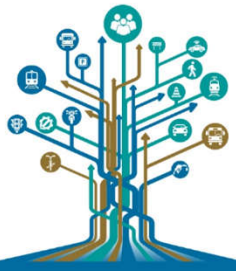

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Stakeholder Focus Group (SFG) Meeting #3

Level 2 Evaluation Results

Agenda

1. Check In, Welcome, and Introductions
2. Public involvement Update
3. Level 2 evaluation and results
4. Information Station Open House
5. Sneak peak of level 3
6. Moving Forward

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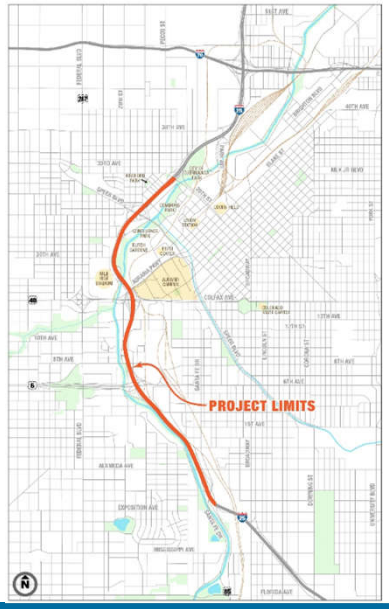
Project Refresher

Project Limits:
I-25, US 85 to 20th Street

Meeting #1:
- Purpose and need
- Goals and objectives
- Existing conditions

Meeting #2
- Outcomes of the Level 1 alternative evaluation (purpose and need)



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Public Involvement

615+ SURVEY RESPONSES

95 EMAIL COMMENTS

30 STAKEHOLDER INTERVIEWS

SFG MEMBERS 50

470 EMAIL BLAST RECIPIENTS

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Survey Feedback

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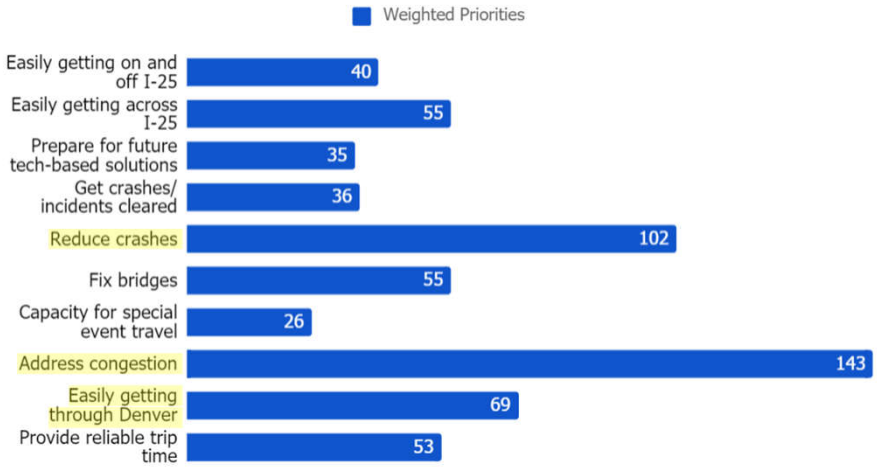
Survey Respondents' Top 3 Priorities



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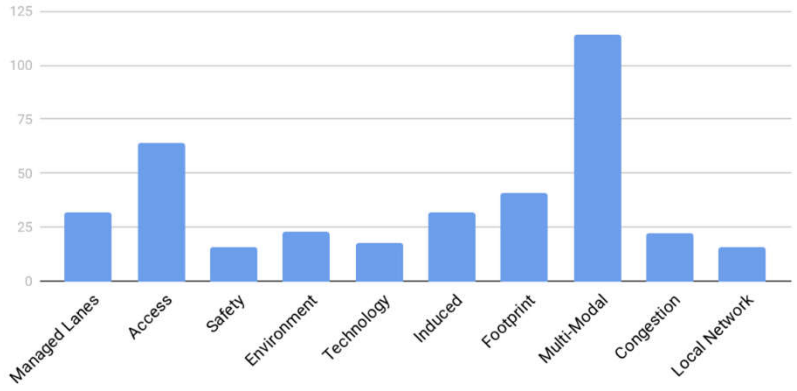
Survey Feedback

Q. 7 Responses by Type

What other issues should we consider? Any additional feedback?



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SFG Input

- Multi-modal (transit/bike/ped)
- Consider future density
- Induced demand
- Impact to neighborhoods

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Alternatives Evaluation Process

This project is using a three level evaluation process:

Level 1:

Does the alternative meet the project's purpose and need?

Yes/No/Neutral

Level 2:

Does the alternative address the needs, goals, and objectives to a satisfactory level?

Yes/No/Neutral with qualitative discussion

Level 3:

Does the alternative address the needs, goals, and objectives to a satisfactory level and balance trade-offs?

Quantitative data and qualitative discussion

I-25 Central PEL

Level 1 Evaluation Outcomes

No Action		Additional General Purpose Lanes
I-25 Reroute with Urban Boulevard	X	Dedicated Transit Lanes
Lane Reductions	X	New Transit Facility
Shoulder Lane Use	→	Collector/Distributor Roads
I-25 Geometric Refinements		Add Express Lanes
I-25 Geometric Improvements		Multi-Level Highway
I-25 Realignment		TDM and ITS
Lane Conversion		Congestion Pricing

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Alternatives Evaluation Process

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Level 2:

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Yes/No/Neutral with qualitative discussion

Level 3:

Does the alternative address the needs, goals, and objectives to a satisfactory level and balance trade-offs?

Quantitative data and qualitative discussion

I-25 Central PEL

Criteria Considered During Level 2 Evaluation

- Safety
- Congestion
- Travel Time Reliability
- Crossings
- Access
- Environment
- Future Flexibility and Technology
- Constructability

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Outcomes of Level 2 Evaluation

Carried Forward – Primary Element

- Alternative is carried forward as a primary element of a Level 3 alternative.

Carried Forward – Secondary Element

- Alternative has negative tradeoffs that make it an undesirable alternative for consideration as a primary element. Specific elements of the alternative will be carried forward for potential incorporation with a primary element during the Level 3 evaluation.

Not Recommended

- Alternative meets the purpose and needs of the project but requires extraordinary design or costs that make it difficult to implement at this time. The alternative will not be refined or evaluated further in Level 3.

