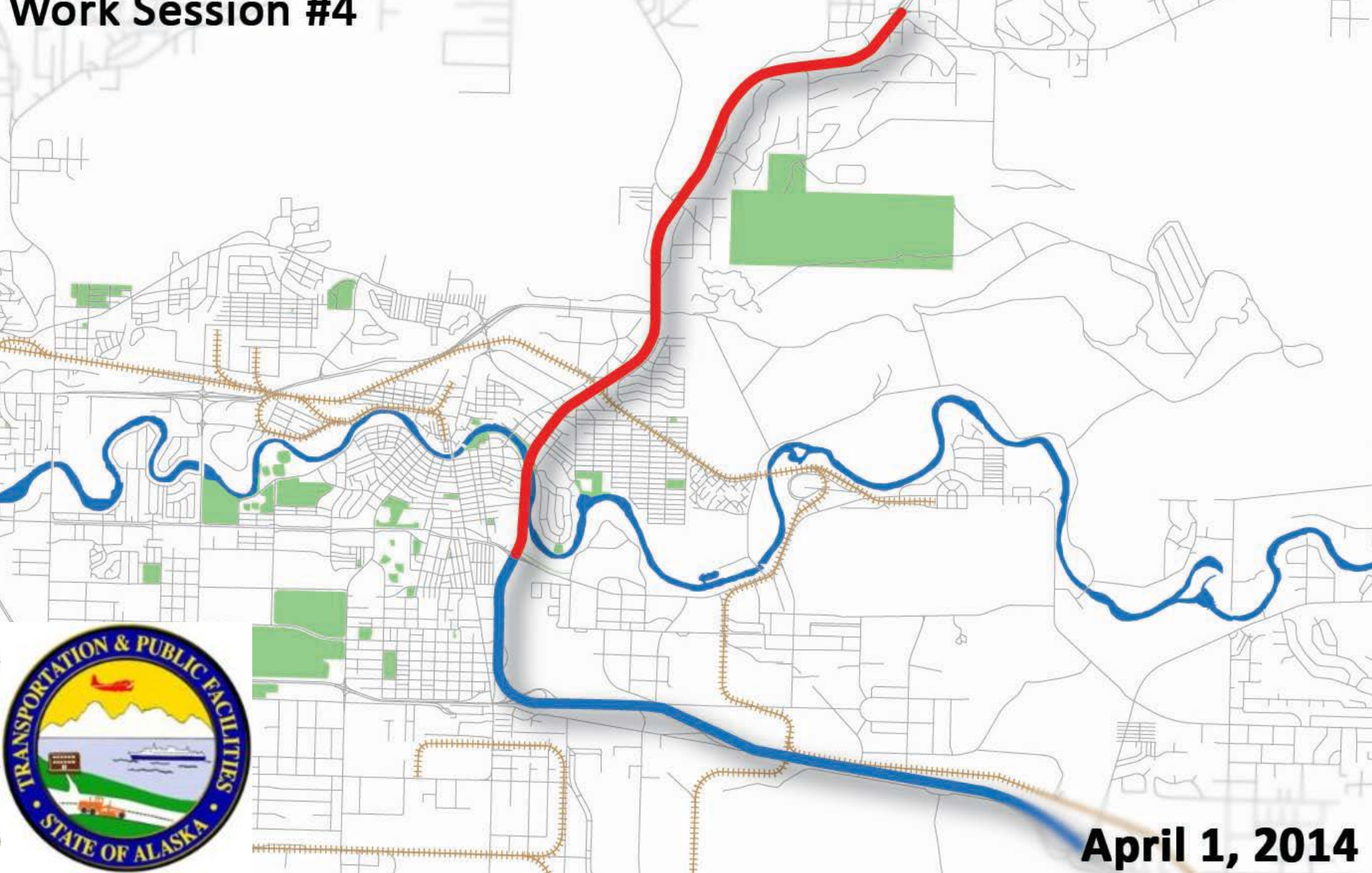


Richardson Highway/Steese Expressway

Planning & Environmental Linkage

Work Session #4



April 1, 2014

AGENDA

- **Introductions**
- **PEL definition, purpose, and need**
- **Efforts to date**
- **Concept updates**
- **Public and agency comments**
- **Concept evaluation**
- **What's next?**
- **Questions/comments**

