THIRD INFANTRY DIVISION HIGHWAY CORRIDOR STUDY

Expert Working Group
Fourth Meeting
April 28, 2011
Atlanta, Georgia

Meeting agenda

- Introductions
- Review of Previous Meeting
- Cost Estimates for Corridors
- Project Development Steps
- Upcoming Public Involvement
- Next Steps
- Closeout/next meeting

What the study is….

The 3rd Infantry Division Highway Corridor Study will be conducted in two phases:

- Phase I (underway now) – Conceptual Feasibility Report: identify potential alignments that connect designated urban areas, develop cost estimates and recommend implementation steps
- Phase II (optional) – Sub-Studies and Beyond: explore potential alternative alignments for potential use in a long-range planning study and subsequent NEPA studies

The Conceptual Feasibility Report developed during Phase I will be used to inform Congress of the steps that would be necessary to move the project forward and will provide a planning-level estimate of what it would cost to construct. Additional planning studies will be conducted in Phase II as directed by FHWA.

What this study is not…..

- States and MPOs not required to:
  - implement any alternative
  - conduct further analyses
- The study will not result in a recommendation for a particular design or alignment unless FHWA specifically asks for it, as directed by Congress.
- The study will not necessarily lead to construction of any specific highway improvement

Recap of third meeting

- 4-5 corridors developed from Savannah to Knoxville
- Screened against fatal flaws
  - National Parks and Forests
  - Mountainous Terrain
  - Control Points
- Corridors advanced for Costing
  - Alt A West (entire length)
  - Alt B/B Bypass (Savannah to Millen only)
  - No Build (Signing Only)

THIRD INFANTRY DIVISION HIGHWAY CORRIDOR STUDY

Corridors

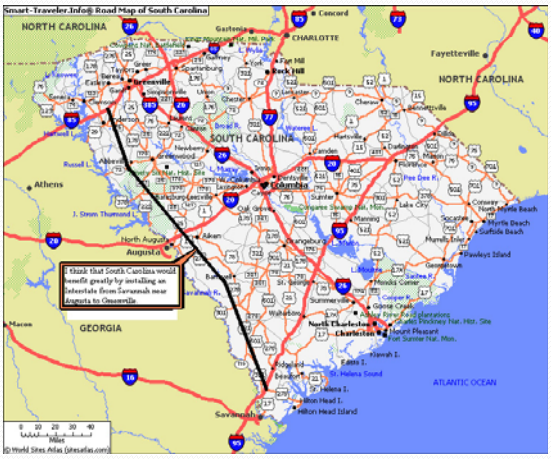
- Corridor A West (Dalton Spur)
- Corridor B Sign Existing Route

Corridors

One new alternative suggested through website

Faces same type of challenges as Alt D

Not recommended for additional consideration



Design Levels

Interstate
- Four lanes
- Interchanges
- Possible tunnels or viaduct

Arterial
- Four lanes
- At-grade intersections

Super-2
- 2 lanes plus passing or climbing lane
- At-grade intersections

Context Sensitive
- Minimal improvements
- Continuous 2 lane route along corridor

Cost Estimating Methodology

- Study team used planning-level cost estimating tools developed by Georgia DOT and Tennessee DOT for sections within respective states
- Each model estimates costs for Preliminary Engineering, Right-of-Way, Utilities, and Construction based on numerous factors
- Consistent with 2007 FHWA *Cost Estimating Guidelines*

Costs: Preliminary Engineering

- Includes costs for environmental/NEPA work, public involvement, and engineering design efforts
- TDOT Tool: 10% Construction Cost
- GDOT Tool: 10% Total Project Cost

Costs: Right-of-Way & Utilities

- Includes costs for acquiring new right-of-way and relocating utilities
- TDOT Tool: Base estimates adjusted for land use type (rural, residential, industrial, commercial, etc)
  - Residential ROW ≈ $93,000/mile project length
- GDOT Tool: Base estimates adjusted for land use type, project type (widening vs new alignment), and county
  - Residential ROW ≈ $150,000/acre

