RFTA Planning Department Monthly Update
August 12, 2021

Regional Bike Share/First and Last Mile Mobility (FLMM) Plan

Background of Study

RFTA has contracted with Toole Design to conduct the regional Bike Share/First and List Mile Study. Toole was selected unanimously by the proposal evaluation committee, consisting of staff of RFTA's member jurisdictions.

The purpose of this study is to develop a regional bike share implementation and expansion plan for the State Highway 82 corridor from Glenwood Springs to Aspen, the Brush Creek corridor to Town of Snowmass Village, and the I-70 corridor from Glenwood Springs to New Castle, recognizing that each community will have unique bike sharing goals and needs; levels of investment; levels of current implementation; and other unique policies or preferences.

Toole Design will provide an update at the Board meeting.

Methane Capture Working Group

With a renewed focus on climate and sustainability under the Biden Administration, methane capture is gaining more attention. Most scientists agree, "Methane is a potent greenhouse gas—about 28 times more powerful

than carbon dioxide at warming the Earth, on a 100-year timescale, and more than 80 times more powerful over 20 years."

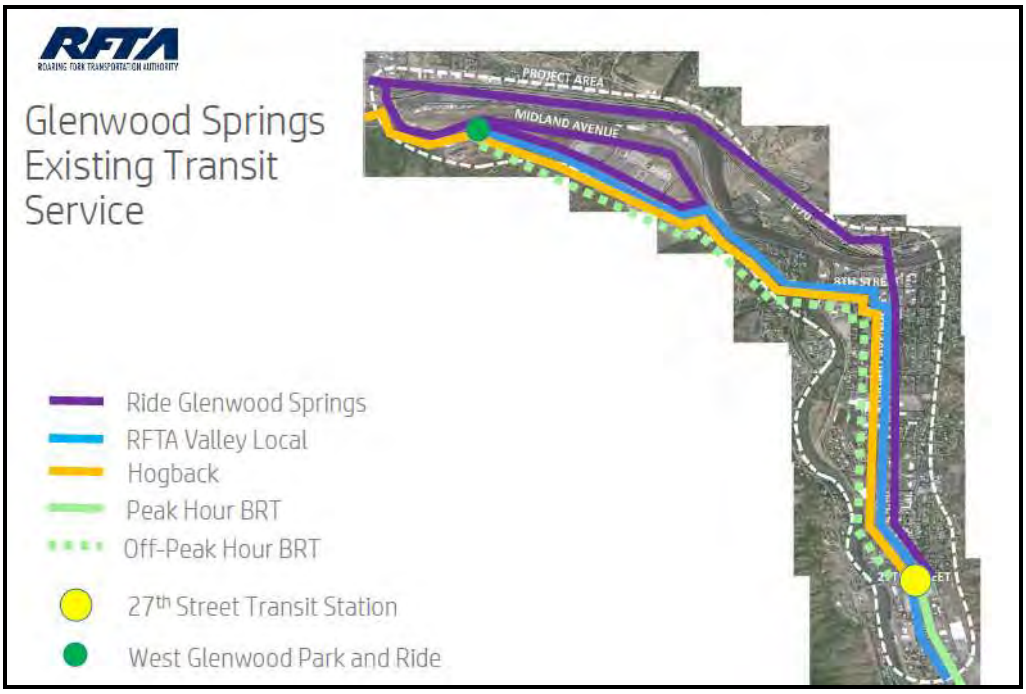
In 2016, the Colorado Energy Office produced a report that points to the largest sources of "fugitive coalbed methane" across the State, resources that could be captured and reused as renewable energy. This report was part of the data gathering process for Aspen Skiing Company's successful methane capture project at the Elk Creek Mine in Somerset.

More recently, the Community Office for Resource Efficiency (CORE) has renewed discussion about fugitive methane at the closed Dutch Creek Mines, in Coal Basin near Redstone. The primary questions are how much methane is being vented, and the cost/benefit analysis of harnessing this resource. A working group has been established that includes representation from CORE, Pitkin County, Wilderness Workshop, RFTA, Aspen Skiing Company and Chris Caskey with Delta Brick & Climate. This group will continue to discuss project details. RFTA is a secondary stakeholder, and the organization would simply be an end-user of methane capture.

