Meeting Agenda

5:00 p.m. - Doors open and Open House
5:30 p.m. - Project Presentation
6:00 p.m. - Public Comment Period
6:45 p.m. - Open House
7:00 p.m. - Closing
CONCEPT DEVELOPMENT

• Present and discuss the recommendations out of the Concept Development Process.
• Solicit public feedback on the concepts presented.
• Discuss public input from March Public Meeting # 1.

NATIONAL ENVIRONMENTAL POLICY ACT: TWO PROJECTS

• Solicit public comment on two upcoming NEPA Projects
  o Floyd Hill
  o WB PPSL

• Receive input and advice around the community issues and concerns for design solutions for these two projects.
EASTBOUND DATA

WINTER 2016-2017 VOLUMES (HIGHER THAN PREVIOUS YEAR)

1.12 million vehicles
2015-2016 winter volumes: 1.03 million vehicles

CORRIDOR SAFETY IMPROVED

Corridor incidents were down 22 percent in the winter season.
Incident response times were 4 minutes quicker than last year.

TRAVEL TIMES IMPROVED

In a worst-day comparison between 2015 and 2016, eastbound travel times between Georgetown and US 40 improved by 21 minutes with Mountain Express Lanes.

Eastbound PPSL: 89,800 vehicles
2015-2016: 42,600 vehicles
EASTBOUND TRAVEL SPEEDS

Travel Times Reduced 26% to 52%

These figures depict average speed by location and by time-of-day. Areas of dark green reflect normal highway speeds, while areas of dark red show times and locations of very slow congested speeds.
EASTBOUND IMPACT

POSITIVE EFFECT OF RECENT CONSTRUCTION

- Travel times for all lanes has improved 22 to 52 percent
- Time to clear corridor back-ups has substantially improved
- Express Lane has been well received by public and the media
- Time to clear incidents has improved
- Frontage Road congestion has been alleviated

Data is from the I-70 Mountain Express Lane January 1 through April 10, 2016 and May 30 through September 5, 2016 Summary of Findings Report
AWARDS & HONORS
CONCEPT DEVELOPMENT PROCESS AND CORE VALUES

CONCEPT SENSITIVE SOLUTIONS PROCESS

1. Establish context statement
2. Define core values & issues
3. Develop concepts
4. Evaluate, select, refine options
5. Determine which option(s) to advance to NEPA
6. Finalize documents and evaluate process

CORE VALUES

- Safety
- Mobility & Accessibility
- Implementability
- Community
- Environment
- Sustainability
- Engineering Criteria & Aesthetic Guidelines
- Historic Context
- Decision Making
WHO’S DOING THE WORK?

CONTEXT SENSITIVE SOLUTIONS

Project Leadership Team
- Drives Concept Development Process and ensures guidance is followed
- Approves decision making process and enables teams to follow process
- Determines what materials are relevant for decision making
- Assists to resolve issues

Technical Team
- Defines context of project segments and identifies critical issues
- Evaluates concepts based on critical issues, core values, and evaluation criteria
- Defines level of feasibility

Engineering Consultants & Contractors
- Participates in meetings to understand Technical Team perspectives
- Develops concepts and identifies fatal flaws, constructibility and design
- Ensures feasibility of Technical Team guidance

Project Management Team*
- Personnel the Project Leadership and Technical Teams uses to organize, fund and facilitate the process

* The Project Management Team is comprised of FHWA; CDOT; HDR, Inc.; THK Associates, Inc.; and CDR Consultants
TEAM PARTNERSHIPS

PROJECT LEADERSHIP TEAM

CDOT
Central City
City of Idaho Springs
Clear Creek County
Eagle County
Federal Highway Administration
Georgetown
I-70 Coalition
Silver Plume
Summit County
Town of Empire
U.S. Forest Service

TECHNICAL TEAM *

CDOT
Central City
City of Black Hawk
City of Idaho Springs
Clear Creek Bikeway Users Group
Clear Creek County
Clear Creek County Archivist
Clear Creek County Emergency Services
Clear Creek County Sheriff
Clear Creek Economic Development Corp.
Clear Creek Fire Authority
Clear Creek Greenway Authority
Clear Creek Open Space
Clear Creek Rafting
Clear Creek School District
Clear Creek Tourism Bureau
Clear Creek Watershed Foundation
Colorado Motor Carriers Association
Colorado Parks and Wildlife
Denver Regional Council of Governments
Downieville, Lawson, and Dumont Neighborhood
Empire Junction
Federal Highway Administration
Floyd Hill Property Owners Association
Georgetown Loop Railroad
Gilpin County
Jefferson County
Loveland Ski Resort
Mile Hi Rafting
Summit County
Trout Unlimited
U.S. Forest Service
Vail Ski Resorts
Winter Park Ski Resort