Costs: Construction

- Includes costs for mainline, structures, interchanges, intersections, mitigations, and more
- TDOT Tool: Base estimates adjusted for terrain (flat, rolling, mountainous) and project type (widening vs new alignment and number of lanes) with per item unit costs for interchanges, intersections, etc
  - 1 mile new 4-lane interstate ≈ $10.9 million/mile
- GDOT Tool: Base estimates adjusted for area type, project type (widening vs new alignment), and facility type (interstate, 2-lane highway, arterial, bridge) with per item unit costs for interchanges
  - 1 mile new 4-lane interstate ≈ $9.5 million/mile

Costs: Other

- Construction Engineering and Inspection: estimated 10% of Construction Cost
- Contingencies (10-30% total Project Cost) applied to account for unknown costs
- Costs rounded to nearest million to represent level of uncertainty inherent in conceptual study

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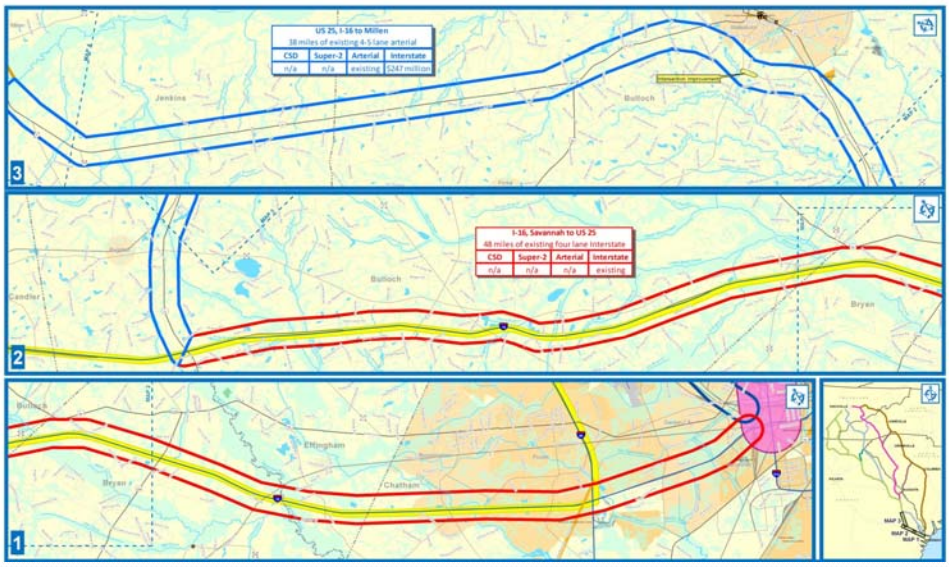
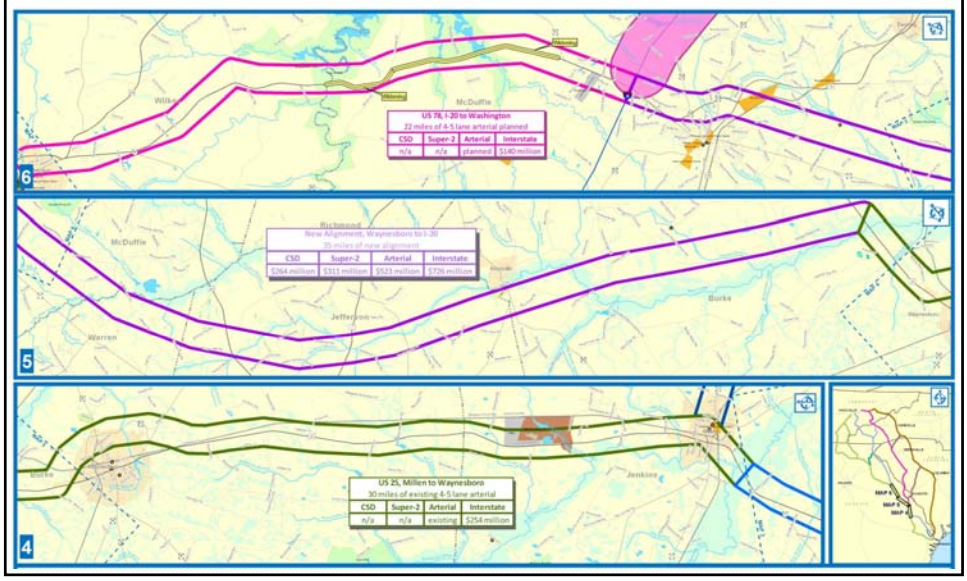
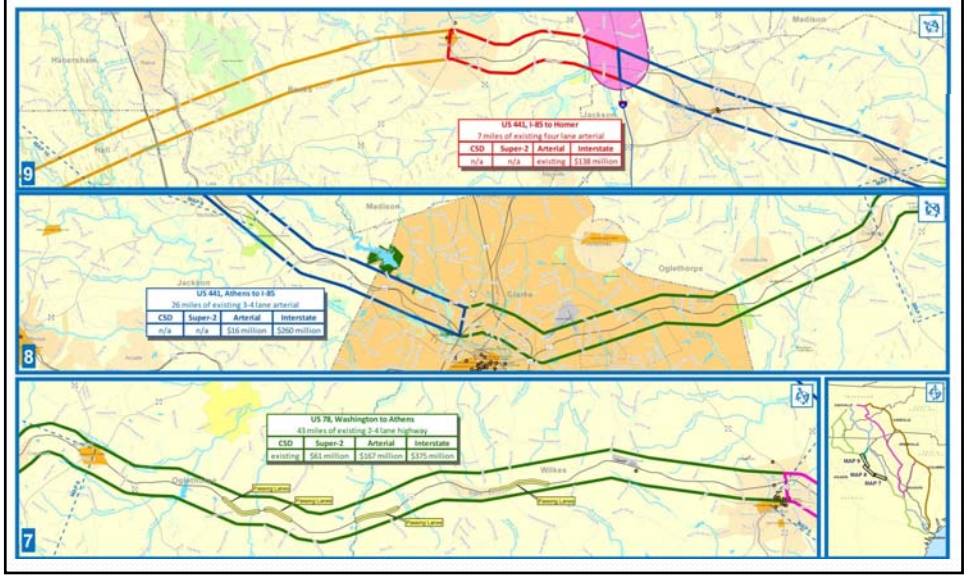
A West: Savannah to Millen



