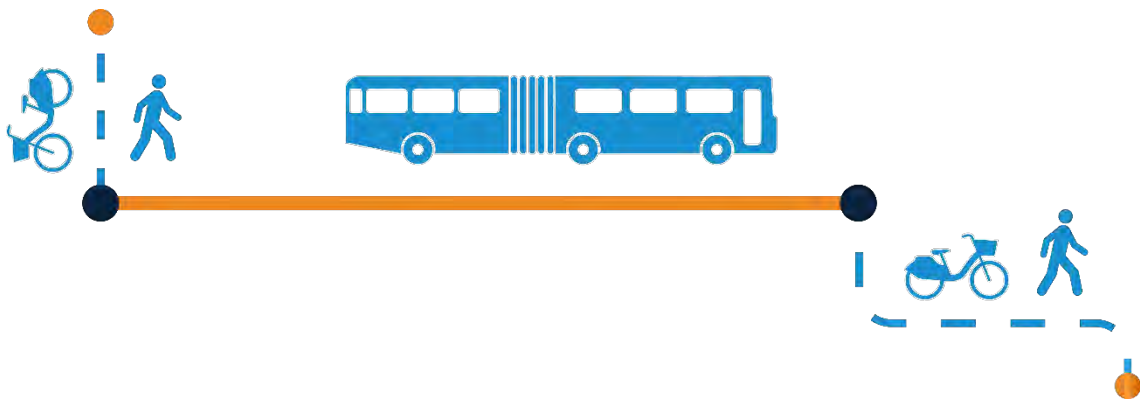


Roaring Fork Valley Regional Bikeshare Plan



Prepared for the
Roaring Fork Transportation Authority

May 2022

ACKNOWLEDGMENTS

ROARING FORK TRANSPORTATION AUTHORITY

Dan Blankenship, Chief Executive Officer

Kurt Ravenschlag, Chief Operating Officer

Michael Yang, Chief Financial and Administrative
Officer

David Johnson, Director of Planning

WE-CYCLE

Mirte Mallory, Co-Founder | Executive Director

James Currie, Director of Operations & Strategy

Jack Dimmit, Director of Operations & Technology

Ana Tapia, WE-cycle Outreach Ambassador

TECHNICAL ADVISORY COMMITTEE

Lynn Rumbaugh, City of Aspen

John Kruger, formerly City of Aspen

Gabriel Finesilver, City of Aspen

Susan Philp, formerly Town of Basalt

James Lindt, Town of Basalt

Catherine Christoff, Town of Basalt

Ryan Mahone, Town of Basalt

John Leybourne, Town of Carbondale

Linda DuPriest, City of Glenwood Springs

David Peckler, Town of Snowmass Village

Sam Guarino, Town of Snowmass Village

Paul Smith, Town of New Castle

David Pesnichak, Pitkin County

Jared Barnes, Eagle County

Mirte Mallory, WE-cycle



DESIGNWORKSHOP

CONTENTS

Acknowledgments	1
1. Introduction	3
2. Existing WE-Cycle Program	6
2.1 Summary of Existing System	6
2.2. Existing Operating Model	11
2.3 Challenges and Opportunities	13
3. Local Context Analysis	16
3.1 Oppourtunities and Challenges	16
3.2 Equity and Under-Served Communities	19
4. Peer City Practice Review	22
4.1 CDPHP Cycle	22
4.2 Fort Worth Bike Sharing	24
4.3 LINK Dayton Bikeshare	26
4.4 GREENBike Salt Lake City	28
5. Community Engagement	31
5.1 Engagement Strategies	31
5.2 Key Themes	33
6. Governance Model	39
6.1 Governance Considerations	39
6.2 Evaluation of Potential Governance Models	41
6.3 Recommended Governance Model	41
7. Potential Expansion Plan	46
7.1 System Planning Approach	46
7.2 Phasing Terminology	48
7.3 Regional Expansion Phasing	48
8. Funding Plan	54
8.1 Cost Analysis	54
8.2 Funding Proposal	55
Appendix A: List of Stakeholders	
Appendix B: Potential Expansion Schedule	
Appendix C: Bikeshare Capital Budget	
Appendix D: Bikeshare Operating Budget	
Appendix E: Local Jurisdiction Funding Needs	

CHAPTER 1
INTRODUCTION



1. INTRODUCTION

Since the WE-cycle program was established in 2013 as a 100-bike /13-station bikeshare system in Aspen, it has become a model for small-community bikeshare. The existing WE-cycle system operates in Aspen (known as the Aspen Area system), Snowmass Village (known as the Snowmass Village Bikeshare Connector), Basalt, and the El Jebel area of unincorporated Eagle County and Pitkin County (known as the Mid-Valley system). A regional bikeshare system could include new service in the Lower Valley and expanded service in the Upper Valley and Mid-Valley. A regional system would bring first- and last-mile mobility and local circulation benefits to new communities and would enhance utility and ridership of the system in existing communities as users will be able to use bikeshare at either end of their trip.

As the system continues to grow, there is a need to modernize the existing system with current software and hardware, and for additional resources to support the long-term sustainability and viability of the program. Regional expansion is also an opportunity to develop a long-term governance model that leverages the strengths of the public, private, and non-profit partners that are key stakeholders in the bikeshare program and to identify a clear, consistent, and transparent set of expectations for agencies participating in the program as they consider new service or expansion of the program in their communities.

For the long-term operation of a regional bikeshare system in the Roaring Fork Valley (i.e., for 2023 and beyond), RFTA should formalize a public-private-non-profit partnership to secure the long-term future of the existing WE-cycle program and expand the service to other communities. The partnership would include the following parties:

- RFTA: as the regional transit agency supporting bikeshare as a first- and last-mile extension to the transit system; the principal financial supporter of the program; a trusted agency providing regional coordination.
- Local Jurisdictions: as the local permitting entity; responsible for a portion of financial support for capital and local service; working with WE-cycle to coordinate on local service planning and permitting.
- WE-cycle: as the regional advocate and planner for bikeshare; operator of bikeshare service throughout the region; leader of bikeshare technology and service innovation initiatives; and working with local jurisdictions and RFTA to plan and budget service.



Figure 1. A WE-cycle station co-located at a RFTA BRT station in Basalt.

Photo credit: WE-cycle

A long-term agreement between these parties will establish a budget and expected service levels each year and project expected future year budgets and service levels. It will also identify how funding will be allocated, collected, disbursed, and made available to WE-cycle and identify WE-cycle's reporting requirements.

RFTA is committed to delivering on its Destination 2040 commitment to expand bikeshare service to the region including new service in Carbondale and Glenwood Springs and increased levels of service in Aspen and Basalt. RFTA understands that additional funds beyond those identified in Destination 2040 will be needed for regional expansion to occur and has developed a local match funding proposal that, subject to RFTA Board authorization

REGIONAL BIKESHARE PLAN



Figure 2. A rider checks out a WE-cycle bike.

Photo credit: Kelsey Brunner / The Aspen Times

and annual appropriations, would see RFTA take on a significant portion of capital and operating for the system. For expansion related to Destination 2040, RFTA would provide 80% of funding for new capital and capital replacement, 100% of funding for regional indirect operating costs, system planning, start-up operations, and start-up or expansion equipment. Local jurisdictions would be required to provide a 20% local match on new capital and capital replacement and pay 100% of the direct operating costs for local service in their jurisdiction. There are options available for local jurisdictions to further reduce their costs through in-kind contributions to offset WE-cycle's expenses, reduced service levels, and access to RFTA's First and Last Mile Reserve (FLMR) funding.

Outside of Destination 2040, jurisdictions, including those not included in Destination 2040 (e.g., Snowmass Village and New Castle) can apply for FLMR funding that currently provides 50% of capital or operating costs from RFTA and a 50% local match. Additional funds may be available in the future as well as opportunities to fund expansion through grants, private sector support, development contributions, and including bikeshare in other infrastructure projects.

This report documents the planning process undertaken for the Regional Bikeshare Plan. The process included setting the stage with a review of the existing program, a local context analysis, and a review of what peer cities and agencies are doing to address regional expansion that helped to identify opportunities and challenges for regional expansion and long-term governance and funding. An extensive community and stakeholder outreach process was conducted to inform the development of local expansion plans and preferences and needs of each stakeholder for the long-term governance of the program. Finally, a regional expansion plan was developed that identified potential expansion scenarios and a recommended governance framework and funding plan that could be used to secure the long-term future of the program.

This plan provides a recommended framework for long-term implementation of regional bikeshare. However, implementation of the plan will need to be flexible enough to react to opportunities and challenges as they arise and will require coordination between the regional partners.

CHAPTER 2
EXISTING WE-CYCLE
PROGRAM



2. EXISTING WE-CYCLE PROGRAM

WE-cycle was founded as a non-profit in 2010 to provide a community bikeshare service in the Roaring Fork Valley. Through their partnership with PBSC Urban Solutions, WE-cycle launched its first bikeshare system in Aspen in 2013 with 13 stations and 100 bikes. At that time, WE-cycle was the first bikeshare program to operate in North America outside of a major metropolitan area and WE-cycle has continued to expand and maintain its reputation as an innovative service provider.

True to Aspen and the Roaring Fork Valley's reputation as a center of innovation and excellence, the program was built from the ground up by local champions through a non-profit structure that established strong partnerships with the local community and forged its own expertise to oversee and operate the program.

The program has successfully expanded through ongoing partnerships with RFTA, local agencies, the private sector, and the local community to become a 284-bike/55-station system operating in Aspen, Snowmass Village, and the Mid-Valley and has piloted several innovations that have become industry standard. It is a testament to the program and the trust that it has built in the community that voters recently decided to invest a further \$1.271 million in capital expansion and \$583,495 annually¹ to expand operations of the program as part of the Destination 2040 bond measure.

This chapter reviews the development of the WE-cycle system and its existing service area and organizational framework and identifies potential opportunities and challenges posed by regional expansion.

2.1 SUMMARY OF EXISTING SYSTEM

LOCATIONS AND COVERAGE

WE-cycle uses a dock-based bikeshare technology. The system has grown from 13 stations and 100 bikes in Aspen in 2013 to 55 stations and 284 bikes and e-bikes in Aspen, Basalt, and Snowmass Village in 2022. The majority of bikes are three-speed, pedal-powered bikes, however, the system also includes a 52 e-bikes (Class 1 pedal-assist, with no throttles). WE-cycle first integrated six e-bikes into its fleet in 2020 and increased that to 26 e-bikes for the 2021 season. E-bikes have been well-received by the community and are viewed as an important part of the WE-cycle fleet due to topographical barriers and long distances between some stations in the Roaring Fork Valley. As WE-cycle looks to expand, e-bikes will continue to be a critical part of the program's infrastructure.



Figure 3. WE-cycle launch in Aspen in 2013.

Photo credit: WE-cycle

¹ O&M funding represents \$583,495 in 2020 and increasing 3% per year thereafter.

REGIONAL BIKESHARE PLAN

WE-cycle’s bikeshare stations are modular, solar powered, and docked based. Riders can sign up for rides using a mobile app (Transit) or the website. Bikes are checked out from a dock using either an unlock code from the Transit app or using a keycard. In 2021, WE-cycle piloted a modular solar-powered station capable of charging e-bikes at the dock, the first such operational technology in the US. The pilot showed the potential for reduced greenhouse gas emissions and operational cost savings and leasing or purchasing more of these stations will also form part of the regional expansion plan.

Some program statistics from 2013 to 2021 are shown in **Table 1**.



Figure 4. WE-cycle station with credit card kiosk.

Source: WE-cycle

Table 1. WE-cycle System Growth and Ridership Statistics from 2013 to 2021

	2013	2014	2015	2016*	2017	2018**	2019	2020***	2021
Stations	13	15	17	43	44	48	49	46	49
Regular Bikes	100	100	100	190	190	210	209	224	228
E-Bikes	0	0	0	0	0	0	0	6	25
Operating Days	151	183	183	183	183	183	174	146	178
Rides	10,123	17,808	20,871	6,310	43,878	63,741	58,707	23,105	50,573
Average rides per day	67	97	114	211	240	348	337	158	284
Unique riders	1,807	2,271	2,626	3,152	3,227	6,043	6,247	3,998	5,826

*WE-cycle launches in Basalt

**WE-cycle launches fare-free service for 30-minute rides, underwritten by local jurisdictions

***WE-cycle launches in Snowmass Village; COVID-19 pandemic begins

TRANSIT INTEGRATION

Since it began, WE-cycle has aimed to be a first- and last-mile service to enhance access to transit. As part of this effort, WE-cycle has taken steps to ease user experience and supports seamless connections between transit and bikeshare trips. For example, by working with the Transit app, WE-cycle allows its riders to checkout bikes and see real-time RFTA bus schedules. In the past, WE-cycle provided a RFTA Seasonal Zone Pass which enabled riders to board the bus and checkout a bike with one card.² WE-cycle stations are also located at bus stops and BRT stations so users can see and access bikeshare at the station.

² WE-cycle discontinued the use of the seasonal zone pass in 2021.

REGIONAL BIKESHARE PLAN

WE-cycle’s efforts to integrate with transit service have been successful. Approximately 50% of trips start or end at a RFTA BRT station and based on rider surveys and trip data from the program’s 2019 annual report:

- 74% of riders used the Transit app to access a WE-cycle bike.
- 65% of riders used the Transit app for WE-cycle and to check RFTA bus schedules.
- Two-thirds of WE-cycle riders think it is “very important” or “extremely important” to access the valley’s transportation options in one application.



Figure 5. Bikeshare is a proven first- and last-mile enhancement for regional transit service.

RIDERSHIP

WE-cycle experienced a solid growth in ridership since launching, despite having only a short operating season (approximately 6 months). WE-cycle grew from an average of 67 trips per day and 1,807 unique riders in 2013 to 337 trips per day and 6,247 unique riders in 2019 (see **Figure 6**). In 2019, WE-cycle had approximately 1.6 trips per bike per day across Aspen and Basalt. There was a notable decline in ridership in 2020, likely due to the COVID-19 pandemic, but data from 2021 suggests that ridership is recovering.

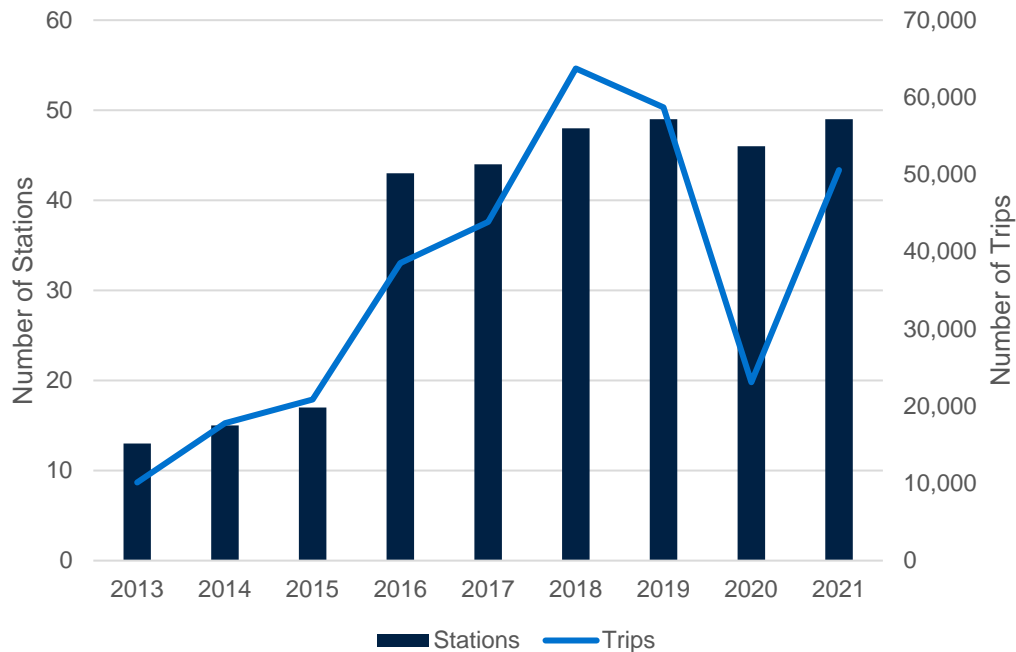


Figure 6. Change in number of WE-cycle rides with system growth.

