

SH 82

GRAND AVENUE BRIDGE

Stakeholders Working Group



August 22, 2012

SH 82

GRAND AVENUE BRIDGE

Project Update

- How we got here
- New Information



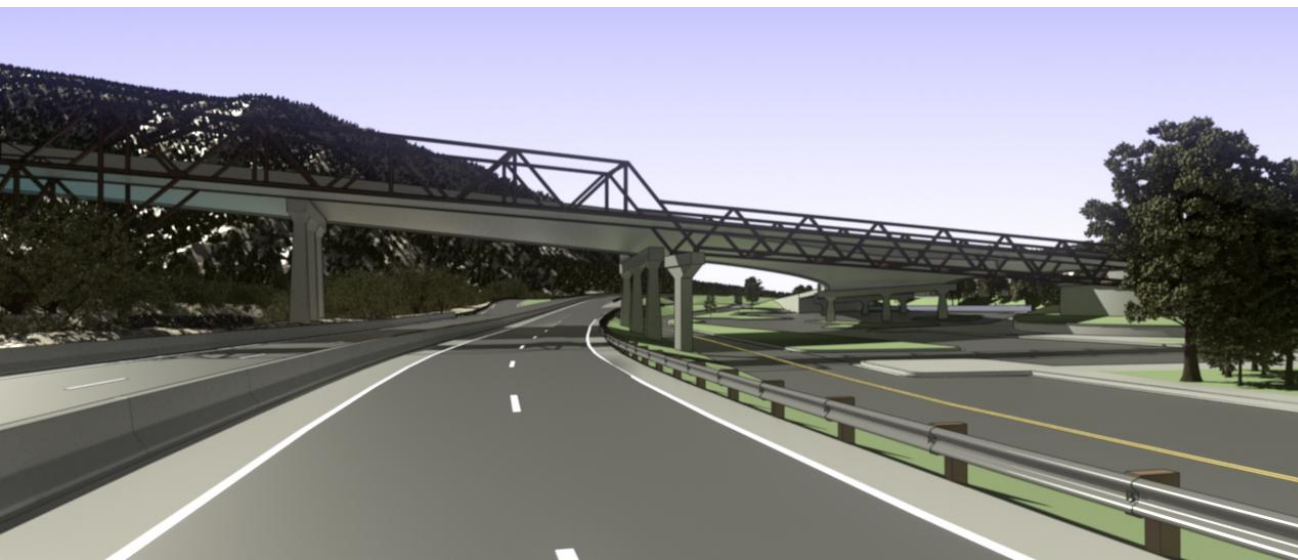
How we got here

- Need to fix bridge / Colorado Bridge Enterprise funding
- Environmental Assessment to determine best way to address this need



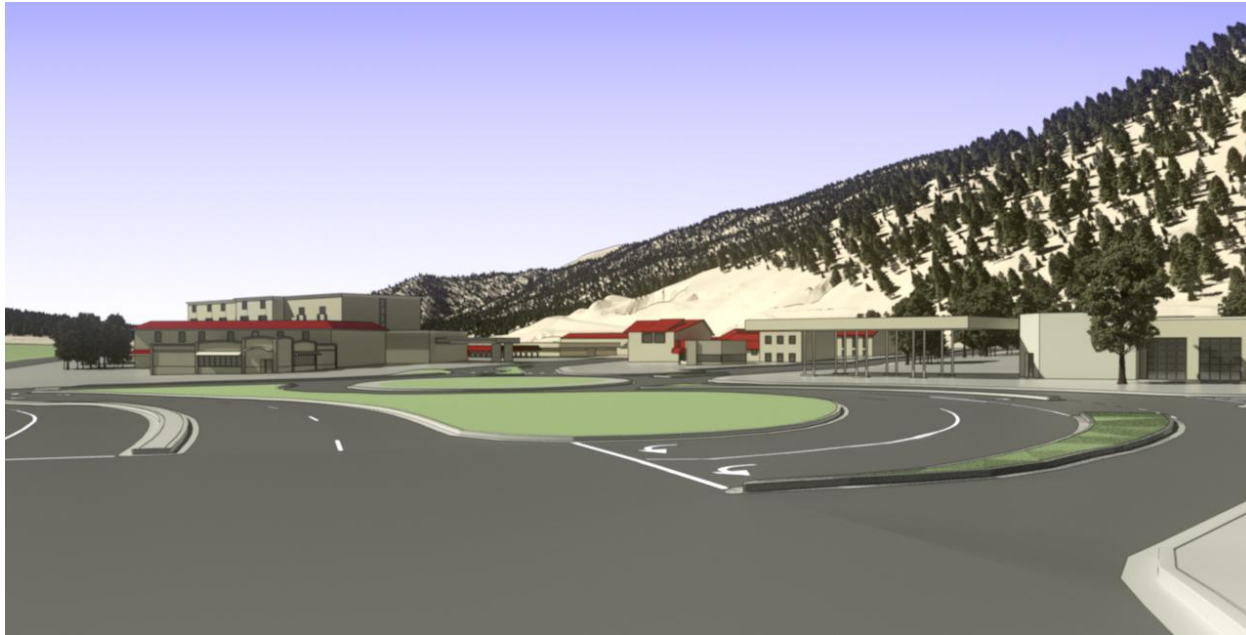
How we got here (cont.)

- Alternatives development and evaluation process to select best alternative
- Public input to understand issues and gain input



How we got here (cont.)

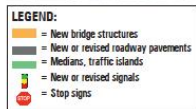
- Independent Peer Review
- Current Alternatives 1 and 3



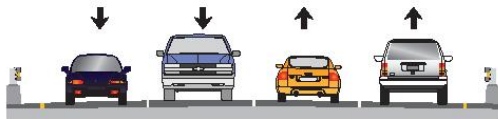
Alternatives

Alternative 1-A

New 4-lane Grand Ave. bridge on/near existing alignment

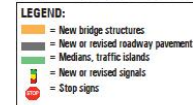


- Keep existing pedestrian bridge, no sidewalk north of railroad on new bridge
- No changes to existing 6th Street or the I-70 interchange area

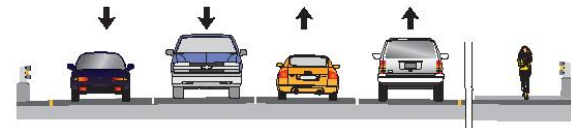


Alternative 1-B

New 4-lane Grand Ave. bridge on/near existing alignment



- Remove existing pedestrian bridge to enhance new bridge aesthetics.
- Peds/bikes may be separated by a barrier or space.
- No change to existing 6th Street or the I-70 interchange area

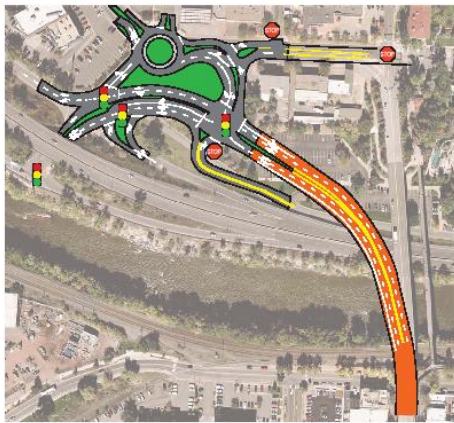


4 traffic lanes on the bridge +
a sidewalk separated with either barrier or space