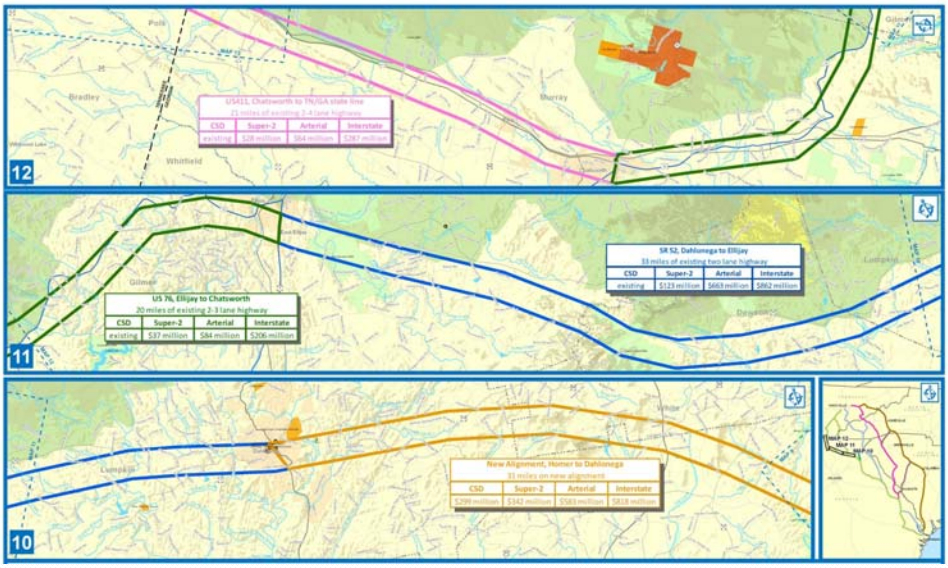
A West: Millen to Washington



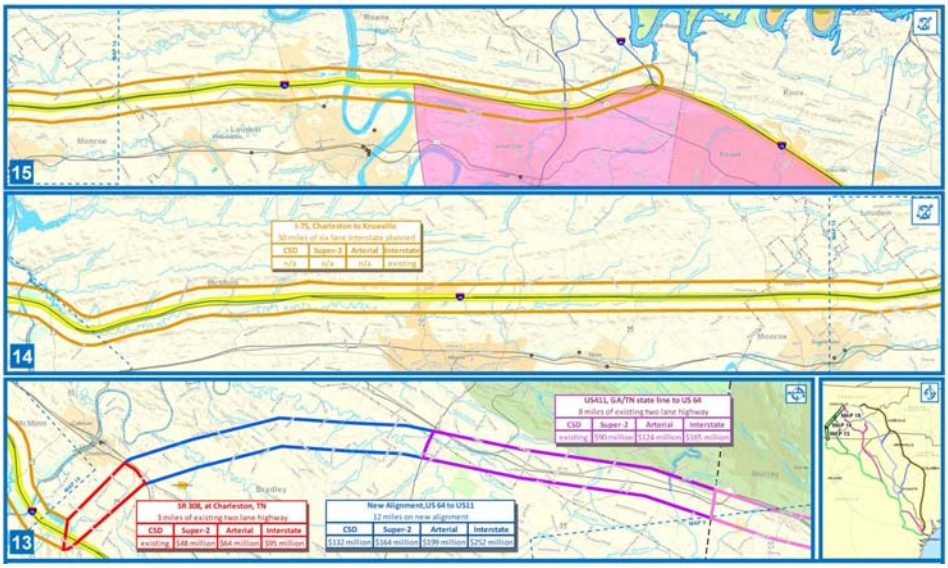
A West: Washington to the Chattahoochee River



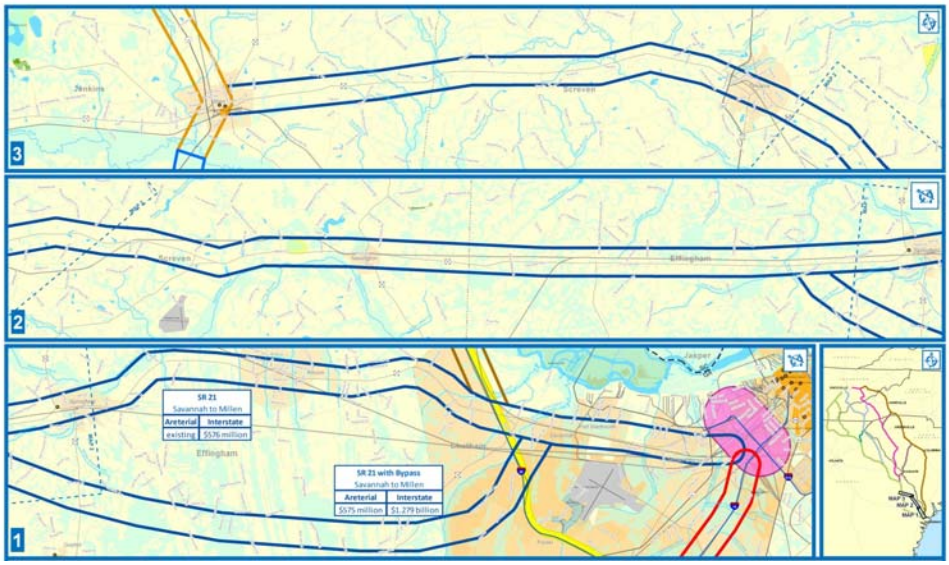
A West: Chattahoochee River to TN



A West: TN/GA Line to Knoxville

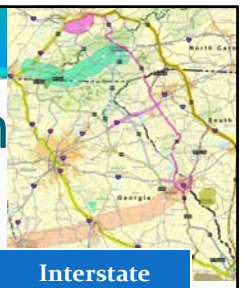


B/B Bypass: Savannah to Millen



Corridor Cost Comparison

Between Control Points



Section	CSD	Super-2	Arterial	Interstate
A West Savannah to I-20	$263	$311	$523	$1,226
B/B Bypass Savannah to Millen	---	---	$575 (Bypass)	$576 (B) $1,279 (Bypass)
A West I-20 to I-85	---	$61	$183	$774
A West I-85 to Knoxville	$431	$831	$1,782	$2,823

Costs shown in $ Millions

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Corridor Cost Comparison

Entire Length

Section	CSD	Super-2	Arterial	Interstate
A West Savannah to Knoxville	$700 Million	$1.2 Billion	$2.5 Billion	$4.8 Billion
A West Savannah to Dalton	$600 Million	$900 Million	$2.0 Billion	$4.2 Billion
B/A West Savannah to Knoxville	Same as A	Same as A	$2.5 Billion (B) $3.1 Billion (BP)	$5.2 Billion (B) $6.1 Billion (BP)
No Build Signing Only	---	---	---	< $0.5 Million