Ridership dipped significantly in 2020 due to the COVID-19 pandemic. However, 2020 included the first year of the e-bike pilot and there were approximately 134 trips per bike for pedal bikes compared to 341 trips per bike for e-bikes suggesting that continuing conversion to an e-bike fleet will also increase system ridership. In 2021, this trend continued with e-bikes being ridden 3.5 times more frequently than pedal bikes.

REGIONAL BIKESHARE PLAN

Table 2 presents a selection of key usage statistics for 2019 (the year before the pandemic).

Table 2. WE-cycle Rider and Trip Statistics in 2019

Statistic	WE-cycle (2019)
Total Trips	58,707
Unique Users	6,247
Average trip length	1.2 miles
Average trip time	9 minutes
Utilization (trips per bike per day)	1.6
Percentage of trips in free-ride period	97%
Sign up method:	
• Transit app	43%
• Website	34%
• Station kiosk	23%
Percentage of riders using multiple systems	5%
Percentage of trips replacing vehicle trips	45%

Sources: WE-cycle 2019 Annual Report and Survey of Users

USERS

Analyzing trends in existing user and rider patterns helps to understand where existing riders come from, where riders are currently underserved, which segments of the population are over- and under-represented, and how users currently interact with other modes, especially transit. Data from WE-cycle's 2019 End of Season Survey shows that WE-cycle riders live and work throughout the Valley, including in communities where WE-cycle does not yet operate. The highest percentage of riders live in Aspen (40%), but many live in Carbondale, Basalt, El Jebel, Glenwood Springs, Snowmass Village, or visit from out of town. According to the survey, almost two-thirds of riders commute to Aspen (66%), nearly 20% of riders work in another town with an existing bikeshare system (e.g., Basalt, El Jebel, or Snowmass Village), and the remainder work in Carbondale, Glenwood Springs, work from home, or commute to multiple places throughout the Valley.

REGIONAL BIKESHARE PLAN

Rider Demographic Trends

In 2019, WE-cycle survey respondents were slightly more likely to be female (52%) compared to male (47%). One percent of respondents identified as “Other”. Most respondents were between ages 35 and 64 (84%).

Frequency of Use

About half of respondents (54%) ride WE-cycle at least once a week and nearly 30% of respondents ride once a month or a few times a month. Sixteen percent of respondents ride less than once a month.

Connections to Transit

Many riders use WE-cycle to travel in and around town, but a considerable number use it as a first- or last-mile service to connect to or from RFTA’s services. As shown in **Figure 8**, 77% of survey respondents indicated that they use WE-cycle in conjunction with RFTA’s services. WE-cycle trip data further confirms the use of WE-cycle as a first- or last-mile service. In 2019, 50% of trips made using WE- cycle started or ended at one of RFTA’s VelociRFTA (Bus Rapid Transit) stations. In addition, approximately one-fifth of survey respondents indicated that they ride RFTA more often because there is a WE-cycle station near a bus stop (21%).

INNOVATION

WE-cycle is known throughout the shared micromobility industry as an innovator. A number of programs first trialed in Aspen have become industry standard or moved forward development of bikeshare equipment and programs.

In 2015, WE-cycle partnered with Transit to develop an app-based checkout system that would improve rider experience and access to the program by taking advantage of smartphone technology. The following year, WE-cycle expanded beyond Aspen and established a system in Basalt which serves Basalt, Willits, and El Jebel. This system includes 25 stations and 97 bikes.

Also in 2016, WE-cycle launched Movimiento en Bici, a Latino engagement program funded by a grant from the Better Bikeshare Partnership. This program is specifically designed to increase access and ridership opportunities to the valley’s Latino population by providing materials and information in Spanish, engaging Latino community members to be part of the WE-cycle team, offering Spanish-language rider support, and encouraging bikeshare

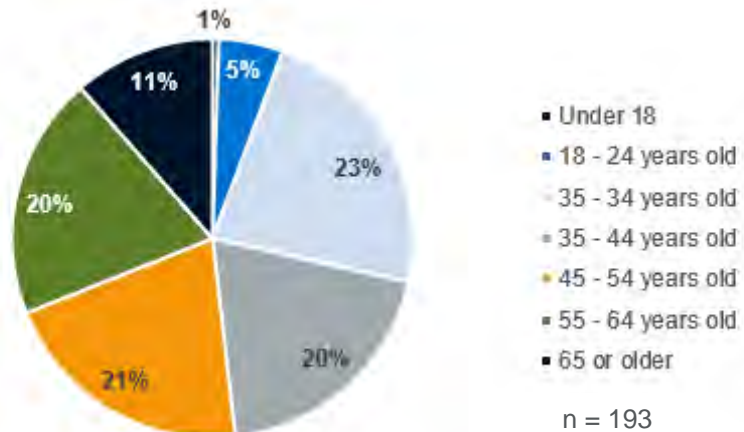


Figure 7. Age distribution of WE-cycle riders.

Source: WE-cycle 2019 End of Season Survey

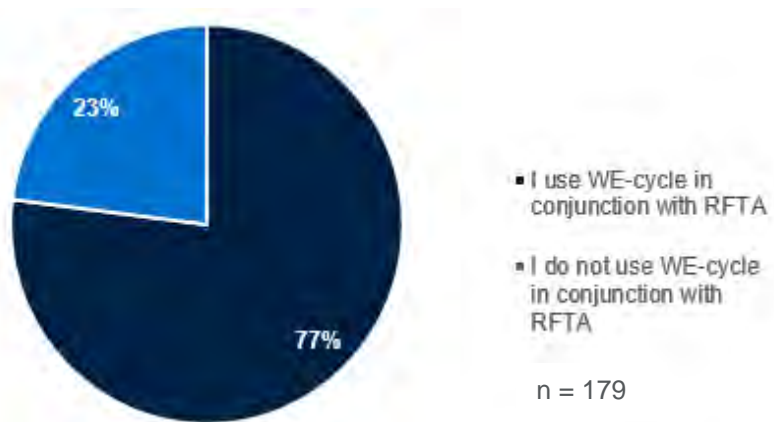


Figure 8. Percentage of survey respondents' who use WE-cycle in conjunction with RFTA services.

Source: WE-cycle 2019 End of Season Survey

REGIONAL BIKESHARE PLAN

participation through targeted outreach and in-person, one-on-one tutorials about how to access the program and ride the bikes.

In 2018, WE-cycle launched its fare-free mobility program. This program provides riders with fare-free rides for the first 30 minutes of every trip. WE-cycle is among the first bikeshare programs in the United States to provide fare-free trips for up to 30 minutes. This visionary program demonstrates the organization's commitment to provide bikeshare as an easily accessible option for short, one-way trips and first- and last-mile connections to transit. It also highlights WE-cycle's commitment to encouraging residents and visitors to leave their cars behind and reduce traffic congestion.

In 2020, WE-cycle expanded to a third community, Snowmass Village. It launched with 2 stations and 15 bikes. Also in 2020, WE-cycle piloted an electric-bicycle option which integrated six e-bikes into the system, including three in Aspen and three in Basalt.

In 2021, despite the COVID-19 pandemic, We-cycle expanded its e-bike fleet and partnered with Skyhook Solar and PBSC Urban Solutions to implement the first solar-powered e-bikeshare station pilot in the country.

Through this partnership, along with funding from community partners, WE-cycle integrated two solar-powered e-stations and 26 e-bikes powered by renewable energy. Thirteen e-bikes were provided in Aspen and another thirteen were integrated into the Mid-Valley system.



Figure 9. Outreach flyer created as part of Movimiento en Bici in 2020.

Source: WE-cycle

2.2. EXISTING OPERATING MODEL

The WE-cycle bikeshare program is a public-private-non-profit partnership. WE-cycle is a non-profit organization established to oversee and operate the bikeshare program, but is dependent on its partners for continued success of the program.

Public partners currently include RFTA, the Elected Officials Transportation Committee (EOTC), the City of Aspen, the Town of Basalt, and Eagle County that provide funding support and collaborate on regional initiatives. Local partners also provide support in planning and permitting station locations, considering WE-cycle in development reviews and project development, and continuing to advocate and implement improvements to the bikeway network.

WE-cycle is well known within the regional community and is well supported by the private sector through sponsorship, donations, in-kind services, and other forms of assistance. This support is critical and its continuation will be needed to ensure the future sustainability of the program.

REGIONAL BIKESHARE PLAN

ORGANIZATIONAL STRUCTURE

WE-cycle is a non-profit organization overseen by a Board of Directors and staffed with an Executive Director, a small management team, and a team of staff responsible for operations, design production, promotions, and other day-to-day activities. **Figure 10** shows the current organizational structure.

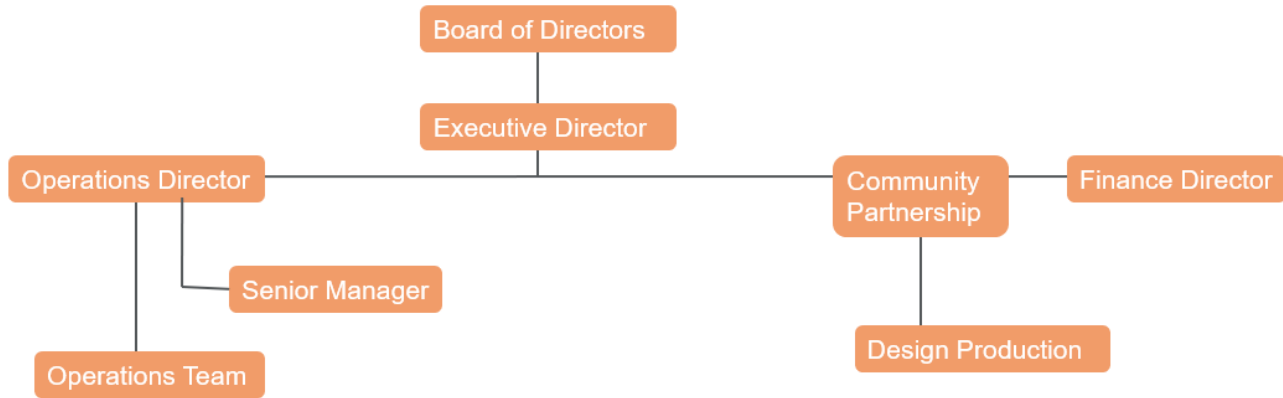


Figure 10. WE-cycle organizational structure (Spring 2021).

Operations are overseen by an Operations Director and includes a team of part-time and seasonal employees responsible for ensuring the daily operation of the program, including station maintenance, bike redistribution, bike repair, and other tasks. WE-cycle currently has an office and operations hub/shop in Aspen and a smaller office and shop space in Basalt. The Snowmass Village Transit Connector does not have its own local presence and is operated with staff and resources from the Aspen and Basalt locations.

If WE-cycle were to expand in Snowmass Village or start service in new communities such as Carbondale, Glenwood Springs, or New Castle, additional operations staff would be needed, and WE-cycle would likely need to establish service hubs in those communities responsible for local operations. The management team would remain centralized, but additional capacity would be needed to accommodate expanded service.

Other staffing challenges for WE-cycle include recruiting and retaining employees in a competitive market and being able to offer competitive salary and benefits packages commensurate with the industry standards and the local cost of living. The seasonality of operations is also a challenge. Currently, the service operates for approximately 6-months of the year and many of the employees are part-time or seasonal. Ideally, service could be extended to 9- or 12-months in the Mid-Valley, Carbondale, and Glenwood Springs, to enable WE-cycle to generate more ridership and allow it to have more consistency, retain employees, and offer full-time salaries and benefits.

EXISTING PROGRAM FUNDING

Bikeshare programs have two major costs – capital and operations. Capital costs include purchasing the equipment needed to run the program, e.g., bikes, e-bikes, stations, docking points, rebalancing vehicles, spare parts, etc. Operating costs include day-to-day expenses to operate and maintain the service including staff salaries and benefits, vendor fees, rent and utilities, shop tools, etc.

As shown on **Figure 11**, in 2021, WE-cycle expended approximately \$717,000 – mostly related to system operations. The system secured approximately \$836,000 in funding and revenue, which came from the following sources:

REGIONAL BIKESHARE PLAN

- Public sector support represented approximately 62% of 2021 revenues and included contributions from RFTA, the City of Aspen, the EOTC, Eagle County, and the Town of Basalt. These agency partners have committed these funds for several years; but each year they need to be approved as part of that jurisdiction’s budget cycle. These amounts have generally not kept pace with inflation.
- Sponsorship, donations, and other private sector support represented approximately 26% of 2021 revenues. Although sponsorship and donations are a key source of revenue, there is a lot of effort needed to obtain these revenues in terms of staff time in sponsorship outreach, design of materials, and other costs that offset some of these revenues.
- User fees for rides over 30-minutes represented approximately 3% of revenues in 2021. In 2018, WE-cycle converted to a pricing structure that allows users to ride for free for the first 30-minutes with overtime fees incurred for trips longer than 30-minutes. The free ride period is critical in attracting users for short trips to replace vehicle trips and to access transit. This model is intentionally designed to discourage longer trips on WE-cycle and WE-cycle has partnered with local bike shops to encourage users to rent bicycles for longer, recreational trips.

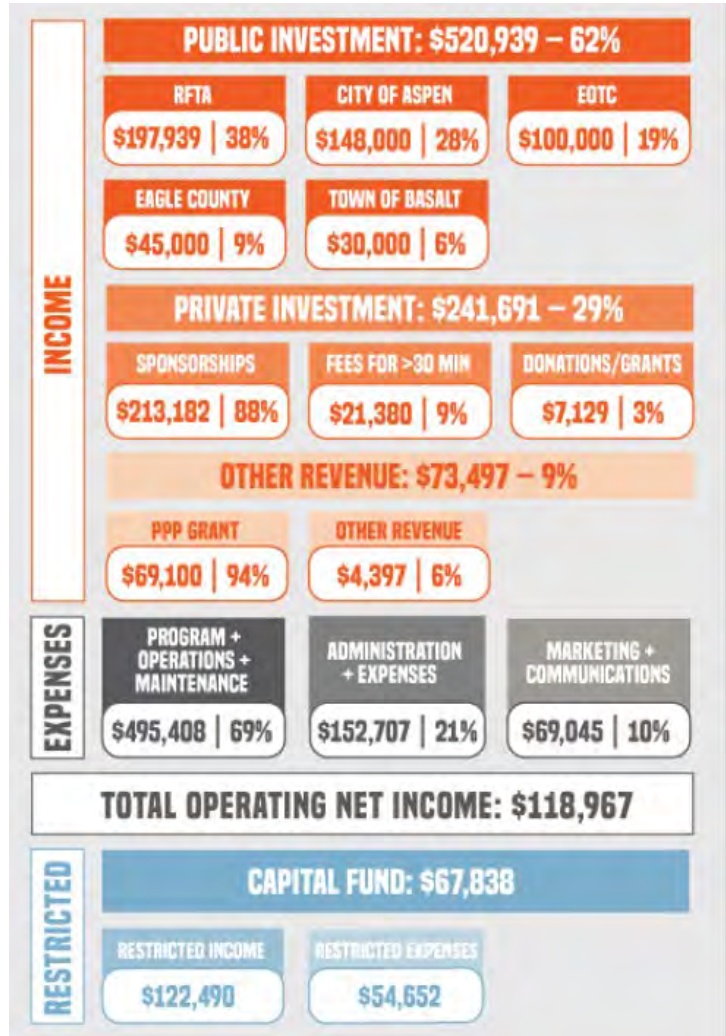


Figure 11. WE-cycle 2021 costs and revenue.

Source: WE-cycle 2021 Financial Summary

- Other revenue represented approximately 9% of revenues in 2021. The majority of this was a PPP Grant. This revenue categories is generally much smaller and variable from year-to-year.

