



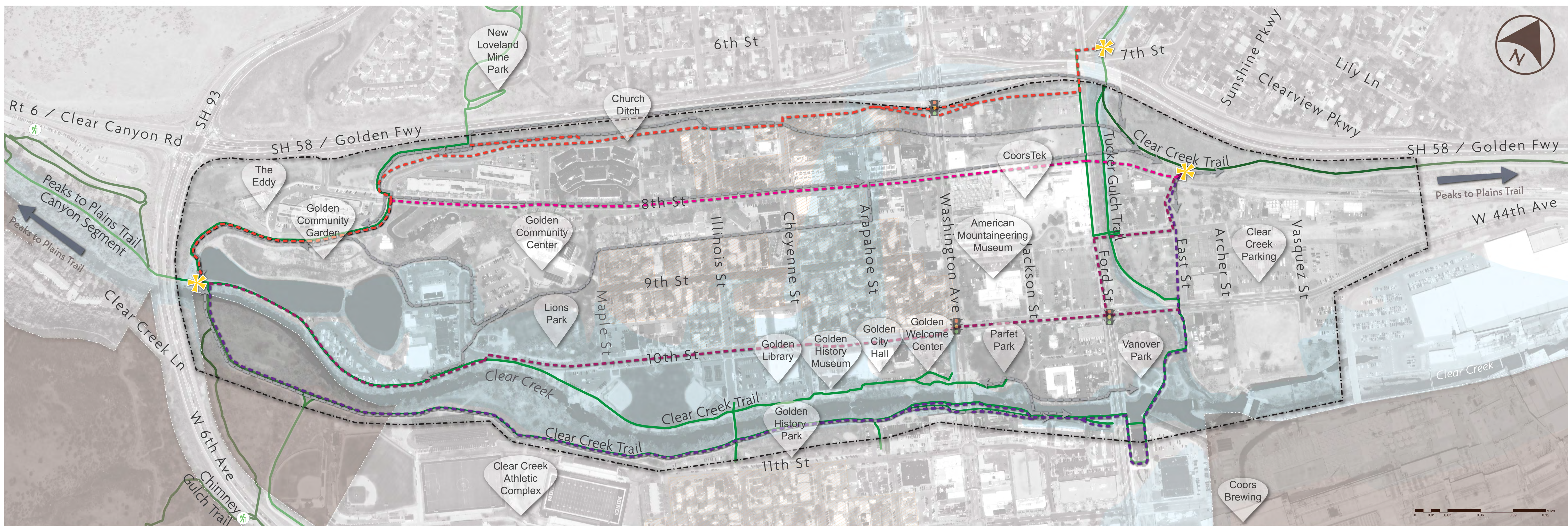
GOLDEN PEAKS TO PLAINS: All Considered Alignment Alternatives

Background:

Subsequent the first open house event in May, the suggested alignments and comments were taken into consideration. Four potential alignments were derived from that information and are shown on the map below.

Primary Goal for the Selected Alignment

Define a connection that will safely and efficiently connect the Peaks to Plains trail within and through the City of Golden that reduces conflicts between bicyclists, pedestrians, vehicles, and tubers.



LEGEND

- Study Area Boundary
- City of Golden Boundary
- Jefferson County
- Trailheads
- Historic Districts
- 100 Year Floodplain
- Jefferson County Trails
- City of Golden Shared-Use Paved Trails
- Proposed Alignments from Open House 1
- Proposed Alignment A (Church Gulch)
- Proposed Alignment B (8th Street)
- Proposed Alignment C (10th Street)
- Proposed Alignment D (South Clear Creek Trail)
- Peaks to Plains Connection Points



GOLDEN PEAKS TO PLAINS: Evaluation Criteria

Background:

Once the four alternative alignments were established, the feasibility of the alternatives was analyzed using a series of evaluation criteria. These evaluation criteria categories and details are included on this board. Review the information on this board before reviewing how each alternative alignment scored

Primary Goal for the Selected Alignment

Define a connection that will safely and efficiently connect the Peaks to Plains trail within and through the City of Golden that reduces conflicts between bicyclists, pedestrians, vehicles, and tubers.

