Glenwood Springs

MULTIMODAL OPTIONS FOR A VIBRANT ECONOMY

MOVE Project Update

July 9, 2020

CONTENTS

01. **Project Background**

Scope of Work, Schedule, Project Vision, Purpose and Need.

02. **Existing Conditions**

Key Findings: Bike/Ped, Roadway, Traffic Operations, Transit Operations, Safety

03. **Coming Soon**

Traffic Operations Modeling, Evaluation of BRT Alignments and Downtown Transit Stations

04. **Parking**

05. **Next Steps/ Questions**

The **Roaring Fork Transportation Authority (RFTA)** and the **City of Glenwood Springs** (The City) have initiated a study to develop a long-term vision and program for transportation in and through the travel corridors of SH-82 (Grande Ave.), SH-6 (West Glenwood), I-70 and the RFTA Rio Grande Railroad Corridor. Focus will be placed on the transportation, land use, environmental, economic and social needs of the City and the region.

The **Multimodal Options for a Vibrant Economy (MOVE)** study will investigate various aspects of mobility for the City, including but not limited to transit, parking, and internal circulation.

BACKGROUND

Vision

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

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.

PRELINIMARY 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
- Improved parking management to minimize searching for parking

Congestion (non-transit)

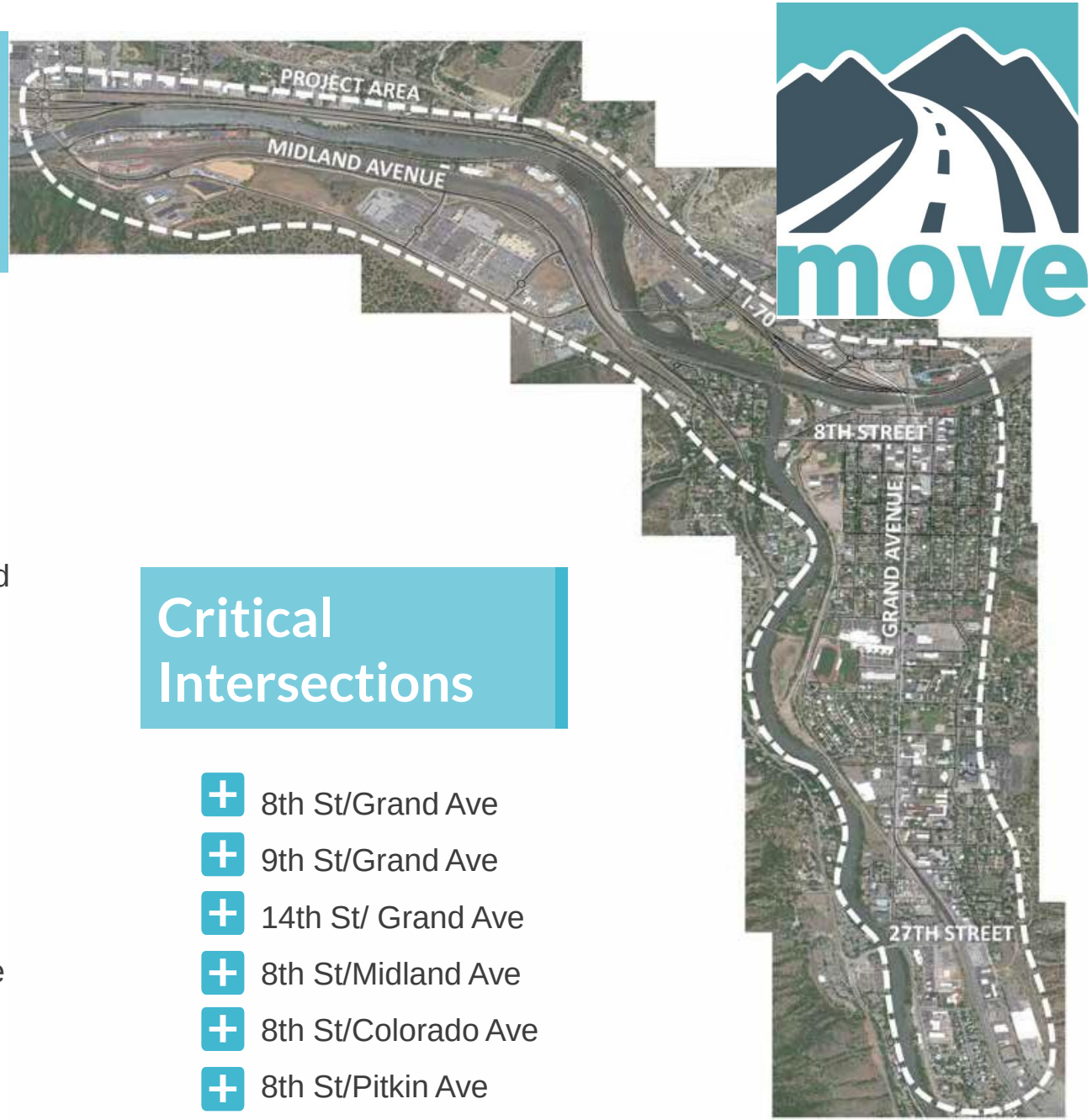
- Improve traffic safety, circulation and operations particularly during the morning and afternoon peak periods and considering growth over the next 20 years..