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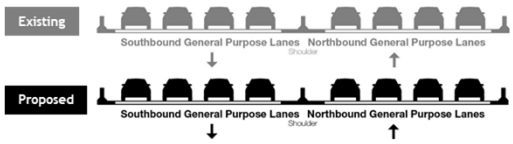
No Action

Family: Operational/Offline Improvements

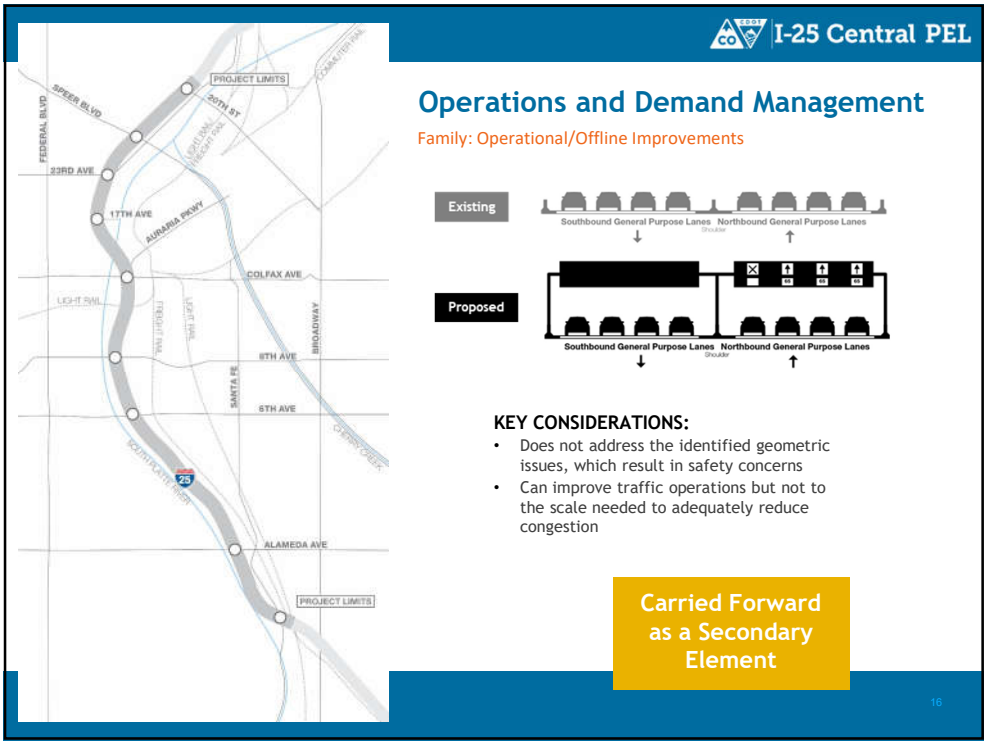


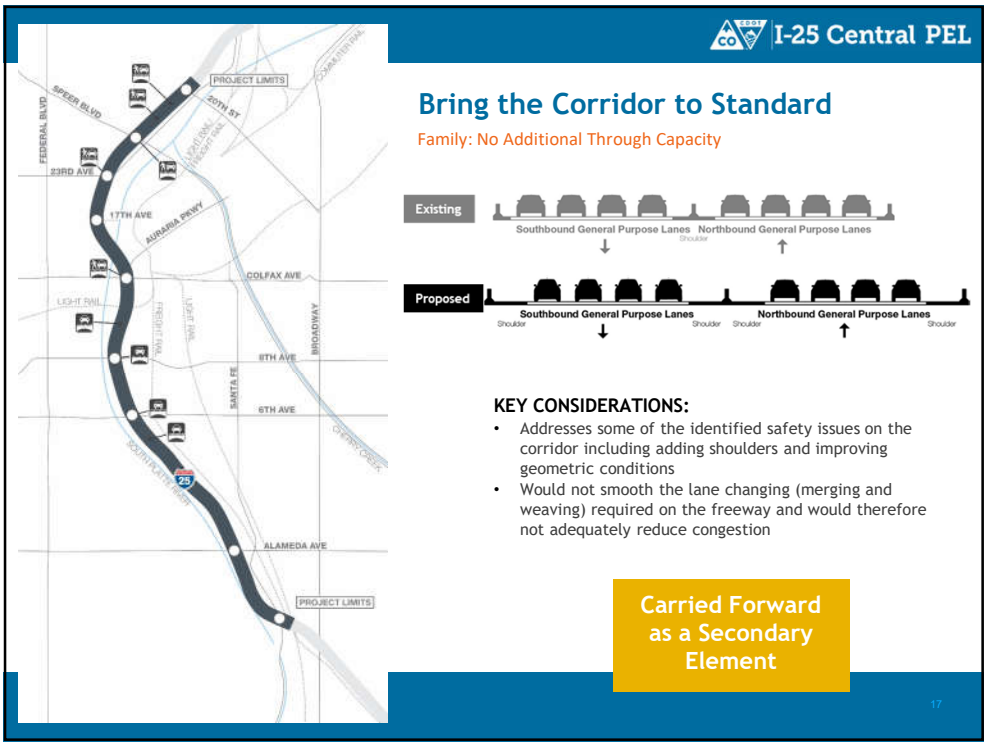
KEY CONSIDERATIONS:

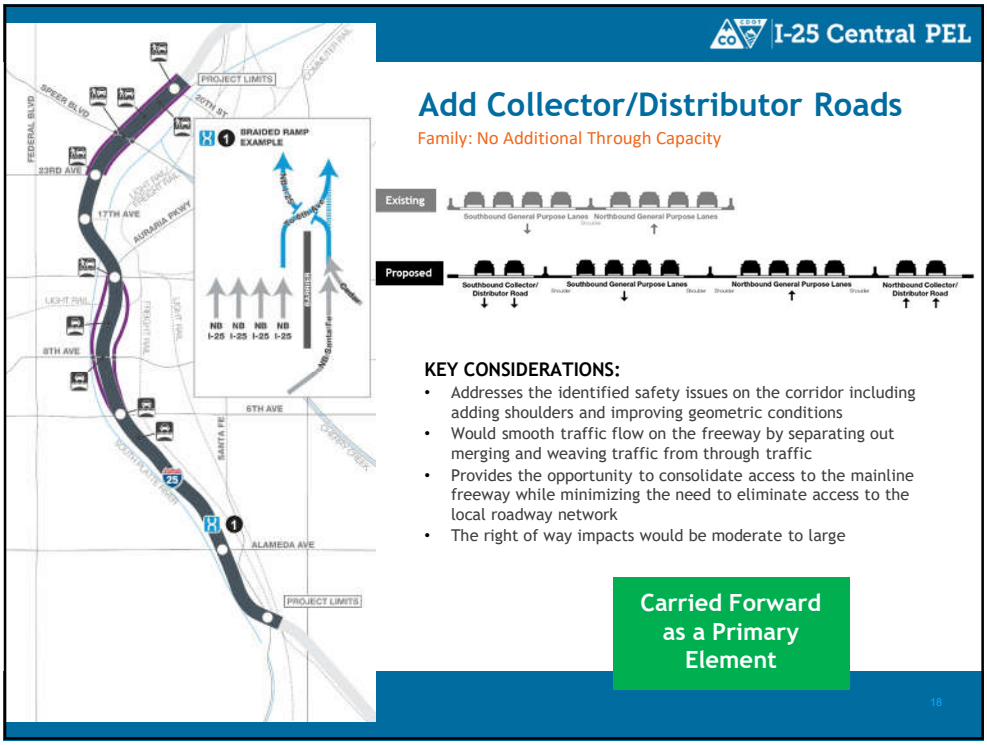
- Does not address the identified geometric issues which result in safety concerns
- Does not add capacity nor reduce demand for I-25
- Does not reduce the impact of incident or events along the corridor
- *Carried forward only to provide a baseline for future comparisons*

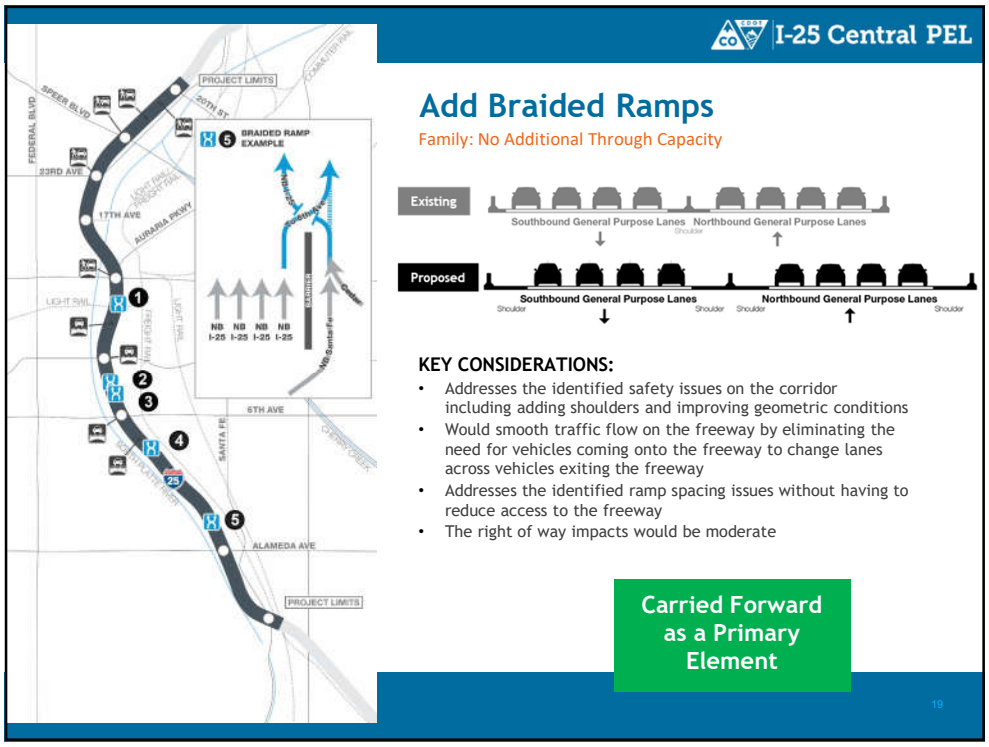
Carried Forward as a Stand-Alone Alternative

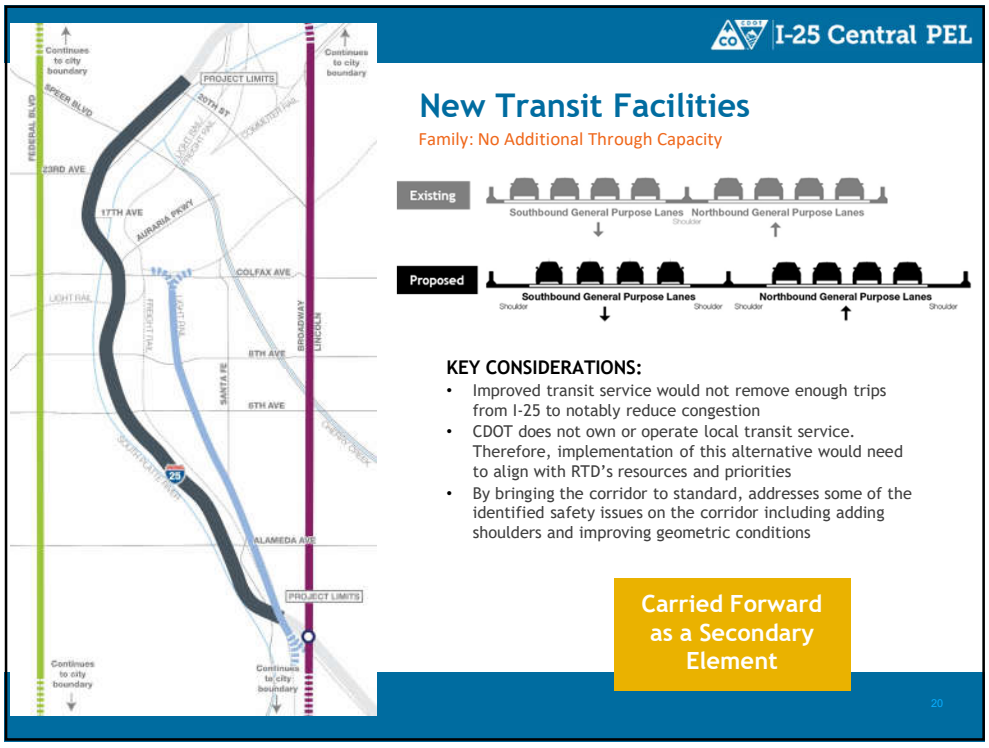

I-25 Central PEL
PROJECT LIMITS
SPEER BLVD
20TH ST
FEDERAL BLVD
23RD AVE
17TH AVE
AURARIA PKWY
COLFAX AVE
LIGHT RAIL
BROADWAY
8TH AVE
SANTA FE
6TH AVE
CHERRY CREEK
25
ALAMEDA AVE
PROJECT LIMITS
Congestion Pricing
Family: Operational/Offline Improvements
Existing
Southbound General Purpose Lanes
Shoulder
Northbound General Purpose Lanes
Proposed
Southbound General Purpose Lanes
Shoulder
Northbound General Purpose Lanes
KEY CONSIDERATIONS:
• Does not address the identified geometric issues which result in safety concerns
• General tolling on interstate facilities is limited by current federal law. Therefore, implementation of this alternative would require extensive coordination
Carried Forward as a Secondary Element
15