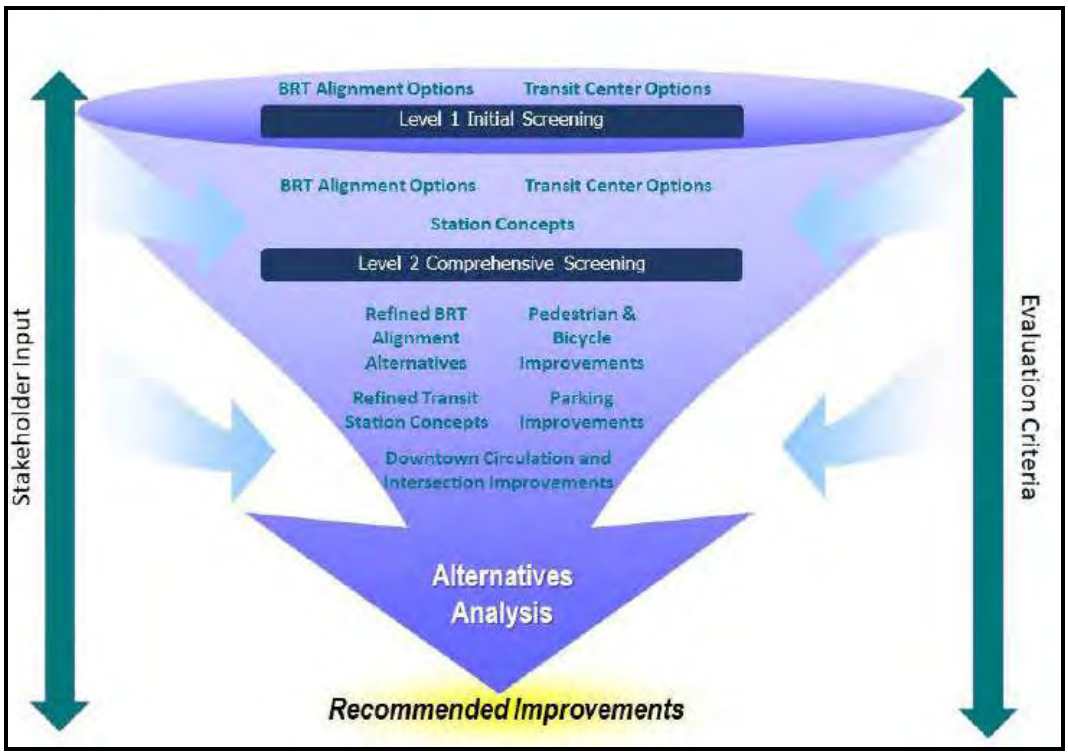
Multimodal Options for a Vibrant Economy (MOVE) Study

While the entire Garfield-Pitkin County region is anticipated to grow over the next 20 years, population and employment growth will be most acute between Glenwood Springs and Parachute. Glenwood Springs lies at the heart of this region and will likely bear the benefits and impacts this growth. Since State Highway (SH) 82 is the major route through Glenwood, traffic is also expected to increase. The purpose of the MOVE is to consider a variety of transportation improvements and options to address traffic congestion, mobility and accessibility within Glenwood Springs and throughout the region, with emphasis on the following:

- Glenwood Springs Parking programs and projects
- Glenwood Springs Bicycle and Pedestrian Improvements
- Glenwood Springs Local Traffic Improvements – Signal and Street optimization
- Glenwood Springs Local Transit Optimization and interface with Regional Transit
- RFTA Transit Parking Access: Where to locate expanded parking access to BRT
- RFTA BRT Alignments within and through downtown Glenwood Springs
- Location of BRT stations between 27thStreet and Downtown Glenwood
- Location of Glenwood Springs Transit Center



For RFTA, a critical aspect of this study was an analysis of alternatives for BRT Alignments and of Transit Center scope and location. The alternatives analysis focused primarily on these two components. As shown in the Analysis of Alternative Process, there two were rigorous levels of screening for BRT alignments and transit center locations.