Bicycle and Pedestrian

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

- 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, rider 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

STUDY AREA



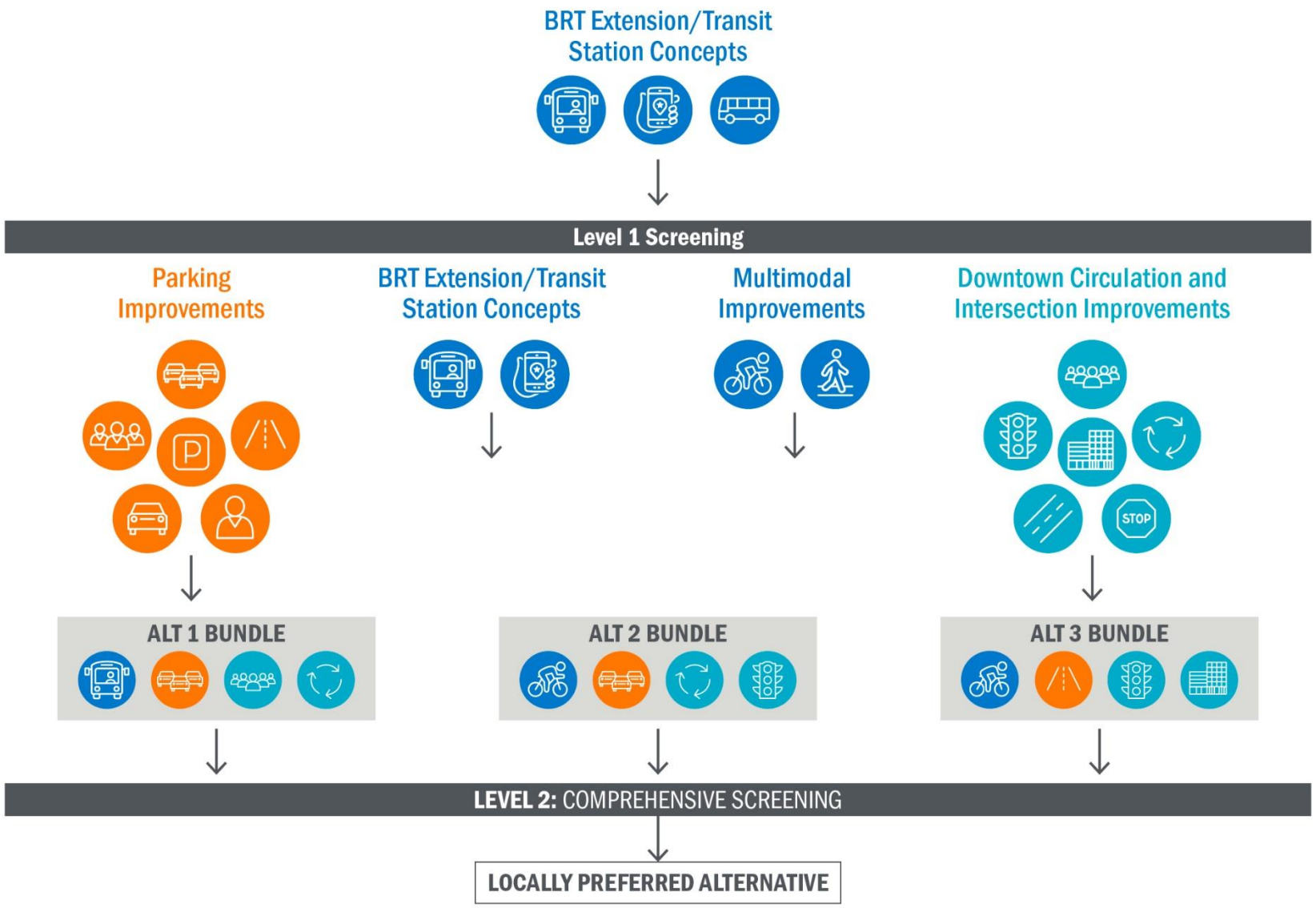
Study Components

- **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)