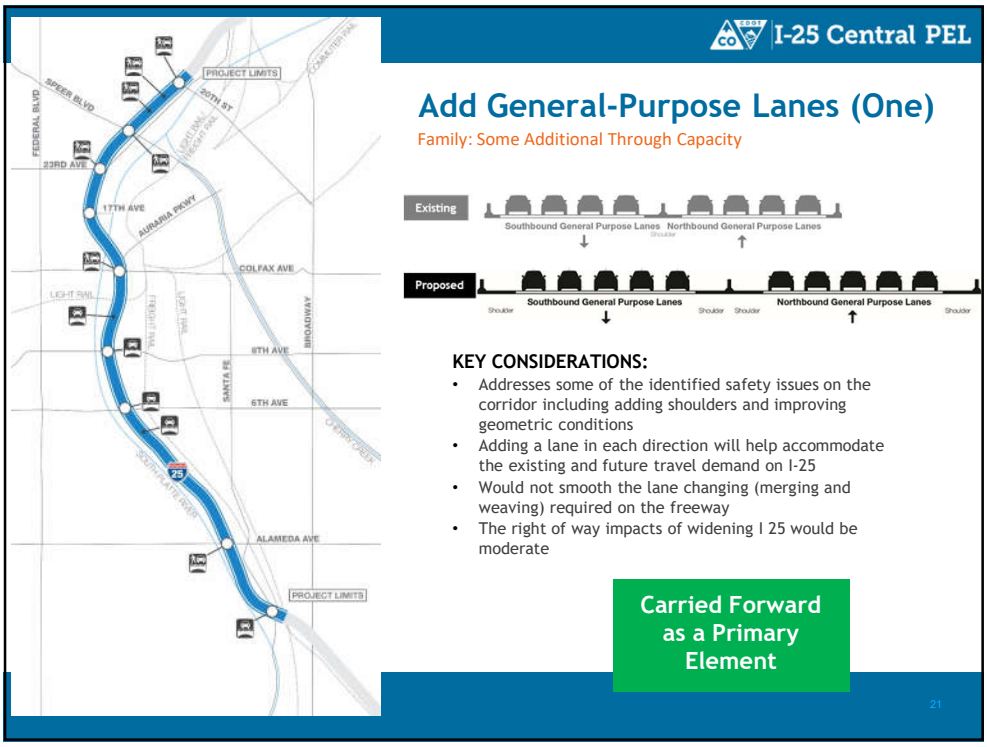

I-25 Central PEL
PROJECT LIMITS
SPEER BLVD
20TH ST
FEDERAL BLVD
23RD AVE
17TH AVE
AURARIA PKWY
COLFAX AVE
LIGHT RAIL
BROADWAY
8TH AVE
SANTA FE
6TH AVE
CHERRY CREEK
25
ALAMEDA AVE
PROJECT LIMITS
Operations and Demand Management
Family: Operational/Offline Improvements
Existing
Southbound General Purpose Lanes
Shoulder
Northbound General Purpose Lanes
Proposed
Southbound General Purpose Lanes
Shoulder
Northbound General Purpose Lanes
KEY CONSIDERATIONS:
• Does not address the identified geometric issues, which result in safety concerns
• Can improve traffic operations but not to the scale needed to adequately reduce congestion
Carried Forward as a Secondary Element
16

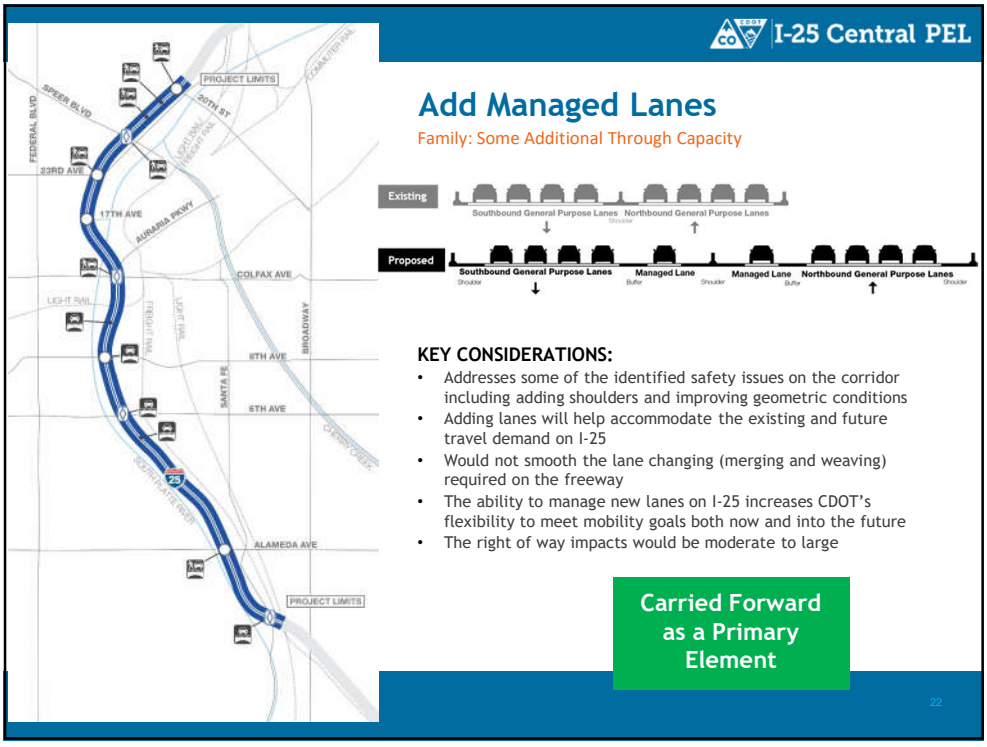

I-25 Central PEL
Bring the Corridor to Standard
Family: No Additional Through Capacity
Existing
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Shoulder
Proposed
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Shoulder
KEY CONSIDERATIONS:
• Addresses some of the identified safety issues on the corridor including adding shoulders and improving geometric conditions
• Would not smooth the lane changing (merging and weaving) required on the freeway and would therefore not adequately reduce congestion
Carried Forward as a Secondary Element
17
PROJECT LIMITS
SPEER BLVD
20TH ST
FEDERAL BLVD
23RD AVE
17TH AVE
AURARIA PKWY
COLFAX AVE
LIGHT RAIL
BROADWAY
8TH AVE
SANTA FE
6TH AVE
CHERRY CREEK
ALAMEDA AVE
PROJECT LIMITS