2.3 CHALLENGES AND OPPORTUNITIES

WE-cycle started as a small non-profit organization providing bikeshare service with 100 bikes in the City of Aspen in 2013. Today, the organization employs a number of full- or part-time staff and provides service with 284 bikes in three different communities in the Roaring Fork Valley. As the region plans for the expansion of bikeshare into new communities and expanding service in communities already served by WE-cycle, several key challenges and opportunities must be considered.

REGIONAL BIKESHARE PLAN

CHALLENGES

As an organization, WE-cycle is operating at maximum capacity. Current staffing and resources would both need to be increased to support system expansion and service enhancements in the region. This is particularly important for service expansion into new communities such as Carbondale, Glenwood Springs, or New Castle, which will require staff to either frequently travel long distances to rebalance, maintain, and repair bikes (at high cost), or more likely, result in the need for local offices and operations teams to be created to ensure systems can be fully operational at adequate service levels.

An additional challenge that WE-cycle faces each year is the need to hire and retain skilled staff who are familiar with the unique skillset required for installing, operating, and maintaining a bikeshare system. The seasonal nature of the bikeshare program and slim operating funding margins limit WE-cycle's ability to provide wages high enough to attract and retain staff in a region with a high cost of living.

Last, WE-cycle's current funding model requires staff to negotiate public funding approvals, secure sponsorships, and develop service agreements every year. This approach was manageable at a small scale, but as the system expands this approach stretches staff resources and leaves the organization vulnerable to fluctuations or inconsistency in these funding sources, which in turn can further limit the organization's ability to provide high-quality service.

OPPORTUNITIES

There are several challenges that must be overcome for WE-cycle to successfully expand. However, the organization's dedication to providing quality service, its ability to be resourceful and innovative, and the strong partnerships that have been developed with both public and private partners in the region will help the program succeed if the appropriate support is provided.

WE-cycle is a well-established program that has developed trust in the community and built-up unparalleled expertise in what it takes to operate bikeshare in the Roaring Fork Valley. The program can provide a cost-effective transit option for short trips and has proven to be successful in providing a viable alternative to single occupancy vehicle travel, increasing access to RFTA's Bus Rapid Transit (BRT) system, and providing transit-like service to locations that may be difficult to serve by fixed-route transit.

CHAPTER 3

LOCAL CONTEXT ANALYSIS



3. LOCAL CONTEXT ANALYSIS

Expansion of the bikeshare program is highly dependent on the local context within each community and the region. This chapter summarizes the opportunities and challenges for expansion in the RFTA service area. This includes a high-level assessment of the geographic, transportation network, demographic, jurisdictional, and other characteristics of the region.

3.1 OPPORTUNITIES AND CHALLENGES

There are several challenges that will influence the implementation and expansion of bikeshare in the Roaring Fork Valley. However, the technological advances in bikeshare, such as the use of e-bikes, and the demonstrated growth of the existing WE-cycle program suggest that bikeshare expansion can be successful. The varied characteristics of communities throughout the valley (e.g., population size, geography, and climate) suggest that the size and vehicle mix chosen for individual community bikeshare systems may vary so that the system can effectively accommodate local conditions.

GEOGRAPHY AND NATURAL BARRIERS

The Roaring Fork Valley is in the heart of the Rocky Mountains and is known for its mountainous terrain, beautiful landscapes, and alpine resorts. Several aspects of the Valley's geography create challenges for the existing bikeshare program and for program expansion. While most town centers are in flat areas, there are potential bikeshare riders who live or work in areas with steep terrain (e.g., Snowmass Village), or whose communities are divided by major barriers, such as the Colorado River and the Roaring Fork River in Glenwood Springs. There are significant distances between communities, however, most population centers are connected by regional transit service. This geographic context highlights the suitability of bikeshare to play a key role in supporting and increasing access to regional transit services.

TOPOGRAPHY

Topographical variations in a community can have a strong influence on the use of bikeshare programs. Some parts of the Roaring Fork Valley have very steep topography that will impact how bikeshare is delivered and how well it is used. The integration of e-bikes into the bikeshare system will help mitigate topographical barriers and communities like Snowmass Village and New Castle may need higher percentages of e-bikes to encourage high use. Communities with generally flat topography, such as Carbondale and the Mid-Valley are relatively flat and more suitable to regular pedal bikes (although results from WE-cycle's pilot of e-bike usage suggests that people prefer e-bikes even for short distances and in flat terrain).



Figure 12. Continued investment in bicycling infrastructure will be critical to attracting more riders to WE-cycle.

Photo credit: WE-cycle

REGIONAL BIKESHARE PLAN

CLIMATE

Warm and dry weather is ideal for bicycling, especially for attracting new riders. The Roaring Fork Valley is subject to snowy and cold winters that limit the effectiveness of providing bikeshare year-round. This tends to be more limiting and may mean shorter seasons in Upper Valley communities such as Aspen and Snowmass Village (that currently have 6-month operating seasons); whereas service may be able to operate for 9-months or year-round further down valley, in communities like Carbondale or Glenwood Springs. From late spring to early fall, the climate in the Valley is generally dry and sunny which creates optimal conditions for bicycling and use of bikeshare services.

BUILT BARRIERS

Some communities have significant transportation barriers created by highways, railroads, river crossings, and other built features that may limit where service can be provided or create operational challenges for the bikeshare program. For example, there are limited connections for riders to access different parts of Glenwood Springs that are separated by the Roaring Fork and Colorado Rivers as well as the confluence of two major highways, and several significant railway lines. Crossings and corridors subject to local traffic congestion may also limit the movement of maintenance and redistribution vehicles. Many of the communities in the valley are divided by highways which can be major barriers for people walking or bicycling and limit access to bikeshare stations or key destinations. These include I-70 and Highway 82 as well as Highway 6 in Glenwood Springs and Highway 133 in Carbondale.

POPULATION, LAND USE, AND FORM

The population in the region has been growing steadily over the last few decades and is expected to continue grow in the future. According to recent predictions from the State of Colorado, Pitkin County is expected to grow by 29 percent by 2050, and Eagle and Garfield County populations will grow by 65 percent.³

The population in the Roaring Fork Valley fluctuates throughout the year due to the number of second homes and short-term residents along with a high influx of visitors and skiers. **Table 3** shows the population, area, and population density for seven communities in the Valley. Glenwood Springs, Aspen, and Carbondale have the largest populations within the region and Carbondale, Basalt, and Aspen have the highest population densities. Bikeshare is typically best suited for denser areas where people live within a short bicycling distance to key destinations, including local and regional transit stops.

Table 3. Population Statistics for Communities in the Roaring Fork Valley

Community	Population	Area (square miles)	Population Density
Aspen	7,431	3.9	1,905
Basalt	3,847	2.0	1,924
Carbondale	6,785	2.0	3,393
El Jebel	4,725	5.4	875
Glenwood Springs	9,915	5.9	1,681
New Castle	4,875	2.6	1,875
Snowmass Village	2,783	27.9	100

Source: U.S. Census Bureau, American Community Survey, 2015 - 2019

³ Scott Condon. Post Independent. "State demographer predicts growth through 2050." January 29, 2018. <https://www.postindependent.com/news/local/how-much-will-pitkin-county-grow-over-the-next-32-years/>

JURISDICTIONAL BOUNDARIES

Many of the potential bikeshare service areas have multiple jurisdictions, e.g., the Mid-Valley service operates in the Town of Basalt as well as in unincorporated areas of Eagle and Pitkin Counties. The Aspen Area service currently operates just within Aspen, but expansion to the Airport, the Airport Business Center, Buttermilk, and Burlingame could introduce service into Pitkin County. Systems that operate in multiple jurisdictions have proven to be successful in the region in the past, but they require additional stakeholder collaboration and coordination.

TRANSPORTATION NETWORK

The valley is connected by the Highway 82 and I-70 corridors that are impacted by congestion during peak travel times. RFTA's regional transit service, the WE-cycle system, and continued investment in regional trails and bicycle infrastructure can help to reduce congestion and provide a diversity of mobility options.

Bicycling Infrastructure

Bicycling conditions in the Roaring Fork Valley are highly varied. Several communities have trails and paved shoulders, but many of the communities in the valley lack a complete bicycle network. There are a few notable trails including the Rio Grande Trail that runs between Glenwood Springs and Aspen, the Owl Creek Trail between Aspen and Snowmass, Crystal Valley Trail, along Highway 133 in Carbondale, and the ABC Trail along Highway 82 from Aspen to Buttermilk Ski Resort. There are also plans to expand the Lower Valley Trail to connect Glenwood Springs to Parachute along the Colorado River. The existing trail network offers connectivity between some population and activity centers, however, additional bike facilities and crossing improvements are needed to create a complete bicycle network.

Continuing to develop safe and comfortable networks and crossings for people walking and bicycling will be an important component of increasing bikeshare ridership and encouraging widespread adoption of the program. Experience from other jurisdictions indicates that it is not necessary to have a complete bicycle network to implement a successful bikeshare program and that bikeshare can be a catalyst for promoting the need for more bicycling infrastructure.⁴ Communities should consider the development of bicycle facilities in parallel with the development or expansion of the bikeshare program.

Transit Service

The transit network in the valley includes a combination of bus-rapid-transit, regional and local service buses, and local circulators. Transfers are allowed between RFTA services, including between RFTA and Ride Glenwood services. RFTA offers free transit service between Snowmass Village and Aspen, and between Woody Creek and Aspen/Snowmass. In addition, to fixed-route services, RFTA operates free "next day" ADA complementary paratransit service in Aspen, Carbondale, and Glenwood Springs for individuals that have been assessed by RFTA staff and for whom it has been determined they have a disability that precludes them from accessing and navigating the fixed-route systems in these communities.

RFTA's transit services enhance connectivity between communities and local service and circulators provide transit connections within communities. Regardless of regional and local service, there are still a number of areas in many communities that do not have convenient access to transit and where bikeshare could fill these service gaps.

⁴ Bike Sharing in the United States: State of the Practice and Guide to Implementation. Federal Highway Administration. United States Department of Transportation. September 2012.

REGIONAL BIKESHARE PLAN

POLICY

As bikeshare programs are relatively new, the form of equipment, installation, and operations are not always codified into existing zoning, permitting, and other ordinances. Communities with existing bikeshare service have developed processes to review and approve station permits. Some communities, such as Basalt, have also begun to integrate bikeshare considerations into their development review processes and are even using development fees to help fund bikeshare infrastructure. As the bikeshare program expands, communities throughout the region will need to consider what policies and ordinances need to be updated to allow for the implementation and sustainable success of bikeshare. For example, as e-bikes continue to be integrated into the bikeshare fleet, communities like Snowmass Village will need to determine whether existing regulations need to be updated to permit e-bikes on their trail network.

New communities can learn from the precedents set by Aspen, Basalt, and Snowmass Village around the process for siting and permitting bikeshare stations. Regulations governing advertising and sponsorship in the public right-of-way may also need to be reviewed if these types of revenues are important to the financial sustainability of the program.

FUNDING

Bikeshare in the region has historically been funded by a combination of RFTA, EOTC, local and county agency funding as well as sponsorship, private donations, grants, and user fees. In 2018, voters passed the Destination 2040 bond measure which included a commitment of approximately \$1.271 million in capital funding and \$583,495 per year in operating funds (for 2020, increasing by 3% per year) for new bikeshare service in Carbondale and Glenwood Springs and expanded bikeshare service in Aspen and Basalt. RFTA has also committed a portion of reserve funding towards addressing first- and last-mile mobility to transit.



Figure 13. Community outreach is a critical part of WE-cycle's goal to engage more diverse riders to the service.

Photo credit: WE-cycle

3.2 EQUITY AND UNDER-SERVED COMMUNITIES

The distribution of transportation infrastructure, including access to bikeshare, influences access to basic services such as healthcare, healthy food, transit, and opportunities for education and employment. When transportation projects are developed with demographic and socioeconomic equity in mind, they provide an opportunity to help address the impacts of historical inequities, such as underinvestment in marginalized communities and communities of color.

REGIONAL BIKESHARE PLAN

The project team analyzed the distribution of historically underserved communities throughout the region. The analysis used U.S. Census data from the American Community survey (five-year estimates, 2015 to 2019) and considered the population’s racial and ethnic identity and median household income. People of Color, people of Hispanic/Latino descent, and lower income populations are more likely to be underserved by transportation facilities and community amenities and may be more dependent on walking, bicycling, and riding transit to meet their daily needs. These groups should be the focus of increased infrastructure investment and deployment of programmatic resources.

The largest non-White racial/ethnic group in the region is Hispanic or Latino. Approximately 23% of the population in the seven communities shown in **Figure 13** identify as Hispanic or Latino.⁵ The communities with the highest concentrations of People of Color and people of Hispanic/Latino descent include Carbondale, El Jebel, and Glenwood Springs (see **Figure 13**). Median household incomes also vary by community. The percentage of the population who earn less than \$50,000 a year is higher in Glenwood Springs (39%) and Aspen (33%) than Basalt (30%), Carbondale (27%), Snowmass Village (17%), El Jebel (13%), or New Castle (15%).

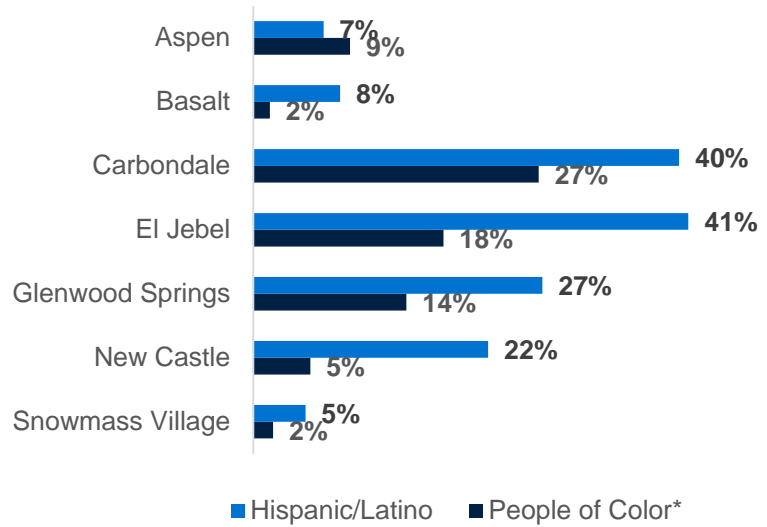


Figure 14. Percentage of population by race and ethnicity.

*Includes people who identify as Black, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, or two or more races

Source: U.S. Census Bureau, American Community Survey, Five-Year Estimates (2015-2019)

⁵ Note that this population may be much higher as it does not reflect undocumented immigrants or members of the population who do not feel comfortable completing the Census.

CHAPTER 4
REVIEW OF INDUSTRY
PRACTICES



4. PEER CITY PRACTICE REVIEW

Since bikeshare launched in the Roaring Fork Valley, the bikeshare and shared mobility industries have changed significantly, and early-adopter programs are having to adapt to new trends in ownership and technology. Early-adopter non-profit systems are re-evaluating the best direction to move forward. This decision is very dependent on the local context and similar programs around the country have taken different approaches depending on the interest, capacity, and funding environment they are working in.

RFTA has been a significant partner and a primary funder of bikeshare in the region. Over the past few years, since the 2018 passing of the Destination 2040 bond measure, RFTA has had discussions with WE-cycle about providing additional support or taking a more involved role in the program. This includes enhancing the existing public-private-non-profit partnership and leveraging its regional role and access to more stable and steady funding streams. RFTA has also considered bringing the bikeshare program in-house as part of a new bikeshare or mobility management department. The organizational framework developed as part of this plan is not only important for the long-term future of the bikeshare program, but also could provide a framework for how other new first- and-last mile mobility options are delivered in the region.

WE-cycle and RFTA are not the only non-profit bikeshare system and transit agency interested in expanding bikeshare service regionally and considering different bikeshare operating models. The experience of peer systems can be used to draw out comparisons and identify lessons learned that can be applied to the partnership between RFTA, WE-cycle, the local jurisdictions, and other stakeholders. This chapter reviews the experience of several peer non-profit and transit agency bikeshare programs to identify key factors in deciding an appropriate governance model.