Alternatives

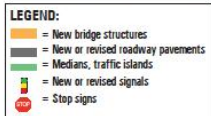
Alternative 3-A (Intersection Option A)

SH 82 separated from 6th Street +
Single-lane roundabout for local traffic at 6th/Laurel



(modified based on input received at June 6 Public Open House)

- River Road connected with right-turn only access to SH 82
- Full acquisition of Shell station and former Dairy Creme
- See separate graphics for pedestrian and bicycle connections



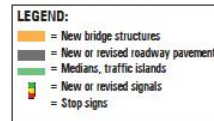
Alternative 3-D (Intersection Option D)

SH 82 separated from 6th Street +
"T" intersection to 6th/Pine for local access



(new since June 6 Public Open House)

- Partial acquisition of Shell station (south side)
- Traffic signal at 6th/Laurel intersection
- Traffic signal at SH 82 and Pine Street
- River Road connected with right-turn only access to SH 82
- See separate graphics for pedestrian and bicycle connections



Alternatives

Alternative 3-E (Intersection Option E)

SH 82 separated from 6th Street +
Traffic signal for local traffic at 6th/Laurel Street



LEGEND:
= New bridge structures
= New or revised roadway pavements
= Medians, traffic islands
= New or revised signals
= Stop signs

*(new based on feedback from June 6
Open House and coordination with busi-
nesses)*

- **River Road connected with right-turn only access to SH 82**
- **Full acquisition of Shell station and former Dairy Creme**
- **See separate graphics for pedestrian and bicycle connections**