Level 2 Screening Criteria for BRT Alignments

Level 2 Evaluation Criteria
Transit Performance
Transit Service Hours
Costs
Automobile Travel Time Improvement
Multimodal Ease and Safety
Preliminary Business Parking Displacement
Impacts on Community Amenities
Construction Challenges/Duration
Ridership

The study made the following recommendations specifically for regional transit:

Phase 1 Improvement Recommendations (Low/No Cost Immediate Recommendations)	
RFTA Parking	Better connectexisting overflow lot Establish a more robust parking enforcement program
Phase 2 ImprovementRecommendations (Higher Cost Recommendations)	
RFTA Parking	Lease additional parking, purchase land for additional parking Formalize a kiss & ride area at the 27th Street station Improve multimodal connections.
Regional and Local Transit	Thin number of stops along Grand Avenue for BRT and Hogback or consider a deviation of RGS to serve Blake Avenue instead of Grand Avenue.
Phase 3, Option 1: Improvement Recommendations Needed for BRT Extension (Grand Avenue Alignment)	
BRT Alignment	Extend Dedicated BRT lanes between 27th Street and 23rd Street. Provide dedicated BRT lanes between 13th and 8th Street by removing pedestrian bulb outs, relocate curb and gutter and relocate traffic signals. Install queue jump lane signal head at northbound terminal of BAT lane
Stations	West Glenwood Transit Center, 14th and Grand BRT Station, 9th and Grand BRT Station
Phase 3, Option 2: Improvement Recommendations Needed for BRT Extension (Rio Grande Rail Corridor)	
BRT Alignment	Install bus activated traffic signal on 8th Street where buses enter/leave RFTA property and Rio Grande Corridor
Stations	West Glenwood Transit Center, 14th and RGT, 8th and RGT

The project team will be finalizing all deliverables below by the end of August.

Report
MOVE Study Draft Final Report/Summary
Appendix A – Corridor Understanding
Appendix B – Public Outreach Summary
Appendix C – Integrated Bus Service Report
Appendix D – Multimodal Improvements Memo
Appendix E – Parking Report
Appendix F – VISSIM Technical Report and Traffic Implementation Plan
Appendix G- Alternatives Analysis Report
Appendix H - Conceptual Design, Cost Estimates, and BRT Implementation
Appendix I - Funding Plan
Appendix J – Project Renderings

Battery Electric Bus (BEB) Leadership Group

The purpose of the Battery Electric Bus (BEB) Leadership Group is to give RFTA and City of Aspen staff across several departments an opportunity to discuss the pros/cons of the BEB Pilot Project that has been operating for 18+ months. The group will use current qualitative and quantitative performance data and observations. Some of the project criteria include staff culture, public perception, operational needs, Holy Cross time of use charging tariff, smart charging software, and greenhouse gas reduction goals. The information gathered during 2021 will better inform future decisions about fleet replacement and capital projects, as well as assist all stakeholders in furthering their local greenhouse gas (GHG) emission reduction goals.

The most recent topic of discussion is where the most strategic location might be to install RFTA's first on-route bus charger. This high-capacity charger will "top off" a bus in 5-7 minutes. The group was in general agreement that Rubey Park, or elsewhere in the City of Aspen, might serve as the most useful location. RFTA staff will be following up with City of Aspen staff to further this discussion.

EOTC 201 Near-Term Transit Improvement t Program

The main topic of the EOTC Meeting on Thursday, July 29 was Acceptance of the 2021 EOTC Near-Term Transit Improvement Program (TIP), developed by EOTC staff. Projects in the TIP were derived from two studies: The Integrated Mobility System (IMS) study (Fehr and Peers), and the Upper Valley Transit Enhancement (UVTE) study (Mead and Hunt).

The IMS was developed by the 31 Member Citizen Community Task Force on Transportation and Mobility in 2016 and 2017. The members developed five strategies for improving mobility in the upper valley.

- Ride Hailing
- Ride Sharing
- HOV Lane Enforcement
- Congestion Reduction Measures
- Phased BRT Enhancement

The UVTE analyzed infrastructure projects on SH82 between the roundabout and Service Center Road to advance the Phased BRT Enhancement Strategy. Improvements are focused on increasing transit efficiency and speed, and increasing bike/ped access to transit stops.