4.1 CDPHP CYCLE

TRANSIT AGENCY OWNED AND MANAGED

CDPHP Cycle! in upstate New York launched in 2017 and operates as a seasonal program from April to November. The program is owned and managed by the Capital District Transportation Authority (CDTA) and is operated by Mobility Cloud.⁶ The program operates in several cities in the region including Albany, Cohoes, Saratoga Springs, Schenectady, Troy, and Warren County (the latter being outside of the CDTA service area). The program is funded through a combination of funds from CDTA, local public agencies, and the title sponsor, CDPHP, a regional, non-profit health insurance plan. The program recently added electric-assist bikes to its fleet and is integrating other micromobility devices, including e-scooters.



Photo credit: Capital District Transportation Authority

- Albany Population: 874,401 (2019)
- Albany Population Density: 4,455 people per square mile

⁶ CDTA initially contracted with Social Bicycles for equipment and operations, which was then transitioned to JUMP, then Uber, and now Mobility Cloud.

REGIONAL BIKESHARE PLAN

System Characteristics

- Equipment: pedal-powered and electric-assist bikes
- Equipment Type: smart-bike / hub-based
- Equipment Ownership: CDTA
- Operator: Mobility Cloud
- Operations: 24 hours, 7 days / week, April - November

System Size⁷

- Current system:
 - » Bikes: 500
 - » Stations: 80
- Initial system:
 - » 160 bikes at 41 stations

Governance Model

CDTA began providing regional bikeshare services in 2017. CDTA owns all of the program’s assets and is ultimately responsible for the program including negotiating and managing multi-year funding agreements with the title sponsor and local agencies. The program is housed in CDTA’s Marketing Department and has hired a Mobility Director to oversee the program and CDTA’s other mobility interests. Administrative, marketing, human resources, and other administrative needs are provided by existing staff at CDTA. CDTA contracts with Mobility Cloud to operate the service.

Funding

The program launched using a \$2 million CMAQ grant that covered the equipment purchase. In 2021, CDTA allocated \$250,000 of its budget to operating expenses.⁸ In addition there is a title sponsor and each local agency that participates in the program contributes the same amount: \$25,000 each (although the number of stations and bikes is different in each jurisdiction). A memorandum of understanding (MOU) between CDTA and the local agency commits both agencies to the funding agreement for two to three years. Anecdotally, sponsorship, usage fees, and local agency funds cover approximately 85% of operating costs and CDTA covers the remaining 15%.

Mobility Cloud employs four full-time and four part-time staff assisting with bike and station repair, rebalancing, and other services.

Table 4. Program Roles and Responsibilities

Responsibilities	Governance Model: Agency Owned		
	CDTA	Mobility Cloud	Local Agencies
Ownership	X		
Funding Responsibility	X		X
Operations		X	
Administration	X		
Marketing / Promotions	X		
System Planning	X		X

Additional Program Details

CDTA determines whether to provide service to a new community based on the local agency being able to commit to the \$25,000 operating contribution, whether the community anticipates that there is general community interest and anticipated riders for the program, and if there are safe places (e.g., bike lanes) for people to ride.

⁷ CDTA Strategic Plan, Fiscal Year 2020-2023. <https://www.cdta.org/strategic-plan-2020>

⁸ CDTA 2021 Fiscal Year Operating and Capital Plan. https://www.cdta.org/sites/default/files/pdfs/cdta_2021fiscalyear_final.pdf

REGIONAL BIKESHARE PLAN

Membership Fees⁹

- Annual: \$85
- Annual Discounted: \$65
- Monthly: \$15
- Hourly: \$5

Membership and Ridership (2019)¹⁰

- Members: 12,000
- Total Rides: 41,500

The first 60 minutes of a ride is free with a membership and riders pay \$5 per hour thereafter.

4.2 FORT WORTH BIKE SHARING

NON-PROFIT TRANSITIONED TO TRANSIT AGENCY OWNED AND MANAGED

Fort Worth Bike Sharing launched in April 2013 and operates a year-round program. While the program initially started as a 501(c)3 non-profit organization it has recently (2021) transitioned ownership to Trinity Metro (formerly called the Fort Worth Transportation Authority). Funds from local public agencies and a significant donation from Trinity Metro were used to launch the program. Today, Trinity Metro, local agency funds, private sponsors, and rider fees cover the system's operating and expansions costs.

- City Population: 874,401 (2019)
- Population Density: 2,455 people per square mile



Photo credit: Fort Worth Star Telegram

System Characteristics

- Equipment: pedal-powered and electric-assist bikes
- Equipment Type: docked / station-based
- Equipment Ownership: transitioned from the non-profit to Trinity Metro
- Operator: transitioned from non-profit to Trinity Metro
- Operations: 24 hours, 7 days / week, 365 days / year

System Size

- Current system:
 - » Bikes: 350
 - » Stations: 46
- Initial system:
 - » 300 bikes at 30 stations

Governance Model

Fort Worth Bike Sharing was established as a non-profit in 2013 to own and operate a local bikeshare system. Trinity Metro was an early and ongoing partner in the program. Fort Worth Bike Sharing continued to operate as a non-profit, but in 2020 there were concerns over long-term funding and the competition from dockless mobility programs coming into the City. The non-profit started discussions with Trinity Metro in 2020 and developed a Purchase of Assets agreement in 2021 that transitioned ownership and operating responsibilities to Trinity Metro.

⁹ Students, area businesses, and universities receive discounts for each membership type

¹⁰ CDPHP. Annual Report. 2019. <https://www.cdphp.com/about-us/annual-report-2019/philanthropy>

REGIONAL BIKESHARE PLAN

The program kept its name and branding as Fort Worth Bike Sharing, but bikeshare is now a department within Trinity Metro. The program maintains a certain level of independence in that they have a separate office and warehouse and maintain a lot of their previous functions and roles with assistance from Trinity Metro as needed. Fort Worth Bike Share staff are now employed by Trinity Metro with full benefits and recognition of their previous years served. The non-profit's Executive Director is now the Bikeshare Director at Trinity Metro and is responsible for coordination with upper management, participating in weekly management meetings, preparing regular reports, budget planning, and coordinating resources and assistance needed from Trinity Metro. The bikeshare program uses Trinity Metro's resources to help with graphic design, marketing, human resources, procurement, and other administrative functions.

Table 5. Program Roles and Responsibilities

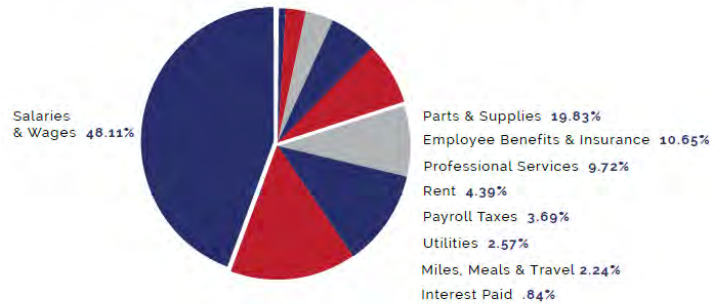
Responsibilities	Agency Owned (current model)		Non-Profit Owned (previous model)
	Trinity Metro	Bikeshare Department	Fort Worth Bikesharing
Ownership	X		X
Funding Responsibility	X	Support	X
Operations		X	X
Administration	X	X	X
Marketing / Promotions	Support	X	X
System Planning		X	X

Funding

In 2019, before the program came under the umbrella of Trinity Metro, it cost approximately \$479,000 to operate and maintain the system. Revenues were approximately \$510,000 with 54% coming from sponsorship, advertising, and donations; and the remaining 46% coming from membership and usage fees.¹¹

In 2021, Trinity Metro allocated \$417,000 of its operating budget to Fort Worth Bike Sharing. Fort Worth Bike Sharing was allocated \$584,000 from Trinity Metro's department budget.¹² Trinity Metro added four full-time positions and four part-time positions when it acquired Fort Worth Bike Sharing.

TOTAL EXPENSES FOR 2019 | \$479,033



Source: Fort Worth Bike Sharing's 2019 Annual Report

Additional Program Details

- Fort Worth Bike Sharing initially launched as a non-profit with \$104,636 from Trinity Metro via an FTA grant match. Trinity Metro also provided a grant match of \$138,653 for an FHWA grant to expand the system by 15 stations and 50 bikes.¹³

¹¹ Fort Worth Bike Sharing. Annual Report. 2019. <https://fortworthbikesharing.com/wp-content/uploads/2020/03/Annual-Report-2019.pdf>

¹² Trinity Metro Business Plan Annual Budget. Fiscal year 2021. <https://ridetrinitymetro.org/wp-content/uploads/2021/02/FY21-TM-Business-Plan-and-Annual-Budget.pdf>

¹³ Fort Worth Bike Sharing. <https://fortworthbikesharing.com/stats-facts/>. Accessed June 2, 2021.

REGIONAL BIKESHARE PLAN

- Trinity Metro provides GoPass, an app that lets users plan and pay for transit trips, that also allows users to find bike share stations, look up bike availability, and connect to BCycle's app to check out bikes.

Membership Fees

- Annual: \$100
- Annual Discounted: \$65
- Monthly: \$20
- Semester: \$50
- 24 Hours: \$8

Membership and Ridership (2019)⁹

- Day Passes: 23,204
- Annual Passes: 472
- Semester Passes: 607
- Monthly Passes: 497
- Total Rides: 26,000

First 60-minutes of a ride is free with a membership and riders pay \$4 per hour thereafter (up to \$36 per day).

4.3 LINK DAYTON BIKESHARE

TRANSIT AGENCY AND NON-PROFIT PARTNERSHIP

Link launched in the Spring of 2015 and is a year-round bikeshare program. The program was created through a partnership between Bike Miami Valley, a 501(c)3 non-profit organization, and the Greater Dayton Regional Transit Authority (Greater Dayton RTA). Originally, the program operated as a docked (station-based) system, however, in 2020, the program contracted with Drop Mobility to provide electric-assist bicycles and transitioned the entire program to a dockless hub-based system that requires users to lock bikes to bike racks, but does not require docking stations.

- City Population: 140,569 (2019)
- Population Density: 2,533 people per square mile



Photo credit: Dayton Most Metro

System Characteristics

- Equipment: Pedal-powered and e-assist bikes
- Equipment Type: Dockless, hub-based system
- Equipment Owner: Greater Dayton RTA and Bike Miami Valley
- Operator: Drop Mobility through Greater Dayton RTA
- Operations: 24 hours, 7 days / week

System Size

- Current system:
 - » Bikes: 325
 - » Hubs: 27
- Initial system:
 - » 225 bikes at 24 stations

Governance Model

Greater Dayton RTA and Bike Miami Valley launched Link in 2015 with equipment purchased using \$1 million of federal funding issued through the Miami Valley Regional Planning Commission. There is a contractual agreement between the Greater Dayton RTA and Bike Miami Valley that outlines the responsibilities of each party in the operations of the bikeshare program. Greater Dayton RTA owns some of the system's bikes, provides storage for the bikes and stations, and provides bike maintenance and rebalancing. Bike Miami Valley is responsible for system planning, fundraising, marketing, customer support, outreach and is the owner of the program. Bike Miami Valley owns most of the bikes used in the program. They also secure program sponsors, lead system planning, lead communications with the equipment provider, and coordinate outreach and promotion.

REGIONAL BIKESHARE PLAN

Table 6. Program Roles and Responsibilities

Responsibilities	Governance Model: Transit Agency and Non-Profit Partnership	
	Greater Dayton RTA	Bike Miami Valley
Ownership		X
Funding Responsibility		X
Operations	X	
Administration		X
Marketing / Promotions		X
System Planning		X

Funding¹⁴

Bike Miami Valley’s 2019 Annual Report indicated that the Link system generated revenues of approximately \$71,000 from membership and usage fees and spent approximately \$303,000 to operate the program.

Additional Program Details

- Greater Dayton RTA is exploring a Mobility-as-a-Service platform to support trip planning and allow riders to pay fares across multiple modes. The service is being tested through a pilot project contracted to Masabi and Transit app.
- The Miami Valley Regional Planning Commission provides in-kind support in the form of office space for bikeshare staff and access to office equipment.
- Wright Stop Bike Shop is a bike repair shop in Downtown Dayton owned by Greater Dayton RTA. They repair Link bikes and provide bike repair services to the general public.

Membership Fees

- Annual: \$90
- Three-month: \$26
- 24 Hours: \$8 (\$15 e-bike)
- Single Trip: \$1

Membership and Ridership (2019)¹⁵

- Unique Users: 4,630
- Total Rides: 30,100

Depending on the membership type, riders get access to the bike for 80 minutes (3-month and annual memberships) or four hours (24-hour memberships) without additional charges. Additional charges vary from \$0.05 to \$0.10 per minute for regular bikes to \$0.10 to \$0.15 per minute for e-bikes.

¹⁴ Bike Miami Valley. Annual Report. 2019. <https://www.bikemiamivalley.org/wp-content/uploads/2021/01/LNK-Bike-Miami-Valley-Annual-Report-2019-January2021.pdf>

¹⁵ Bike Miami Valley. Annual Report. 2019. <https://www.bikemiamivalley.org/wp-content/uploads/2021/01/LNK-Bike-Miami-Valley-Annual-Report-2019-January2021.pdf>

4.4 GREENBIKE SALT LAKE CITY

NON-PROFIT OWNED & OPERATED

GREENbike launched in April 2013 as Salt Lake City's bikeshare program. The program is a public-private partnership between GREENbike, a 501(c)3 non-profit organization, Salt Lake City, the Salt Lake Chamber of Commerce, and the Salt Lake City Downtown Alliance. Local public funding and significant sponsorship was used to launch and operate the system.

The Utah Transit Authority (UTA) is a Strategic Partner and a station sponsor. UTA holds a seat on the GREENbike Board of Directors.

- City Population: 197,756 (2019)
- Population Density: 1,746 people per square mile



Photo credit: Salt Lake City Tribune

System Characteristics

- Equipment: Pedal-powered bikes and e-bikes
- Equipment Type: Docked / station-based
- Equipment Ownership: Non-profit
- Operator: Non-profit
- Operations: 24 hours, 7 days / week, closed in winter

System Size

- Current system:
 - » Bikes: 400
 - » Stations: 42
- Initial system:
 - » 100 bikes at 12 stations

Governance Model

The impetus for a bikeshare system was driven from the Mayor's Office. However, the City did not have the funds to launch the system and so asked the Downtown Alliance if they would take on responsibility for developing a business model and seeking funds for the system. The Downtown Alliance secured a title sponsor and other sponsors sufficient to launch and maintain operations for a 12-station system in 2013. The GREENbikes non-profit organization was created to oversee and operate the program.

Funding

In 2015, GREENbike's revenue came from private sponsorships (39%), membership and usage fees (17%), and local and federal funds (44%).¹⁶ In 2014 GREENbike anticipated that in 2019 the programs total revenue was \$1,783,000; 58% of that revenue came from pass or member sales and usage fees and the remaining 42% came from sponsors and partnerships. In that same year, total expenses were \$1,545,000 resulting in a net income of \$266,000.¹⁷

¹⁶ Downtown SLC. <https://downtownslc.org/stay/itemlist/tag/GREENbike>. Accessed June 7, 2021.

¹⁷ GREENbike Strategic Plan Implementation Plan. National Park Service Rivers, Trails, and Conservation Assistance Program. 2014.

REGIONAL BIKESHARE PLAN

Table 7. Program Roles and Responsibilities

Responsibilities	Governance Model: Non-Profit Owned & Operated	
	GREENbikes	UTA
Ownership	X	
Funding Responsibility	X	
Operations	X	
Marketing / Promotions	X	
Strategic Partner		X
Sponsor		X

Additional Program Details

GREENbike is now part of the UTA's Hive Pass, a subsidized monthly pass that provides access to regular buses, TRAX, and the S-Line Streetcar. The pass now also includes a one-year GREENbike pass.