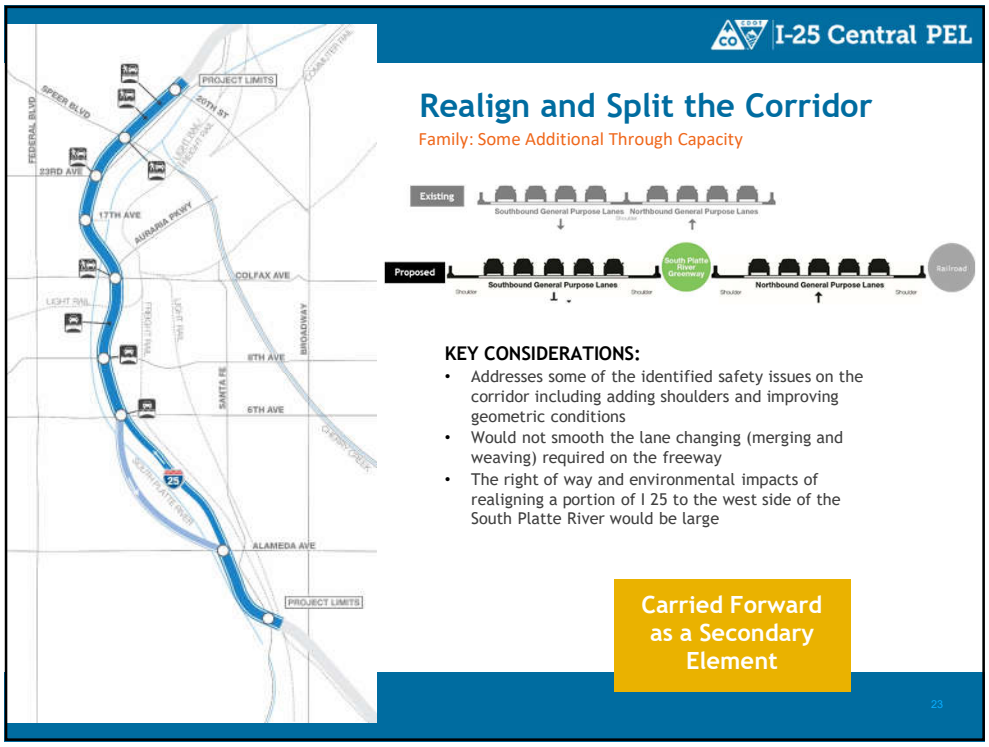

I-25 Central PEL
Add Collector/Distributor Roads
Family: No Additional Through Capacity
BRAIDED RAMP EXAMPLE
NB I-25
NB I-25
NB I-25
NB I-25
Existing
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Proposed
Southbound Collector/ Distributor Road
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Northbound Collector/ Distributor Road
KEY CONSIDERATIONS:
• Addresses the identified safety issues on the corridor including adding shoulders and improving geometric conditions
• Would smooth traffic flow on the freeway by separating out merging and weaving traffic from through traffic
• Provides the opportunity to consolidate access to the mainline freeway while minimizing the need to eliminate access to the local roadway network
• The right of way impacts would be moderate to large
Carried Forward as a Primary Element
18
PROJECT LIMITS
SPEER BLVD
20TH ST
FEDERAL BLVD
23RD AVE
17TH AVE
AURARIA PKWY
8TH AVE
6TH AVE
SANTA FE
CHERRY CREEK
ALAMEDA AVE
PROJECT LIMITS