Right of Way & Land Use

Right of Way (ROW)

Does alignment utilize existing public right-of-way or require new acquisitions or easements?

Adjacent Land Use Consistency

What is the impact to adjacent residential properties or other land uses?

Pedestrian Safety & Comfort

Pedestrian Crossings

Safety and convenience at intersections and mid-block crossings

Pedestrian Level of Traffic Stress (LTS)

Measures the level of traffic stress experienced by pedestrians

Bicycle Safety & Comfort

Portion Off-Street Versus On-Street

Linear length of the alignment that is off-street versus on-street (local, collector, arterial)

Bicycle Crossings

Safety and convenience at bicycle crossings

Bicycle Level of Traffic Stress (LTS)

Is the design option safe & comfortable for bicycles?

Vehicle Interactions

Total At-Grade Crossings

Number of at-grade crossings of all roads and accesses

Number of Signalized Crossings

Number of signalized crossings

Number of Unsignalized Crossings

Number of unsignalized roadway crossings

Number of Driveway Crossings

Number of driveway crossings

New Grade-Separated Crossings

Includes addition of new grade separated crossing

Environmental Resources

Portion of Alignment in Floodway

Percentage of alignment in flood plain

Wetlands Impact

Waters of the US within footprint of alignment

Historical Impact

Potential impacts to historic resources within alignment

Economic

Expected New Visitors to Local Businesses

Measure change in new tourism or shopping

Integration with Planned Development

Are there portions of an alignment that could integrate with planned development?

User Experience

Route Directness

Considers length and connectivity

Ease of Navigation

Intuitiveness of navigation to connect on trail versus other routes

Elevation Gain

Measures total elevation gain to measure total effort for bikes and peds to traverse

Interaction with Other Recreational Users

Define conflicting areas that other recreational users are utilizing

Options to Connect to Existing Clear Creek Trail

Number of opportunities available to connect. How easy is this connection?

Urban Realm

Does the trail improve streetscape or natural improvements of varying quality?

Existing Trees

Does the trail preserve existing mature trees?

Parking

Change in Parking Spaces

Number of parking spaces changed by alignment

Traffic

Change in Intersection Operations

Change in traffic Level of Service (LOS) at select intersections

Cost

Capital Cost

Estimated capital cost

Major Structure Investment Needed

Major investment needed such as a new bridge

Maintenance Costs

Estimated ongoing maintenance and operational expense

Constructibility

Infrastructure Conflicts

Level of utility, ditch, or other infrastructure conflicts

ADA Accessibility

Level of effort to meet Americans with Disabilities Act (ADA Public Right of Way Accessibility Guidelines)

Public Preference

Public Preference

Public opinion about alignment gained at public meeting





GOLDEN PEAKS TO PLAINS: Scoring Summary

Background:

These scores were determined objectively on a 1-5 scale and were weighted based on an activity at the second community meeting. Public votes were obtained via tokens placed in jars from approximately 25 people.

The two highest scoring alternatives, **Church Ditch** and **Clear Creek Trail**, will progress into concept design.

The two lowest scoring alternatives, 8th Street and 10th Street, still scored well and could be considered as options should fatal flaws be identified with Alternative A or B.