Membership Fees

- Annual: \$75
- Annual Go Pass: \$1
- 24 Hours: \$7

Membership and Ridership (2013)¹⁶

- Unique Users: 6,100
- Total Rides: 25,361

Annual passes provide the first 60-minutes free. Day passes provide the first 30-minutes free.

CHAPTER 5
COMMUNITY OUTREACH



5. COMMUNITY ENGAGEMENT

Community engagement for the Regional Bikeshare Plan was combined with RFTA’s Regional First- and Last-Mile Mobility Study. The engagement process was designed to include all demographics and allow input on ways to improve access to transit, jobs, services, and other destinations within the Roaring Fork Valley as well as preferences about bikeshare and potential new station locations. The Public Engagement Strategy included a variety of tools for virtual and in-person outreach and a targeted effort to engage with historically hard-to-reach population groups in a way that was comfortable for them to communicate and provide input.

The overall goals for the community engagement process were to:

1. Generate quantifiable information that directly informed the Plan’s recommendations.
2. Ensure that the process was equitable and included strategies to “meet people where they are” and obtain input from hard-to-reach populations.
3. Employ a variety of methods to reach a wide and diverse audience, utilize existing communication networks, and allow people to respond in different ways depending on their level of comfort during the COVID-19 pandemic.



Figure 15. Public participation by the numbers.

5.1 ENGAGEMENT STRATEGIES

Multiple outreach strategies were used to gather input from stakeholders and the public on their first-and last-mile preferences and the Regional Bikeshare Plan. Stakeholder outreach strategies included:

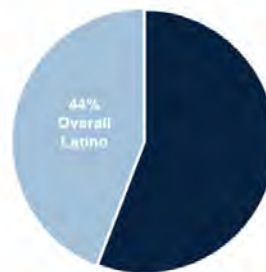
- **Technical Advisory Committee (TAC) Meetings:** the committee was responsible for reviewing project deliverables, providing feedback, and providing direction and decision-making in the development of the Regional Bikeshare Plan. The TAC included staff from RFTA, the EOTC, Eagle and Pitkin Counties, the Towns of Basalt, Carbondale, New Castle, and Snowmass Village, and the Cities of Aspen and Glenwood Springs, and WE-cycle.

REGIONAL BIKESHARE PLAN

- **Focus Groups:** virtual focus group meetings were held with the following stakeholders:
 - » Active transportation advocacy groups.
 - » Bike shops.
 - » Community-based organizations.

Public outreach strategies included:

- **Project flyer:** a one-page information sheet was created that described the project, the planning process, and ways for people to engage with the project, including a QR code for community members to access the project website, the survey, and the web map:
 - » More than 400 one-pagers were distributed in both English and Spanish including at mobile home communities, residential neighborhoods, and bus stops.
- **Project website:** RFTA hosted a project website that provided information about the project, advertised in-person and virtual outreach events, and linked to the interactive web map and online survey tools.
- **Virtual Open House:** The project team hosted a virtual open house to provide an opportunity for members of the public to learn more about the Regional Bikeshare Plan and First- and Last-Mile Mobility Study and ask questions directly to RFTA staff.
- **Interactive web map:** a crowdsourcing web map was created that allowed users to comment on an existing bikeshare station, add a potential station location, or like or dislike a previously suggested station location.
 - » Approximately 70 people provided approximately 140 locations for potential bikeshare stations.
 - » 13% of respondents identified themselves as persons of color.
- **Survey:** a survey was created to collect information from respondents about their bikeshare preferences and demographics and to provide general comments on bikeshare and transportation in the region. The survey was available in an electronic and paper-based format.
 - » Approximately 140 responses were received.
 - » 10% of respondents identified themselves as persons of color.
- **Community ambassador program:** local organizations were identified to serve as community ambassadors and to help connect more effectively with local communities, especially Latino and other hard-to-reach populations. These organizations, which included community-based organizations, libraries, and HOAs, utilized their networks to share project information, the survey, and website; and to advertise in-person engagement activities.
 - » One mobile home park HOA was able to share project information to more than 400+ residents.
- **In-person tabling events:** five in-person events were coordinated with local markets, existing events, or conducted at local transit stops to engage residents and to meet Latino and other harder-to-reach populations. Project boards outlined project information and two interactive exercises allowed participants to provide information about potential new locations for



Total Participants – 175
% Latino – 44%

Figure 16. Approximately 44% of the 175 people that engaged at in-person tabling events were Latino.

REGIONAL BIKESHARE PLAN

bikeshare stations and to identify the biggest challenges to accessing public transit. In-person events were held in:

- » Aspen.
- » El Jebel/Basalt.
- » Carbondale.
- » Glenwood Springs.
- » New Castle.

5.2 KEY THEMES

In the Roaring Fork Valley, Aspen, Snowmass Village, Basalt and El Jebel have existing bikeshare stations. Communities further down valley including Carbondale, Glenwood Springs, and New Castle do not currently have access to bikeshare.

From the 140 responses to the survey, 89% had heard of bikeshare and 46% had used bikeshare. When asked what additional communities (not including those that already have bikeshare) they might consider using bikeshare, Carbondale and Glenwood Springs were the most likely places where people would ride with some support for New Castle. Approximately one-quarter were unsure or said they would not use bikeshare in any of these communities.

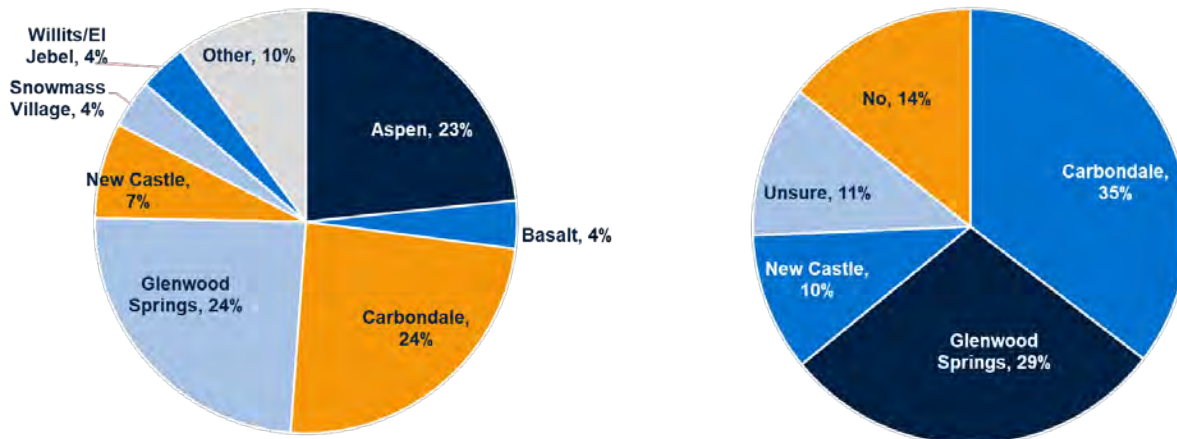


Figure 17. Where survey respondents live in the Roaring Fork Valley (left) and new communities in which people would consider riding WE-cycle (right).

When asked if and where they would support service expansions to the WE-cycle program, the most supported expansions were into Carbondale (76% of respondents supported this expansion) and Glenwood Springs (75% supported). There was also good support for expansion in the Aspen Area and in the Mid-Valley areas of Basalt, Willits, and El Jebel, unincorporated Eagle County.

From in-person engagement, community-based organizations (CBOs) expressed a need for more action from RFTA to address inequities in infrastructure and transit investment in the Roaring Fork Valley. CBOs indicated a need for more investment in campaigns and communication targeting the Latino community, which is a significant portion of RFTA's ridership.

REGIONAL BIKESHARE PLAN

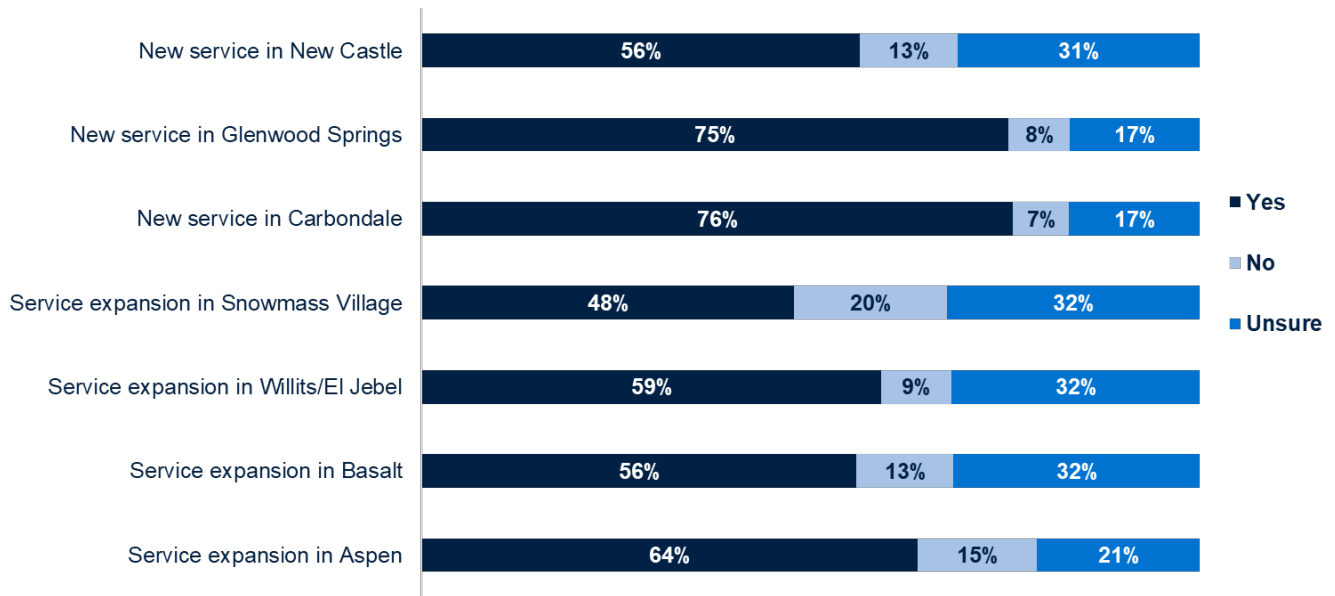


Figure 18. Support amongst survey respondents for WE-cycle service expansion.

Other input suggested that core areas with density made sense for additional or new bikeshare stations, but that these need to be linked to residential neighborhoods, which are often located outside of the core and can have low densities.

A common theme through the public engagement process was a clear message that more safe and comfortable bike infrastructure is needed and would benefit the community and the WE-cycle system.



Figure 19. Tabling event conducted in Carbondale.

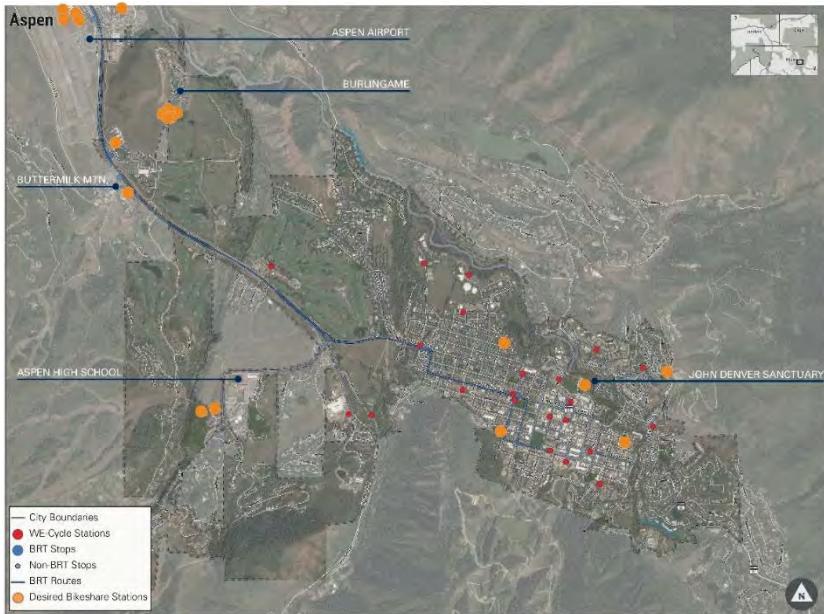


Figure 20. At tabling events, participants could suggest where they would like to see bikeshare stations.

REGIONAL BIKESHARE PLAN

Aspen

In-Person Event: Aspen Saturday Market; Saturday, August 14, 2021, 8:30 – 10:00 am; Downtown Aspen



Key Takeaways:

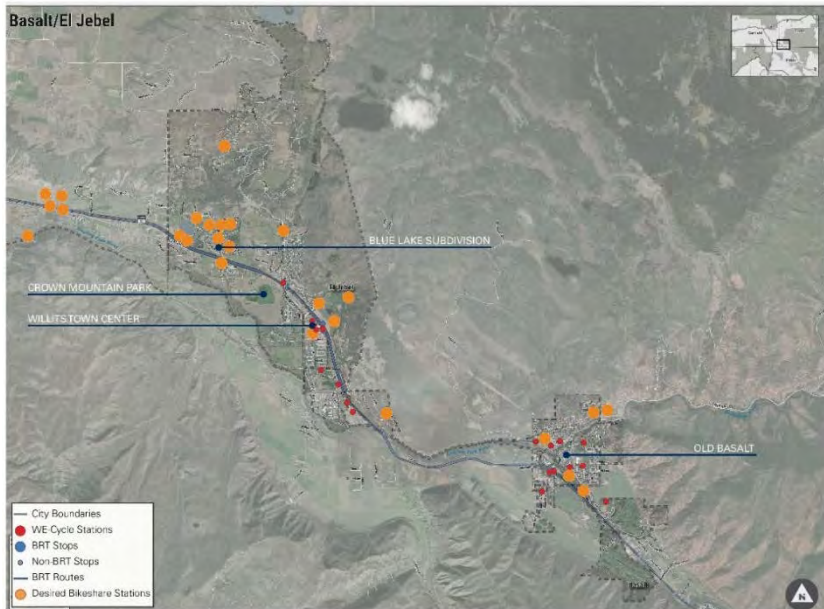
- Some interest in infill stations in the Downtown Core.
- Most interest in extending bikeshare to serve the airport, ABC, Burlingame, and Buttermilk for improved access to transit.
- Interest in extending service along the Maroon Creek corridor.



Figure 21. Suggested bikeshare station locations in the Aspen Area.

Basalt / El Jebel

In-Person Event: Pop-up; Wednesday, August 10, 2021, 4:00 – 6:00 pm; El Jebel BRT Station, Hwy 82



Key Takeaways:

- Residents would like to see bikeshare locations that connect El Jebel to transit stations for access to Carbondale and Glenwood Springs.
- Bikeshare in El Jebel could improve access between neighborhoods, services, and the RFTA bus station.

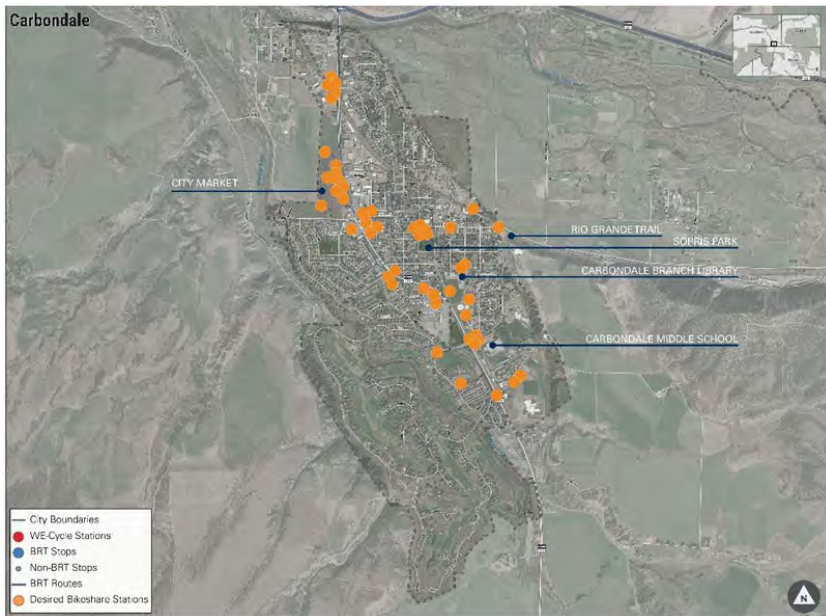


Figure 22. Suggested bikeshare station locations in Basalt, Willits, and El Jebel.