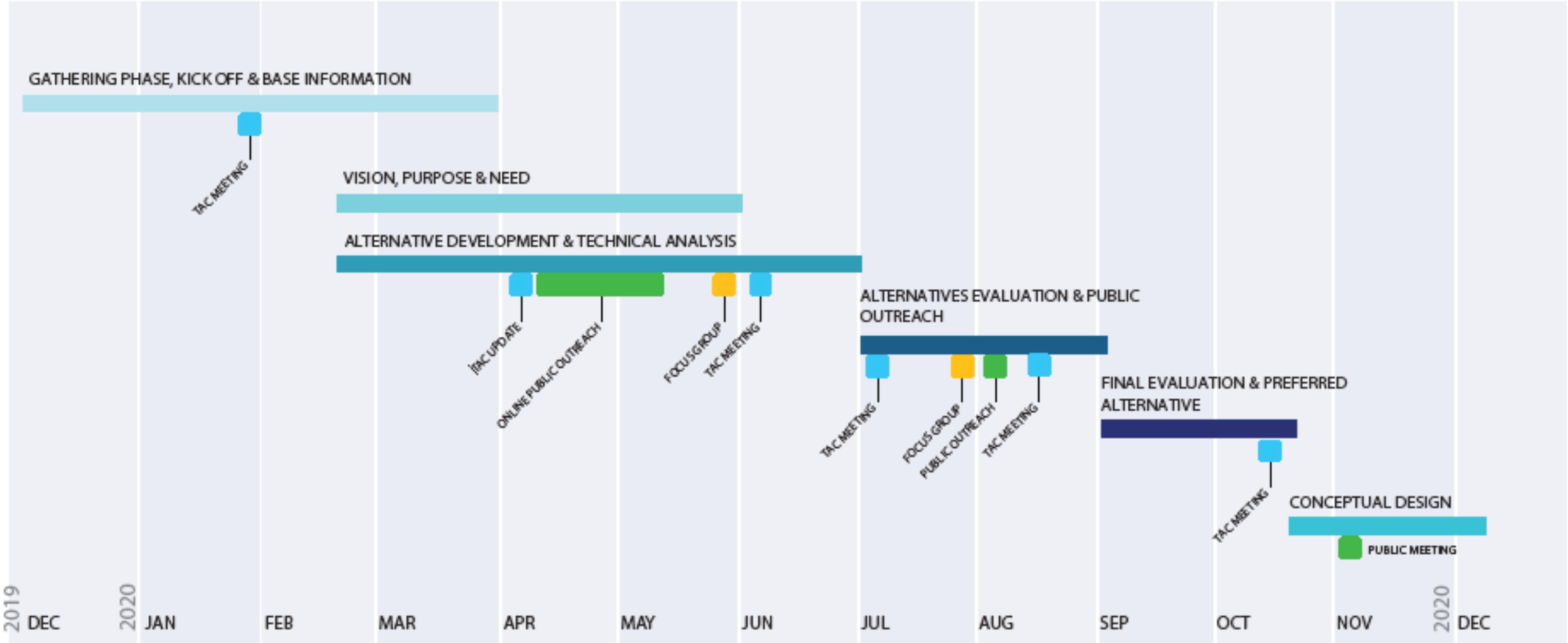
Critical Intersections

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

STUDY PROCESS



SCHEDULE


GATHERING PHASE, KICK OFF & BASE INFORMATION
TAC MEETING
VISION, PURPOSE & NEED
ALTERNATIVE DEVELOPMENT & TECHNICAL ANALYSIS
TAC UPDATE
ONLINE PUBLIC OUTREACH
FOCUS GROUP
TAC MEETING
ALTERNATIVES EVALUATION & PUBLIC OUTREACH
TAC MEETING
FOCUS GROUP
PUBLIC OUTREACH
TAC MEETING
FINAL EVALUATION & PREFERRED ALTERNATIVE
TAC MEETING
CONCEPTUAL DESIGN
PUBLIC MEETING
2019
DEC
2020
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
2020
DEC

Surveyed the various dynamics that influence mobility within Glenwood Springs:

- Parking
- Transit
- Pedestrian/bicycle activity
- Safety
- Vehicular traffic operations

Existing Plans Review:

City of Glenwood Springs Downtown Parking Study Update (2013)
Glenwood Springs Comprehensive Plan (2014)
Glenwood Springs Long Range Transportation Plan 2015-2035
Glenwood Springs Confluence Area Redevelopment Plan (2017)
6th Street Corridor Master Plan (June 2017)
Ride Glenwood Springs Transit Operations Plan (2018)
“Glenwood: Moving Forward Together” Project – U.S. EPA Brownfields Area-Wide Plan (2019)

EXISTING CONDITIONS
Key Findings

Bike/Ped

Long List of Improvements
Long Wait times to cross SH82
Long intersection crossing distances
Lack of bicycle parking and wayfinding

