Glenwood Springs

MULTIMODAL OPTIONS FOR A VIBRANT ECONOMY

MOVE Project Update

September 2020

CITY OF GLENWOOD SPRINGS COLORADO

RFTA

CONTENTS

01. Vision, Purpose, Need, Goals

02. Schedule, Study Area and Components

03. Screening Process and Results

04. Next Steps

Vision

A community with safe, multimodal, and efficient connection options that makes Glenwood Springs a city of great vitality and quality of life.

move

Purpose

To optimize the efficiency and utility of the transportation system within and through Glenwood Springs by developing, evaluating, and selecting transportation strategies and opportunities that align with the City's goals for mobility, land use, economic vitality, economic sustainability and quality of life.

What are the project goals?

- Improve mobility, connectivity, safety, and accessibility
- Determine effective and affordable transportation solutions with strong community support
- Provide reliable BRT access to the downtown/Confluence area of Glenwood Springs
- Improve travel time for auto travel and local transit
- Reduce congestion in the corridor
- Improve service efficiency (e.g. higher transit ridership, riders per trip, riders per hour of service)
- Meet current and future person-trip demand
- Encourage a shift of auto trips to attractive and reliable alternative modes
- Support local livability, development, and sustainability plans and policies
- Improve transit connections and accessibility to affordable housing

PROJECT NEEDS

Transit

- Integrate and optimize the local and regional transit systems to make them more attractive, convenient, reliable, effective and efficient.

Parking

- Recommendations for priority parking locations, facilities, phasing plans and policies for City-owned facilities and for RFTA's 27th Street BRT station
- Improve parking management to minimize searching for parking

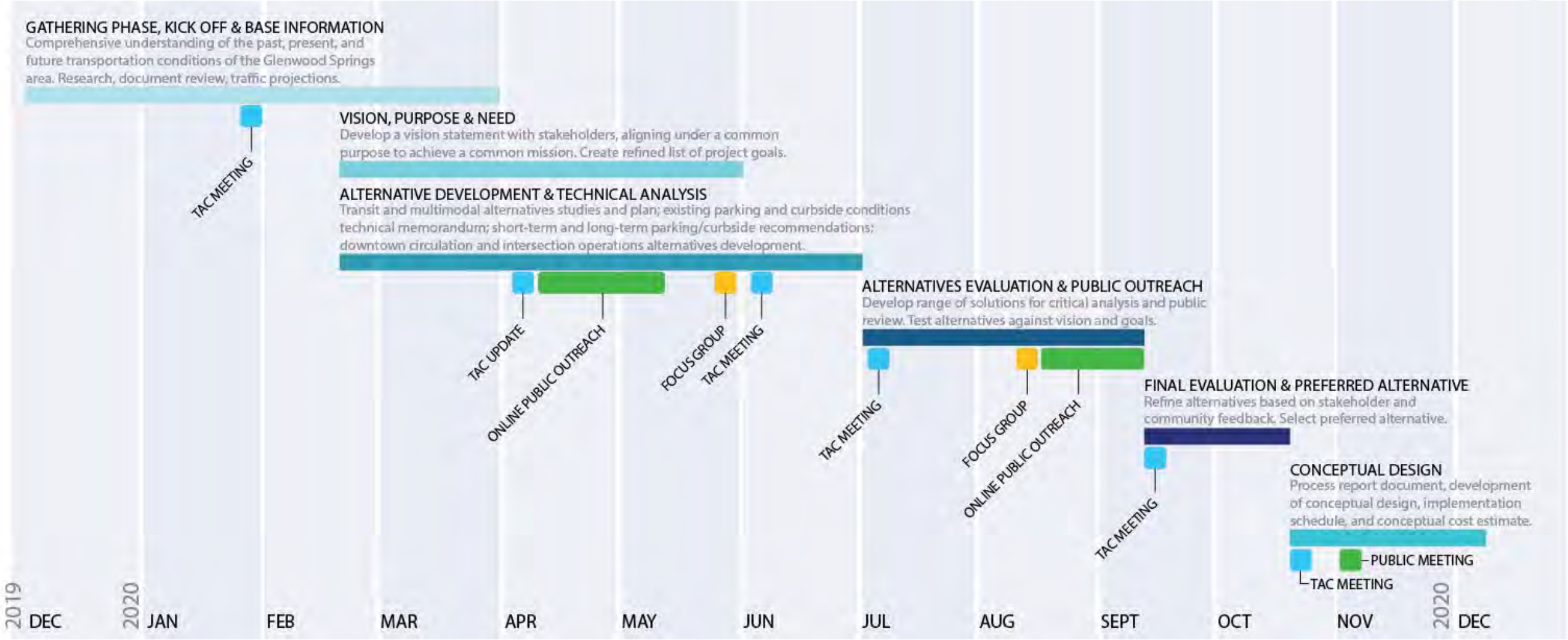
Congestion (non-transit)

- Improve traffic safety, circulation and operations particularly during the morning and afternoon peak periods and considering growth over the next 20 years.