| Category | Alternative A: Church Ditch | | Alternative B: 8th Street | | Alternative C: 10th Street | | Alternative D: Clear Creek Trail Improvements | |
|-----------------------------|--|---------------------------------|--|---------------------------------|---|---------------------------------|---|---------------------------------|
| | Category Score | Weight Based on Public Feedback | Category Score | Weight Based on Public Feedback | Category Score | Weight Based on Public Feedback | Category Score | Weight Based on Public Feedback |
| Right of Way & Land Use | 3 | 3 | 3 | 3 | Highest Category Score 4 | 4 | 3 | 3 |
| Pedestrian Comfort & Safety | Highest Category Score 4 | 12 | 3 | 9 | 2 | 6 | Highest Category Score 4 | 12 |
| Bicycle Comfort & Safety | 4 | 13 | 3 | 8 | 2 | 6 | 4 | 13 |
| Vehicle Interactions | 4 | 9 | 2 | 3 | 2 | 4 | 4 | 9 |
| Environmental Resources | 4 | 4 | Highest Category Score 5 | 5 | 3 | 3 | 4 | 4 |
| Economic | 2 | 2 | 3 | 3 | 5 | 5 | 3 | 3 |
| Parking | 5 | 5 | 2 | 2 | 1 | 1 | 5 | 5 |
| Traffic | 5 | 5 | 3 | 3 | 3 | 3 | 5 | 5 |
| User Experience | 6 | 9 | 4 | 12 | 5 | 14 | 3 | 8 |
| Cost | 5 | 5 | 3 | 5 | 4 | 7 | 3 | 6 |
| Constructability | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Public Preference | 5 | 5 | 4 | 4 | 4 | 4 | 2 | 2 |
| Total Score | Highest Scoring Alternative 45 74 | | Lowest Scoring Alternative 36 60 | | Third Highest Scoring Alternative 37 60 | | Second Highest Scoring Alternative 44 73 | |

Additional Notes

- Simple weights were categorized using public votes as follows: 1-5 public votes =1 simple weight; 6-10 public votes=2 simple weight; 11-18 public votes = 3 simple weight.
- The scoring mechanisms shown above are defined as:
 - Category Score: an average of the scores of all the criteria in a category, which results in a 1-5 score for each category.
 - Weighted Score: multiplies each category score by the simple weight (1-3) based on public voting as defined above.
- Regardless of the preferred alignment, improvements to bike and pedestrian infrastructure on 8th Street and 10th Street may still be considered for future implementation.

GOLDEN PEAKS TO PLAINS: Church Ditch

Long-Term Option

Instructions:

Review the alignment and details included.

If you have any comments or questions about the proposed route, use the sticky notes and markers provided and place them on the board.