REGIONAL BIKESHARE PLAN

Carbondale

In-Person Event: First Friday; August 6, 2021, 5:00 – 7:00 pm; Main Street in Downtown Carbondale



Key Takeaways:

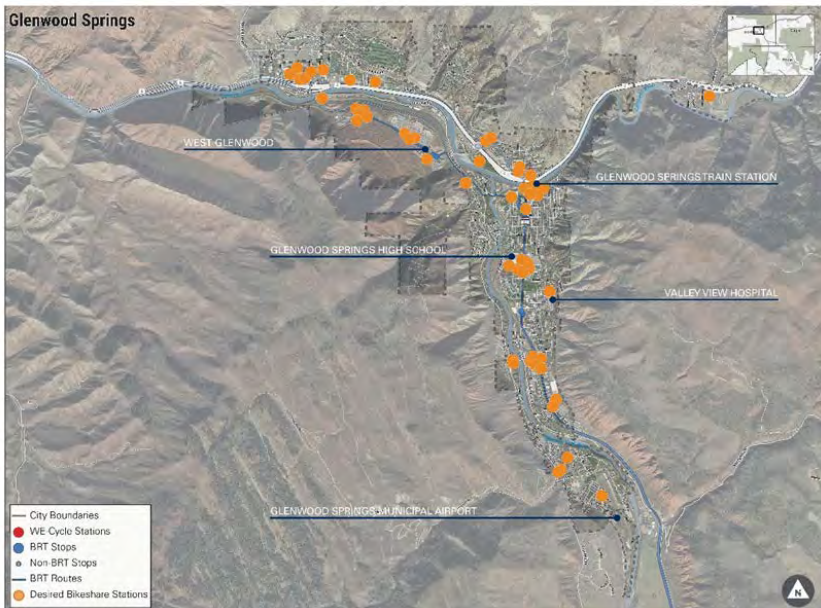
- Bikeshare station suggestions included the City Market grocery store, local library, and destinations on Main Street in downtown.
- Bikeshare stations in lower income neighborhoods and at mobile home parks could improve access for low-income individuals and be used by teens to get to and from school.



Figure 23. Suggested bikeshare station locations in Carbondale.

Glenwood Springs

In-Person Event: Downtown Market and Music Series; Tuesday, August 10, 2021, 4:00 – 6:00 pm; 7th Street in Downtown Glenwood Springs



Key Takeaways:

- The downtown core would benefit from bikeshare.
- Bikeshare could connect people to the 27th Street BRT station.
- Bikeshare locations in West Glenwood surrounding concentration of apartment complexes.

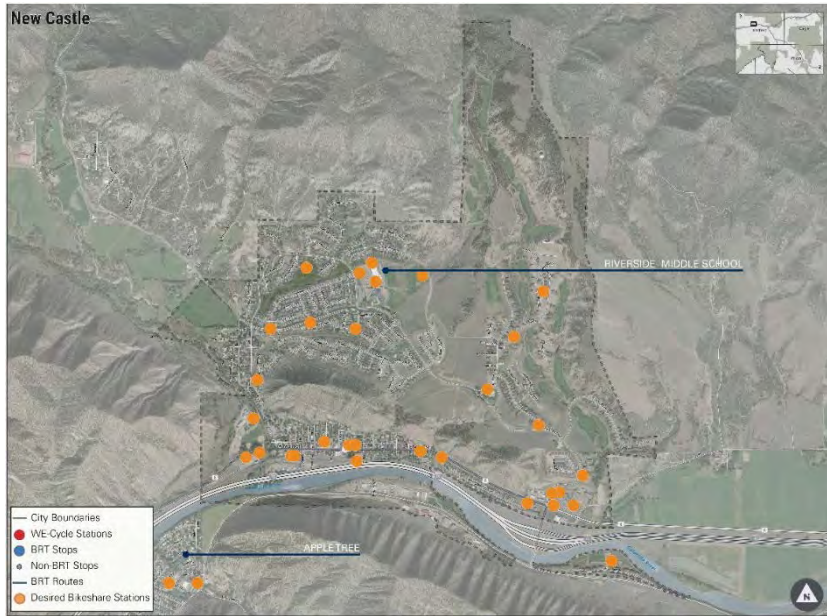


Figure 24. Suggested bikeshare station locations in Glenwood Springs.

REGIONAL BIKESHARE PLAN

New Castle

In-Person Event: New Castle Community Market, Loteria; Thursday, September 2, 2021, 5:30 – 7:30 pm; Burning Mountain Park



Key Takeaways:

- Bikeshare stations in the residential neighborhoods off the highway would improve access to destinations on the main street and highway and transit services that are often 2-3 miles walking distance.



Figure 25. Suggested bikeshare station locations in New Castle.

CHAPTER 6
GOVERNANCE MODEL



6. GOVERNANCE MODEL

This chapter reviews the needs of the major bikeshare partners in the region and evaluates these against the existing governance model and other models emerging out of the peer city practice reviews to develop a recommended long-term governance model that best fits the region.

6.1 GOVERNANCE CONSIDERATIONS

Part of the stakeholder outreach process was to gather input from the critical partners about their needs for long-term governance of the program. This input was used to explore different governance models and develop a model that could support the expansion of bikeshare in the Roaring Fork Valley. The stakeholder outreach process included meetings with RFTA Executive staff and the RFTA Board, WE-cycle staff and Board members, local agency staff, and the project's Technical Advisory Committee (TAC). From this engagement, the following key themes were identified related to regional bikeshare:

- There is strong support among all stakeholders for a regional bikeshare system that provides a seamless user experience and is supported by a steady and consistent funding source. Stakeholders agree that the bikeshare service should include a common fare structure, a single pass, and if possible, future integration into trip planning, fare payment, and other technology innovations that would further integrate with regional and local transit services.
- Stakeholders recognize that there are varying degrees of readiness for bikeshare and in some communities, such as Carbondale and Glenwood Springs, additional system planning and public outreach is needed before a bikeshare program can or should be established.

Table 8 (see next page) provides a summary of key findings related to the three groups of stakeholders, WE-cycle, RFTA, and the local agencies (including the EOTC).

A national scan of bikeshare governance models was conducted to learn from peer cities including systems operating regional bikeshare programs and a variety of non-profit bikeshare programs that have either continued to operate as non-profits, transitioned into being operated by transit or other public agencies, or transitioned into private bikeshare delivery models (see Section 4).

A number of potential governance models came out of the peer city scan and were considered by the TAC and project teams. These included:

- RFTA taking on ownership, oversight, and operating responsibilities with WE-cycle staff transitioning to RFTA staff to help operate the program (e.g., CDPHP Cycle, Fort Worth Bike Sharing).
- RFTA taking on ownership and oversight responsibilities with WE-cycle transitioning to become the contracted operator (e.g., LINK Dayton Bikeshare).
- RFTA taking on ownership and oversight responsibilities and contracting operations to one or more private contractors. WE-cycle transitions to providing advocacy, education, and other supporting functions.
- RFTA and the local jurisdictions taking on ownership responsibilities to create an oversight committee with representatives from each agency. WE-cycle transitions to become the contracted operator (e.g., Austin MetroBike).

REGIONAL BIKESHARE PLAN

- WE-cycle maintaining its role as the owner and operator of the program with RFTA coordinating regional and local agency support through an Advisory Committee (e.g., Kansas City RideKC).
- Transitioning the system to private ownership (e.g., Minnesota NiceRide).

Table 8. Key Findings from Interviews and Work Sessions

WE-cycle	RFTA	Local Agencies and EOTC
<ul style="list-style-type: none"> • WE-cycle is the preferred bikeshare and micromobility solution for the region. It is trusted, aligns with local and regional values, provides local employment opportunities, and uses an organized, docked-based (i.e., station) technology. • WE-cycle values its autonomy, agility, nimbleness, entrepreneurialism, mission, work culture, and role as innovators in sustainable mobility services. • WE-cycle's biggest concerns are centered on inconsistent funding and system vulnerability, capacity and support for expansion, and staff recruitment and retention. 	<ul style="list-style-type: none"> • RFTA is a well-respected, trusted regional agency. It is the regional agency that brings the local communities together and it has established service and service agreements with local communities. It is viewed as a natural partner for regional bikeshare. • Local agencies and the EOTC support RFTA taking a larger role in the region's bikeshare program. • RFTA's primary interest is the first- and last-mile portion of bikeshare in delivering and better serving its customers in making regional transportation connections. • Stakeholders' concerns about RFTA taking increased ownership of the bikeshare system are centered around slower decision-making processes (compared to WE-cycle); differences in organizational culture; concerns that bikeshare may not be prioritized within a larger organization that primarily focuses on transit service; and concerns that functions beyond first- and last-mile trips will not be adequately recognized. 	<ul style="list-style-type: none"> • Local agencies and the EOTC are not interested in owning or operating bikeshare. • Local agency staff must be allowed to provide input and approve system planning and station siting as well as some input on the type of technology used, and other decisions relevant to the local communities. They recognize and trust WE-cycle's ability to effectively operate bikeshare. • Local agencies recognize that RFTA's Destination 2040 funding will not cover the entire cost of the system and some form of local contribution is necessary for bikeshare service. • Local agencies want to see an appropriate allocation of resources, including Destination 2040 and other RFTA funding, that recognizes investment in the existing system and the inequitable distribution of wealth and resources between communities.

REGIONAL BIKESHARE PLAN

Based on the key findings from stakeholder input, the project team heard little support for a private bikeshare model and removed this option from consideration. Local agencies were also not interested in owning or operating their own bikeshare programs so a local agency bikeshare model was also removed from consideration. The project team further explored the options to continue (and refine) the current non-profit owned and operated governance model or to bring the bikeshare program in-house under RFTA.

6.2 EVALUATION OF POTENTIAL GOVERNANCE MODELS

Bringing WE-cycle, its employees, assets, and services in-house under RFTA, was discussed by the parties in late 2019 and early 2020. However, this process is complex and, absent a regional bikeshare expansion plan, involved a great deal of uncertainty as to what the future of regional bikeshare would be. As an alternative, RFTA in cooperation with WE-cycle, undertook the development of this regional bikeshare expansion plan and explored ways that the existing governance model could be enhanced to meet the changing needs of WE-cycle as it expands service.

The ultimate assumption of WE-cycle by RFTA has not been precluded by the plan and, at some point in the future it may yet be undertaken. However, it is believed that employing the recommended governance model (outlined below) will be the most expedient means of implementing regional bikeshare expansion in the short term, while providing additional time for the parties to work together and evaluate the pros and cons of the assumption of WE-cycle by RFTA.

The recommendation to formalize a public-private-non-profit partnership through a multi-agency Memorandum of Understanding (MOU) and a Service Operating Agreement (SOA) is outlined in detail below. Several variations of this model were also considered but ruled out including a multi-party MOU that would include WE-cycle; and an Inter-jurisdictional MOU with WE-cycle having separate contracts with RFTA and each local jurisdiction.

The multi-party MOU with WE-cycle would create a single agreement with all parties represented. To date there is no precedent of RFTA having an MOU with a non-profit and this would require additional provisions be added around WE-cycle's requirements that would add complexity for local jurisdictions reviewing and joining onto the agreement. As well, the agreement would need to determine who acts as the fiscal agent to collect monies from all parties and may create more effort for WE-cycle to act in this role. The separate contracts model would still require a multi-agency MOU to agree on common system elements but would require a lot more staff time for WE-cycle and the local jurisdictions to manage separate contracts.

6.3 RECOMMENDED GOVERNANCE MODEL

For the long-term operation of a regional bikeshare system in the Roaring Fork Valley (i.e., for 2023 and beyond), RFTA should formalize a public-private-non-profit partnership to secure the long-term future of the existing WE-cycle program and expand the service to other communities. The partnership would include the following parties:

- RFTA: as the regional transit agency supporting bikeshare as a first- and last-mile extension to the transit system; the principal financial supporter of the program; a trusted agency providing regional coordination.
- Local Jurisdictions: as the local permitting entity; responsible for a portion of financial support for capital and local service; working with WE-cycle to coordinate on local service planning and permitting.

REGIONAL BIKESHARE PLAN

- WE-cycle: as the regional advocate and planner for bikeshare; operator of bikeshare service throughout the region; leader of bikeshare technology and service innovation initiatives; and working with local jurisdictions and RFTA to plan and budget service.

A long-term agreement will establish a budget and expected service levels each year and project expected future year budgets and service levels. It will also identify how funding will be allocated, collected, disbursed, and made available to WE-cycle and identify WE-cycle's reporting requirements.

A "contracting mechanism" is needed to formalize the public-private-non-profit partnership and the recommended long-term mechanism is a Multi-Agency Memorandum of Understanding (MOU) with a separate Service Operating Agreement (SOA).

Some of the benefits of the multi-agency MOU plus SOA governance model are that it:

- Creates a single agreement between RFTA and the local jurisdictions and a single agreement between RFTA and WE-cycle resulting in less administration for WE-cycle and the local jurisdictions than if there were agreements with each local jurisdiction separately.
- Utilizes RFTA's experience as a trusted regional partner to work as the contracting agent and to collect and disburse funding.
- Provides consistent terms and a transparent funding model for all participating jurisdictions allowing them to budget and prepare for future expansion.
- Allows for RFTA to own the system assets and remove that responsibility and administrative burden from the local jurisdictions.

MULTI-AGENCY MOU

The multi-agency MOU would be entered into between RFTA and the participating local jurisdictions (including the EOTC) and establish WE-cycle as the common bikeshare operator and regional bikeshare planning leader and representative. The MOU will:

- Outline the responsibilities of each party in coordinating with each other and with WE-cycle.
- Outline the financial responsibilities of each entity and the process for RFTA to collect, manage, and disburse funds on an annual basis.
- Identify the process and schedule for coordinating local system planning and budgeting with WE-cycle.
- Create a Regional Bikeshare Advisory Committee (similar to the Technical Advisory Committee on the Regional Bikeshare Plan) with staff representatives from RFTA, WE-cycle, and each participating local jurisdiction. The committee would discuss planning level issues and challenges and make recommendations to the RFTA and WE-cycle Boards for any changes to the program.
- Outline the expectations and cooperative responsibilities of participating local jurisdictions in an exhibit to the MOU including:
 - » Designating a bikeshare point of contact who is responsible for advocating for bikeshare and facilitating bikeshare processes and permitting and coordination within the local jurisdiction.
 - » Leading all bikeshare station siting and permitting through the local jurisdiction's approvals process.
 - » Making best efforts to site stations in the public right-of-way in safe, visible, and year-round locations.

REGIONAL BIKESHARE PLAN

- » Assuming any costs for site preparation (if necessary), e.g., concrete pad construction.
- » Striving to find shop/office space for WE-cycle in local jurisdiction-owned buildings and providing rent at a reduced rate or at no charge.
- » Continuing to lead planning efforts for bicycle infrastructure and safe route improvements to stations in the public right-of-way.
- Include WE-cycle as a regional transportation referral agency for regionally significant development and capital projects. WE-cycle and RFTA will coordinate responses and recommend where mitigation and impact fees related to bikeshare may be appropriate. However, it is recognized that RFTA (and WE-cycle) hold an advisory role on the development and capital project review process led by other jurisdictions.
- In advance of planning service expansion to a new local jurisdiction, the jurisdiction will sign the MOU and consider establishing a Bikeshare Working Group/Committee that includes an elected official, a jurisdiction staff member, a RFTA staff member, a member of the Bike-Ped Committee (or other related volunteer committee), and community members at-large including at least one Spanish-speaker. WE-cycle will lead and facilitate this group in supporting the planning and implementation of bikeshare in the particular jurisdiction.
- RFTA will retain ownership for all of the capital equipment purchased with its funds and establish an agreement for WE-cycle to operate this equipment. In contributing their local match for capital purchases, local jurisdictions will assign the ownership of their percentage of the assets to RFTA. The MOU will outline how equipment will be accounted for and reimbursement terms should the program close or if a participating jurisdiction decides to leave the program.