Bicycle and Pedestrian

- Improve pedestrian access throughout the Downtown area including connections with transit stations
- Improve ADA access and SH 82 pedestrian crossings
- Facilitate bicycling as a connection to transit.

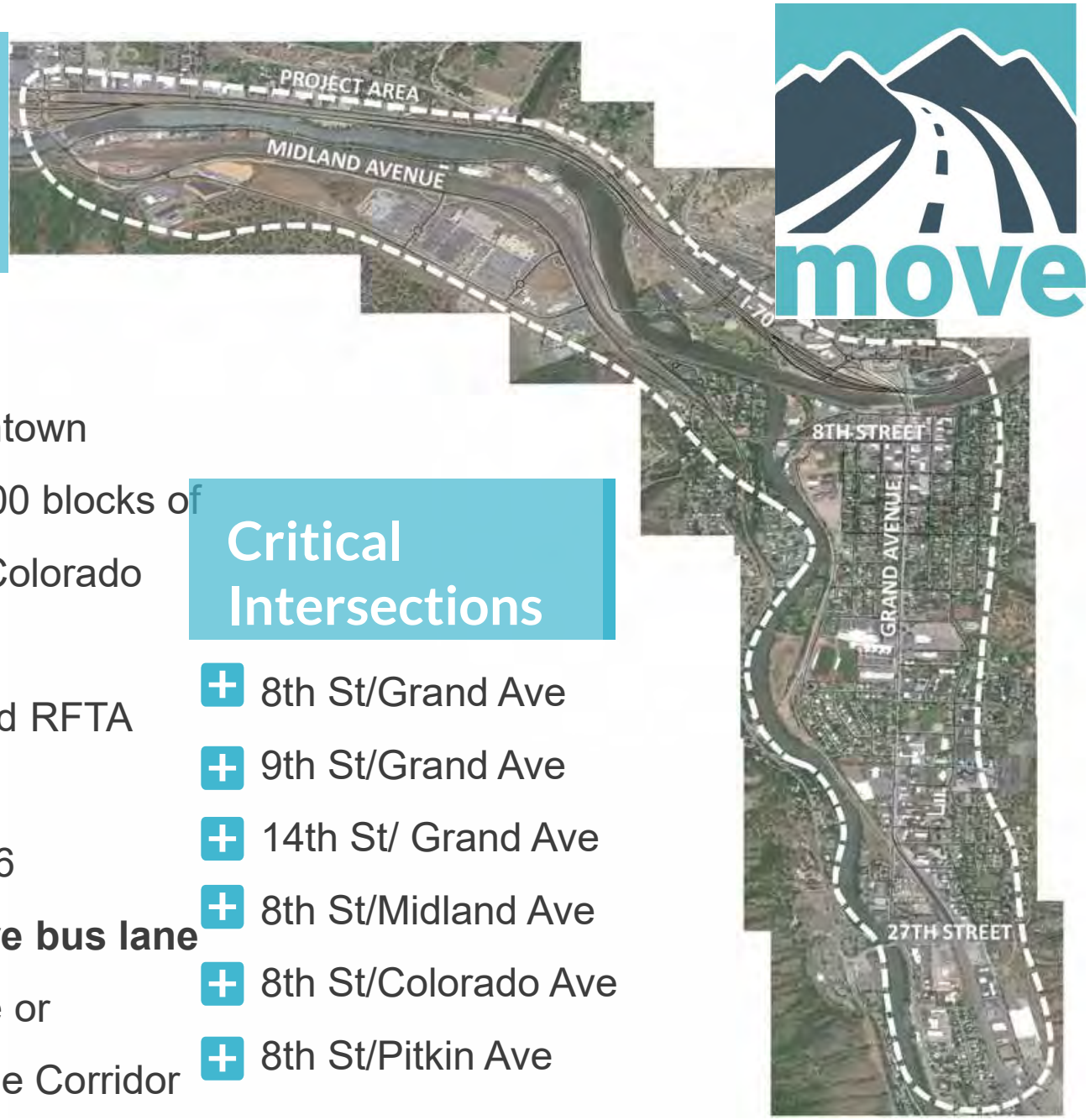
SCHEDULE


GATHERING PHASE, KICK OFF & BASE INFORMATION
Comprehensive understanding of the past, present, and future transportation conditions of the Glenwood Springs area. Research, document review, traffic projections.
TAC MEETING
VISION, PURPOSE & NEED
Develop a vision statement with stakeholders, aligning under a common purpose to achieve a common mission. Create refined list of project goals.
ALTERNATIVE DEVELOPMENT & TECHNICAL ANALYSIS
Transit and multimodal alternatives studies and plan; existing parking and curbside conditions technical memorandum; short-term and long-term parking/curbside recommendations; downtown circulation and intersection operations alternatives development.
TAC UPDATE
ONLINE PUBLIC OUTREACH
FOCUS GROUP
TAC MEETING
ALTERNATIVES EVALUATION & PUBLIC OUTREACH
Develop range of solutions for critical analysis and public review. Test alternatives against vision and goals.
TAC MEETING
FOCUS GROUP
ONLINE PUBLIC OUTREACH
FINAL EVALUATION & PREFERRED ALTERNATIVE
Refine alternatives based on stakeholder and community feedback. Select preferred alternative.
TAC MEETING
CONCEPTUAL DESIGN
Process report document, development of conceptual design, implementation schedule, and conceptual cost estimate.
PUBLIC MEETING
TAC MEETING
2019
DEC
2020
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEPT
OCT
NOV
2020
DEC

STUDY AREA

Study Components

- **Oversupply and undersupply parking issues** downtown around 7th and 8th streets and the 800, 900, and 1000 blocks of Grand Avenue, Cooper Avenue, Pitkin Avenue, and Colorado Avenue
- **Parking study** for the 27th Street and West Glenwood RFTA Stations
- **Transit center location** in downtown core and/or SH6
- **Alignment for possible exclusive or semi-exclusive bus lane** from 27th Street to 8th Street including Grand Avenue or alternate routes such as parallel streets or Rio Grande Corridor (while maintaining current bicycle and pedestrian trail)



Critical Intersections

- 8th St/Grand Ave
- 9th St/Grand Ave
- 14th St/ Grand Ave
- 8th St/Midland Ave
- 8th St/Colorado Ave
- 8th St/Pitkin Ave

Screening Process

GLENWOOD SPRINGS COLORADO

RFTA

Alternatives and Improvements Considered

Transit Alternatives

- BRT extension from 27th Street RFTA station to downtown Glenwood Springs
- Transit center locations in downtown Glenwood Springs

Parking

- Short term and long-term improvements for downtown Glenwood Springs
- Short term and long-term improvements for the Glenwood Springs RFTA park-n-ride stations

Congestion (non-transit)

- Traffic flow and congestion improvements for Grand Avenue and 8th Street.

