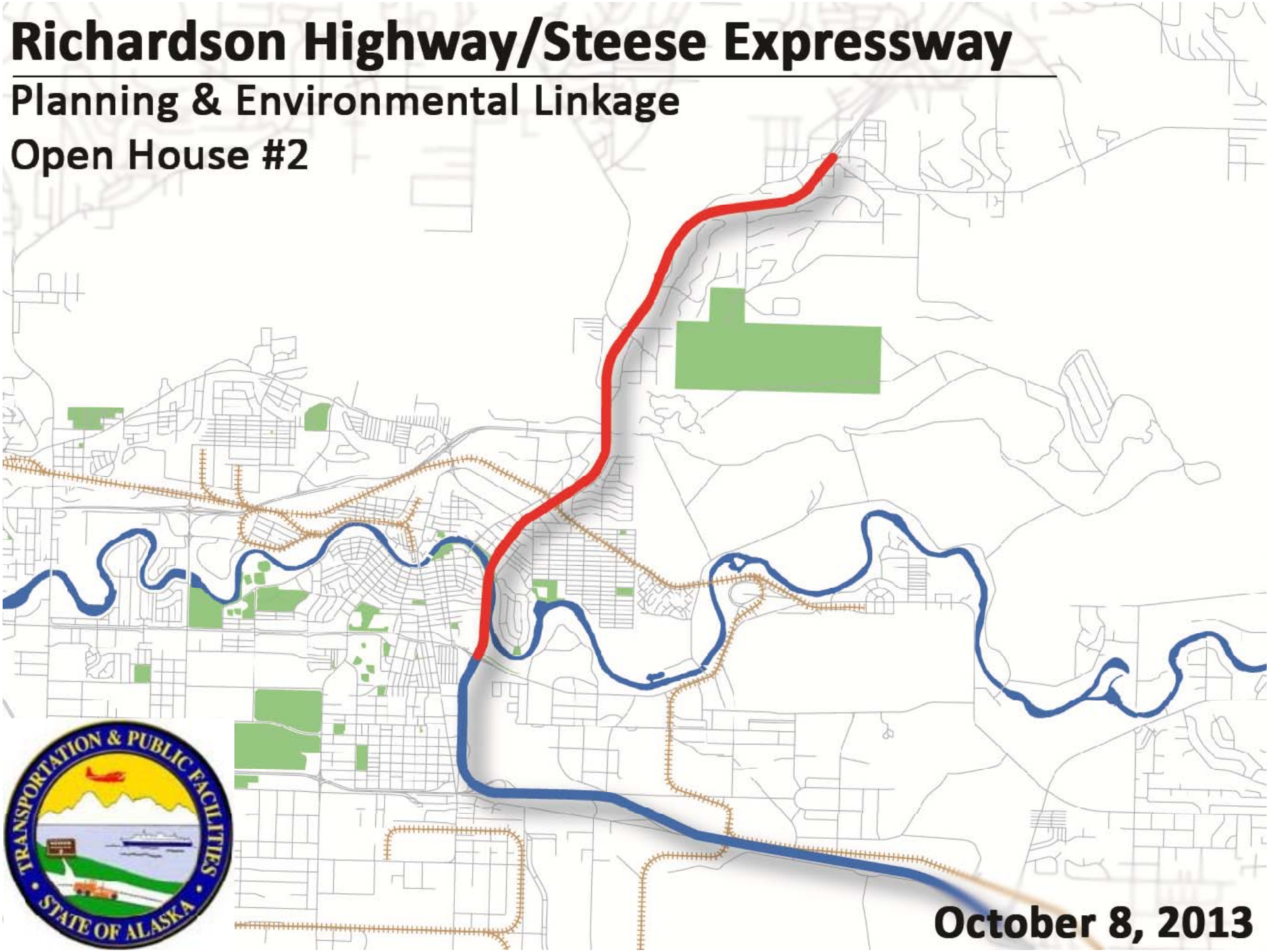
Richardson Highway/Steese Expressway

Planning & Environmental Linkage

Open House #2



October 8, 2013

AGENDA

- Safety minute
- Introductions
- PEL definition, goals, and process
- What has been completed so far?
- Corridor concepts
- What's next?
- Questions/comments

INTRODUCTIONS Project Team

DOT&PF

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

DOWL HKM

- Steve Noble, P.E., Project Manager
- Rachel Steer, Project Coordinator

WHAT IS A PEL STUDY?

- An approach to transportation decision making that:
  - Considers environmental issues early in the planning process;
  - Carries those considerations through project development, design, and construction; and
  - Tries to identify “red flags.”
- A seamless decision-making process that:
  - Minimizes duplication of effort;
  - Promotes environmental stewardship; and
  - Reduces delays in project implementation.