SH 82

GRAND AVENUE BRIDGE

Viewsheds – View to Downtown

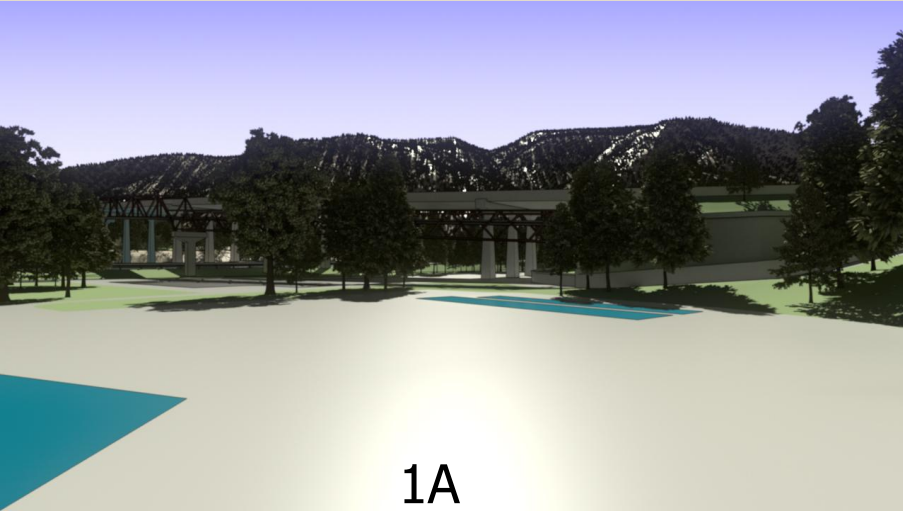


SH 82

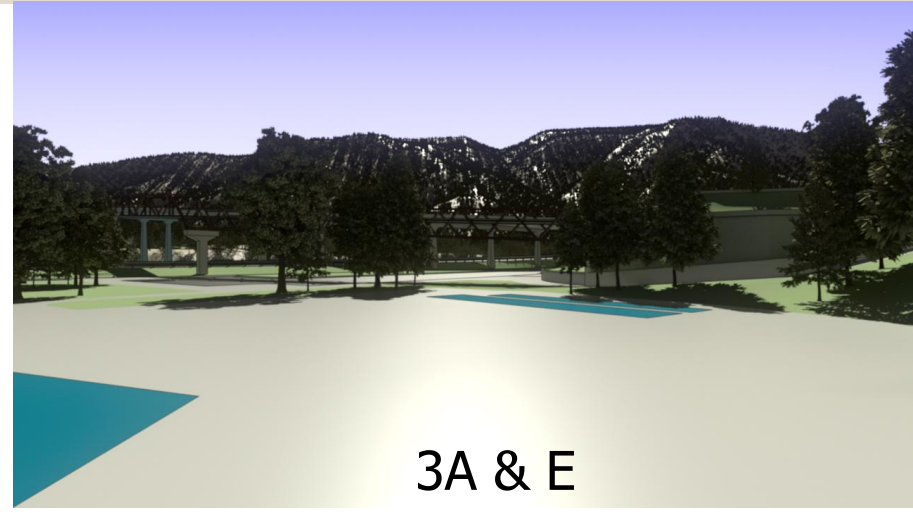
GRAND AVENUE BRIDGE



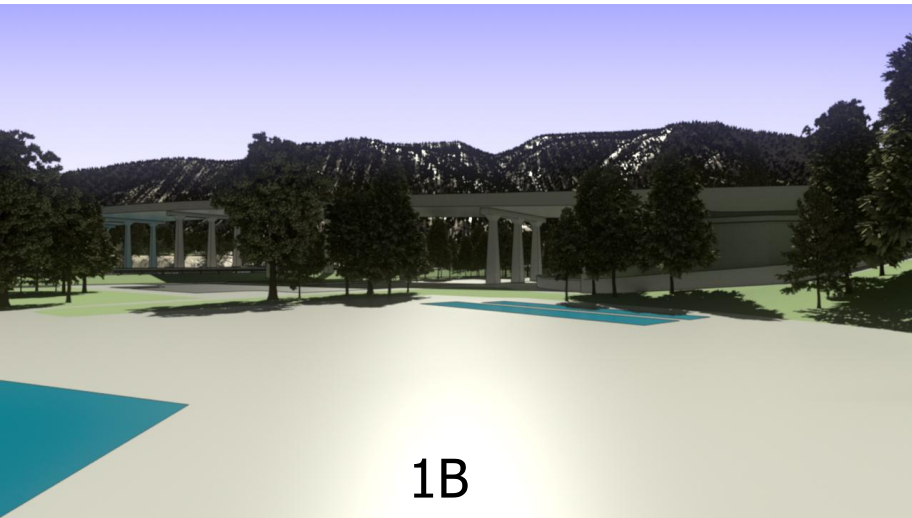
Viewsheds – View from Hot Springs



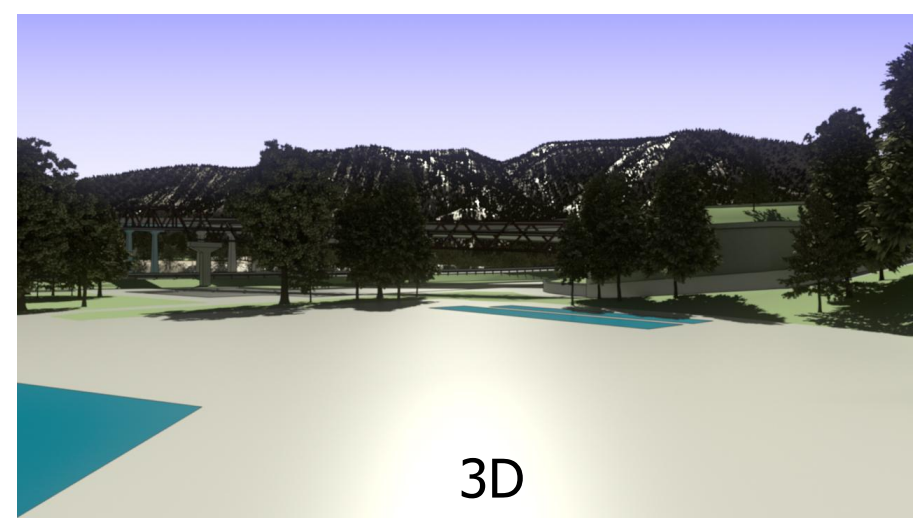
1A



3A & E



1B

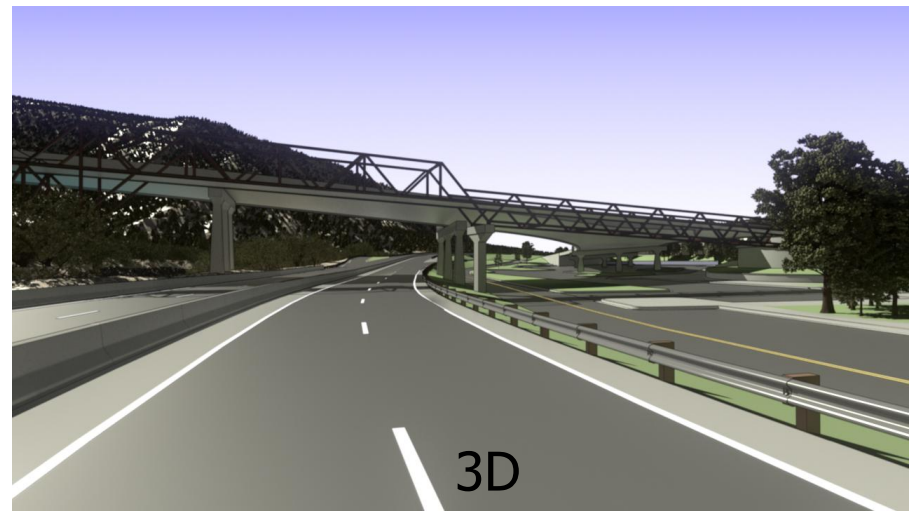
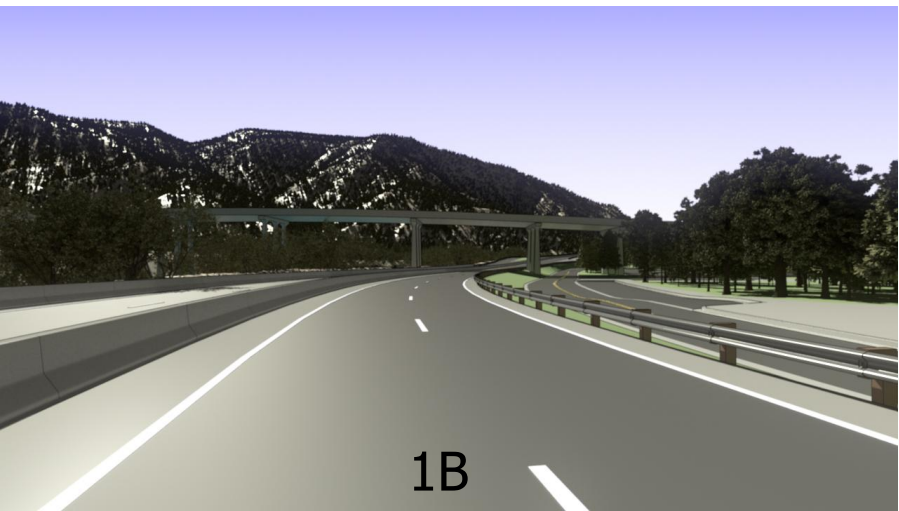
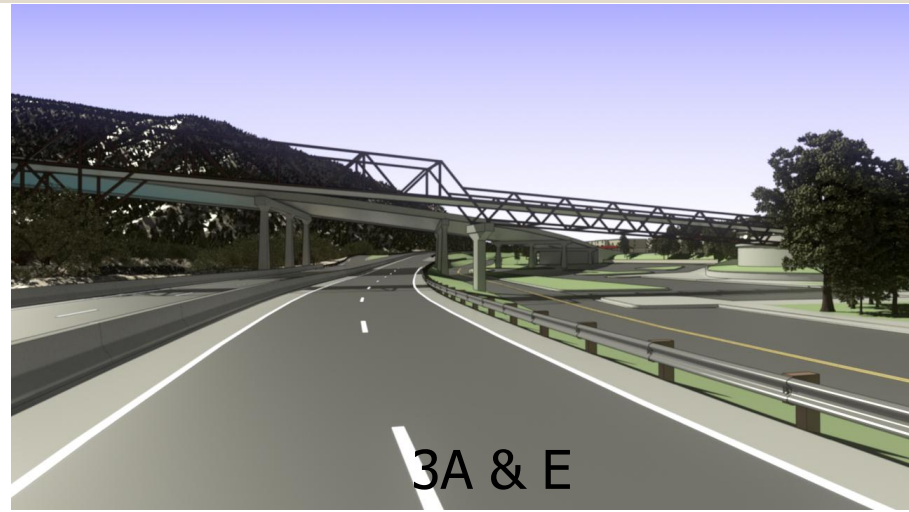
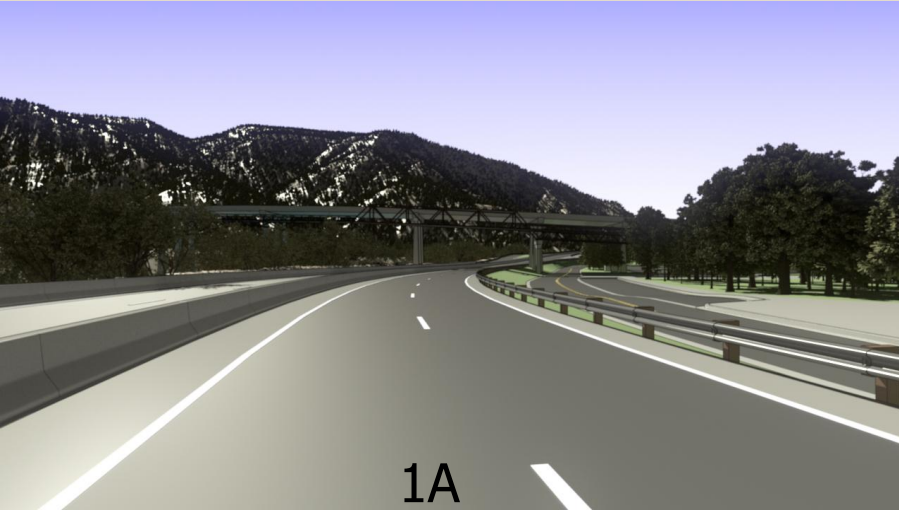