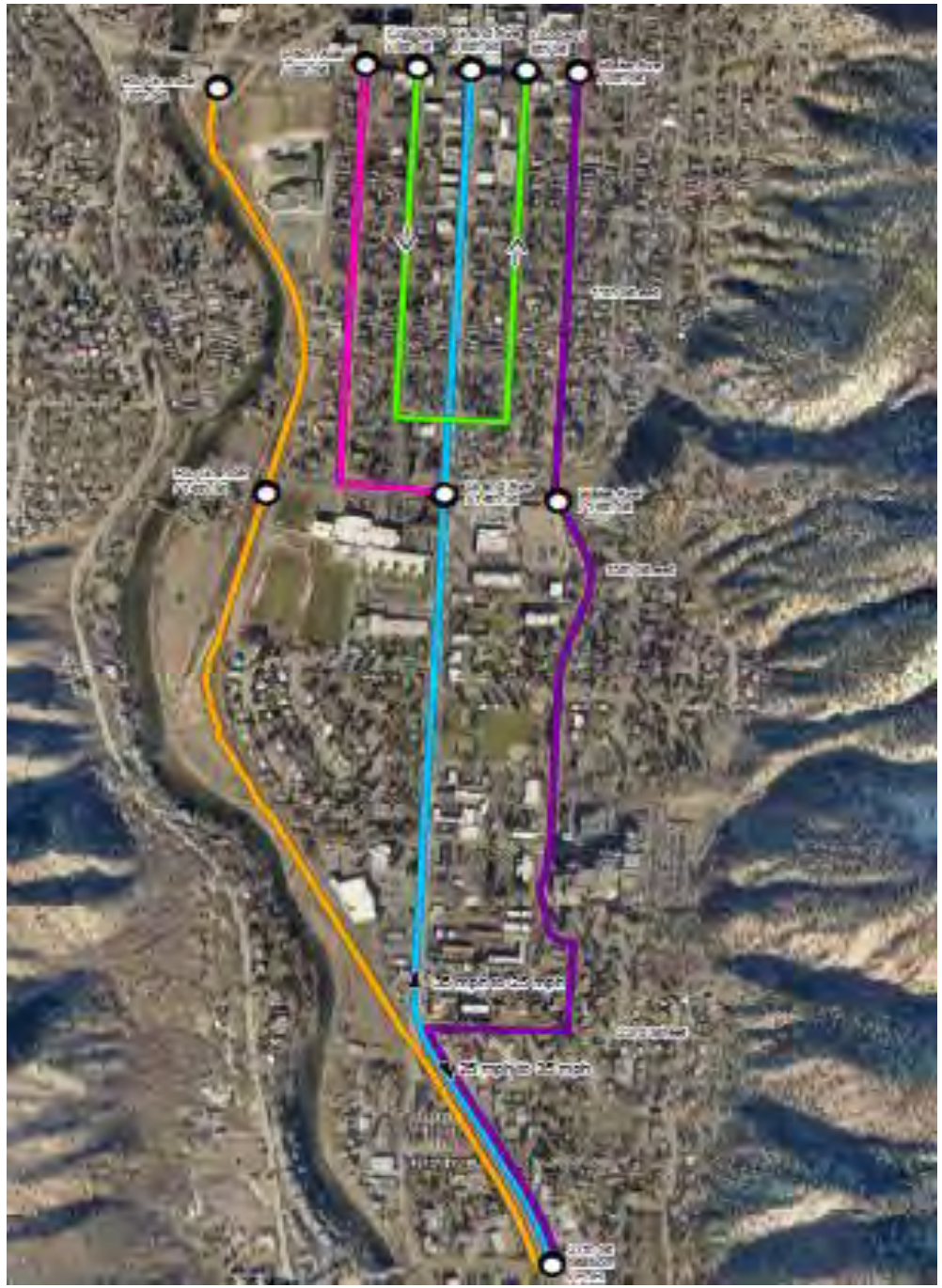
Bicycle and Pedestrian

- Pedestrian improvements throughout the downtown area
- Bicycle improvements connecting to transit
- Pedestrian improvements connecting to transit

Transit Center Alternatives

DOWNTOWN TRANSIT STATION

1. 7th Street and Colorado Avenue
2. Rio Grande corridor alignment
3. SH 6 Area
4. 7th Street, adjacent to the City's lift station
5. Northwest corner of Defiance Street and 8th Street



BRT Extension Alternatives

27th STREET TO DOWNTOWN

1. **Grand Avenue alignment**
2. **Rio Grande corridor alignment**
3. Blake Avenue alignment
4. Cooper/Colorado Avenues one-way couplet alignment
5. Pitkin Avenue alignment