PROCESS

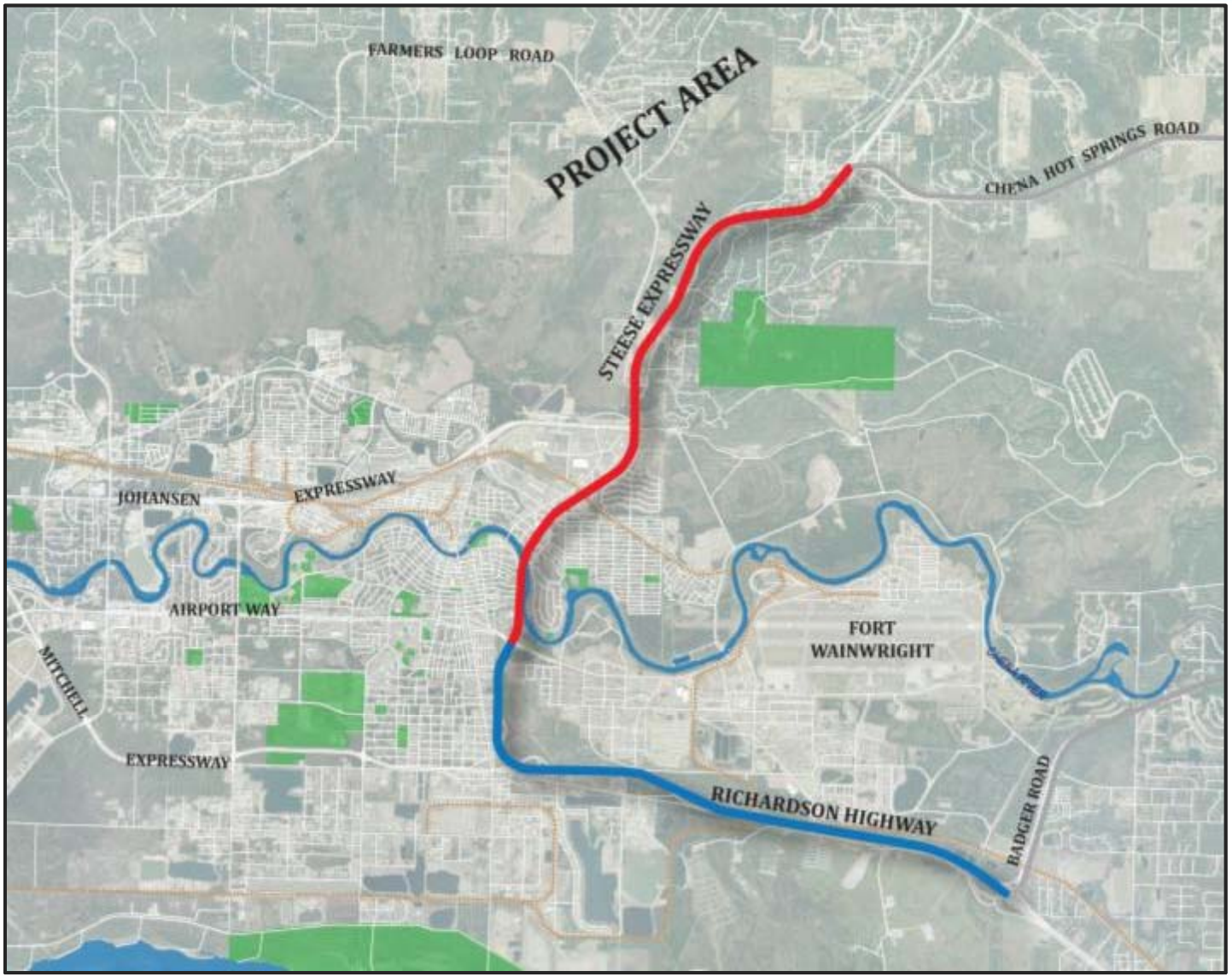
We are here

- Identify transportation deficiencies.
- Develop project concepts that consider:

-Feasibility	-Land use
-Logical termini	-Freight movement
-Cost	-ROW impacts
-Air quality	-Environmental impacts
-Multi-modal traffic	-and more…

- Identify direct, indirect, and cumulative impacts.
- Use this information and analysis in future project development.