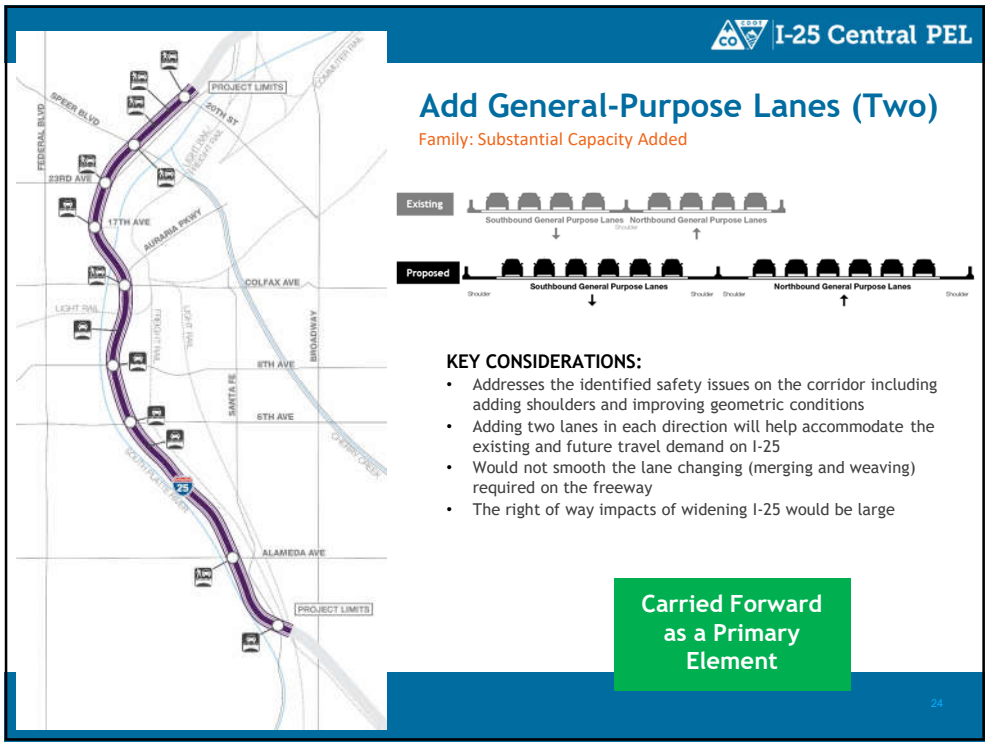

I-25 Central PEL
Add Braided Ramps
Family: No Additional Through Capacity
Existing
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Shoulder
Proposed
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Shoulder
KEY CONSIDERATIONS:
• Addresses the identified safety issues on the corridor including adding shoulders and improving geometric conditions
• Would smooth traffic flow on the freeway by eliminating the need for vehicles coming onto the freeway to change lanes across vehicles exiting the freeway
• Addresses the identified ramp spacing issues without having to reduce access to the freeway
• The right of way impacts would be moderate
Carried Forward as a Primary Element
19
PROJECT LIMITS
SPEER BLVD
20TH ST
23RD AVE
17TH AVE
AURARIA PKWY
FEDERAL BLVD
LIGHT RAIL
FREIGHT RAIL
6TH AVE
SANTA FE
ALAMEDA AVE
CHERRY CREEK
5 BRAIDED RAMP EXAMPLE
NB I-25
NB I-25
NB I-25
NB I-25
NB Santa Fe

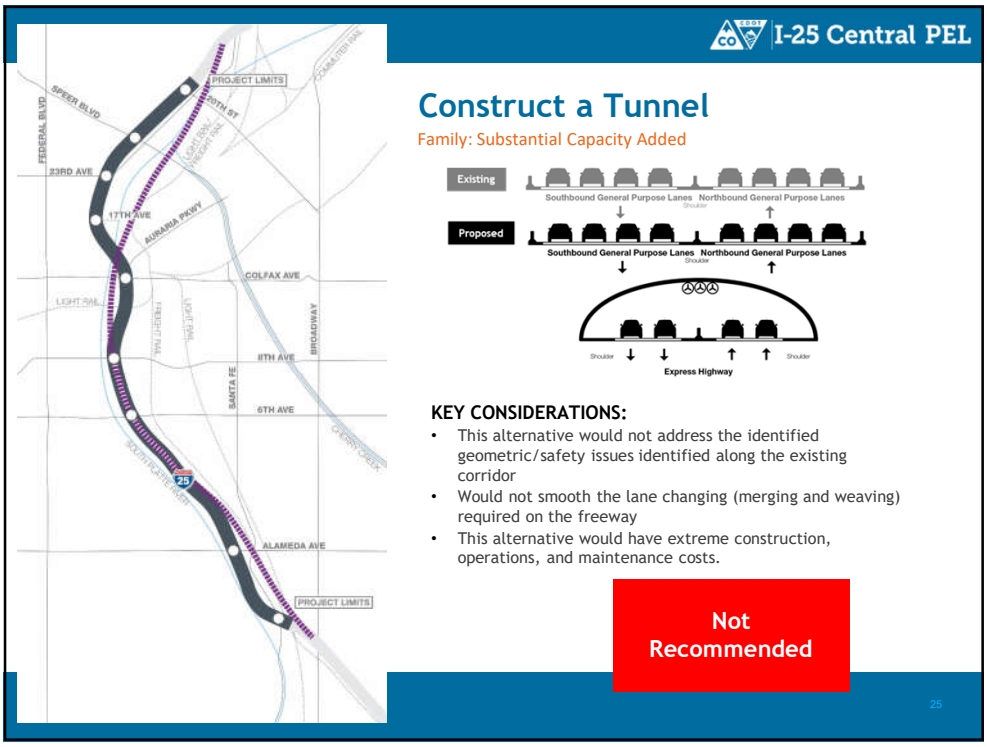

I-25 Central PEL
New Transit Facilities
Family: No Additional Through Capacity
Existing
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Shoulder
Proposed
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Shoulder
KEY CONSIDERATIONS:
• Improved transit service would not remove enough trips from I-25 to notably reduce congestion
• CDOT does not own or operate local transit service. Therefore, implementation of this alternative would need to align with RTD's resources and priorities
• By bringing the corridor to standard, addresses some of the identified safety issues on the corridor including adding shoulders and improving geometric conditions
Carried Forward as a Secondary Element
20
Continues to city boundary
PROJECT LIMITS
SPEER BLVD
20TH ST
23RD AVE
17TH AVE
AURARIA PKWY
FEDERAL BLVD
LIGHT RAIL
FREIGHT RAIL
COLFAX AVE
8TH AVE
6TH AVE
SANTA FE
BROADWAY
LINCOLN
ALAMEDA AVE
CHERRY CREEK