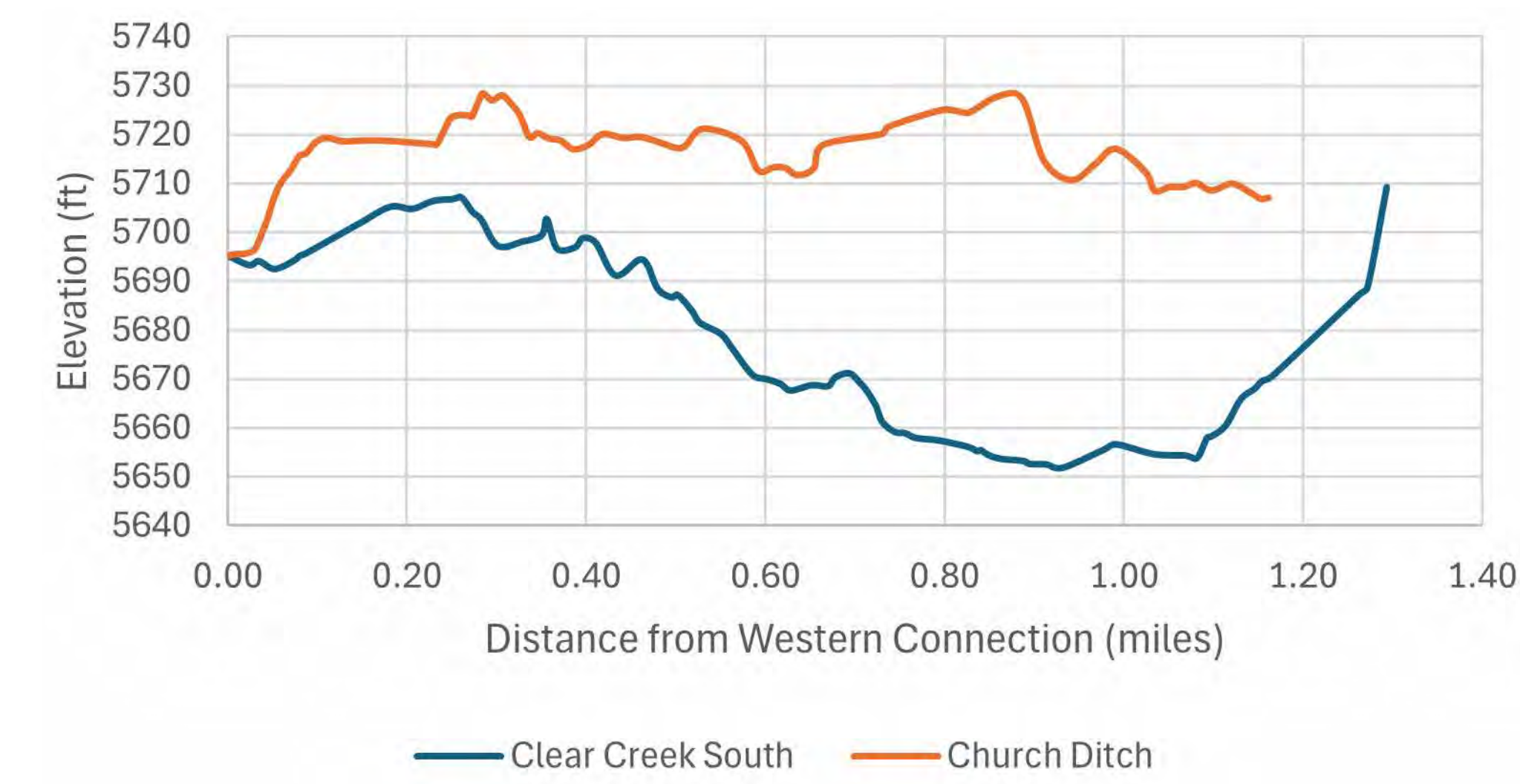
Design Considerations

- Trail elevation will likely be at or near the elevation of the ditch
- Trail will be placed north of the ditch wherever feasible to reduce impact on adjacent properties
- Trail design should be coordinated with design of future sound walls along south side of CO-58
- Coordination with ditch company is ongoing and considering enclosing the ditch in constrained locations

Alignment Highlights

- Point-to-point trail **distance** is **17%** shorter than the existing Clear Creek North Trail
- Has **3 intersection crossings** and about **11 driveway crossings**
- **Elevation gain** is estimated to be **71'**

Alignment Profiles



- Improve at-grade crossing at 8th Street
- Begin separation from existing trail
- Offer bypass trail to reduce elevation change
- Potential ramp to existing bridge to reduce out-of-direction travel
- Alignment discussions held with Briarwood
- Utilize road surface or install new trail between Illinois and Cheyenne
- Improve and utilize road surface between Cheyenne and Arapahoe
- Potential for underpass at Washington Ave or signalized at-grade crossing
- Improve and utilize road surface between Washington and Ford
- Improve crossing at Ford Street



LEGEND

| | | |
|-------------------------|--|---------------------------------|
| Study Area Boundary | Jefferson County Trails | Proposed Facility Types: |
| City of Golden Boundary | City of Golden Shared-Use Paved Trails | Neighborhood Bikeway |
| Jefferson County | Proposed Alignment A (Church Ditch) | Shared Use Path |
| | Peaks to Plains Connection Points | |



- Consider safety of trail users near CO-58 on-ramp
- Consider alternate connection to Clear Creek Trail



GOLDEN PEAKS TO PLAINS: Clear Creek South Trail

Near-Term Option

Instructions:

Review the alignment and details included. As part of this near-term plan, this alignment design will likely be complemented by a package of management strategies. These are provided in the Design Considerations section for your review.

If you have any comments or questions about the proposed route, use the sticky notes and markers provided and place them on the board.