* Technical Team is made up of agencies that have been invited to participate
## COMMENTS HEARD AT MARCH 14TH PUBLIC MEETING

### COMMENTS ON NEED
- Improvements are needed
- Make sure safety issues are addressed
- Existing interchanges have problems
- Emergency access needs to be considered
- At the bottom of Floyd Hill, consider improving conditions for the Greenway, existing businesses and rafting industry
- Account for traffic from the Gaming Areas in addition to traffic on I-70 and traffic generated from local developments and subdivisions

### COMMENTS ON CONCERNS
- Neighborhood concerns must be incorporated
- Noise, air quality, historic building and economic development are important in Idaho Springs

(Please see handout for response to all comments received)
CRITICAL ISSUES: SEGMENT 1

LEGEN:
- ROD: Right of Way
- Surface Route
- Conservation
- Mining Area
- Environmental

Issues Type:
- Safety
- Accessibility
- Community
- Environment
- Noise Control

Improvements in ROD:
- Six-lane front Floyd Hill to Veterans Memorial Tunnels
- Bike trail from Maple Springs to US 6
- Frontage road from Idaho Springs to US 6
- Interchange improvements at base of Floyd Hill

Improvements in MOU:
- Widening 3 lanes westbound
- Improve design speed
- Replace bridge at bottom of Floyd Hill
- Reconstruct interchanges at US 6
- Phase 2 of Greenway and Frontage Road

Homeowners Associations:
- Beaver Brook
- Saddleback
- Grand Preserve
- Floyd Hill
CRITICAL ISSUES: SEGMENT 2

Clear Creek County and Idaho Springs Visioning Ideas:
- Consider a local bridge over I-70 to accommodate pedestrian, bicycle, and recreational traffic west of Exit 241 bridge
- Frontage road to the foothills south of I-70 must be cleared and cleaned up
- Consider a parking structure/transit center at Exit 240. Should retain development space
- Discourage through truck traffic on Colorado Boulevard
- Replace sound wall by football field
- Consider signage at Exit 239 for rail traffic
- Consider a stop sign at end of westbound 239 exit ramp
- Expand rail stage area at base of Exit 239

January 2014 MOU:
- Westbound PPSL
CRITICAL ISSUES: SEGMENT 3

Clear Creek County and Idaho Springs Visioning Ideas:
- Investigate moving the Port of Entry
- Construction schedules developed with stakeholder input
- Improve view-quality, reduce noise, signage, lights
- Connect Fall River Road to Frontage Road with bridge
- Greenway construction
- Study light, shadow, and icing at Fall River Road before any curve improvements
- Retiate eastbound/westbound medians
- Keep signage to a minimum
- Incorporate Downieville-Lawson-Damant Neighborhood Plans
- Cover I-70 in Downieville-Lawson-Damant area
- Raise I-70 or otherwise buffer Lawson and Silver Lakes area
- Buffal Rocky Mountain Village to provide noise and visual mitigation
- Relocate government uses at Empire Junction
- Include iconic pedestrian/bicycle bridge at Empire Junction
- Minimize county development and recreation uses at Empire Junction

January 2014 MOU:
- Westbound PSSL
- Not exceed scope of westbound PSSL
EVALUATION MATRICES

- Used to determine **alignment** and **interchange** concepts for Segment 1
- Used to determine **cross section concepts** for Segments 2 and 3
- Will be **brought to NEPA** for more detailed review and discussion
- Evaluation Criteria **developed by PLT and TT**
- Concepts **compared to each other** and then used to **develop recommendations**.
### Summary of findings

Recommended to be advanced into the NEPA process. This concept has several benefits (provides additional access points, improves mobility and reliability, does not affect known historic resources and is fully responsive to CCC Master Plan) and more negative features (unresolved safety issues of steep grades, challenging geometry, extensive construction effects to the traveling public, reduced recreation access, most impacts to wildlife and Clear Creek, high impact to landslide, multiple structures in the canyon) but none that mean the concept should not be studied further in the NEPA process.

Recommended to be advanced into the NEPA process. This concept has many benefits (opens the canyon for AGS and Greenway alignments, enhances recreational potential, least impact to wildlife, no effects to known historic properties, consistent with Clear Creek County desires for the US 6 interchange, responsive to Clear Creek County 2017 Master Plan, provides direct access to the interstate) and some features that are not clearly benefits (impact to commercial vehicles, lessor impact to the landslide, reduced number of structures in the canyon) but none that mean the concept should not be further studied in the NEPA process.

Recommended to be advanced into the NEPA process. This concept has fewer benefits (it eliminates a confusing interchange) and more negative features (it requires out of direction travel, reduces travel options, results in extensive impacts to the traveling public during construction, affects an archaeological site, reduces tourism potential) but none that mean the concept should not be further studied in the NEPA process.