SERVICE OPERATING AGREEMENT

The Service Operating Agreement (SOA) would be entered into between RFTA and WE-cycle and will:

- Outline the responsibilities of both parties in coordinating with each other and the local jurisdictions to plan and budget service.
- Establish a budget and a Scope of Work outlining the expected service levels for the upcoming year and budget projections for future years of service.
- Document WE-cycle's funding responsibility to provide sponsorship support.
- Outline how funds will be disbursed and made available to WE-cycle. It is expected that WE-cycle will be contracted on a per service unit cost basis and paid by RFTA on a monthly basis, per delivery of Level of Service (LOS) reports.
- Identify LOS reporting requirements including:
 - » Monthly reports on agreed-upon Key Performance Indicators (KPIs).
 - » Annual Report.
 - » Annual Financial Report.

The Regional Bikeshare Plan included developing a detailed financial model and a unit cost schedule for capital (including capital replacement) and service operations. Using these unit costs, WE-cycle will establish a budget based on expected service levels for the upcoming year and budget projections for future years of service in coordination with RFTA and each participating local jurisdiction. The budget will identify RFTA and each local jurisdiction's funding responsibilities.

REGIONAL BIKESHARE PLAN

For capital, RFTA will pay the 50% deposit on equipment in the year prior to it being deployed and will pay the remainder upon receipt of the equipment. RFTA will then reimburse itself from collection of local match funding in the year the equipment is deployed. For operations, RFTA will remit funding to WE-cycle based on an agreed-upon schedule. RFTA and WE-cycle will track actual costs compared to budgeted amounts quarterly and at the end of the year, RFTA and WE-cycle will compare actual costs to the budgeted amount. If a refund is due, RFTA will issue a refund to the jurisdictions as appropriate. If the quarterly tracking shows that actual costs are exceeding budgeted amounts, RFTA and WE-cycle will develop a plan for adjusting service or funding the shortfall.

For continuity and planning purposes, it is recommended that the SOA be annually renewing, subject to annual appropriations by RFTA, for an initial term of five years.

CHAPTER 7
POTENTIAL EXPANSION PLAN



7. POTENTIAL EXPANSION PLAN

WE-cycle is a regional bikeshare program that consists of service in various communities with WE-cycle as the common operator providing a consistent management framework and a seamless rider experience throughout the Roaring Fork Valley. The existing WE-cycle bikeshare program includes systems in the Aspen Area (i.e., the City of Aspen), the Town of Snowmass Village, and the Mid-Valley (i.e., the Town of Basalt, Eagle County, and Pitkin County). Future expansion may include additional service in these areas and new service in the Town of Carbondale, the City of Glenwood Springs, the Town of New Castle, and additional stations in unincorporated Pitkin County.

Potential service areas, phasing plans, and high-level station locations were developed to help understand the possible scale of future expansion in each local community. However, these assumptions will need to be refined and specific station locations identified as a part of the implementation plan as WE-cycle works with each jurisdiction and the local community to identify and finalize local service plans and station locations.

7.1 SYSTEM PLANNING APPROACH

A regional bikeshare expansion plan was developed to understand the potential scale of bikeshare in the region and for planning purposes to estimate future funding requirements.

Local bikeshare system expansion plans were developed for each sub-area using the following inputs:

- **Purpose and Trip Opportunities:** service should be at a sufficient scale to serve key areas and purposes and be operationally viable. WE-cycle is designed to be both a “first- and last-mile” mobility service to provide access to and from RFTA’s services and as an “only mile” service that is complementary in filling gaps where RFTA service is not financially feasible.
 - » There are opportunities to provide additional mobility options to areas that currently have few or limited transportation options - providing connections to regional transit and extending the reach of local service.
 - » There is a lot of new development planned to come online in the Roaring Fork Valley and bikeshare could reduce the travel demand impact and connect new residents without relying on an automobile.
- **Service Parameters:** WE-cycle has almost ten years of bikeshare operating experience and understands what is needed to open and operate a viable, impactful, and operationally feasible system. This includes creating a system large enough to operate at scale, in a relatively compact area that can be easily serviced, and with good access and connections between stations to facilitate rebalancing. There are also basic needs to make service expansions operationally viable that include expanding the system in carefully planned ways so as to efficiently integrate the additional maintenance and rebalancing burdens in a cost-effective manner without compromising existing levels of service. The following baseline characteristics are considered essential for service and to create these efficiencies and justify the start-up costs for the system:
 - » System size: 15 to 20 stations with at least 80 bikes.
 - » E-bikes: trends in North American bikeshare show higher deployment, uptake, and usage of e-bikes and WE-cycle is committed to moving towards a hybrid system that includes a combination

REGIONAL BIKESHARE PLAN

of standard and electric equipment in each community. One-third to one-half of bikes should be e-bikes, topography dependent.

- » E-stations and e-docks: should be prioritized at BRT locations and daytime receiving areas. E-stations would be anticipated to make up 15% to 20% of stations, depending on location and size.
 - » Station sizes: nine-dock stations are the operational minimum unless there is a cluster of three or more stations in the vicinity at which point stations can be seven-docking points. BRT or receiving stations should be at least 27-docks.
 - » Station siting: stations must be placed on a hard surface, be visible, have safe access, and have sufficient solar exposure. It is preferred that stations be located such that they can remain in place year-round.
 - » Bike infrastructure: safe bike and pedestrian access to and from stations is essential to create confidence for riders to use the service. If an area has intense vehicular use and no safe biking routes, then bikeshare is not recommended and there should be a focus on creating bike infrastructure first with bikeshare to follow.
 - » Pricing: it is assumed that WE-cycle's fare structure will remain the same with the first 30 minutes of each trip being free and overtime fees accrued for bikes checked out for longer than 30 minutes at a time.¹⁸
- **Stakeholder and Public Input:** the plan was developed with input provided by:
 - » Technical Advisory Committee members including RFTA, County, and local agency staff.
 - » WE-cycle staff.
 - » Focus group meetings conducted with community-based organizations, local advocacy groups, and local bike shops.
 - » Public input gathered from an online map and survey and in-person outreach events conducted in Aspen, the El Jebel area of Eagle County, Carbondale, Glenwood Springs, and New Castle.
 - » An analysis of land use patterns, locations of affordable housing, local and regional transit stops, bicycle and pedestrian infrastructure, and other factors influencing demand or use of the system.



Figure 26. Solar-powered charging stations and e-assist bikes will be a critical part of regional expansion.

Photo credit: WE-cycle

¹⁸ Currently overtime fees are set at \$0.50 per minute for pedal bikes and \$5.00 per minute for e-bikes.

7.2 PHASING TERMINOLOGY

The following terminology is used to consistently describe system buildout in the region. The proposed system plan outlined below is a guide and needs to be flexible enough to evolve and consider changes in funding, travel and development patterns, jurisdictional priorities, bikeshare equipment and technology offerings, and to react to new development, bike infrastructure, private sector investment, and other opportunities as they arise.

- **Existing system:** refers to the current systems including stations, dock, and bikes in the City of Aspen, the Town of Basalt, Pitkin County, Eagle County, and the Town of Snowmass Village.
- **Opening system:** refers to the first launch of bikeshare in a new community. The opening system must be of sufficient scale and meet the service parameters outlined above.
- **Phases 2 – 4:** expand the existing or opening systems as funding becomes available. These phases should add capacity around existing stations, e.g., at BRT stops, downtowns, and denser areas (about 20% of all future docking points) with the additional 80% going towards expanding the service area.
- **Development-initiated and private expansion:** this refers to stations funded as part of new development or other public/private partnerships. The timeline on this expansion varies and may come prior to Phase 2 – 4 expansions. By identifying these needs in the master planning effort, jurisdictions can reference them as part of the development approvals and permitting process and ideally secure funding for these stations. Securing operating funding for these stations is critically important and could be a use for travel demand mitigation fees.
- **Infrastructure expansion:** this refers to locations where station funding could be built into capital projects for new bikeways, shared use paths, parking lots, park-and-ride lots, underpasses and bridges, multi-modal infrastructure, or as travel demand management during construction. This is an opportunity to fund bikeshare infrastructure outside of the Destination 2040 and local resources and by identifying these locations, jurisdictions are supported in incorporating the financial needs of a bikeshare station into their planning, grant applications, funding requests, procurement processes, etc.

7.3 REGIONAL EXPANSION PHASING

The Aspen Area and Mid-Valley systems are existing and are now in an expansion and optimization phase. The “increased levels of service” as written in the Destination 2040 (“D2040”) materials would include new stations, bikes, and infrastructure, but also includes adding e-bikes, the electrification of existing stations, and expansion of existing stations to enhance performance. The improvements will enhance the levels of service and allow service to continue to align with industry best practices.

Destination 2040 committed funds to establish bikeshare service in Carbondale and Glenwood Springs. This would provide additional options for first- and last-mile access to transit, improve local mobility options, and increase the utility of the bikeshare system by allowing riders to be able to use a bike at both ends of a trip. Snowmass Village and New Castle were not included in Destination 2040 but could also benefit from expanded or new bikeshare service, respectively.

Other expansion opportunities can occur over time and as resources become available, for example as part of first- and last-mile mobility investments, as new pedestrian or bicycling infrastructure is built, or as opportunities arise for new development and public-private partnerships emerge to help fund the system.

REGIONAL BIKESHARE PLAN

Expansion needs to consider the additional operating burden on the system. New stations have additional operating costs, though these are lower for infill or contiguous expansion. However, expanding to new areas may increase operating costs for additional staff time to access and rebalance the system. New expansion areas need to balance coverage and station density and it is more operationally viable and impactful for users to have a density of stations in a smaller area rather than a few stations in a large service area.

A plan for regional expansion of the bikeshare program was developed and includes several possible phases to build out the program. These include:

- 2022 System Modernization.
- Destination 2040 Implementation + Enhanced Upper Valley Service.
- Outside of Destination 2040.

A timeline of potential expansion is included in **Figure 27** and each of these phases is described below. A schedule of expansion and assumptions for the number of regular and solar powered stations, regular and e-docks, station plates, bikes, and e-bikes is included in Appendix A.

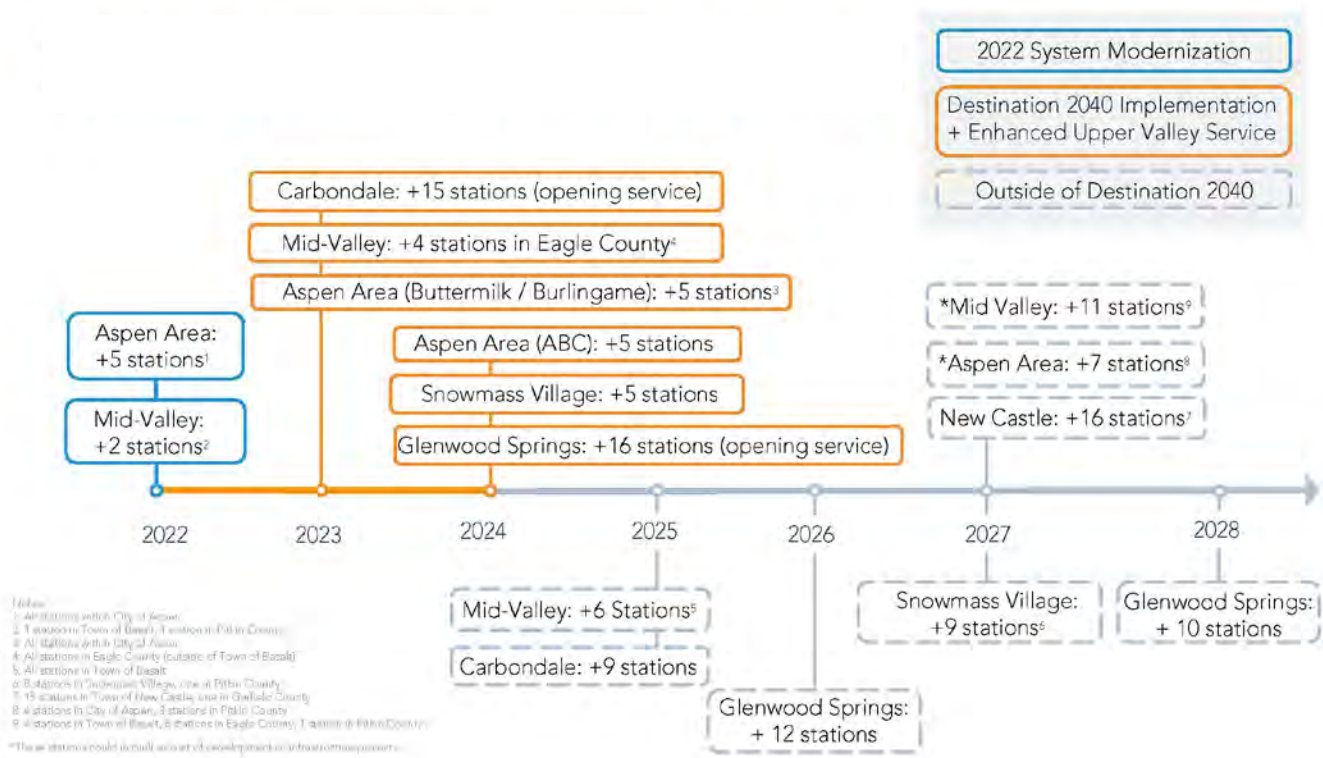


Figure 27. Schedule for potential regional bikeshare expansion.

REGIONAL BIKESHARE PLAN

EXISTING SYSTEM & MODERNIZATION

An Interim Agreement was developed between RFTA and WE-cycle for the 2022 operating season to modernize the existing program and provide for expanded service in Aspen and the Mid-Valley. The WE-cycle program in 2022 will include 55 stations including 26 stations in Aspen, 2 stations in Snowmass Village (known as the Snowmass Village Bikeshare Connector), and 27 stations in the Mid-Valley system that includes Basalt (16 stations), and the El Jebel area of unincorporated Eagle County (8 stations) and Pitkin County (3 stations).

In addition to providing safe, reliable, healthy, and 24/7 bike transportation as a first- and last-mile connection to RFTA bus stops and as a car-independent mode for in- and around-town travel, WE-cycle will make the following enhancements to its service in 2022:

- **Upgrades & Repairs:** Upgrade all existing station modems to meet 5G cellular requirements; repair select station hardware due to use or end of life; comprehensive inspection, repairs, and part replacements on all 227 pedal bikes (100 of which are 10 years old); upgrade website, sign-up portal, and rider account dashboard for compatibility with current software and API; absorb increased part and transport costs per current prices. These investments have been deferred as long as safe to do so and are now necessary repairs and upgrades to meet operating standards. They collectively reflect an approximately 5 times increase in maintenance and repair costs as compared to 2021.
- **Increased staffing levels to meet system demands, service levels, and planning responsibilities:**
 - » WE-cycle is adding the equivalent of 2 FTEs to the leadership / year-round team (for a total of 5) to align staffing with system requirements and to accommodate the increased system size. These individuals will allow WE-cycle to maintain and repair the existing equipment to required standards and complete the necessary outreach and planning associated with expanded service in existing communities and future service in Carbondale and Glenwood Springs.
 - » Increased local operating staff hours to operate and maintain the increased system size and complexity of both station and bike electrification.
 - » Increased staff compensation and benefits to meet industry standards and regional market rates in order to retain existing staff and attract new talent.
 - » These staffing adjustments collectively comprise an approximately 50% personnel cost increase as compared to 2021.
- **Aspen System:** The City of Aspen has invested in five new solar-powered e-stations, funded through a CMAQ grant and the City's local match which represents a 28% growth in system size. Three of the new stations will be located in the Maroon Creek Valley (Aspen Highlands, Aspen Recreation Center, and the Aspen School Campus) thereby extending the service area by approximately 1 mile. RFTA is funding 13 new e-bikes which doubles the e-bike fleet size bringing the total number of bikes to 146. Six existing station map panels will be replaced. After 10 years of use, the trailer for the electric balancing vehicle is being replaced. The Aspen System will operate from early May to end of October 2022.
- **Mid-Valley System:** RFTA has funded two new solar-powered e-stations which will be located at the Basalt Upvalley and Willits BRT stations which represents an 8% growth in stations to a total of 27. RFTA is funding 13 new e-bikes which doubles the e-bike fleet size and bringing the total number of bikes to 118. Twenty-four map panels will be replaced including at 14 stations in Town of Basalt, 8 stations in Eagle County, and 2 stations in Pitkin County. An electric balancing bike and trailer is being added to facilitate non-vehicle bike balancing in the Basalt area. The Mid-Valley System will operate from late-April to end of October of 2022.