3D

SH 82

GRAND AVENUE BRIDGE

Viewsheds – View from I-70 WB

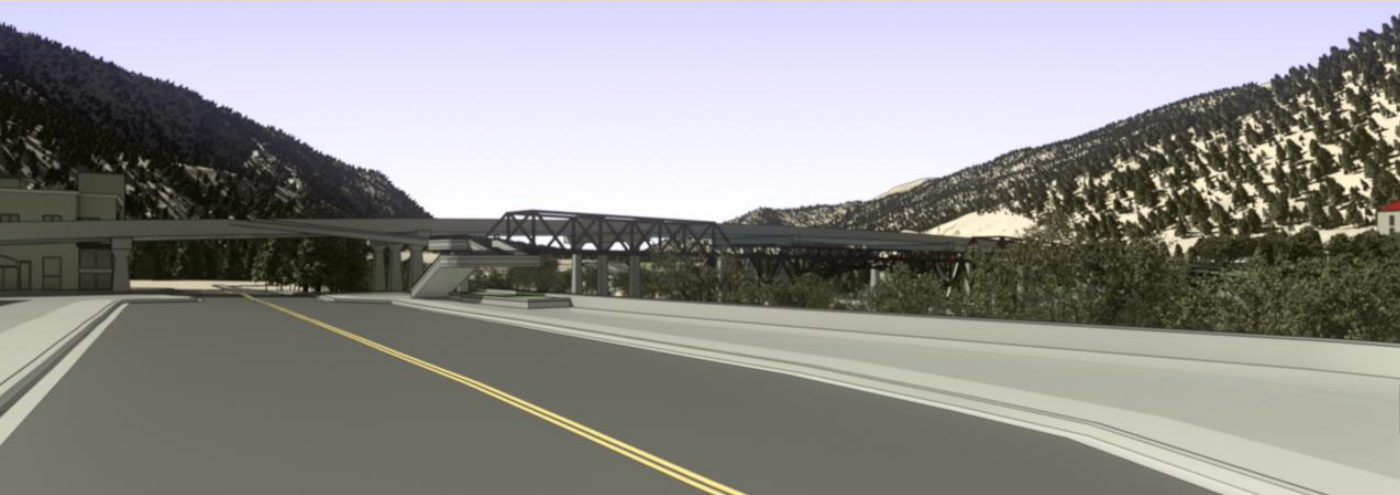


SH 82

GRAND AVENUE BRIDGE

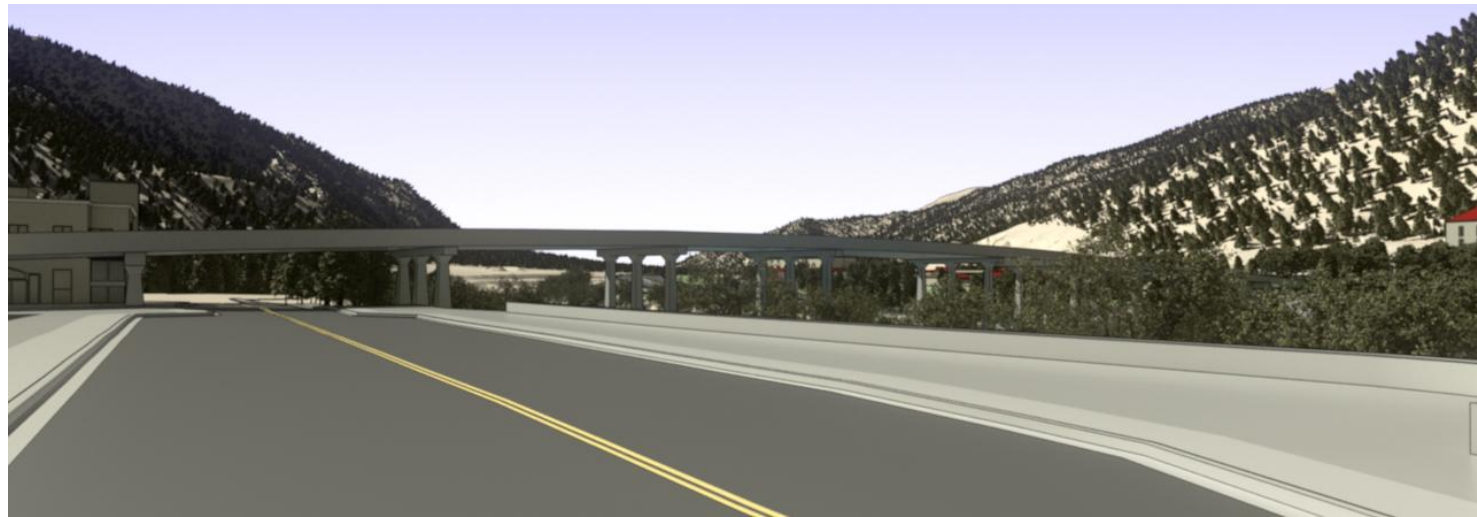


Viewsheds – View from 7th Street



1A

1B



SH 82

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Viewsheds – View from 7th Street



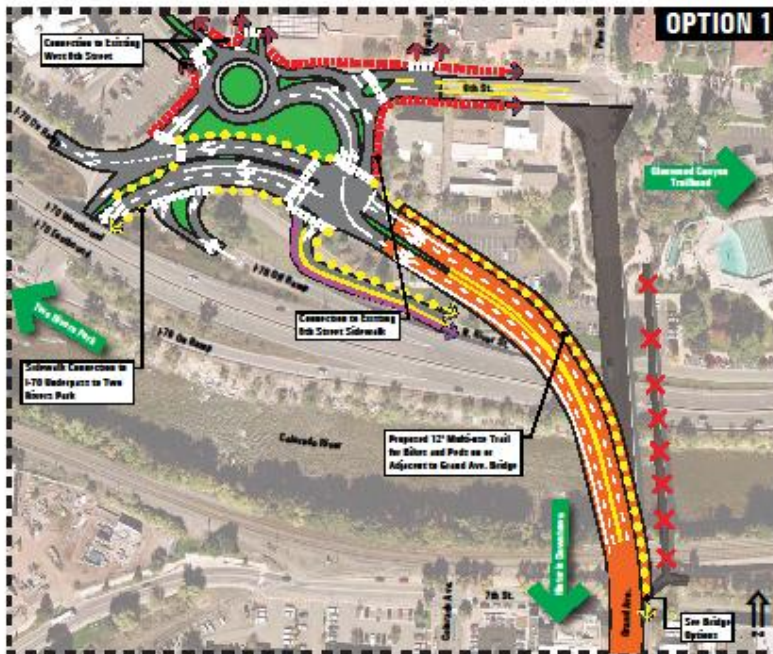
3A & E

3D



Bicycle Pedestrian Options

Alternative 3-A Bicycle / Pedestrian Options



City's Bicycle/Pedestrian Plan
Source: Glenwood Springs Bike & Trail Map

Connections Legend	
	Crosswalk
	Pedestrian
	Bicycle Route
	Shared Use Path (Bicycle/Pedestrian)
	Connection to Existing Sidewalk or Trail
	Urban Design Opportunities