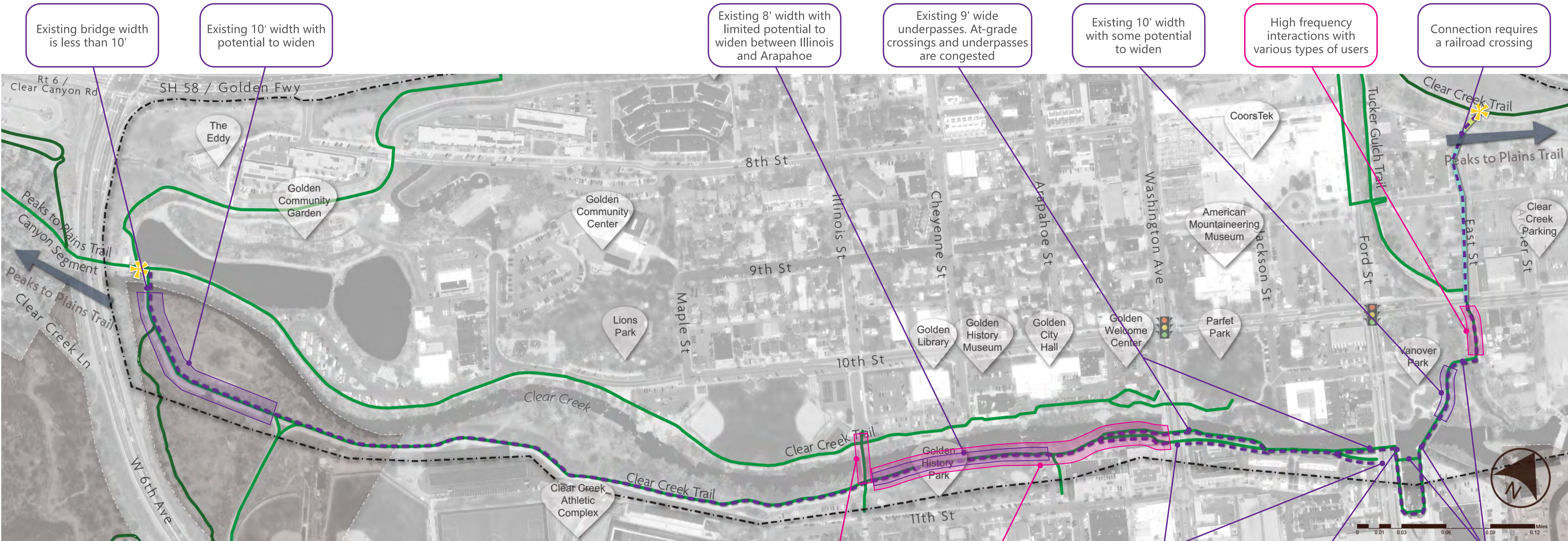
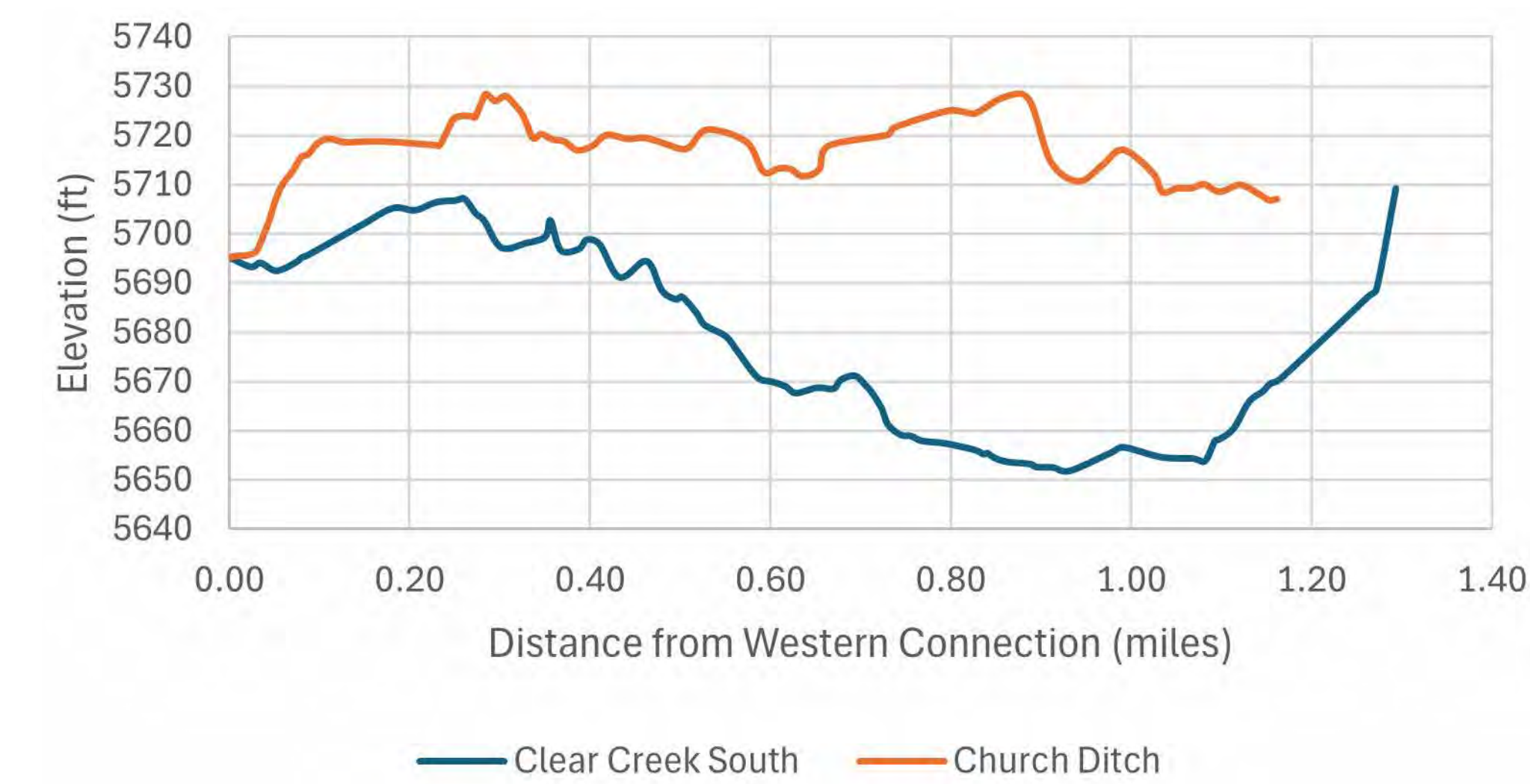
Design Considerations