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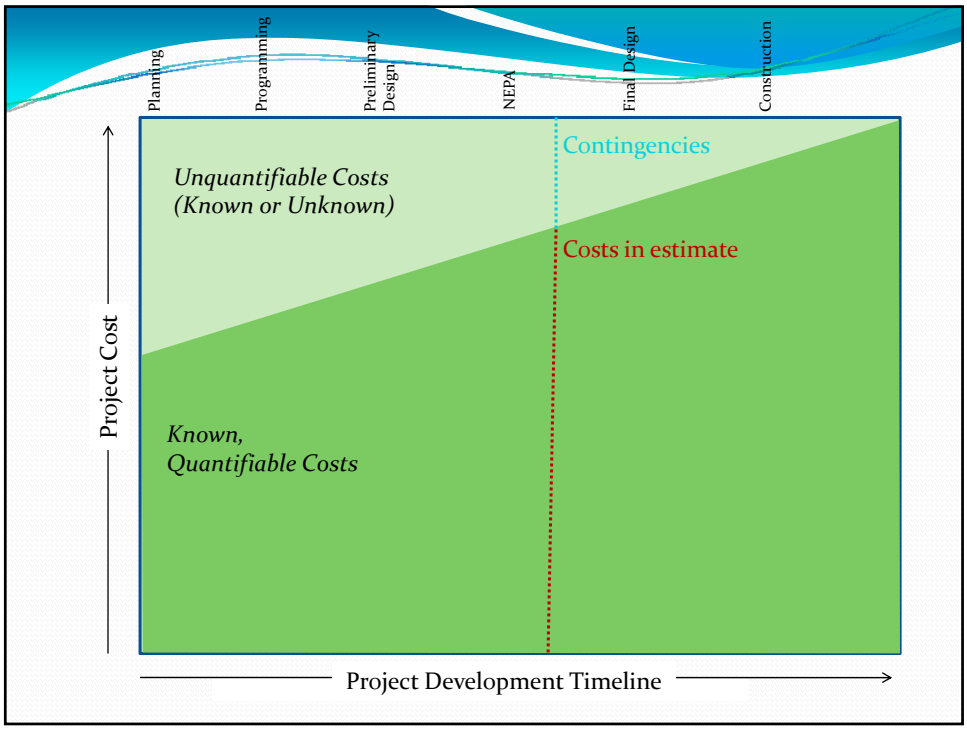
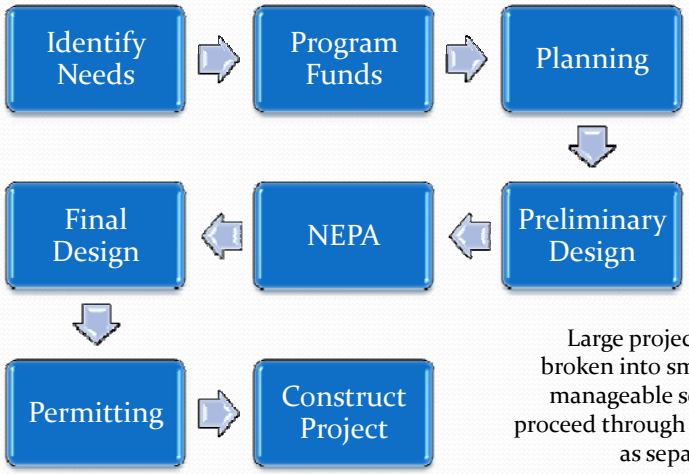


Cost Uncertainties

- Conceptual level of development creates large unknown risks in cost estimates
- Types of risks/uncertainties affecting costs:
  - Unclear project definition
  - Inflation
  - Delays in implementation
  - Indirect risks
- Costs could be significantly higher

Project Development Steps



Large projects are often broken into smaller, more manageable sections and proceed through the process as separate pieces.