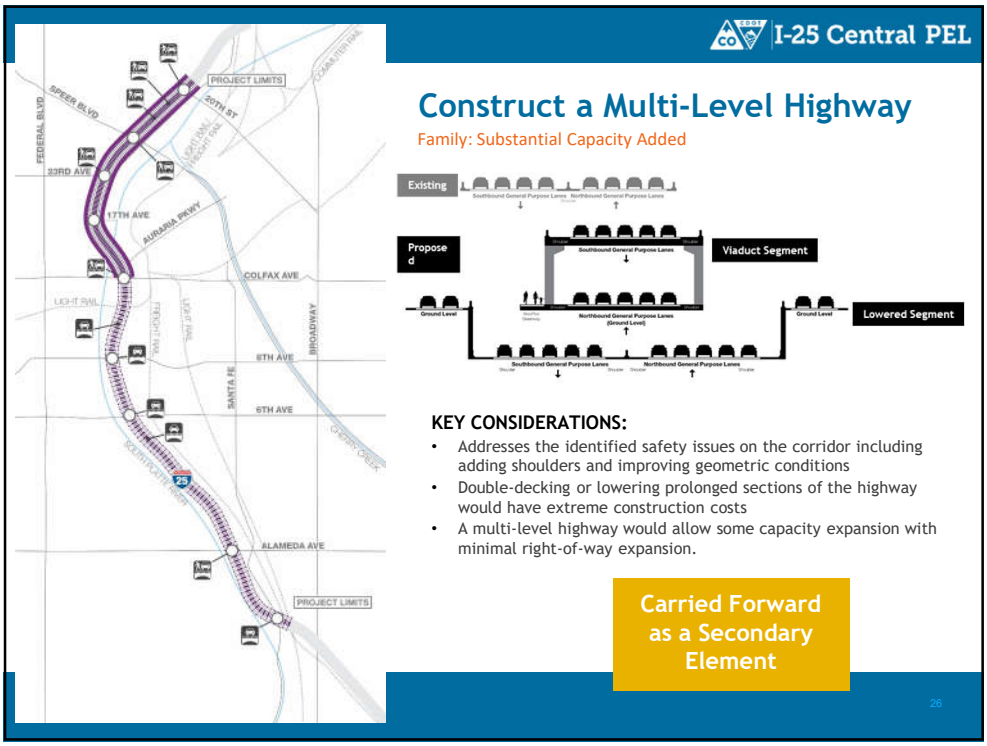

I-25 Central PEL
Add General-Purpose Lanes (One)
Family: Some Additional Through Capacity
Existing
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Proposed
Southbound General Purpose Lanes
Northbound General Purpose Lanes
KEY CONSIDERATIONS:
• Addresses some of the identified safety issues on the corridor including adding shoulders and improving geometric conditions
• Adding a lane in each direction will help accommodate the existing and future travel demand on I-25
• Would not smooth the lane changing (merging and weaving) required on the freeway
• The right of way impacts of widening I 25 would be moderate
Carried Forward as a Primary Element
PROJECT LIMITS
SPEER BLVD
20TH ST
23RD AVE
17TH AVE
AURARIA PKWY
COLFAX AVE
8TH AVE
6TH AVE
ALAMEDA AVE
FEDERAL BLVD
BROADWAY
SANTA FE
LIGHT RAIL
25
21


I-25 Central PEL
Add Managed Lanes
Family: Some Additional Through Capacity
Existing
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Proposed
Southbound General Purpose Lanes
Managed Lane
Managed Lane
Northbound General Purpose Lanes
KEY CONSIDERATIONS:
• Addresses some of the identified safety issues on the corridor including adding shoulders and improving geometric conditions
• Adding lanes will help accommodate the existing and future travel demand on I-25
• Would not smooth the lane changing (merging and weaving) required on the freeway
• The ability to manage new lanes on I-25 increases CDOT's flexibility to meet mobility goals both now and into the future
• The right of way impacts would be moderate to large
Carried Forward as a Primary Element
PROJECT LIMITS
SPEER BLVD
20TH ST
23RD AVE
17TH AVE
AURARIA PKWY
COLFAX AVE
8TH AVE
6TH AVE
ALAMEDA AVE
FEDERAL BLVD
BROADWAY
SANTA FE
LIGHT RAIL
25
22

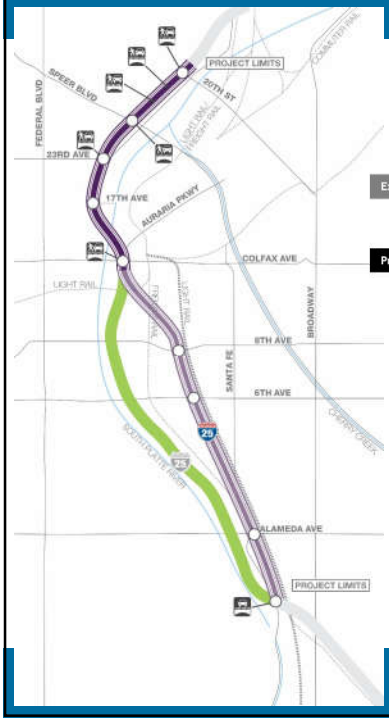

I-25 Central PEL
Realign and Split the Corridor
Family: Some Additional Through Capacity
Existing
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Proposed
South Platte River Greenway
Railroad
Shoulder
KEY CONSIDERATIONS:
• Addresses some of the identified safety issues on the corridor including adding shoulders and improving geometric conditions
• Would not smooth the lane changing (merging and weaving) required on the freeway
• The right of way and environmental impacts of realigning a portion of I 25 to the west side of the South Platte River would be large
Carried Forward as a Secondary Element
23
PROJECT LIMITS
SPEER BLVD
20TH ST
23RD AVE
17TH AVE
AURARIA PKWY
COLFAX AVE
LIGHT RAIL
FREIGHT RAIL
BROADWAY
SANTA FE
8TH AVE
6TH AVE
CHERRY CREEK
SOUTH PLATTE RIVER
25
ALAMEDA AVE
PROJECT LIMITS


I-25 Central PEL
Add General-Purpose Lanes (Two)
Family: Substantial Capacity Added
Existing
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Proposed
Shoulder
KEY CONSIDERATIONS:
• Addresses the identified safety issues on the corridor including adding shoulders and improving geometric conditions
• Adding two lanes in each direction will help accommodate the existing and future travel demand on I-25
• Would not smooth the lane changing (merging and weaving) required on the freeway
• The right of way impacts of widening I-25 would be large
Carried Forward as a Primary Element
24
PROJECT LIMITS
SPEER BLVD
20TH ST
23RD AVE
17TH AVE
AURARIA PKWY
COLFAX AVE
LIGHT RAIL
FREIGHT RAIL
BROADWAY
SANTA FE
8TH AVE
6TH AVE
CHERRY CREEK
SOUTH PLATTE RIVER
25
ALAMEDA AVE
PROJECT LIMITS


I-25 Central PEL
Construct a Tunnel
Family: Substantial Capacity Added
Existing
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Proposed
Southbound General Purpose Lanes
Northbound General Purpose Lanes
Express Highway
KEY CONSIDERATIONS:
• This alternative would not address the identified geometric/safety issues identified along the existing corridor
• Would not smooth the lane changing (merging and weaving) required on the freeway
• This alternative would have extreme construction, operations, and maintenance costs.
Not Recommended
25
PROJECT LIMITS
SPEER BLVD
20TH ST
FEDERAL BLVD
33RD AVE
17TH AVE
AURARIA PKWY
COLFAX AVE
LIGHT RAIL
BROADWAY
11TH AVE
SANTA FE
6TH AVE
CHERRY CREEK
ALAMEDA AVE
PROJECT LIMITS

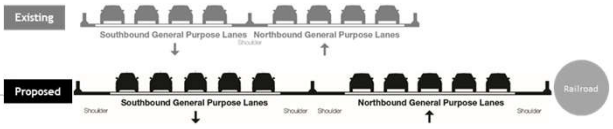

I-25 Central PEL
Construct a Multi-Level Highway
Family: Substantial Capacity Added
Existing
Propose d
Viaduct Segment
Southbound General Purpose Lanes
Northbound General Purpose Lanes
(Ground Level)
Ground Level
Lowered Segment
KEY CONSIDERATIONS:
• Addresses the identified safety issues on the corridor including adding shoulders and improving geometric conditions
• Double-decking or lowering prolonged sections of the highway would have extreme construction costs
• A multi-level highway would allow some capacity expansion with minimal right-of-way expansion.
Carried Forward as a Secondary Element
26
PROJECT LIMITS
SPEER BLVD
20TH ST
FEDERAL BLVD
33RD AVE
17TH AVE
AURARIA PKWY
COLFAX AVE
LIGHT RAIL
BROADWAY
8TH AVE
SANTA FE
6TH AVE
CHERRY CREEK
ALAMEDA AVE
PROJECT LIMITS