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SCREENING PROCESS

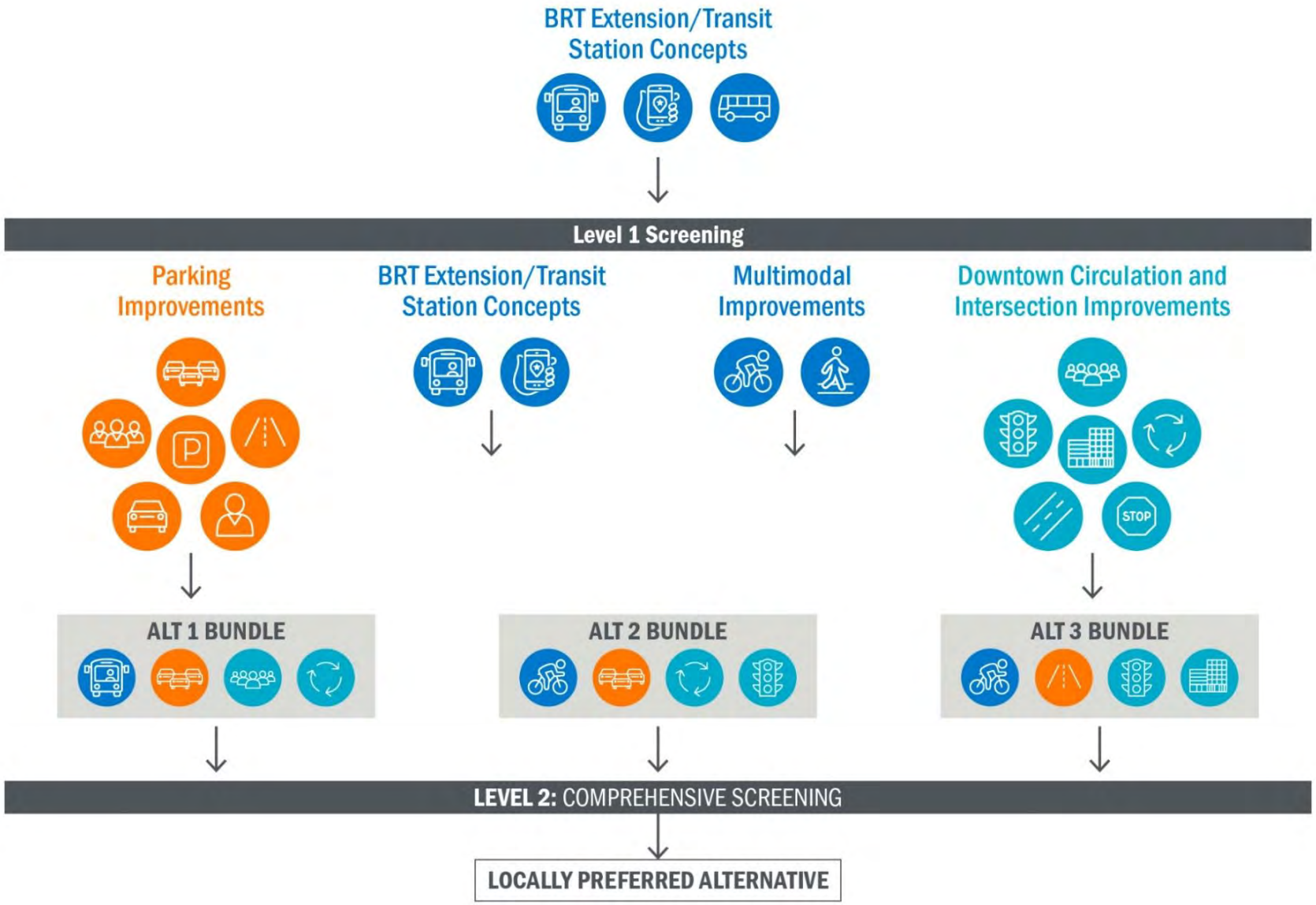
Level 1

- Meet Purpose and Need
- Evaluate alternatives against transit service criteria and parking impacts

Level 2

Evaluate alternatives against following criteria:

- Costs
- Multimodal ease and safety
- Traffic Impacts
- Transit Service
- Community amenities
- Community support



Level 1 Screening Results: BRT Extensions

	Level 1 Evaluation Criteria:	No Build	Grand Avenue	Rio Grande Corridor	Blake Avenue	Cooper/Colorado One-way Couplet	Pitkin Avenue
1	**BRT Travel Time Reliability** (based on percentage of alignment in dedicated lanes)	Poor	Moderate	Good	Good	Moderate	Moderate
	Score:	1	2	3	3	2	2
2	**BRT Travel Time** (one-way transit travel time in minutes of the BRT with available dedicated lanes)	8 minutes	7.1 minutes	4.6 minutes	7.9 minutes	7.2 minutes	8.2 minutes
	Score:	1	2	3	1	2	1
3	**BRT Travel Time Savings** (one-way transit travel time savings of the BRT with proposed dedicated lanes, compared with existing Grand Avenue)	N/A	0.9 minutes faster	3.4 minutes faster	0.1 minutes faster	0.8 minutes faster	0.2 minutes slower
	Score:	1	2	3	1	1	1
4	**Number of on-street parking spaces displaced**	0	140 mostly business spaces	0	278 mostly residential spaces	140 mostly residential spaces7	161 mostly residential spaces