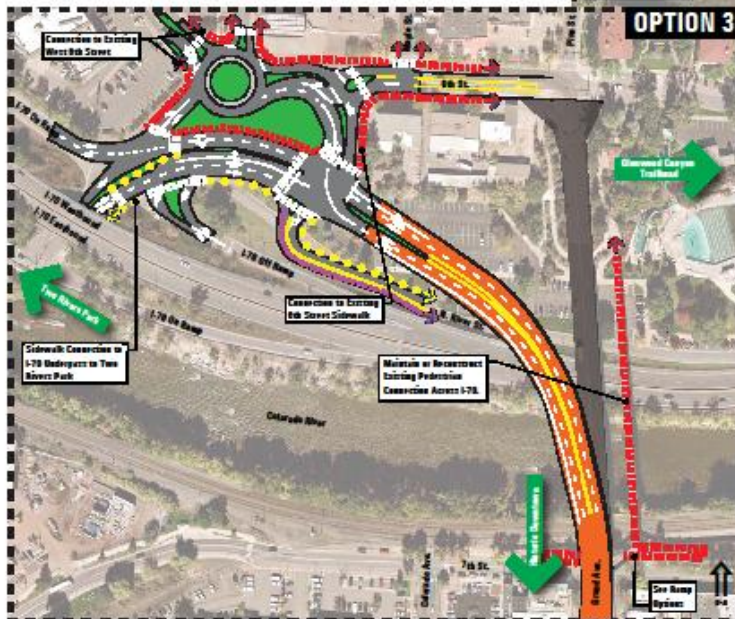
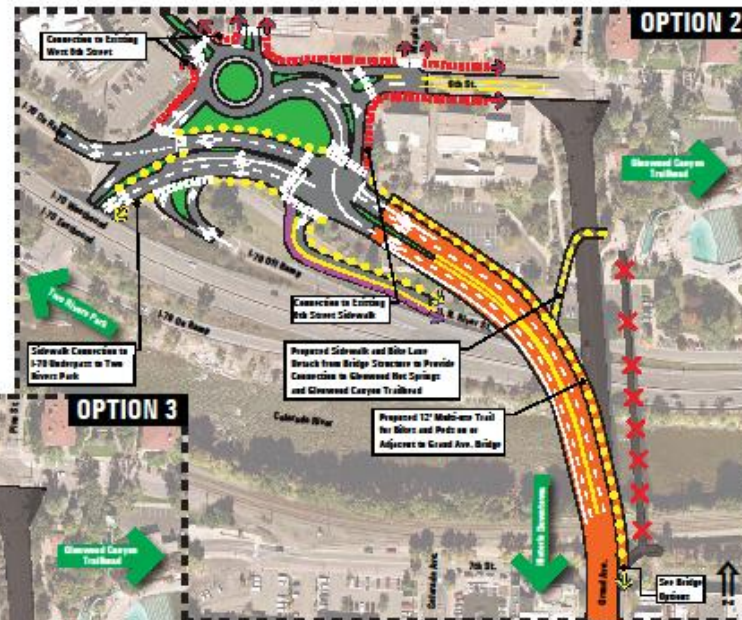
* Note: Some Facilities Existing or Planned by City



Bicycle Pedestrian Options

Crosswalk
 Pedestrian
 Bicycle Route
 Shared Use Path (Bicycle/Pedestrian)
 Connection to Existing Sidewalk or Trail
 Urban Design Opportunities
** Note: Some Facilities Existing or Planned by City*

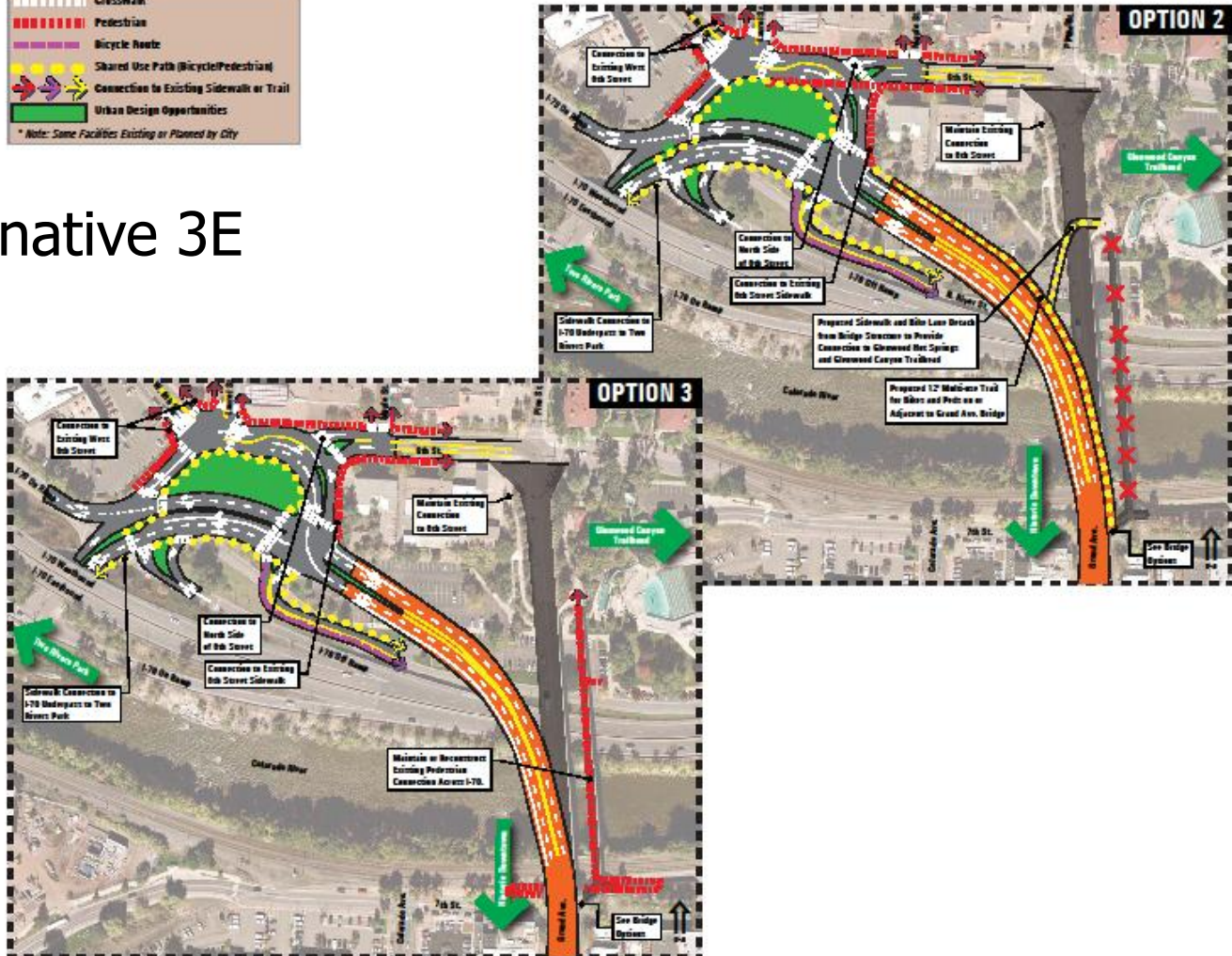
Alternative 3A



Bicycle Pedestrian Options

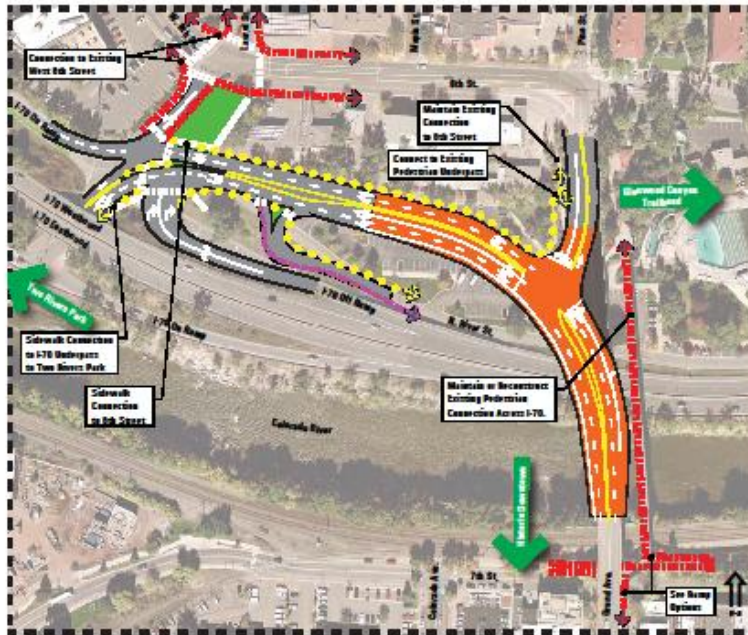


Alternative 3E



Bicycle Pedestrian Options

Alternative 3-D Bicycle / Pedestrian Options



Connections Legend	
	Crosswalk
	Pedestrian
	Bicycle Route
	Shared Use Path (Bicycle/Pedestrian)
	Connection to Existing Sidewalk or Trail
	Urban Design Opportunities