- Trail management strategies to be considered in areas with high frequency interactions with other users
- Potential strategies to consider include:
 - separating bikes and pedestrians on either side of the creek
 - dismount zones
 - warning/regulatory signage and striping
 - one-way trail use

Alignment Highlights

- Point-to-point trail **distance** is **10%** shorter than the existing Clear Creek North Trail
- **4 intersection crossings** and about **4 driveway crossings**
- **Elevation gain** is estimated to be **91'** (when utilizing the existing underpasses)

Alignment Profiles



LEGEND

| | | |
|-----------------------------|--|--------------------------|
| --- Study Area Boundary | — Jefferson County Trails | Proposed Facility Types: |
| --- City of Golden Boundary | — City of Golden Shared-Use Paved Trails | — Neighborhood Bikeway |
| ■ Jefferson County | — Proposed Alignment D (Clear Creek Trail) | — Shared Use Path |
| | ✱ Peaks to Plains Connection Points | |

| | | | | |
|---|--|----------------------------|----------------------|--|
| High frequency interactions with various types of users | High pedestrian activity near downtown | Improve at-grade crossings | Blind 90 degree turn | Existing bridge widths are less than 10' |
|---|--|----------------------------|----------------------|--|



MANAGEMENT STRATEGIES

INSTRUCTIONS:

As part of the Clear Creek near-term trail alignment, management strategies will be incorporated. Review the management strategy types below. **Place a sticker below to support this management strategy.** Sticky notes are provided if you would like to include any comments about a management strategy, or suggestions for additional management strategies.