Project Development Steps

1. Identify Needs

- State DOT or MPO identifies a transportation need
  - Traffic trends
  - Roadway geometry
  - Safety concerns
  - Condition
- Project may enter Long Range Plan

2. Program Funds

- DOT decides if project is worth pursuing
- Does project warrant funding?
  - How much?
  - When?
- Iterative process

Project Development Steps

3. Planning

- Purpose and Need
- Develop Alternatives
- Overview of potential issues
- Project enters STIP/TIP

4. Prelim. Design

- Feasibility studies
- Refine and evaluate Alternatives
- Conceptual design work
- Environmental analysis

Project Development Steps

5. NEPA

- Analyze and Document Project Impacts
- Results in NEPA Document:
  - CE
  - EA/FONSI
  - EIS/ROD
- Federal approval of location & design

6. Final Design

- Plans, specifications, & estimates necessary for construction

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Project Development Steps

7. Permitting

- Permits vary by project
  - US Army Corps
  - US Coast Guard
  - Water Quality/Erosion
  - TVA Permits
  - State Permits

8. Construct Project

- Right-of-Way acquisition
- Utility relocations
- Maintenance of Traffic
- Earth work
- Open to Traffic
- Continuing maintenance & operations

THIRD INFANTRY DIVISION HIGHWAY CORRIDOR STUDY

Upcoming Public Involvement

- Three public webinars Q&A sessions on May 17-18th
  - Tuesday, 12:00-1:00 pm
  - Tuesday, 6:30-7:30 pm
  - Wednesday, 10:00-11:00 am
- Distribution of Fact Sheet and Flyer to contacts
- Continue to accept comments through public website

THIRD INFANTRY DIVISION HIGHWAY CORRIDOR STUDY

Flyer:

The Federal Highway Administration

Presents an

Online Information Session

for the 3rd Infantry Division Highway Corridor Study

from 12:00-1:00 pm
h from 6:30-7:30 pm
th from 10:00-11:00 am

rn about the 3rd Infantry Division Highway
ame information through a brief overview of

ntry Division Highway?

ly?

or highway cost?

estions so project team members can provide
of each meeting and frequently asked
w.fhwa.dot.gov/planning/section_1927/. Visit
study and the upcoming Q&A sessions.

ww.joinwebinar.com a few minutes before a
ID for the event you are interested in:

nch: 739903006

ning: 868736998

orning: 128482726

speakers or choose to call in through your
s soon as you log into the online session.

Fact Sheet:

3rd Infantry Division Highway Corridor Study

U.S. Department of Transportation Federal Highway Administration

Spring 2011

PROJECT FACT SHEET

What is the 3rd Infantry Division Highway Corridor Study?

The 3rd Infantry Division Highway is a congressionally mandated study of a proposed highway that would connect the cities of Savannah, Augusta and Knoxville (refer to the map on page 2). The Federal Highway Administration (FHWA) is currently studying potential routes, steps and costs that would be necessary to designate and construct a highway between these cities.

Will FHWA be recommending a preferred alignment (i.e., location and roadway type)?

No. FHWA will not be recommending a preferred alignment. The purpose of this study is to present a range of potential options for the 3rd Infantry Division Highway. No particular design, including Interstate design, will be recommended. In addition, FHWA will not be recommending whether or not to build the highway.

Is there any funding to support planning, environmental review or construction?

No. There is currently no funding identified to support long-range planning, environmental review or construction. These activities must be initiated at the state or regional level.

Why is the 3rd Infantry Division Highway being studied?

What does the study involve?

The 3rd Infantry Division Highway Corridor Study involves:

- Collecting and analyzing existing transportation, environmental and socioeconomic information
- Developing potential study alignments
- Determining conceptual cost estimates
- Documenting the steps involved in constructing highways
- Conducting stakeholder involvement
- Recommending additional studies, if needed
- Submitting a report to Congress

How are the study alignments being developed and analyzed?

The study team is developing potential study alignments to connect the cities of Savannah, Augusta and Knoxville. The study team is considering the transportation network, existing and planned improvements, environmental and cultural resources, military facilities, economic generators, stakeholder input and more during the development of alignments.

Sensitive environmental resources will be avoided to the extent possible, such as protected state and federal lands (e.g., wilderness areas), areas with geologic issues (e.g., challenging terrain, high rockslide potential) and protected wildlife habitats. Other considerations include land use, socioeconomic conditions and environmental justice issues.

Next Steps

- Provide your comments
- ICF team will provide meeting summary
- Next tasks
  - Public Involvement
  - Assemble final report to FHWA
  - Final EWG call/webinar in late May/early June

Closeout/next meeting

- Recap of meeting
- Questions/comments
- Future meetings
- Contact information:
  - John Mettille, WSA
    (859) 254-5759
    JMettille@wilbursmith.com