City's Bicycle/Pedestrian Plan
Source: Glenwood Springs Bike & Trail Map

SH 82

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Traffic Simulations

Other Considerations

Alternative 1-A

- Fewer right-of-way needs
- Likely Lowest cost
- Keeps existing traffic patterns
- Keeps existing pedestrian patterns

Alternative 1-B

- Fewer right-of-way needs
- Keeps existing traffic patterns
- Likely lower cost
- Provides better opportunity for bridge aesthetics

Alternative 3-A

- Improved traffic flow near Exit 116
- Best opportunity to improve 6th Street pedestrian connections from US 6 hotels to pool and to downtown
- Reduced construction impacts to traffic and businesses
- Improved turning movements for through SH 82 traffic
- SH 82 and US 6 traffic routed away from 6th Street businesses
- Better long-term redevelopment opportunities for 6th Street area
- Reduced effects to Hot Springs Pool (a historic property)
- Roundabout at 6th and Laurel provides lower traffic delay than Alternative 3-E

Alternative 3-D

- Improved traffic flow near Exit 116
- Good opportunity to improve 6th Street pedestrian connection
- Reduced construction impacts to traffic and businesses
- Improved turning movements for through SH 82 traffic
- SH 82 traffic routed away from 6th Street businesses
- Better long-term redevelopment opportunities for 6th Street area
- More out of direction travel for connections between I-70 and US 6/West Glenwood
- Reduced effects to Hot Springs Pool (a historic property)
- New intersection on bridge has more visual impacts from Hot Springs area than Alternatives 3-A and 3-E.

Alternative 3-E

- Improved traffic flow near Exit 116
- Best opportunity to improve 6th Street pedestrian connections from US 6 hotels to pool and to downtown
- Reduced construction impact to traffic
- Improved turning movements for through SH 82 traffic
- SH 82 and US 6 traffic routed away from 6th Street businesses
- Better long-term redevelopment opportunities for 6th Street area
- Reduced effects to Hot Springs Pool (a historic property)
- Pedestrian signal at 6th and Laurel provides separate walk signal for pedestrians compared to Alternative 3-A.

Next Steps

- **Bridge type and construction phasing with public input (September-December)**
- **Agency Review of Environmental Assessment (Spring 2013)**
- **Public Hearing (March-April 2013)**
- **Decision Document (October 2013)**
- **Design (approximately 1 year after Decision Document)**
- **Anticipated construction start (late 2014)**