INTRODUCTIONS Project Team

DOT&PF

- **Al Beck, P.E., Project Manager**
- **Chris Cavallo, P.E., Project Engineer**

DOWL HKM

- **Steve Noble, P.E., Project Manager**
- **Chris Grgich, P.E., Traffic Engineer**
- **Emily Creely, Environmental Analyst**
- **Rachel Steer, Project Coordinator**

PEL STUDY NEED -- SAFETY

- Improve future safety for motorized and non-motorized traffic by developing concepts that:
 - Upgrade transportation infrastructure to meet current DOT&PF design standards where practicable,
 - Reduce conflict points for motorized and non-motorized use,
 - Reduce the frequency and severity of crashes, and
 - Improve pedestrian and bicycle crossings.



PEL STUDY NEED -- MOBILITY

- Enhance the mobility of travelers in the corridor by developing concepts that:
 - Reduce traffic delay and congestion,
 - Improve intersection and road segment Level of Service (LOS) to C or better where practicable to account for projected traffic growth, and
 - Accommodate access to adjacent properties.



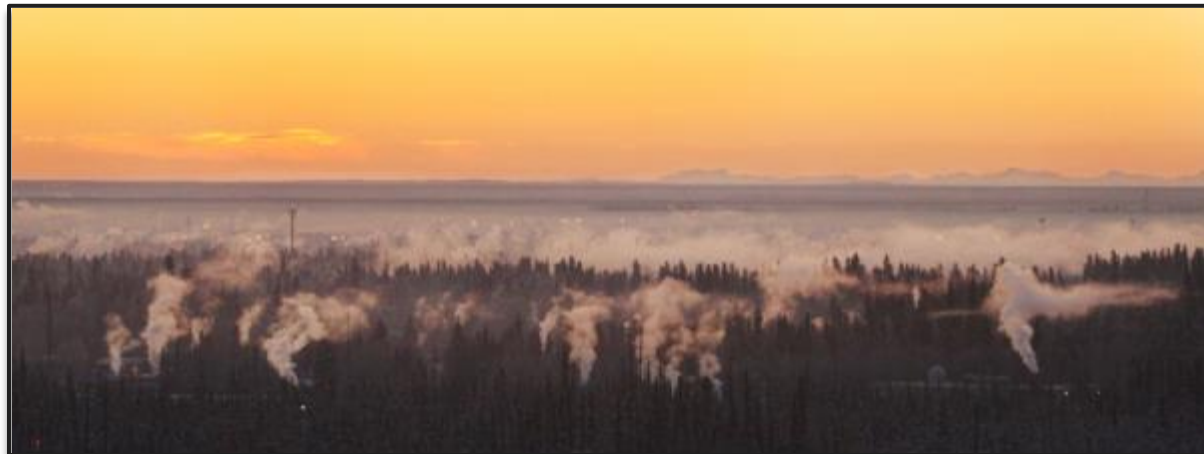
PEL STUDY NEED -- FREIGHT

- Optimize existing freight transport operations by developing concepts that:
 - Provide for efficient movement of freight,
 - Minimize at-grade railroad crossings to the degree practicable, and
 - Reduce vertical clearance obstructions (e.g. traffic signal mast arms).



PEL STUDY NEED – AIR QUALITY

- Reduce air pollution in the Air Quality Non-Attainment and Maintenance areas which overlap the study area by developing concepts that:
 - Meet the 2006 24-hour PM_{2.5} National Ambient Air Quality Standards,
 - Reduce vehicle idle times at intersections, and
 - Improve vehicle travel time through the corridor.



PROJECT EFFORTS TO DATE

- Draft Traffic Engineering Report
- Identification of 3 corridor concepts
- Agency, public, and stakeholder outreach
- Agency scoping
- Alaska Railroad coordination



CORRIDOR CONCEPTS

- **Concept 1**
 - High mobility, low access
- **Concept 2**
 - Moderate mobility, moderate access
- **Concept 3**
 - Low mobility, high access



Mobility — Emphasis on reducing travel time for through traffic
Accessibility — Emphasis on providing direct connection to adjacent properties

CONCEPT 1—HIGH MOBILITY/LOW ACCESS

- **Focuses on maximizing capacity and travel speed**
 - Improves Richardson Highway/Steese Expressway as freeway-type facilities
 - Interchanges at major roadways
 - Frontage roads provide access to adjacent roads and property
- **Updates to Concept 1 since the last PEL work session**