Recommended to be advanced into the NEPA process. This concept has some benefits (no impact to Clear Creek, no impact to the landslide, no impact to known archaeological or historic resources, opens the US 6 canyon for recreational potential, minimal impact to the traveling public during construction) but also some negative features (inconsistent with 2017 Clear Creek County master plan, out of direction travel up a steep hill, limits emergency access points, residents are not supportive of economic development potential on top of Floyd Hill) but none that mean the concept should not be further studied in the NEPA process.

### EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>ID</th>
<th>Criteria</th>
<th>Segment 1: I-70 and US 6 Interchange Options Ranking</th>
<th>RECOMMENDATIONS</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Reconfigure - Full Movement at Current Location</td>
<td>Recommended to be advanced into the NEPA process. This concept has several benefits (provides additional access points, improves mobility and reliability, does not affect known historic resources and is fully responsive to CCC Master Plan) and more negative features (unresolved safety issues of steep grades, challenging geometry, extensive construction effects to the traveling public, reduced recreation access, most impacts to wildlife and Clear Creek, high impact to landslide, multiple structures in the canyon) but none that mean the concept should not be studied further in the NEPA process.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shift - Interchange slightly to the East (full closure option)</td>
<td>Recommended to be advanced into the NEPA process. This concept has many benefits (opens the canyon for AGS and Greenway alignments, enhances recreational potential, least impact to wildlife, no effects to known historic properties, consistent with Clear Creek County desires for the US 6 interchange, responsive to Clear Creek County 2017 Master Plan, provides direct access to the interstate) and some features that are not clearly benefits (impact to commercial vehicles, lessor impact to the landslide, reduced number of structures in the canyon) but none that mean the concept should not be further studied in the NEPA process.</td>
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<td></td>
<td></td>
<td>Close US 6 Interchange and move to the West (Hidden Valley)</td>
<td>Recommended to be advanced into the NEPA process. This concept has fewer benefits (it eliminates a confusing interchange) and more negative features (it requires out of direction travel, reduces travel options, results in extensive impacts to the traveling public during construction, affects an archaeological site, reduces tourism potential) but none that mean the concept should not be further studied in the NEPA process.</td>
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<tr>
<td></td>
<td></td>
<td>Close US 6 Interchange and move to the East (Top of Floyd Hill)</td>
<td>Recommended to be advanced into the NEPA process. This concept has some benefits (no impact to Clear Creek, no impact to the landslide, no impact to known archaeological or historic resources, opens the US 6 canyon for recreational potential, minimal impact to the traveling public during construction) but also some negative features (inconsistent with 2017 Clear Creek County master plan, out of direction travel up a steep hill, limits emergency access points, residents are not supportive of economic development potential on top of Floyd Hill) but none that mean the concept should not be further studied in the NEPA process.</td>
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<table>
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<tr>
<th>1.</th>
<th>Accommodates emergency access and response?</th>
<th>Provides additional access points.</th>
<th>Provides additional access points.</th>
<th>Limits emergency access points.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Addresses safety of the traveling public and the community?</td>
<td>Unresolved safety issues - steep grade and sharp curves. If a roundabout is part of the design, it will need to be designed for commercial vehicles.</td>
<td>Improves safety issues - steep grades possible</td>
<td>Eliminates conflicting and confusing interchange</td>
</tr>
<tr>
<td></td>
<td>Eliminates conflicting and confusing interchange at US6, however traffic will have to move up the steep hill in both directions. If a roundabout it part of the design, it will need to be designed to accommodate commercial vehicles.</td>
<td>Limits emergency access points. A concentration of truck traffic conflicting with residential traffic could hinder operations.</td>
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</tbody>
</table>
CONCEPT DEVELOPMENT TRANSITION TO TWO NEPA PROJECTS

NEPA = National Environmental Policy Act, a federal environmental law that applies to federally funded projects

* Construction funding for projects has not been identified
INFORMATION FROM THE CONCEPT DEVELOPMENT PROCESS TO BE INCORPORATED INTO TWO NEPA PROJECTS

- Issues of concern to the general public, the Project Leadership Team, the Technical Team and the Issue Task Force
- Issues of concern to state and federal resource agencies
- Environmental resources
- Alternatives that should be brought forward into the NEPA process
- Alternatives that should not be advanced into the NEPA process
SEGMENT 1 – FLOYD HILL PROJECT
ALIGNMENT CONCEPTS

SEGMENT 1 (FLOYD HILL)

NORTH ALIGNMENT CONCEPT

Consider an option of realigning I-70 slightly to the north of its current alignment, including a new bridge from Floyd Hill.
ALIGNMENT CONCEPTS
SEGMENT 1 (FLOYD HILL)
OFF ALIGNMENT CONCEPT

Consider an option of realigning I-70 to the north off of its current alignment, including new bridges from Floyd Hill and a tunnel on the west.
Consider straightening curves generally along the existing I-70 alignment, including new bridges from Floyd Hill and south of the existing alignment.
INTERCHANGE CONCEPTS
SEGMENT 1 (FLOYD HILL)

FULL MOVEMENTS AT CURRENT LOCATION

Consider reconfiguring the US-6 interchange at its current location. Options include consideration of roundabouts and flyover ramp structures, along with associated realignments of I-70.