SH 82

GRAND AVENUE BRIDGE

THANK YOU

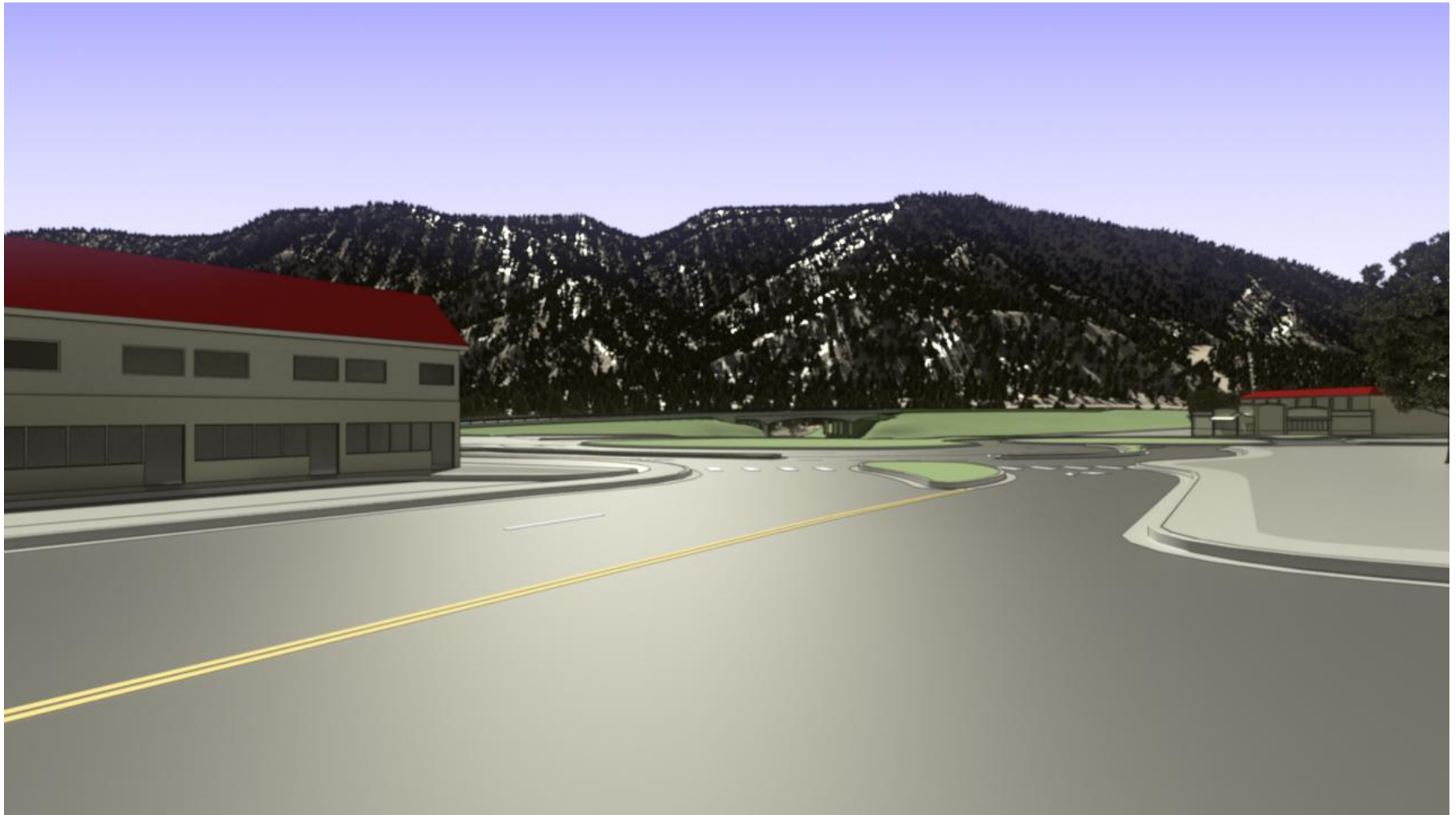


for attending the Public Open House

SH 82

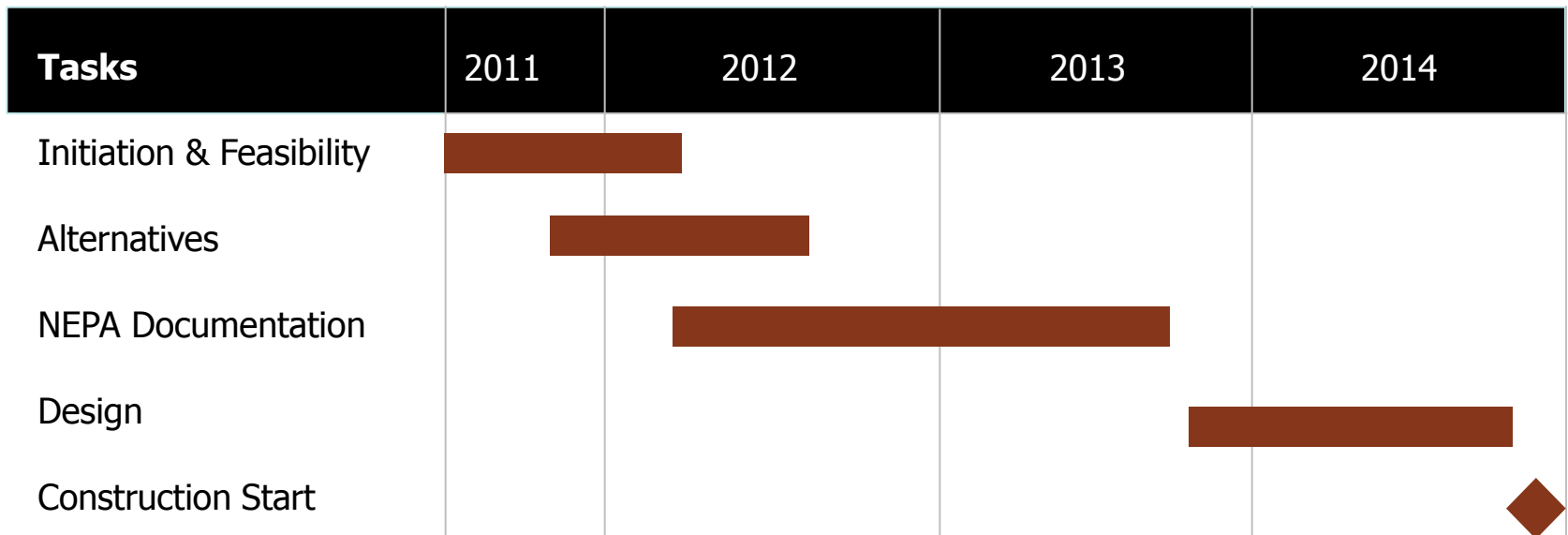
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Background Information

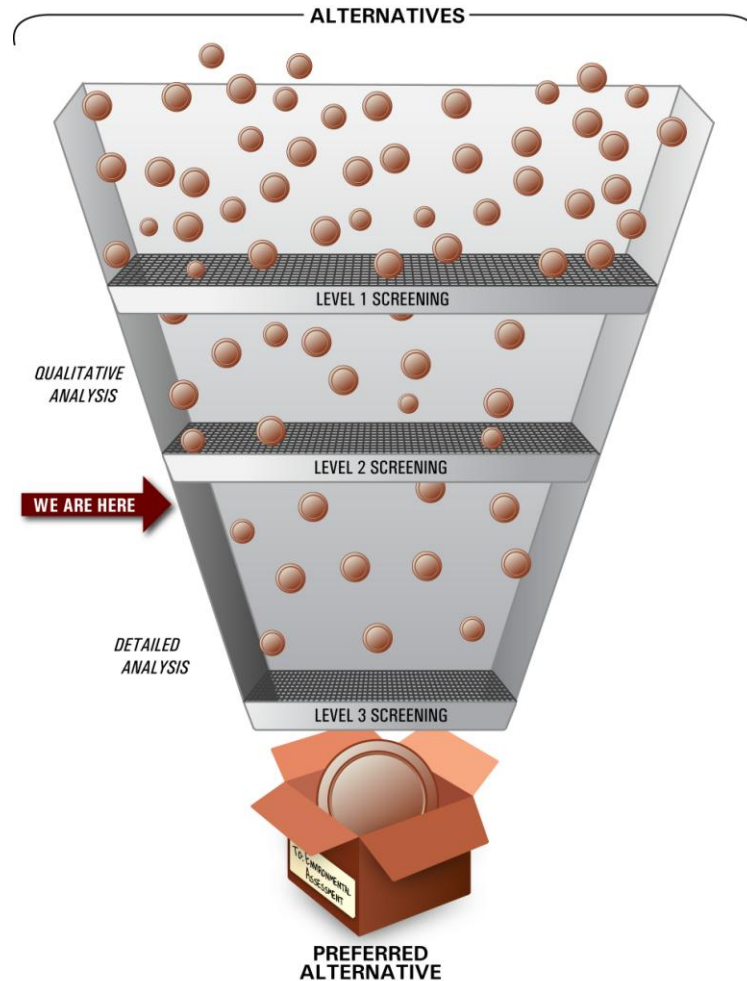


Project Schedule

If the project receives the federally required approvals, construction would begin in late 2014.



Alternatives Screening Process



Level 2 Screening Criteria

Purpose & Need Criteria	Additional Criteria	Additional Criteria (continued)
Purpose & Need Element #1: Improve Connectivity	Design and Feasibility	Community
Between Downtown and Hot Springs	Relative cost of alternative	Relative harmony with community
For Through Traffic	Relative ability of alternative to meet design standards	Consistent with City Planning
Purpose & Need Element #2: Address Functional, Structural, Emergency Service, Reliability	Environmental	Relative ability to reduce and minimize construction impacts
Relative ability to minimize risk of bridge closure	Relative impacts to historic resources	Relative ability to minimize private property impacts
Relative ability to address structural deficiencies	Visual/aesthetics - General-from river, pool, etc.	Relative ability to incorporate sustainable elements into design
Relative ability to improve emergency access	Visual/aesthetics - Cooper and/or Colorado	Transportation
Relative ability to address functional deficiencies	Visual/aesthetics - Grand Avenue	Relative ability to safely accommodate transportation users
Relative bridge life	Relative noise and air quality impacts	Relative ability to reduce and minimize construction impacts
	Relative impacts to parks and recreation resources	Relative ability to maintain and improve multimodal connections
	Relative impacts to water and aquatic resources	Relative ability to maintain or improve transportation operations

Phasing Possibilities and Options

Outside – Inside Concept

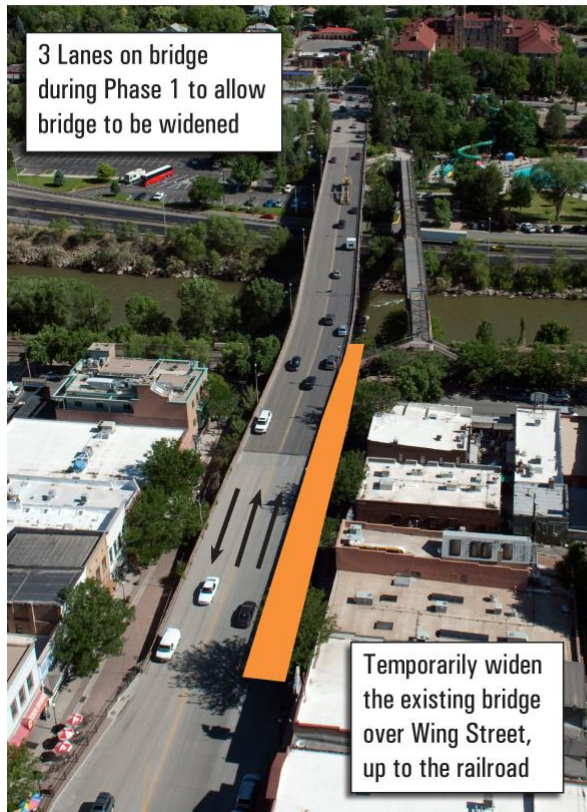
Under this phasing option, new bridge supporting structures would be built to the outside of the existing bridge, leaving 4 lanes on the existing bridge during most of the construction period. Once the outer supporting structure is completed, the driving surface of the new bridge would be filled in either incrementally or during a full closure (+/- 1 month). The existing bridge would ultimately be removed.