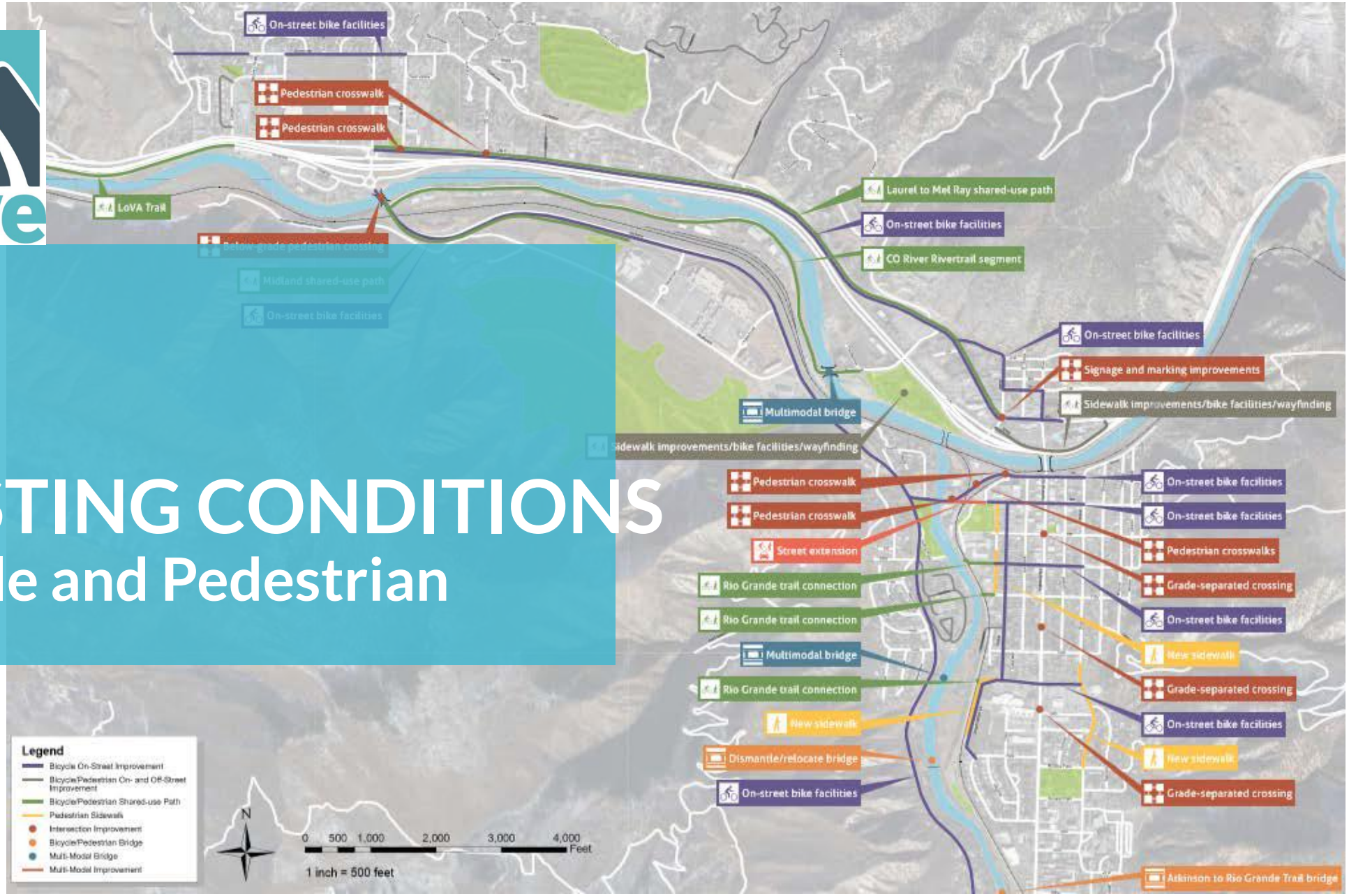
Parking

Many garages and off-street parking lots stay full, depending on time of day.
On-street parking along Grand Avenue in the winter season is relative under-used

Traffic Operations

Significant side-street delay at the signalized intersections of SH82
8th Street congested between Midland, Pitkin and Colorado

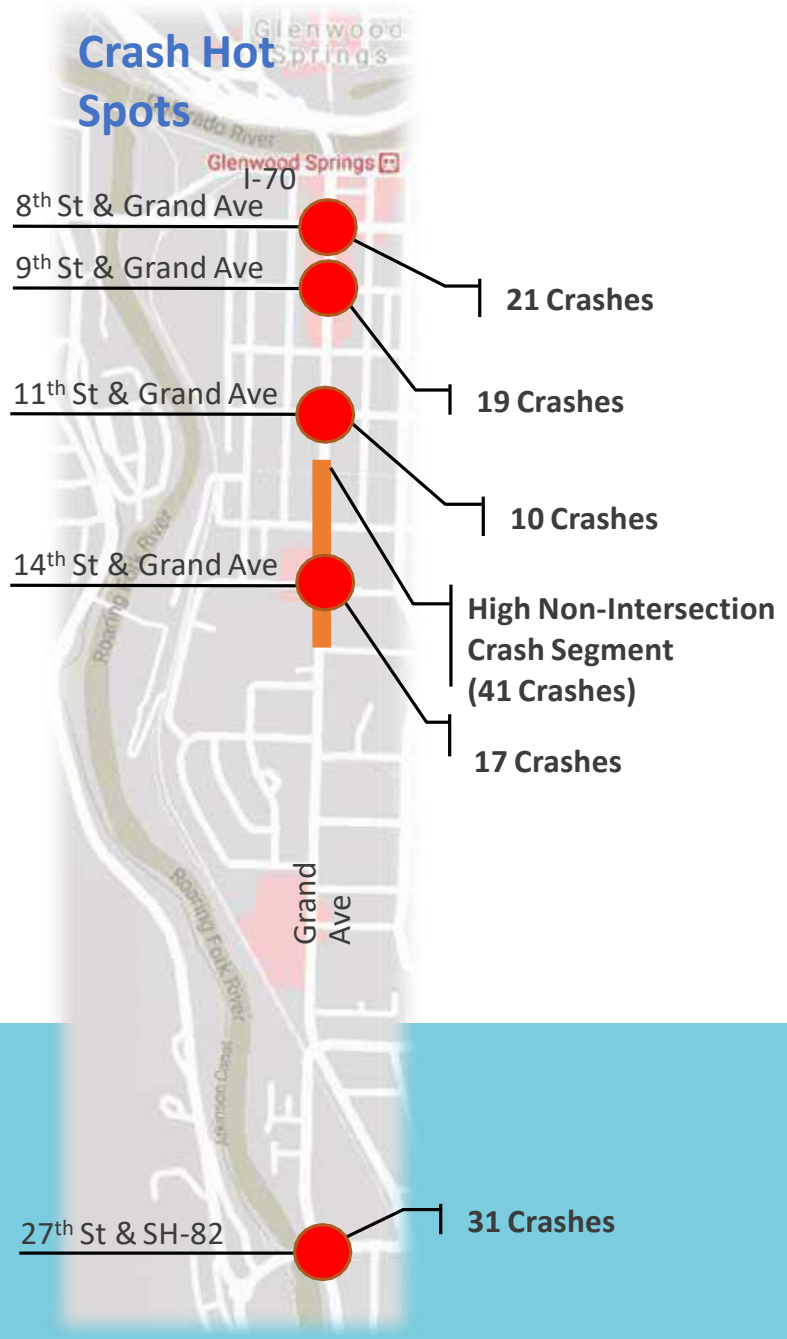
EXISTING CONDITIONS
Bicycle and Pedestrian



Recommended improvements from the ***2015 Glenwood Springs Long Range Transportation Plan***

EXISTING TRAFFIC + SAFETY

- Rear-end crashes most frequent type on SH 82, higher than national average
- Pedestrian/bicycle related crashes along SH 82 higher than national average.