How the IMS and UVTE Studies Work Together

Five Tenants or Strategies of the IMS

Upper Valley Transit Enhancement (UVTE) Study Analyzed Infrastructure Projects to Progress BRT Enhancement Strategy

The estimated vehicle miles traveled (VMT) and greenhouse gas emissions (GHG) of each of the strategies have been further detailed by Fehr and Peers, and quantified below:

Overview of IMS Study Outcomes

Effectiveness Summary

Ranking	Strategy	Long Term Effectiveness GHG emission reduction
1	*Congestion Reduction Measures*	17,600 metric tons/year
2	*Ride Sharing*	3,800 metric tons/year
3	*Phased BRT Enhancements*	800 metric tons/year
4	*HOV Lane Enforcement*	No VMT/GHG emission benefit as a stand-alone strategy.
5	*Ride Hailing*	No VMT/GHG emission benefit as a stand-alone strategy.

The main take-aways of the IMS were:

1. Interdependence of Strategies: Individually, the strategies have limited potential, but effectiveness can be multiplied by implementing together.

2. No Silver Bullet: Small, incremental steps that build upon each other will have the greatest overall impact

These points are illustrated in the table below, where strategies are combined:

Strategy Package	Estimated Annual GHG Emission Reduction (metric tons)
Ride Hailing	0
Ride Hailing + HOV Enforcement	620
Parking Pricing + Phased BRT Enhancements + HOV Lane Enforcement	6,220
Managed Lanes + Phased BRT Enhancements + HOV Lane Enforcement	17,550
Cordon Toll + Phased BRT Enhancements	25,550

The UVTE identified and modeled ten improvements, of which the following four were recommended to be included in the 2021 EOTC Near-Term TIP:

- Maroon Creek Roundabout Down Valley Lane Channelization (Pilot) and Transit Down Valley Queue Jump at Cemetery Lane
- Buttermilk Bike / Ped Underpass w/ Transit Channelization at Owl Creek Road and Harmony Road
- Shared Use Path between Buttermilk and Truscott
- Enforce HOV lane compliance

The EOTC adopted the following top-priority projects for TIP:

1. Aspen Country Inn Trail Improvements to Bike /Ped Underpass and Transit Stops at Truscott and Buttermilk
2. Design and Feasibility Review of Maroon Creek Roundabout Down Valley Channelization and Down Valley Queue Jump at Cemetery Lane
3. Design and Feasibility Review of Harmony / Owl Creek Transit Signal Bypass Lane and Buttermilk Bike / Ped Underpass
4. HOV Lane Enforcement Analysis
5. Analysis of Up Valley and Down Valley BRT Direct Service to Snowmass
6. Additional Permanent Automated Vehicle Counters on Brush Creek Road, Owl Creek Road, Airport/AABC and Highway 82 in Pitkin County

Second priority projects, those with a lower value* to cost ratio, include:

1. Pilot Ridesharing app for Commuters
2. Analysis of Regional Ride Hailing and Car Sharing Service
3. Analysis of Valley Wide Commuter Parking, EV Charging, and Ride Hailing / Sharing Pick Up / Drop Off Locations
4. Service Center Road Signalization and Hwy 82 Brush Creek P&R to Airport Speed Limit Reduction
5. Extension of HOV Lanes Up Valley from Airport and / or Down Valley of Maroon Creek Roundabout
6. Dynamic Road Pricing (Cordon Pricing or Managed / HOT Lane)
7. Sage Way Sidewalk Extension

Grants and Funding Update

Grants Summary

RFTA is currently managing about $72 million in grants for operating, fleet replacement, GMF Renovation and Expansion, the 27th Street Pedestrian crossing, and other projects.