	Score:	3	2	3	1	2	2
	TOTAL SCORE	6	8	12	6	7	6

Level 1 Screening Results: Transit Centers

	Level 1 Evaluation Criteria:	RFTA property on Rio Grande south of 8th St.	7th and Colorado in Confluence area	SH 6 Area
1	**Pedestrian and Bicycle Accessibility to Heart of Downtown GWS (Grand Ave/8th Street):** One-way distance	1,00’	350’	2,800’
	Score:	2	3	1
2	**Routing to West Glenwood PNR:** Travel time	5 minutes	6 minutes	6 minutes
	Score:	3	2	2
3	**Transit Oriented Location:** Density of businesses and activity centers within ¼-mile walk	Lowest	Highest	Middle
	Score:	1	3	2
4	**Congestion relief for downtown Glenwood Springs south of I-70:** attracting fewest cars through downtown	Fair	Poor	Good
	Score:	2	1	3
	TOTAL SCORE	8	9	8

Improvements to consider: Pedestrian

- Repair downtown sidewalks and ADA ramps (Continuous, comfortable sidewalks)
- Improve signal timing to walk across Grand Avenue downtown
- Structural and educational (wayfinding) improvements at Rio Grande Trail and 27th Street
- Improve shelters and signage at major transit stops
- Improve shared-use paths and trails
- Improve trail access at midpoint locations, such as 14th Street/Coach Miller Drive, Riverside Drive/12th Street Ditch
- Year-round maintenance of sidewalk, trail, and bicycle networks