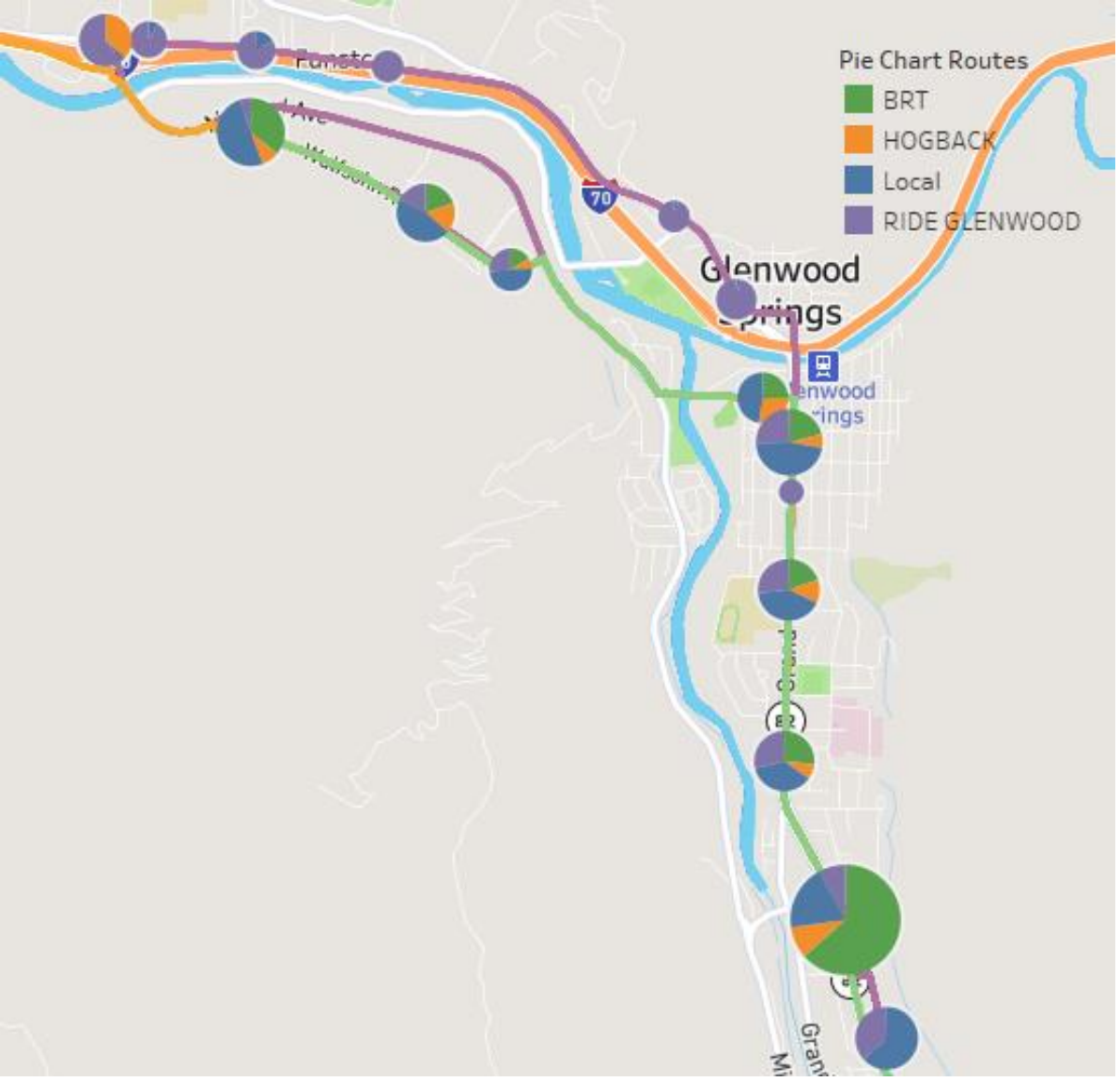


TOTAL CRASH SUMMARY

Intersection (Signalized):	224 (41%)
Intersection (Unsignalized):	46 (8%)
Non-Intersection:	233 (43%)
Driveway Access:	42 (8%)
Total Crashes:	**545**

EXISTING CONDITIONS:
Roadway Cross Sections

Grande Avenue: 8th to 13th Streets



EXISTING CONDITIONS: Transit Operations

- Boarding and Alighting by Route by Season
- Routes and Schedules
- Travel Times
- On-time performance

EXISTING CONDITIONS:
Traffic Operations

KEY FINDINGS

- SH 82 retiming has improved north/south travel
- Side-street operations are LOS E or worse, especially at PM peak
- 8th Avenue also LOS E or failing