2021 RFTA Grants Report, Revised 8/3/2021					
	Grant Source	Grant Amount	RFTA Match	Total Grant Project Cost	Status
EXECUTED GRANTS					
Four (4) 2-door MCI Diesel Commuter Coaches	FY18 5339(b) Bus/Facility	$2,231,500	$557,872	$2,789,372	Arriving in August, 2021
Nine (9) Standard 40-ft low-floor diesel coaches, two (2) diesel Commuter Coaches	FY19 FTA 5339 CCCP	$3,991,440	$997,860	$4,989,300	Delivered or close to delivery
Two (2) Cutaway Vehicles	FY19 5339(b) Bus/Facility	$199,500	$49,875	$249,375	In Service
Four (4) Standard 40-ft Low-Floor Diesel Coaches	FY19 5339(b) Bus/Facility	$1,788,312	$447,078	$2,235,390	All in Service
One Standard 40-ft Low-Floor Diesel	CY21 FASTER (CCCP) Amendment	$440,000	$110,000	$550,000	In Service
Four (4) Standard 40-ft Low-Floor Diesel Coaches	FY20 FTA 5339a Rural (CCCP) Amendment	$1,760,000	$440,000	$2,200,000	All in Service
Facility: BEB 450 kW (1) On-Route Charger	FY20 FASTER CCCP	$480,000	$120,000	$600,000	BEB Leadership Group is working with Aspen to install this charger at Rubey Park.
Facility: GWS SH82/27th St. Ped X	FY21 TAP, MMOF, RPP (IMTPR funds)	$3,050,392	$1,300,392	$4,350,784	
Facility: GMF/RTC Phase 2 Maintenance Bldg. Expansion	CY20 FASTER (CCCP)	$1,581,460	$395,365	$1,976,825	Under Construction
Operating Funding: Regional Commuter	FY21 5311	$1,201,678	$1,201,678	$2,403,356	
Operating: Hogback	CY21 FASTER	$200,000	$200,000	$400,000	
Operating: FY21 5311 CRRSAA & CARES P3 Winter Surge	FTA 5311 Admin/Operating	$24,272,548	$0	$24,272,548	Finance is drawing down the funding.
Planning: Glenwood Springs MOVE Corridor Study	FTA 5304 Planning	$80,000	$20,000	$100,000	Completed
TOTAL EXECUTED		**$41,276,830**	**$5,840,120**	**$47,116,950**	
AWARDED GRANTS PENDING EXECUTION					
Buses: (1) Diesel Replacement	FY21 FTA 5311 (CCCP)	$496,000	$124,000	$620,000	
Buses: (4) Diesel Replacements	FY21 FTA 5339b Rural (CCCP)	$1,984,000	$496,000	$2,480,000	
Buses: (1) Traveler Cutaway	FY21 FTA 5339a Rural (CCCP)	$72,160	$18,040	$90,200	
Facility: GMF P4 Demolition, Earthwork, Retaining Walls	CY21 SB267 (CCCP)	$2,976,000	$595,200	$3,571,200	
Facility: GMF/RTC P3 & P7	FY21 5339(b) Bus & Bus Facilities	$11,475,000	$12,428,800	$23,903,800	
Facility: GMF/RTC P4 Admin Renovation & Access Road, & P5 Bldg. 30B, Drives and Pre-trip Inspection Zones	FY20 USDOT BUILD	$13,009,000	$5,575,137	$18,584,137	
Operating: FY21 5311f CRRSAA Hogback	FTA 5311f Admin/Operating	$100,000	$0	$100,000	CDOT projects an executed contract in late August.
Planning: Alternative Fuels Study	FY21 FTA 5304 Planning	$75,000	$75,000	$150,000	
TOTAL AWARDED		**$30,187,160**	**$19,312,177**	**$49,499,337**	
TOTAL Executedand Awarded		**$71,463,990**	**$25,152,297**	**$96,616,287**	
GRANTS SUBMITTED AWAITING AWARDS					
Facility: 27th & SH 82 Pedestrian Underpasses	FY21 CDOT Revitalizing Main Streets Larger Safety Infrastructure	$1,000,000	$7,850,000	$8,850,000	The total project cost is $10,100,000.Awrds to be announced in July 2021 (last month)
Operating: FY22 5311	FY22 CDOT Super Call	$1,201,678	$1,201,678	$2,403,356	Submitted 7/16/21. Awards projected for January 2022.
Buses: (14) Diesel Replacements	FY22 CDOT Super Call	$7,056,000	$1,764,000	$8,820,000	Submitted 8/3/2021. Awards projected for January 2022.
TOTAL SUBMITTED		**$9,257,678**	**$10,815,678**	**$20,073,356**	
RECENTLY CLOSED GRANTS					
Facility: AMF Phase 9: Replace Fuel Tanks	FY20 CCCP (SB 267)	$1,000,000	$250,000	$1,250,000	On 12/23/20 Ben submitted the final grant reimbursement report to CDOT
Operating: CARES Act 1,2 Combined	CARES Act, 5311 Rural Operating	$10,609,680	$0	$10,609,680	Closed out on 1/4/2021.
Operating: Regional Commuter	FTA FY20 5311	$1,201,680	$1,201,680	$2,403,360	Closed
Operating: CARES Act 1	CARES Act, 5311(f) Hogback Operating	$100,000	$0	$100,000	Closed
Operating: Hogback	CDOT CY20 FASTER	$200,000	$200,000	$400,000	Closed
TOTAL CLOSED		**$13,111,360**	**$1,651,680**	**$14,763,040**	