Improvements to consider: Bicycle Facilities

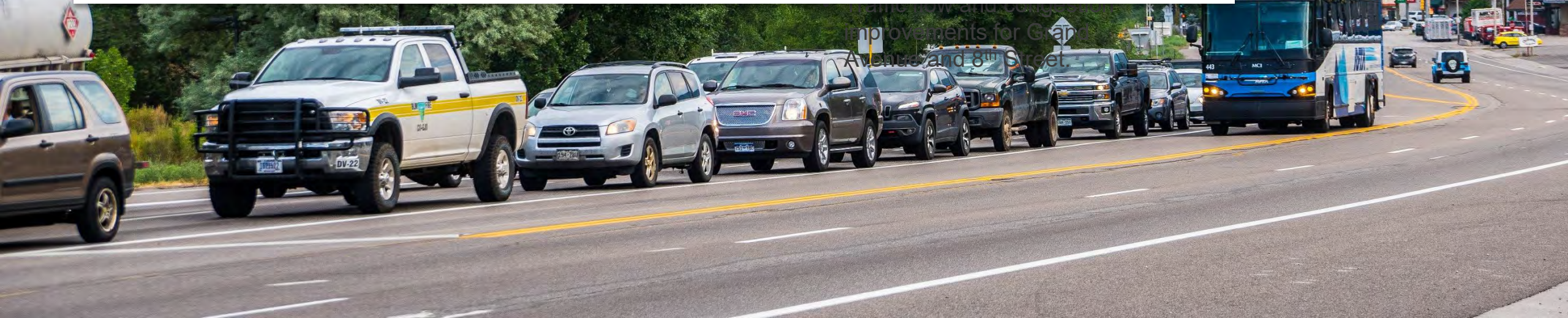
- Improve secure, short-term and long-term bike parking to encourage bicycling to transit stations
- Create bike service stations at major stations or a downtown parking garage.
- Create bike share to provide better first- and last-mile connections between RFTA stops and stations and the downtown core.
- Improve connected, dedicated bike networks (not sidewalks) to increase bicycle connectivity and minimize conflicts with pedestrians and vehicles.
- Improve accessible shared-use paths and trails (i.e. improving trail access at Rio Grande Trail midpoint locations, remove rail tracks in the Rio Grande corridor) to improve safety and comfort for bicyclists.
- Improve major bicycle connection intersections (striping, signal improvements, and geometric improvements) to increase bicycle comfort and connectivity through town.
- Maintain sidewalk, trail, and bicycle networks year-round.
- Improve bike loading on buses

Improvements to consider: Downtown Parking

- Establish a truck loading plan
- Add weekend parking enforcement
- Leverage parking enforcement technology - hand held license plate recognition (LPR) devices pared with automated ticket printing.
- Increase fines (and/or introduce tiered system) for parking violations
- Improve and use proper curb space signage and striping
- Implement paid parking
- Evaluate increasing parking capacity
- Improve transit service downtown
- Plan for Transportation Network Companies and Automated Vehicles

Improvements to consider: RFTA 27th Street Station

- Better connect existing overflow lot at 27th Street
- Lease or purchase land for additional parking spaces near 27th Street
- Establish a more robust parking enforcement program (with 24 hour limit)
- Provide kiss-n-ride area
- Add BRT stations in Glenwood
- Improve multimodal connections to BRT



Improvements to consider: Traffic Operations and Safety

- Improve traffic signal coordination/progression
- Transit signal priority (TSP)
- Safety improvements

Parking

Improvements to consider: Regional and Local Bus Servic

- Improve local transit service to optimize ridership
- Improve local/regional transit service connections
- Reduce local/regional transit service redundancies

Level 2 Screening Criteria: BRT Extensions and Transit Center Locations

We will look at the following categories when further evaluating the BRT Extensions and Transit Center Locations:

- Project Costs
- Auto Travel Time
- Transit Performance
- Pedestrian and Bicycle Ease and Safety
- Business Impacts
- Rio Grande Corridor Impacts
- Construction Duration
- Community Support

Grand Avenue BRT Alignment

Northbound dedicated BRT lane between 27th Street and 23rd Street. 23rd to 13th Street, BRT vehicles in existing mixed flow traffic lanes, with transit signal priority. From 13th Street to 8th Street, business access/transit (BAT) lanes would displace on-street parking and provide semi-dedicated BRT lanes in both directions but would also allow right-turn movements.

PROS

- Low construction impacts and duration
- Capital cost is roughly $4M-$5M
- Slight improved transit and automobile performance along Grand Ave

CONS

- Business parking removed along some sections of Grand
- Pedestrian “buffer” from busses is narrowed
- Numerous locations where cyclists and pedestrians cross BRT routes, potential safety issue
- Increased side street delays

Rio Grande Corridor

Dedicated BRT lanes in the exclusive right-of-way owned by RFTA that currently includes the Rio Grande trail. The right-of-way is typically 50' in this area (27th Street to 8th Street) and can accommodate both the trail and the BRT alignment. 2 options for this alignment are presented in the survey. Below are the pros and cons for all options.