Separating types of trail users

Definition: Trail is physically separated for different users. For instance, bikes and pedestrians could be directed towards trails on opposite sides of Clear Creek.

Example: Cherry Creek Trail, Denver



Leave a sticker to support this strategy

One-way trail use

Definition: Trail traffic, regardless of user type, moves in one direction. Paint is often used to provide more detail about the appropriate location of different users on the trail.

Example: Washington Park, Denver



Leave a sticker to support this strategy

Warning/regulatory signage and striping

Definition: Signage along the trail and ground-striping on the trail provide information about permitted use types, direction, speed, and other information for different sections of the trail.

Example: Boulder Creek Path, Boulder

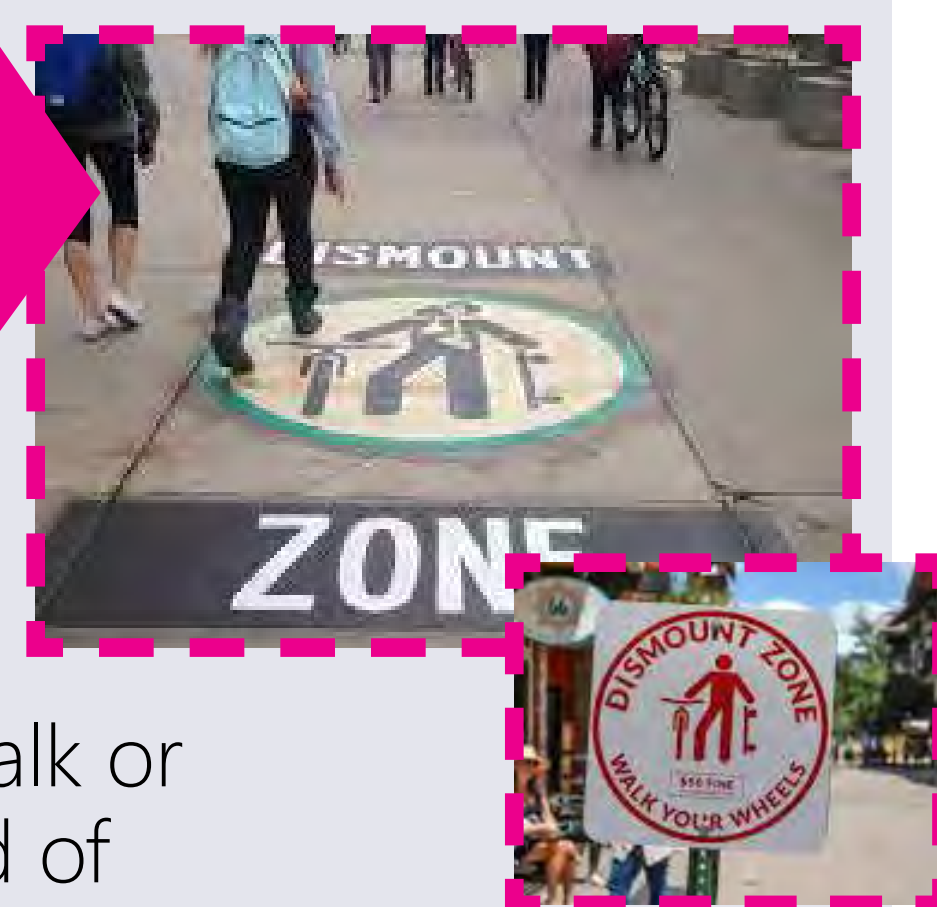


Leave a sticker to support this strategy

Dismount zones

Definition: Signage or paint along the trail are used to indicate where people must walk or carry a wheeled device instead of riding them.

Example: Pearl Street, Boulder



Leave a sticker to support this strategy

COMMENTS

DID WE MISS ANYTHING?

INSTRUCTIONS:

Use this space to record any additional thoughts about the Peaks to Plains Trail Alignment through Golden.