PROJECT CORRIDOR



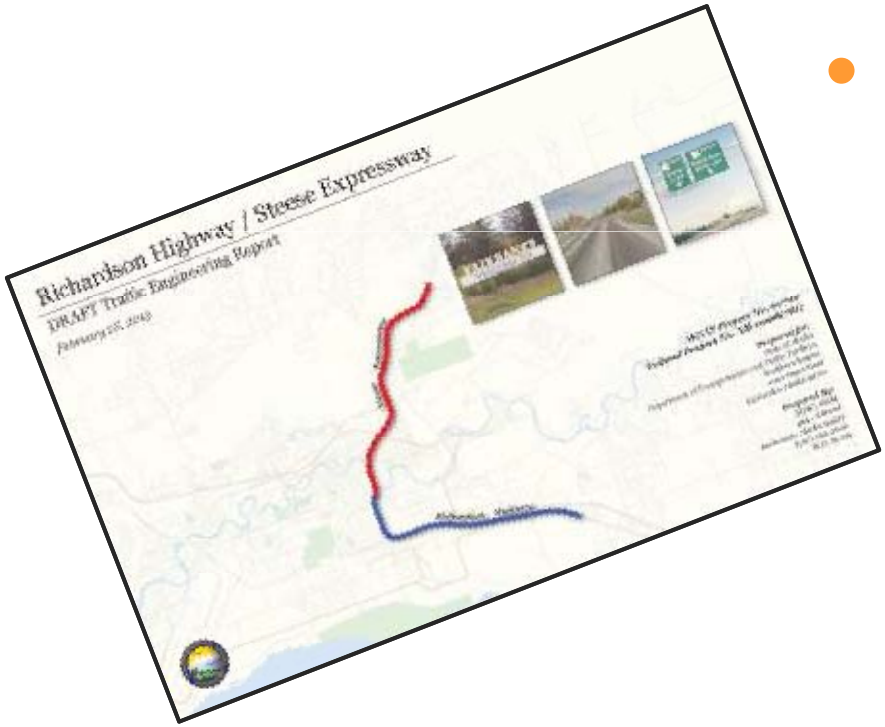
CORRIDOR CHARACTERISTICS

- High-volume principal arterials
- Vital links connecting North Pole and Fairbanks to the National Highway System
- Traverses some of the fastest growing areas in the FNSB

TRAFFIC ANALYSIS

- Built on previous studies
- Created localized model
- Calibrated the model to current conditions (land use, traffic network changes, etc.)
- Non-motorized traffic (compatibility with Non-motorized Transportation Plan)

TRAFFIC ENGINEERING REPORT



- Draft version released February 2013
- Included:
  - Traffic volume estimates for:
    - 2015
    - 2030
    - 2040
  - Intersection and segment capacity analysis
  - Deficiency identification
  - Mitigation alternatives

HOW TO DECIDE?

- Numerous options are conceivable
- Draft Purpose and Need
- Corridor Concepts
  - High mobility, low access
  - Moderate mobility, moderate access
  - Low mobility, high access

Mobility — Emphasis on reducing travel time for through traffic.

Accessibility — Emphasis on providing direct connection to adjacent properties

DRAFT PURPOSE AND NEED

Purpose

- Identify future traffic conditions
- Develop concepts that address:
  - Safety
  - Congestion/delay
  - Access
  - Mobility
  - Minimization of impacts
- Recommend specific projects

DRAFT PURPOSE AND NEED

Need

- This is a major route serving a mix of through and local traffic
- This is a designated truck route
- Land development is driving traffic growth
- The corridor serves several special traffic generators
- There is a lack of continuity for bicycle and pedestrian facilities

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

CONCEPT 1—ADVANTAGES/DISADVANTAGES

Advantages

- Highest capacity/lowest travel time
- Has capacity for additional growth
- Removes commuter traffic from adjacent roadways
- Highest predicted safety

Disadvantages

- Highest initial cost
- More right-of-way acquisition than Concepts 2 and 3
- Less direct bicycle and pedestrian connectivity
- Fewer locations of residential/commercial access

CONCEPT 2—MODERATE MOBILITY/MODERATE ACCESS

- Mix of at-grade and grade-separated intersections (interchanges)
- Attempts to balance corridor mobility and access

CONCEPT 2—ADVANTAGES/DISADVANTAGES

Advantages

- Moderate cost and right-of-way acquisition.
- Improved bicycle and pedestrian access
- Minimal change to residential/commercial access

Disadvantages

- Continued delay at at-grade intersections
- At-grade intersections have more crashes than interchanges

CONCEPT 3—LOW MOBILITY/HIGH ACCESS

- No new interchanges
- Maintain existing access
- Maximize existing at-grade intersections and develop adjacent road network

CONCEPT 3—ADVANTAGES/DISADVANTAGES

Advantages

- Moderate cost and right-of-way acquisition
- Bicycle and pedestrian connectivity accommodated in corridor

Disadvantages

- Highest travel time
- Greatest delay
- Minimal overall safety improvements
- Limited long-term capacity options

NEXT STEPS

- Refine concepts and purpose and need
- Additional environmental analysis
- Agency review
- Final concepts (December 2013)
- Public open house #3 (December 2013)

QUESTIONS/COMMENTS

Submit Your Comments

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WHAT IS LOS?

LEVEL OF SERVICE COLOR KEY

- **LOS A -** *Free Flow*
- **LOS B -** *Reasonably Free Flow*
- **LOS C -** *Stable Flow*
- **LOS D -** *Approaching Unstable Flow*
- **LOS E -** *Unstable Flow*
- **LOS F -** *Breakdown Flow*