Stimulus Funding
RFTA has received (or will receive) stimulus funding from the follow three programs. Allocations for the latest program, the American Rescue Plan, are still being formulated.

Program	Effective Date	Amount	RFTA
Coronavirus Aid Relief and Economic Security (CARES)	March 2020	$2.2 Trillion (Nationally)	$8.6 million
Coronavirus Response and Relief Supplemental Appropriation (CRRSA)	December 2020	$900 billion	$19.3 million
American Rescue Plan (ARP)	March 2021	$1.9 trillion	Dependent on CARES and CRRSAA utilization and 2022 Super Call outcome. CDOT is encouraging transit agencies to spend CARES and CRRSAA funds first

CASTA Statewide Transit Earmark Proposal for FAST Act Reauthorization
Both the House Committee on Transportation and Infrastructure (T&I) and the House Committee on Appropriations have announced Congressional earmark processes for their respective bills. House Democrats and Republicans are expected to request earmarks.

In the Reauthorization Bill, each Member of the Transportation and Infrastructure Committee can expect $15-20 million in earmarks, which means Members not on the Committee (including the Colorado Delegation) will likely receive less.

CASTA had worked with its 56+ member transit agencies to develop a proposal for a Statewide earmark. It is likely that CASTA's Statewide proposal is the best strategy, as the Colorado Delegation is unlikely to want to pick winners and losers among its constituents, and Representative Boebert has made it clear that she will not support earmarks: https://boebert.house.gov/media/press-releases/rep-boebert-fights-against-earmarks-corruption-and-government-waste.

The statewide earmark request consisted of the following:

Agency	Project Description	Request	Local Match
Transfort	CSU Foothills Transit Station	$2,294,840	$573,710
Vail Transit	2 BEBs, charging infrastructure	$1,650,026	$412,506
ECO Transit	Lake Creek Village Bus Stop Improvements and US 6 On-Route Charging Infrastructure	$1,351,145	$150,127

Grand Valley Transit	4 CNG Buses	$1,222,400	$305,600
Gunnison Valley RTA	2 CNG Buses	$1,500,000	$300,000
RFTA	GMF Phase 6 (Operations Center)	$7,400,000	$1,900,000
TOTAL		**$15,418,411**	**$3,641,943**

If RFTA receives this earmark, funding for Phases 1-7 will be complete, and construction can be completed within 3-4 years. Bennet did not include RFTA's $7.4 million request in his list of proposed THUD earmarks due to conflicts, but Hickenlooper did. Democrats and Republicans have agreed to split the earmarks. However, some Republicans have come out against earmarks and are not participating, so the remaining Republicans are going to do well.

The THUD mark-up has not yet occurred, and THUD has the most demands for earmarks. RFTA will provide updates to Hickenlooper's staff as needed.

FY2022 Appropriations Earmarks
Earmarks are also available under the last year of the current Transportation bill, though the FY2022 Appropriations process, but are likely to be limited, like $1 million or less.

RFTA applied for $2 million in funding through the Senate side, to fund hydrogen production and storage facilities for hydrogen powered buses. This project was not awarded.

Other Opportunities
RFTA will be submitting grants proposals to Colorado Department of Local Affairs and to Garfield County FMLD within the next 30 days for facilities projects.