AM Peak Hour

PM Peak Hour

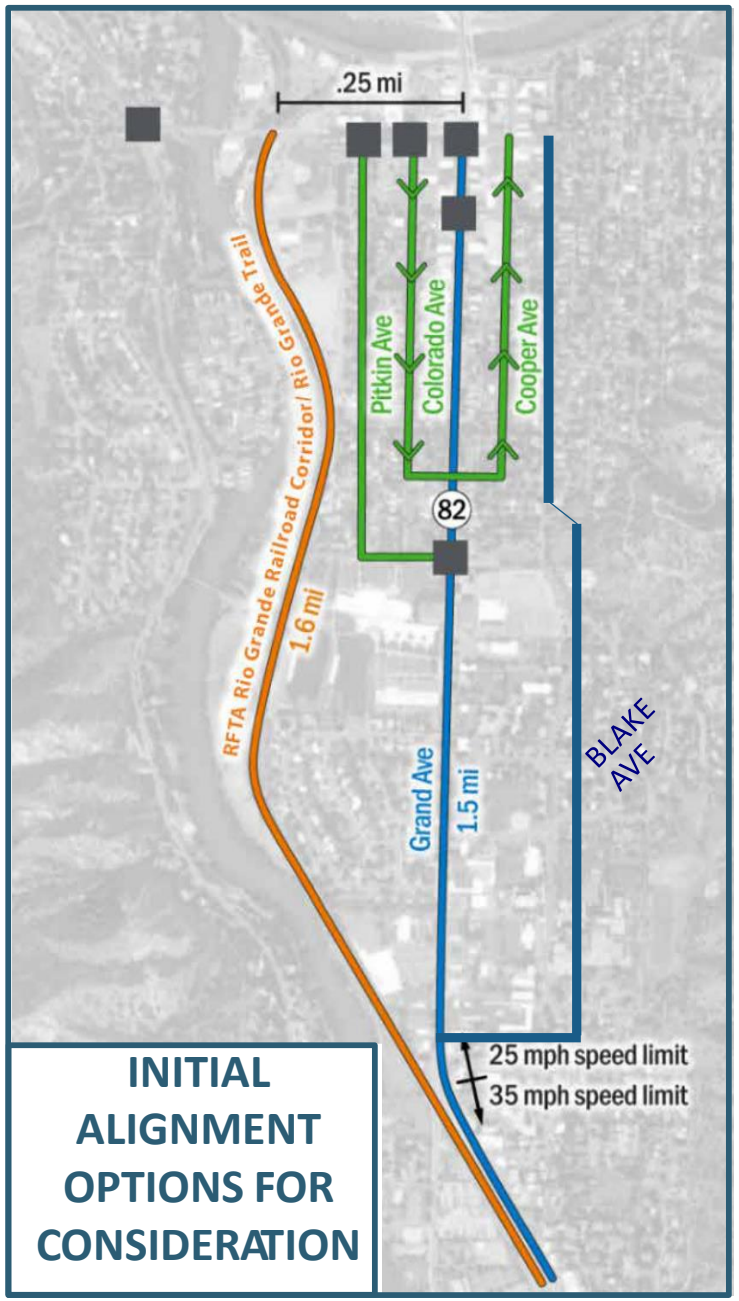
COMING SOON:
Traffic Operations and Analysis

- Micro-simulation traffic analysis
  - Grand Avenue (8th to 14th)
  - 8th Street (Midland to Grand)
  - Focusing on 6 intersections

- Current Conditions
- 2040 No Build Scenario
- 2040 Alternatives Models (two scenarios)