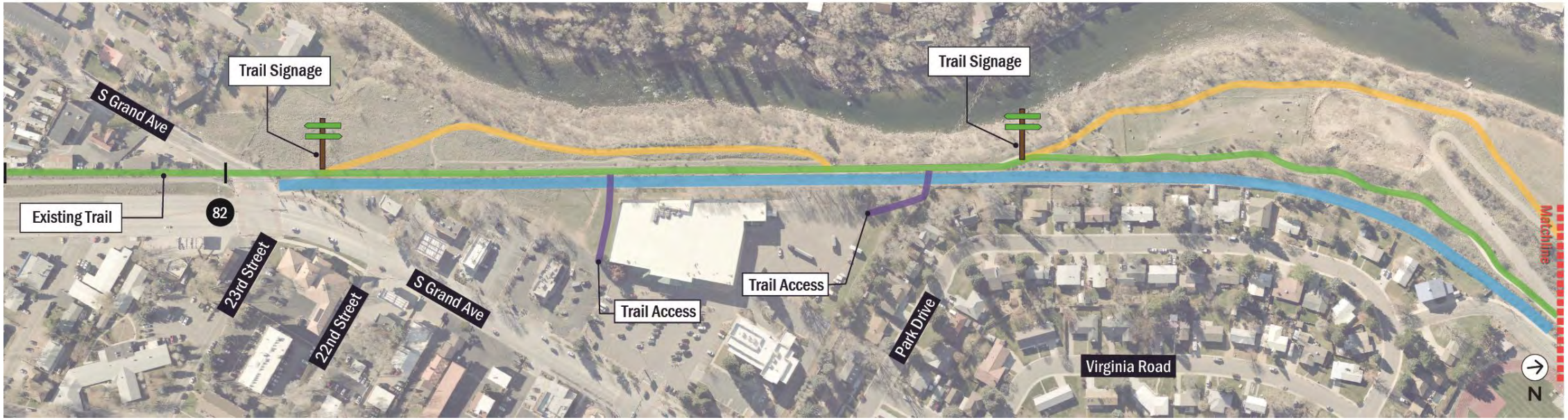
PROS

- Lower travel times and greater reliability than Grand Ave option
- Existing parking not affected
- Pedestrian "buffer" from buses is greater than the Grand Ave option
- Number of locations where cyclists and pedestrians cross BRT routes is low (good safety measure)
- Existing trail width will be increased where possible and parallel gravel running path to be added where space allows.

CONS

- Existing secluded nature of Rio Grande trail will be changed
- Pedestrian and bicycle accessibility to cross the alignment is limited
- Construction impacts and cost are greater than the Grand Ave option

Rio Grande Corridor - Minimal Construction Option



Rio Grande Corridor - Minimal Construction Option

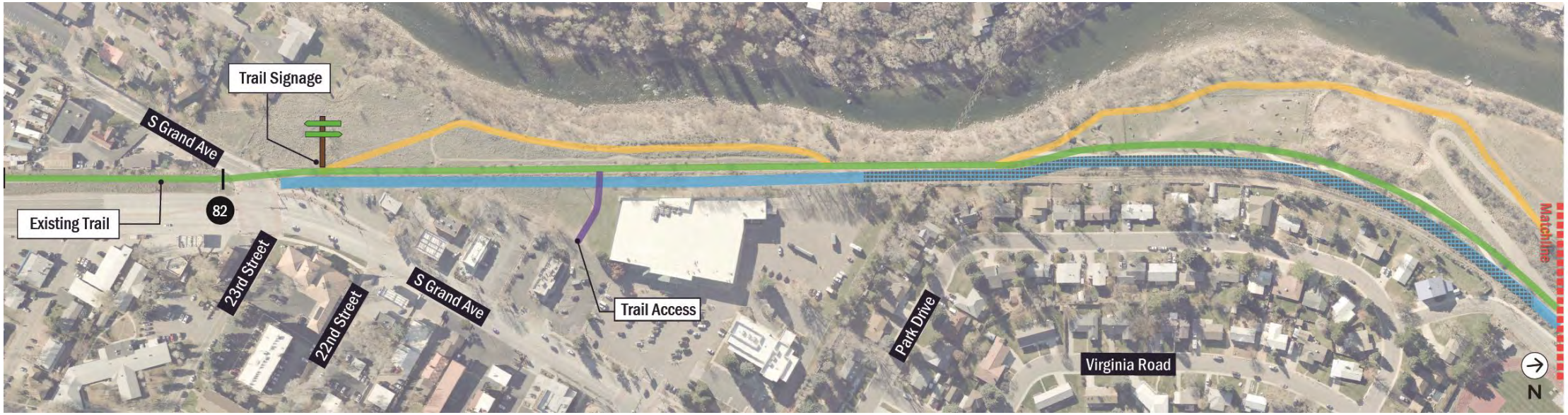
Info and Features

- Minimizes the width of disturbance and places the trail and transit alignment next to each other with a barrier separation
- Capital cost is roughly $15M-$20M
- Can accommodate widening the width of the existing trail from 10’ to 12’