CONCEPT 2—MODERATE MOBILITY/MODERATE ACCESS

- Attempts to balance corridor mobility and access
 - Mix of at-grade and grade-separated intersections (interchanges)
 - Primary difference is at Steese/3rd and Steese/College
- Updates to Concept 2 since the last PEL work session

CONCEPT 3—LOW MOBILITY/HIGH ACCESS

- **Maintain existing access to adjacent property**
 - No new interchanges
 - Maximize capacity from the existing at-grade intersections and develop adjacent road network
- **Updates to Concept 3 since the last PEL work session**

PUBLIC COMMENTS SUMMARY

- **Signal timing is a major problem in the corridor.**
- **Appropriate, major/expensive improvements, rather than band-aids, are necessary.**
- **The railroad needs to be considered as part of this study—current at-grade railroad crossings are a transportation problem in Fairbanks.**
- **Grade-separated crossings are needed on the Steese Highway at Farmers Loop Road, Trainor Gate Road, Johansen Expressway, and Airport Way.**
- **Improved bike access is needed.**
- **We love/hate roundabouts.**

AGENCY COMMENTS SUMMARY

- Increased truck traffic related to natural gas delivery should be considered.
- Pedestrians and bicyclists need to be accommodated throughout the corridor.
- The potential for noise impacts throughout the corridor is of concern.
- Wetland impacts as a result of connecting Johansen Expressway to Farmers Loop Road is of concern.
- Maintaining access for military operations should be a priority.

DOT&PF/ARRC COORDINATION MEETINGS

● GOAL

- Evaluate future performance of railroad crossings as a result of traffic changes from proposed corridor projects.

● RECOMMENDATIONS

- Concepts 1 & 2
 - » Grade separation at Old Steese Highway
 - » Grade separation at Steese Expressway
 - » Grade separation at Richardson Highway
- Concept 3
 - » Improvements do not preclude future grade separation

● CONCLUSION

- Future projects in the corridor should be compatible with grade-separated railroad crossings.

CONCEPT EVALUATION—PLANNING AND ENVIRONMENTAL

CRITERION/ CONCEPT	CONCEPT 1	CONCEPT 2	CONCEPT 3
Consistent with Metropolitan Transportation Plan	●	●	○
Impacts to wetlands and waterways (# acres)	~7	~4	~7
Environmental justice impacts	unknown	unknown	unknown
Minimizes noise impacts	◐	◐	○
Minimizes air quality impacts	●	◐	○
Proximity (w/in 50 feet) of contaminated sites	4	4	2
Right-of-way impacts (# of parcels)	252	149	198
# of potentially impacted cultural/ historic resources	2	1	1
# of potentially impacted 4(f)/6(f) properties	4	1	3

● = Yes/Favorable ◐ = Potential/
Somewhat Favorable ○ = No/
Unfavorable

ELIGIBLE AND POTENTIAL SECTION 106 STRUCTURES (HISTORIC)

- **National Register of Historic Places in vicinity of corridor:**
 - Clay Street Cemetery (7th & Clay Street)
 - Illinois Street Historic District (300-700 Illinois Street)
 - Ladd Field
- **>100 structures over 40 years old that have not been assessed for historical significance**



CONCEPT EVALUATION—TRAFFIC AND ENGINEERING

CRITERION/ CONCEPT	CONCEPT 1	CONCEPT 2	CONCEPT 3
Meets functional roadway classification	●	◐	○
Maintains access to adjacent properties	◐	◐	●
Utility impacts	◐	◐	◐
Improves travel time from north and south	●	◐	○
Improves traffic safety	●	◐	○
Improves non-motorized safety	●	◐	○
Improves non-motorized connectivity	◐	◐	◐
Provides long-term capacity	●	◐	○
Cost	\$296M	\$211M	\$205M



= Yes/Better



= Somewhat/Good



= No

NEXT STEPS

- **Consultation with FHWA**
- **Prioritize or dismiss concepts that do not meet the purpose and need**
- **Public open house #3 (Spring 2014)**
- **Identify individual projects that have independent utility and logical termini**
- **Finalize Traffic Engineering Report**
- **Complete PEL Study Report**

QUESTIONS/COMMENTS

Submit Your Comments

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