AM Peak Hour

PM Peak Hour



INITIAL ALIGNMENT OPTIONS FOR CONSIDERATION

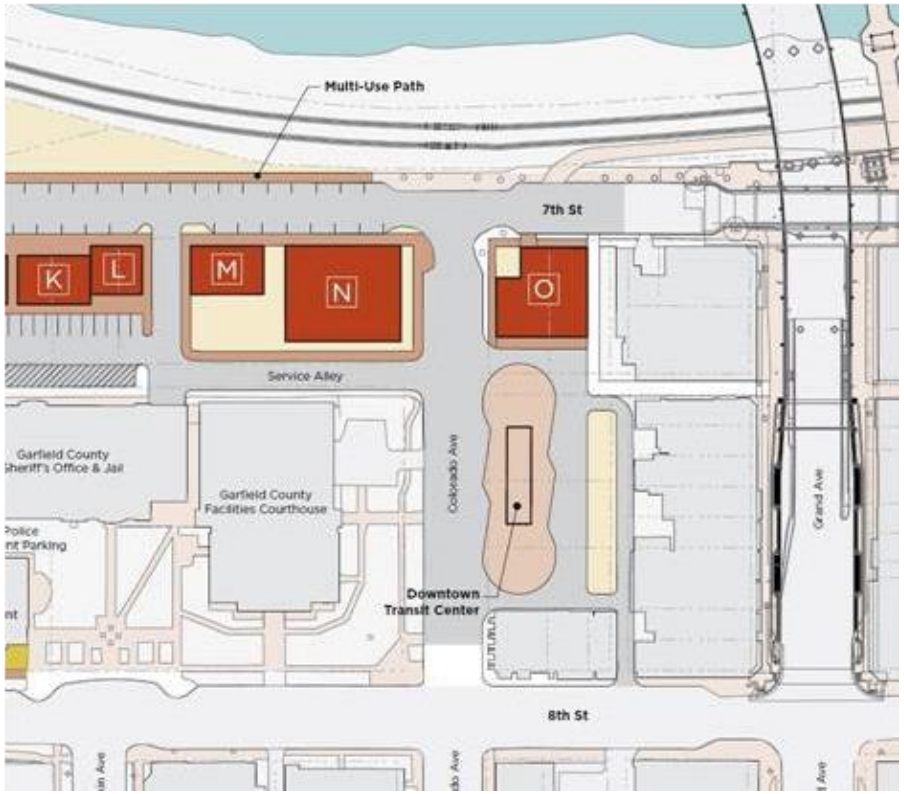
BRT Alignment Options

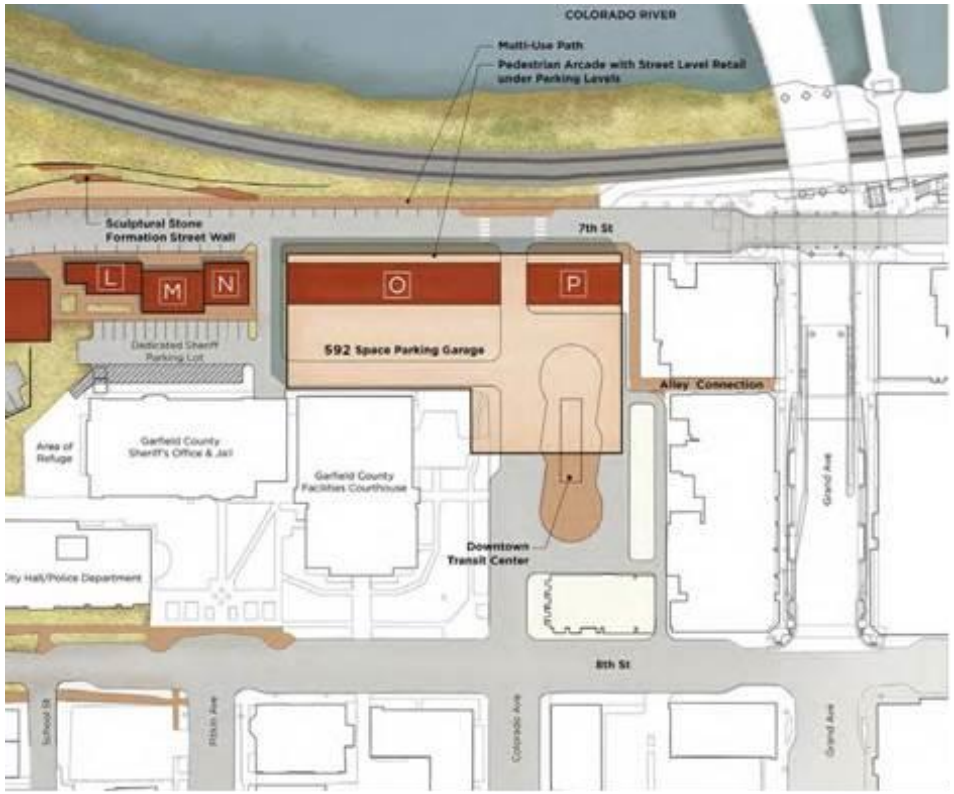
27th STREET TO DOWNTOWN

Critical intersections under consideration

DOWNTOWN BRT STATION

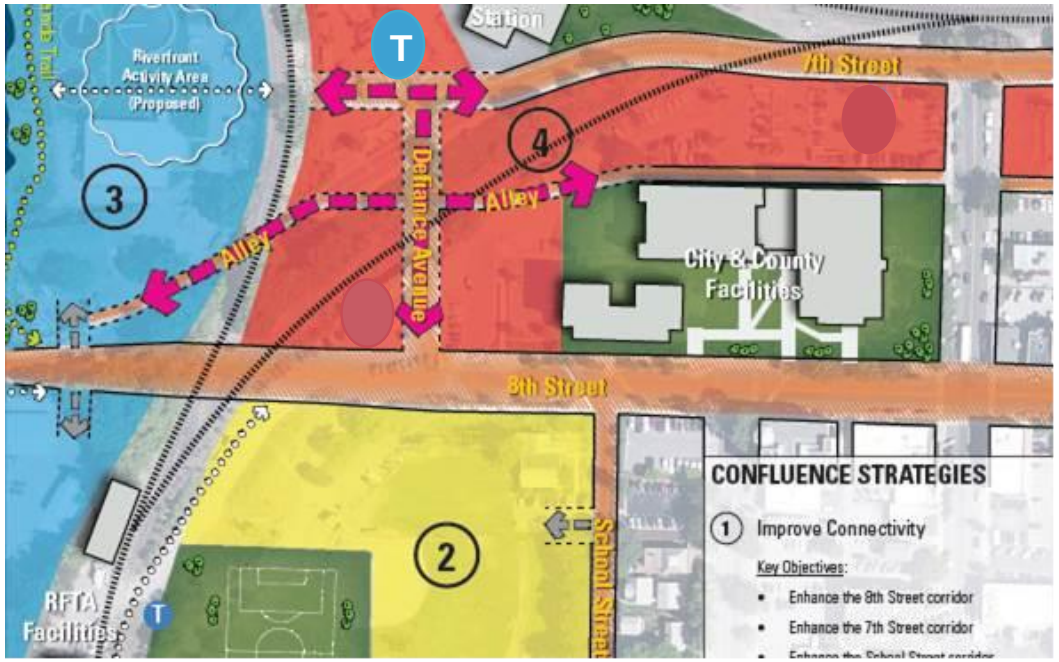
Scope and Location: Options for Consideration





DOWNTOWN BRT STATION

Scope and Location: Options for Consideration



EVALUATION CRITERIA

BRT Alignments and Stations

Evaluation Criteria	BRT Alignment Alternatives					Transit Center Alternatives		
	Grand	Rio Grande	Blake	Pitkin	Cooper/ Colorado	8th Street/RGT	Confluence	SH6 Area
Round 1 (Meets Purpose and Need, and…								
Accessibility Improvement (Current vs Projected)								
Accessibility to Heart of Downtown GWS (8th/Grand)								
BRT Travel Time Savings (Current vs Projected)								
BRT Travel Time Reliability								
Parking Gain/Loss								
Transit Oriented Development Location								
Bicycle and Pedestrian Connectivity								
Round 2 (Meets Round 1 and…)								
Transit Annual Service Hours (BRT, Regional, Local)								
O&M Costs								
Capital Costs								
Auto Travel Time Changes on Grand								
Community Support/Preference								

Parking

Winter Parking Data
Thursday, February 27, 2020
Friday, February 28, 2020

- 5:00 AM – Isolate residential parking demand
- 7:00 AM -- 27th Street BRT Station area
- 9:00 AM –Capture parking demand after AM peak
- 4:00 PM --Overlap between employee and visitor/recreational
- 7:00 PM—Evening Demand

Parking

Name	Type	Parking Spaces	Time Restrictions	Other Observations
City Parking Garage	Public	148	72-hours	Time restrictions not signed
Cooper Avenue Lot	Public	42	72-hours	Time restrictions not signed
7th & Colorado Lot	Public	62	4-hours (some exceptions)	
7th Street Lot	Public	54	24-hours (exceptions for Amtrak patrons)	18 spaces signed for County-only parking
CMC Garage	Shared	65	Evenings after 6 PM & Weekends Only	
County Lot	Shared	39	Evenings after 6 PM & Weekends Only	
West Glenwood Park & Ride	Transit	94	Not specified	17 spaces signed for Bustang-only parking
27th Street South Glenwood Station Park & Ride	Transit	50	Not specified	
North Walmart Lot	Private	203	No overnight parking	27 Snow Storage
Walmart Employee Lot/ RFTA Overflow Lot	Shared	113	Not specified	6-10 taxi parking 10 snow storage