Rendering 1

Rendering 2

Rio Grande Corridor - Vertical Separation Option



Rio Grande Corridor - Vertical Separation Option

Info and Features:

- 70% of trail will move to at least 8’ away from the busway (Rendering 3)
- 30% of trail will be next to busway but vertically separated (Rendering 4)
- Capital cost is roughly $20M-$25M
- Includes landscaping between trail, busway, and properties and parallel gravel running path where space allows
- Maximizes visual separation between bus lane and trail user

Rendering 3

Rendering 4

TRANSIT STATION OPTIONS

RFTA Property

PROS

- Sufficient land area to allow development of the transit center
- Works best with BRT alignment on the Rio Grande Corridor
- Closest and fastest route from this transit center to RFTA's West Glenwood transit center
- Quarter mile to heart of downtown (Grand Ave/8th Street)

CONS

- Not the closest location to the heart of downtown

7th and Colorado

PROS

- Sufficient land area to allow development of the transit center
- Works well with either BRT alignment
- Adjacent to the heart of downtown (Grand Ave/8th Street)

CONS

- Currently being used as a parking lot

SH 6 Area

PROS

- Sufficient land area to allow development of the transit center
- Works well with Grand Avenue BRT alignment
- Close to many businesses on the north side of Glenwood

CONS

- Over a half-mile to heart of downtown (Grand Ave/8th Street)

MOVE Study

NEXT STEPS

Review and consider all written, verbal, and online comments received.

Conduct a detailed analysis of the remaining alternatives.

Summarize above to identify the preferred alternative.

Prepare the preferred alternative for public viewing.

https://rftaglenwoodspringsmove.com/

What are the goals of virtual public outreach?

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PROVIDE

an overview of the project

UPDATE

public on project's progress

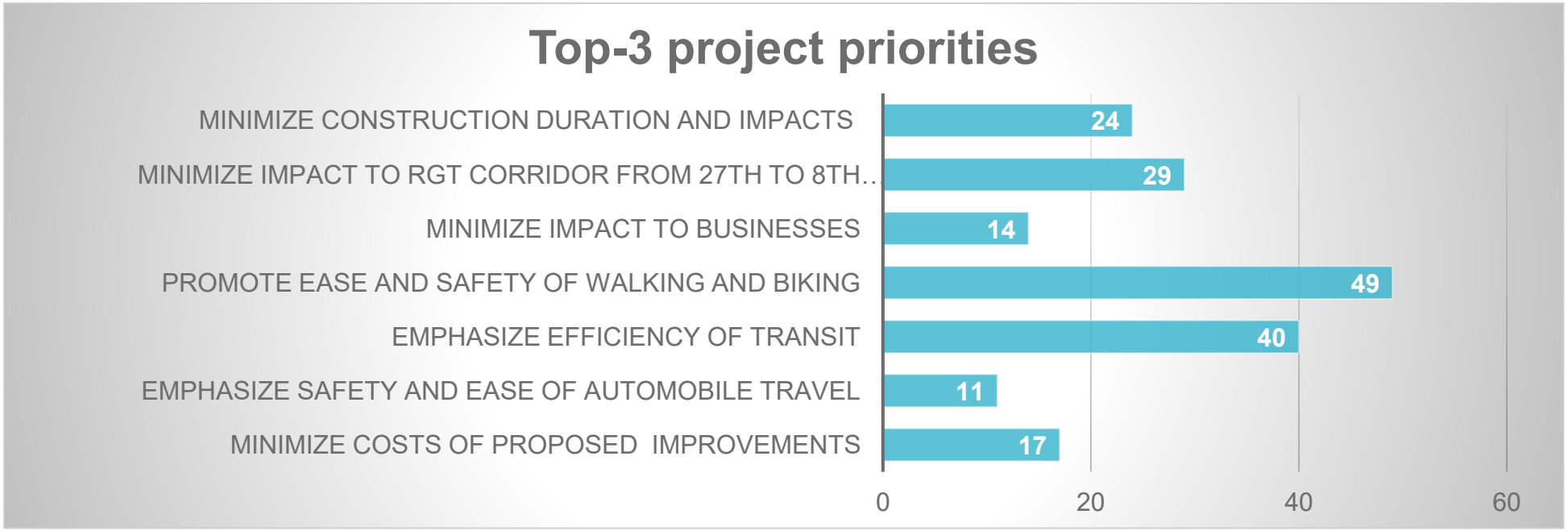
PRESENT

evaluated alternatives

OBTAIN

public input on remaining alternatives

Round 2 of Public Outreach:
August 20-September 11, 2020
https://rftaglenwoodspringsmove.com/

Round 2 Public Involvement Snapshot

- Survey Results as of August 24, 2020
- 36 Responses