I-25 Central PEL



Realign Adjacent to RTD

Family: Substantial Capacity Added



KEY CONSIDERATIONS:

- Addresses the identified safety issues on the corridor including adding shoulders and improving geometric conditions
- The right of way impacts of realigning a portion of I-25 to be adjacent to the RTD light rail tracks would be large

Carried Forward as a Secondary Element

27

I-25 Central PEL

Moving from Level 2 to Level 3 Alternatives

Level 2 Alternatives	Level 2 Evaluation Results
Operational/Offline Improvements	
No Action	Carried forward only to provide a baseline for future comparisons
Congestion Pricing	Does not address the identified geometric issues which result in safety concerns
Operations and Demand Management	Can improve traffic operations but not to the scale needed to adequately reduce congestion
No Additional Through Capacity	
Bring the Corridor to Standard	Addresses some of the identified safety issues, but would not adequately reduce congestion
Add Collector/Distributor Roads	Addresses safety issues, smooths traffic flow, and provides opportunities to consolidate access to the mainline freeway. Would have moderate to large right of way impacts.
Add Braided Ramps	Addresses safety issues, and smooths traffic flow. Would have moderate right of way impacts.
New Transit Facilities	Addresses some of the identified safety issues, but would not adequately reduce congestion. Extensive coordination with RTD required.
Some Additional Through Capacity	
Add General Purpose Lanes (One)	Addresses some of the identified safety issues and better accommodates existing and future travel demand. Would have moderate right of way impacts.
Add Managed Lanes	Addresses some of the identified safety issues and better accommodates existing and future travel demand. Would have moderate to large right of way impacts.
Realign and Split the Corridor	Addresses some of the identified safety issues. Would have large right of way and environmental impacts.
Substantial Capacity Added	
Add General Purpose Lanes (Two)	Addresses some of the identified safety issues and better accommodates existing and future traffic demand. Would have large right of way impacts.
Construct a Tunnel	X — Would not address identified safety issues, and would have extreme costs
Construct a Multi-Level Highway	Addresses the identified safety issues, but would have extreme costs. Would have minimal right of way impacts.
Realign Adjacent to RTD	Addresses the identified safety issues, but would have large right of way impacts

Alternatives Evaluation Process

This project is using a three level evaluation process:

Level 1:

Does the alternative meet the project's purpose and need?

Yes/No/Neutral

Level 2:

Does the alternative address the needs, goals, and objectives to a satisfactory level?

Yes/No/Neutral with qualitative discussion

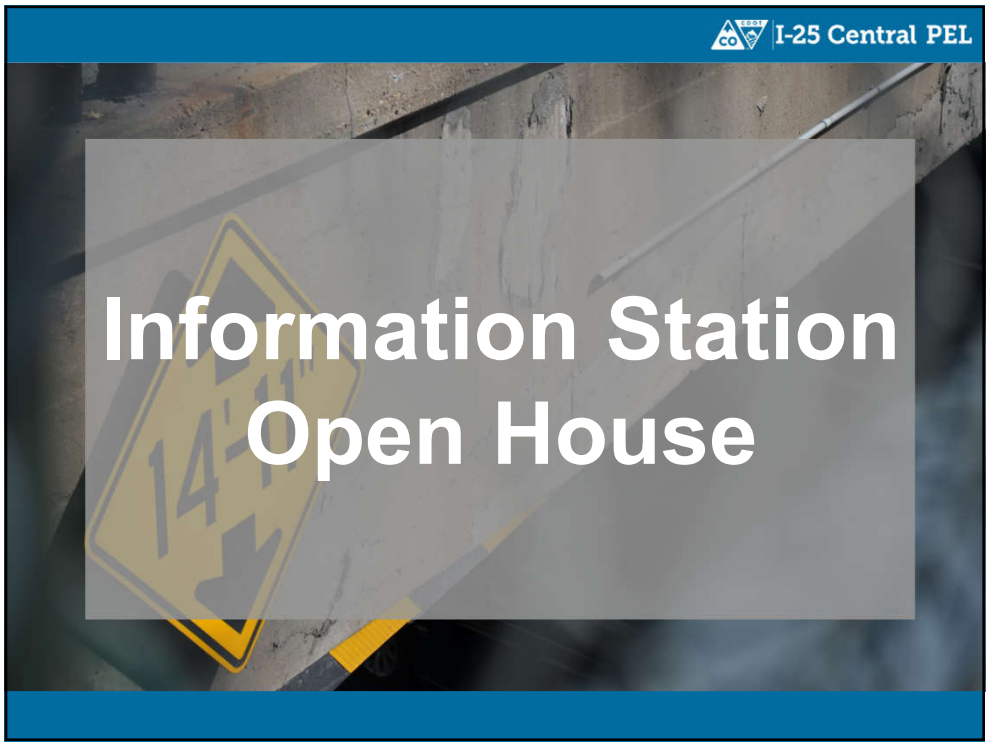
Level 3:

Does the alternative address the needs, goals, and objectives to a satisfactory level and balance trade-offs?

Quantitative data and qualitative discussion

Key Questions to be Answered in Level 3 and documented in the PEL report:

- Can access and geometric fixes alone meet current and future needs, goals, and objectives?
- What multi-modal (transit and bike/pedestrian) improvements are expected in the area, and how can they promoted and accommodated in the corridor?
- How many additional lanes, if any, are needed on I-25 to support current and future needs?
- How will the highway effect volumes on parallel and cross-streets?
- Is there an option for a reasonable guarantee of consistent travel time?
- What will be the impact to the surrounding environment?
- Does the alternative provide for future flexibility?



I-25 Central PEL

Next Steps

- August 2017 - Project initiation/kick-off
- February to August 2018 - Purpose and Need
  Develop evaluation process and alternatives
- October to December 2018 - Review alternatives and level 1 evaluation
- Spring/Summer 2019 - Review level 2 evaluation
  Public open house - June 6
- Summer/Fall 2019 - Review level 3 evaluation
  Next TAC, EOC, & SFG Meeting
- Fall 2019 – PEL study complete

Questions