Short-Term Parking Recommendations

Establish Truck Loading Plan
Locations and times of delivery

Manage 700 Block of Cooper Avenue
Install more permanent signs at mid-block, ends

Weekend Parking Enforcement

Leverage Parking Enforcement Technology
Hand held license plate recognition (LPR) devices and automated ticket printing

Increase Fines for Parking Violations
…and graduating scale for repeat offenders

Curb Space Signage and Striping
- Regular Maintenance of Curb Paint
- Safety Zones red, Loading Zones yellow
- “No Parking” signs in safety zones where feasible
- Uniform signage for loading zones, and for 2-hour parking

Implement Paid Parking

Long-Term Parking Recommendations

Evaluate Increasing Parking Capacity
(but don't rule out managing demand)

Confluence Area Parking

Improve Transit Service Downtown

Plan for Transportation Network Companies (Uber, Lyft), Automated Vehicles

- Prepare to manage the curb space in response to TNCs
- TNCs are considered a precursor for AV operations

More Dynamic Curb Space Management
Designating curb space in high demand areas specifically for passenger loading, with ability to change to other uses, such as loading zones, 15-minute parking, 2-hour parking throughout the day

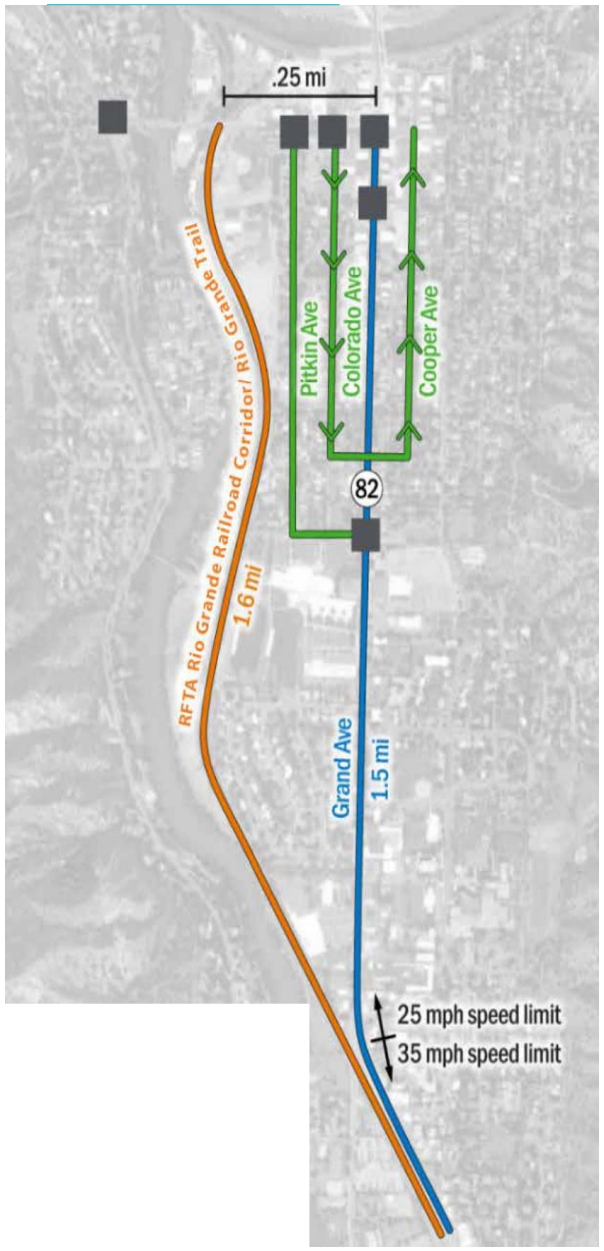
27th Street Parking Recommendations

Purchase or Lease Additional Surface Parking

- 150-320 Parking Spaces Needed Long-term
- More adaptable (than structured parking) to future uses

Reduce Parking Demand

- More Robust Parking Enforcement at 27th
- Kiss-n-Ride Space
- Downtown BRT Station
- 27th Street Pedestrian Crossing
- General Bike/Ped Improvements
- Increase local service from 30-minute to 15-minute, to better connect to BRT



BRT Alignment Options

Parking Impacts and Mitigation

Parking Impacts of Bus-Only Lanes (8th to 13th Streets)

Corridor	On-Street Supply	Friday 5 AM	Friday 9 AM	Friday 4 PM	Friday 7 PM	Friday Avg.	Thurs Avg.
Grand Ave	140	14%	18%	33%	37%	25%	19%
Cooper/ Colorado Ave	140[1]	37%	48%	53%	63%	50%	49%
Pitkin Ave	161	42%	51%	37%	57%	47%	41%

1 Supply on Cooper/Colorado couplet represents one side of the street on each corridor.

Parking Mitigation Measures

- Eliminate Free All-Day Parking Downtown
- Connect the BRT to the West Glenwood Park & Ride
- Provide Convenient Bicycle and Pedestrian Access to the BRT
- Provide Convenient Connections to Local Transit

MOVE Study

NEXT STEPS

Technical Analyses & Alternatives Development

Level 1 Fatal Flaw Screening

Glenwood City Council/RFTA Board Meeting – July

2nd Focus Group Meeting – July

- Review technical analyses and alternatives

2nd Public Engagement – August

Spread the Word & Engage Public

https://rftaglenwoodspringsmove.com/