Phasing Possibilities and Options

Half – Half Concept

Phase 1



Phase 2



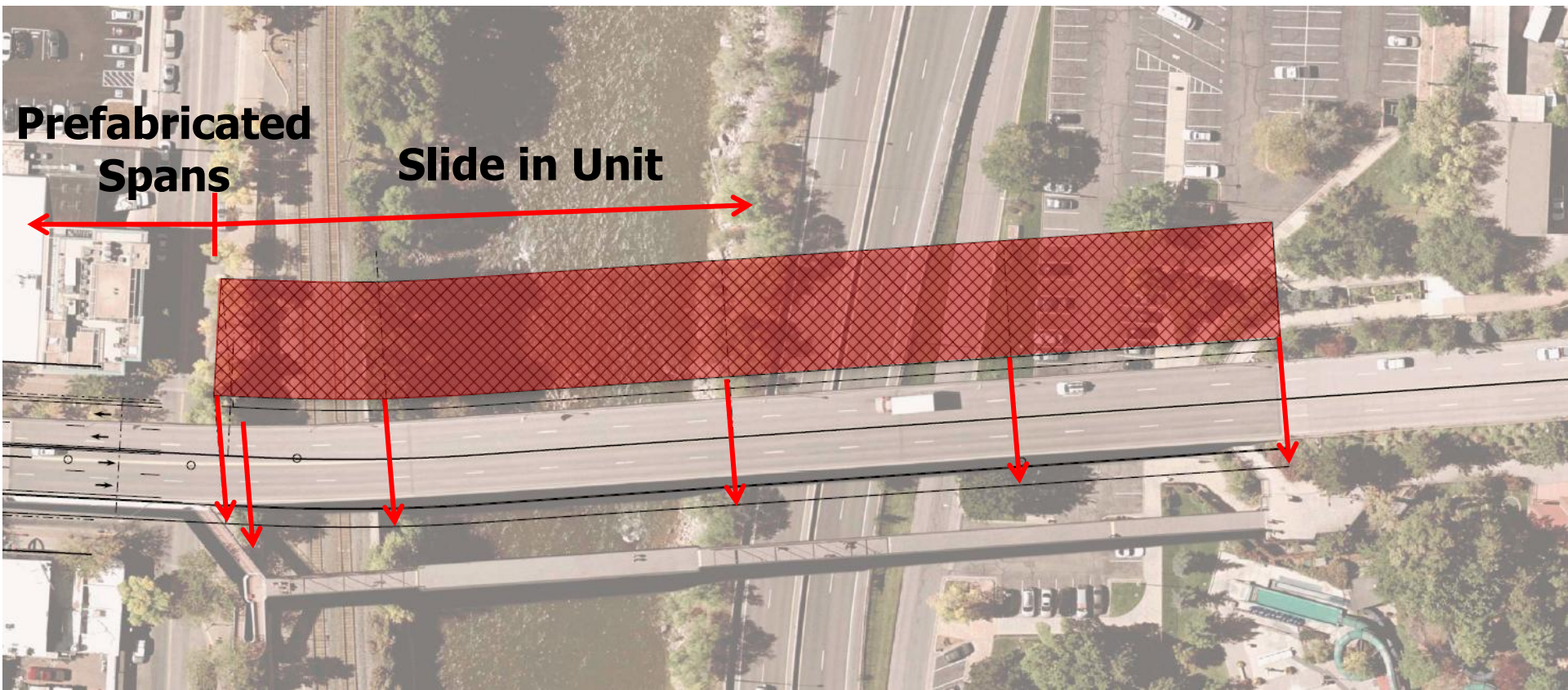
Phase 3



Phasing Possibilities and Options

Slide-in Concept

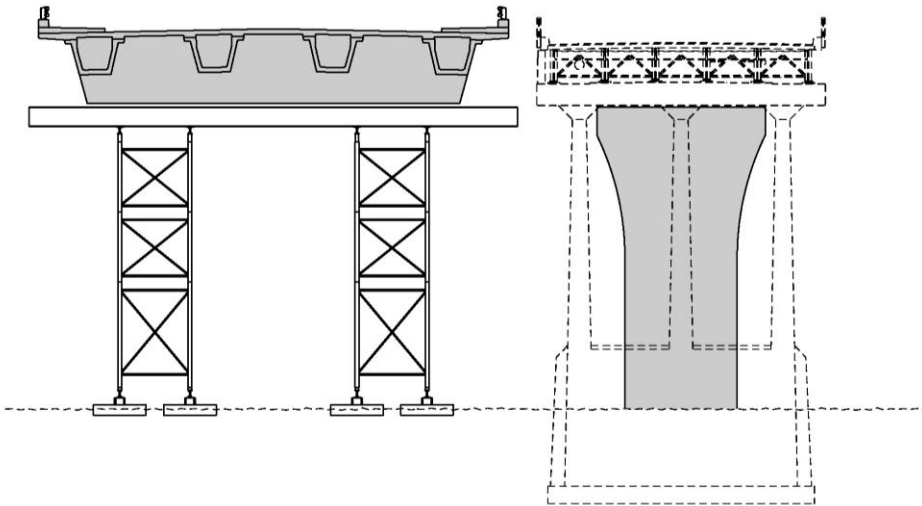
- Prefabricated bridge parts are built off site but nearby, and slid into place.



Phasing Possibilities and Options

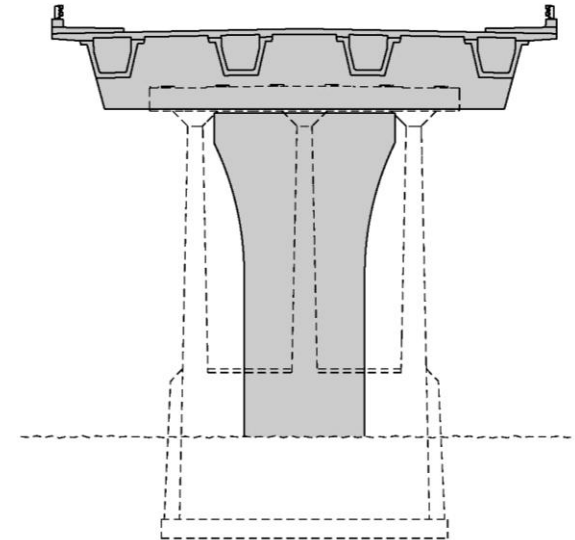
Slide-in Concept

Phase 1



- Build superstructure to west on falsework
- Build new columns under existing bridge

Phase 2



- Remove existing bridge
- Slide new superstructure onto new columns