Option 1

Option 2

Option 3
INTERCHANGE CONCEPTS
SEGMENT 1 (FLOYD HILL)
CLOSE INTERCHANGE AT US 6, MOVE TO WEST (HIDDEN VALLEY)

Consider closing the US-6 interchange access at its current location, and moving US-6 access to the Hidden Valley interchange. Some Hidden Valley interchange improvements would be included.
INTERCHANGE CONCEPTS

SEGMENT 1 (FLOYD HILL)

SHIFT OTHER MOVEMENTS TO THE EAST

Consider moving some US-6 interchange movements up Floyd Hill to the east. Options include consideration of roundabouts and flyover or tunnel ramp structures.

Option 1

Option 2

Option 3
INTERCHANGE CONCEPTS
SEGMENT 1 (FLOYD HILL)

MOVE INTERCHANGE EAST (TOP OF FLOYD HILL)

Consider closing the US-6 interchange access at its current location, and moving US-6 access to the top of Floyd Hill. Options include consideration of roundabouts and ramp flyover or tunnel structures.

Option 1

Option 2
FLOYD HILL NEPA PROJECT

FLOYD HILL SCHEDULE AND PROJECT TEAM

SUMMER/FALL 2017
Begin data collection and alternatives development

WINTER 2017/2018 THROUGH SPRING 2020
NEPA/Design

SPRING/SUMMER 2020
Final Design/Construction

ATKINS PRIME

HDR
T&K associates, inc.
amec foster wheeler
Yeh and Associates, Inc.
Pinyon
SHANNON & WILSON, INC.

SUBS
SEGMENTS 2/3 – Westbound Peak Period Shoulder Lane Project
The Project Leadership Team and Technical Teams agree on the proposed concept for a westbound peak period shoulder lane.

- It provides safety and mobility benefits while minimizing impacts to communities and natural resources.
- It is consistent with the 2011 Record of Decision and mirrors the improvements made in the eastbound direction.
INTERCHANGE CONCEPTS

SEGMENT 3

EMPIRE JUNCTION INTERCHANGE

Consider where peak period shoulder lane (PPSL) will end heading westbound. For PPSL traffic headed to US-40, cutting across the general purpose lanes is an option, with variations on where to end the PPSL lanes for westbound I-70 traffic.

Option 1: PPSL Traffic Weaves Across Other Lanes. PPSL Lane Ends At US 40

Option 2: PPSL Traffic Weaves Across Other Lanes, But PPSL Lane Continues Past US 40 Ramp
INTERCHANGE CONCEPTS
SEGMENT 3

EMPIRE JUNCTION INTERCHANGE

Consider where peak period shoulder lane (PPSL) will end heading westbound. For PPSL traffic headed to/from US-40, a direct connect flyover bridge across I-70 and Clear Creek ending at a T-intersection is an option.

Flyover Bridge with T at US 40 Ramp
INTERCHANGE CONCEPTS
SEGMENT 3
EMPIRE JUNCTION INTERCHANGE

Consider where peak period shoulder lane (PPSL) will end heading westbound. For PPSL traffic headed to US-40, a direct connect flyover bridge across I-70 and Clear Creek ending at a roundabout is an option.

Flyover Bridge with Roundabout
WB PEAK PERIOD SHOULDER LANE (PPSL) NEPA PROJECT

WB PPSL SCHEDULE AND PROJECT TEAM

- **June 2017**: Initiate the National Environmental Policy Act process
- **August 2017 to January 2018**: Develop and Evaluate Project Elements
- **February 2018 to Spring 2018**: Environmental Analysis
- **Spring 2018 to Fall 2018**: Final Design
- **Fall/Winter 2018**: Advertise for Construction

**ROADWAY**
- CDOT
- CO

**NEPA/ENGINEERING SUPPORT**
- HDR

**FACILITATION**
- CDR Associates

**CSS/LANDSCAPE ARCHITECTURE**
- THK

**TRAFFIC**
- apex design
TELL US YOUR IDEAS
THANK YOU FOR JOINING US