REGIONAL BIKESHARE PLAN

- Snowmass Village Bikeshare Connector: No expansions planned but the Snowmass System will benefit from the system-wide upgrades. Two existing station map panels will be replaced. Service will be available from early May to end of October 2022.
- System Planning: WE-cycle will start the planning, coordination, and community engagement process with the Town of Carbondale and the City of Glenwood Springs.

DESTINATION 2040 IMPLEMENTATION

Bikeshare expansion plans were developed with the input of local jurisdictions and were used to identify what expansion could be included in the D2040 implementation and what expansion could be implemented outside of D2040. The following expansion scenario includes a phasing plan that fits the objectives of the D2040 project description and provides some service expansion in the Town of Snowmass Village that will be funded outside of D2040. The “Destination 2040 Implementation + Enhanced Upper Valley Service” plan includes the following expansion:

- Aspen Area:
 - » City of Aspen: Phase 3 (projected for 2023) that could include 5 stations and be coordinated with Pitkin County to expand the existing service area to the Buttermilk, Burlingame, and ABC areas.
 - » Pitkin County: Phase 4 (scheduled for 2024) that could include 5 stations and be coordinated with the City of Aspen to expand the existing service area to the Buttermilk, Burlingame, and ABC areas.
- Snowmass Village:
 - » Phase 2 (projected for 2024) that could include a 5-station pilot in Downtown Snowmass Village and require the creation of a local operations center in the Town of Snowmass Village.
- Mid-Valley:
 - » Eagle County: Phase 3 (projected for 2023) that could include an additional 4 stations. This phase does not include any additional stations in the Town of Basalt or Pitkin County.
- Town of Carbondale:
 - » Opening Service (projected for 2023) that could include 15 stations. With the support of RFTA and the Town of Carbondale, WE-cycle will start planning for this system in 2022 with funding approved as part of the Interim Agreement and continue in early 2023 in anticipation of opening in the spring of 2023. WE-cycle may work with a to-be-formed Carbondale Bikeshare Working Group consisting of an elected official, a jurisdiction staff member, a RFTA staff member, a member of the Bike-Pedestrian Committee, and community members at-large including at least one Spanish-Speaker.
- City of Glenwood Springs:
 - » Opening Service (projected for 2024) that could include 16 stations. With the support of RFTA and the Town of Carbondale, WE-cycle will start planning for this system in late 2022 with funding approved as part of the interim agreement and will continue in 2023 in anticipation of opening in the spring of 2024. WE-cycle may work with a to-be-formed Glenwood Springs Bikeshare Working Group consisting of an elected official, a jurisdiction staff member, a RFTA staff member, a member of the Bike-Pedestrian or Transportation Committee, and community members at-large including at least one Spanish-Speaker.

REGIONAL BIKESHARE PLAN

OUTSIDE OF DESTINATION 2040

A regional system would bring first- and last-mile mobility and local circulation benefits to new communities and would enhance utility and ridership of the system in existing communities as users will be able to use bikeshare at either end of their trip. Destination 2040 will expand bikeshare service into the Lower Valley and there is room for service expansion in all communities outside of Destination 2040. Future service could also be considered in the Town of New Castle, but other first- and last-mile options may be more suitable given the densities, urban form, and availability of resources.

A reasonable level of future expansion was identified from the local jurisdiction bikeshare expansion plans to forecast expected system costs. This will need to be funded outside of D2040 and the “Outside of Destination 2040” plan includes the following potential expansion:

- Aspen Area:
 - » Additional stations in the City of Aspen or Pitkin County as part of development or inclusion in infrastructure projects. Seven (7) additional stations were included to represent this potential expansion.
- Snowmass Village:
 - » Town of Snowmass Village and Pitkin County: Phase 3 (scheduled for 2027) that could include an additional 9 stations including 8 stations in the Town of Snowmass Village and 1 station at the Brush Creek Intercept Lot in Pitkin County.
- Mid-Valley:
 - » Town of Basalt: Phase 3 (scheduled for 2025) that could include an additional 6 stations.
 - » Additional stations in the Town of Basalt, Eagle County, and/or Pitkin County as part of development or inclusion in infrastructure projects. Eleven additional stations were included to represent this potential expansion.
- Carbondale:
 - » Phase 2 (scheduled for 2025) that could include an additional 9 stations.
- Glenwood Springs:
 - » Phase 2 (scheduled for 2026) that could include an additional 12 stations and expand into new service areas on the north and west sides of the Colorado and Roaring Fork Rivers.
 - » Phase 3 (scheduled for 2028) that could include an additional 10 stations and expand the service area into West Glenwood Springs.
- New Castle:
 - » Opening Service (scheduled for 2027) that could include 16 stations including 15 stations in the Town of New Castle and 1 station in Garfield County.

CHAPTER 8
FUNDING PLAN



8. FUNDING PLAN

A financial analysis was conducted to understand the cost implications of the potential regional expansion plan and to develop a funding model that could leverage RFTA's Destination 2040 funding commitment and the financial contributions of participating jurisdictions to sustainably fund the WE-cycle system.

8.1 COST ANALYSIS

CAPITAL COSTS

Capital costs include new bikeshare equipment, start-up equipment, and capital replacement. Unit costs were developed from 2021 prices quoted by PBSC, WE-cycle's equipment vendor, and includes regular and solar-powered stations and regular and e-bikes. Equipment costs include a 3% annual inflation and a 10% fee for shipping and customs. Non-equipment costs such as station assembly and installation, map printing, shop tools and supplies include an inflation rate of 3% per year.

A unit cost schedule will be prepared as part of the multi-agency MOU and updated each year to track price increases and adjust to rising inflation and shipping costs. Capital budgets will be developed each year based on the unit cost schedule and reviewed and approved by RFTA and the local jurisdictions. Capital costs include:

- New capital: including the purchase, assembly, and installation of new stations (inclusive of plates, docks, kiosks, solar panels, map panels) and bikes (some equipment will be electrified).
- Capital replacement: including a 5% capital replacement cost calculated on the value of the equipment (inclusive of plates, docks, kiosks, solar panels, map panels, regular bikes, e-bikes, etc.) in the given year. This is applied immediately to existing equipment and 5-years after new equipment is installed (to account for the typical 5-year warranty period and durability of equipment).
- Start-up or expansion equipment: including balancing vehicles, shop equipment for new or expanded maintenance, equipment and tools for e-charging infrastructure, and bike, dock, and station spare parts to stock the shop prior to new or expanded operations.

OPERATING COSTS

Operating costs include personnel and direct costs for the management, operation, and maintenance of the program. These costs were developed to reflect expected service levels and include modernizing the system, bringing it up to industry standards, offering competitive local wages, and expanding service. Staff wages were based on competitive local rates intended to attract and retain talent and commensurate with industry standards. Direct costs were calculated from existing rates and scaled based on changes in the number of bikes or stations. An inflation rate of 3% per year was applied to all wages and operating costs.

Financial modeling conducted as part of the Regional Bikeshare Plan established a unit cost schedule for operations that accounts for base service levels in each community. This includes 6-month service in the Upper Valley (same as current operations), 9-month service in the Mid-Valley (an increase from the current 6-month service), and 12-month service in the Lower Valley. Note that these service levels can be adjusted using identified scaling factors to increase or decrease service and local operating costs. Local jurisdictions can also pay for additional service requests beyond the base service level and obtain cost reductions from in-kind services or contributions such as providing no-cost or low-cost rent of office and shop space to WE-cycle.

REGIONAL BIKESHARE PLAN

Operating budgets will be developed each year based on the unit cost schedule and reviewed and approved by RFTA and the local jurisdictions. These costs include:

- Regional indirect operating costs: compensation and benefits of the leadership / management team, system-wide costs such as administration, insurance, marketing, system branding, professional services, supplementing the continuation of fare-free service, regional warehouse for off-season equipment storage, etc.
- Local service direct operating costs: compensation and benefits of local operating staff, local operating costs such as vehicle maintenance, supplies, tools, operating software fees, rent and costs for a local office and operations center, seasonal install/uninstall of the system, etc.
- Operating start-up costs: these apply only to communities receiving new service or starting local operations and include rent, utilities, and other costs for 4-months of office/shop space to assemble equipment and prepare for next season operations, supplies and materials for office and shop outfitting, marketing and outreach hard costs, and professional services costs.
- System planning: these include staff and direct costs related to the planning, permitting, and launch of bikeshare in a new community.

8.2 FUNDING PROPOSAL

A funding proposal was developed to cover the capital and operating costs of the system. The proposal considers the resources available from RFTA, WE-cycle, and the participating jurisdictions and how the public-private-non-profit partnership can best be utilized to provide long-term service. Each phase may be funded differently as outlined in the sections below.

EXISTING SYSTEM & MODERNIZATION

The Interim Agreement developed between RFTA and WE-cycle for the 2022 operating season included a modernization of the existing program and expansion of the service in Aspen and the Mid-Valley. The agreement also included funds for operating the program in 2022. The long-term governance agreement and funding plan (outlined below) is expected to be in place for 2023 and beyond.

DESTINATION 2040 IMPLEMENTATION

Per the Destination 2040 Plan, \$1.271 million in capital and \$583,495 annually (in 2020 and growing at 3% per year) was approved by voters for new bikeshare service in Carbondale and Glenwood Springs and expanded service in Aspen and Basalt. Increased costs from delays in operationalizing funding, expansion of the service to meet the project description included in D2040, and continued modernization of the service to bring it up to appropriate levels of staffing, compensation and benefits, and operational performance will require more funding than identified in D2040.

Appendices D and E show detailed budgets for capital and administration, operations, and planning for the seven-year period between 2023 and 2029 respectively. They show the breakdown of costs and funding by jurisdiction. The proposed budgeting process and funding proposal is described below.

Capital costs for the “Destination 2040 Implementation plus Enhanced Upper Valley Service” phasing plan are proposed to be funded with the local match percentages shown in **Table 9**.

REGIONAL BIKESHARE PLAN

Table 9. Local Match Percentages for Capital Funding

Cost	RFTA	Local Match
New Capital and Capital Replacement	80%	20%
Start-Up or Expansion Equipment	100%	0%

Based on the unit capital cost schedule included in Appendix B and the match percentages in Table 9, the following capital would be needed to implement the “D2040 Implementation + Enhanced Upper Valley Service” scenario:

- Total Capital: \$3,689,000 (\$3,045,000 RFTA / \$644,000 local match).
 - » New capital: \$2,260,000 (\$1,808,000 RFTA / \$452,000 local match).
 - » Capital replacement: \$962,000 (\$770,000 RFTA / \$192,000 local match).
 - » Start-up or expansion equipment: \$467,000 (\$467,000 RFTA / \$0 local match).

Appendix C shows a detailed breakdown of the capital budget requirements for RFTA and the local jurisdictions.

For new capital, capital replacement, and initial or expansion equipment, a 50% deposit is required on equipment prior to the payment deadline, which is typically in September of the year before the equipment will be deployed, with the remainder of payment due upon delivery early in the year the equipment will be deployed. RFTA will pay the 50% deposit and the balance of the payment upon receipt of the equipment. RFTA will collect local match funds on new capital and capital replacement from the local jurisdictions that are due upon receipt of the equipment and reimburse themselves. RFTA will own the assets and jurisdictions will assign their portion of the use to RFTA.¹⁹

Operating costs for the “Destination 2040 Implementation plus Enhanced Upper Valley Service” phasing plan are proposed to be funded with the local match percentages shown in **Table 10**.

Table 10. Local Match Percentages for Operating Funding

Cost	RFTA/WE-cycle/EOTC	Local Match
Regional Indirect Operating Costs	100%	0%
Local Service Direct Operating Costs	0%	100%
Operating Start-up and System Planning Costs	100%	0%

Based on the unit operating cost schedule included in Appendix C and the match percentages in Table 10, the following operations funding would be needed to implement the “D2040 Implementation + Enhanced Upper Valley Service” scenario for the 7-year period between 2023 and 2029:

- Total Operating: \$15.24 million (\$7.65 million RFTA / \$1.47 million WE-cycle / \$0.79 million EOTC / \$5.33 million local match).
 - » Regional indirect operating costs: \$9.52 million (\$7.26 million RFTA / \$1.47 million WE-cycle / \$0.79 million EOTC / \$0 local contribution).
 - » Local service direct operating costs: \$5.33 million (\$5.33 million local contribution).

¹⁹ The multi-agency MOU will include language about reimbursement of local shares if, for some reason, the service is discontinued prior to the end of the assets’ useful life.

REGIONAL BIKESHARE PLAN

- » Operating start-up and system planning costs: \$0.39 million (\$0.39 million RFTA / \$0 local contribution).

Appendix D shows a detailed breakdown of the operating budget requirements for RFTA and the local jurisdictions.

Agency Funding Needs

Appendices C and D show the annual budget amounts that are required by each local agency to participate in the program. Appendix E compares these budget amounts to existing funds committed by RFTA and the local jurisdictions and shows the net increase or reduction in funding needed by each agency. Each year, RFTA will collect local match funds from the local jurisdictions and make available their funding to WE-cycle.

The following funding has been committed by RFTA:

- Destination 2040 Capital Funds: RFTA has \$1,144,520 remaining of its Destination 2040 capital funding commitment.²⁰
- Existing RFTA Operating Funds: RFTA has contributed operating funds in the past to the existing system. If RFTA continues this commitment, and assuming a scaling of 3% per year, approximately \$195,700 would be available in 2023.
- Destination 2040 Operating Funds: RFTA has committed operating funds as part of Destination 2040. The amount available in 2023 would be \$637,600 and scaling at 3% per year.
- Accumulated 2020/2021/2022 Destination 2040 Operating Funds: \$1,265,495 has accumulated from unspent Destination 2040 operating funds in 2020, 2021, and 2023.²¹

WE-cycle has committed to providing funding that could be applied to bring down regional shared costs that would be made up of:

- \$191,580 in 2023 from system sponsorship and expected to grow by 3% per year.

The Elected Officials Transportation Committee (EOTC) has in the past committed:

- \$100,000 in 2022 and should be scaled by 3% per year.

The following funding has been committed in the past by the local jurisdictions:

- City of Aspen: \$150,960 in 2022.
- Town of Basalt: \$30,000 in 2022.
- Eagle County: \$45,000 in 2022.

The commitments from the aforementioned jurisdictions were assumed to scale by 3% per year to keep up with inflation and were then compared with each agency's required funding to determine if additional funding needs to be found. Exhibit 2 shows the funding requirements for each jurisdiction. It shows that:

- RFTA would need to find approximately \$1.9 million in additional capital funding over the next seven years to cover its share of new capital, capital replacement, and expansion equipment.

²⁰ This is calculated as \$1,273,000 committed for Capital as part of D2040 minus \$128,480 spent in 2021/2022 to fund expansion in the Aspen Area and Mid-Valley systems.

²¹ This includes \$583,495 in 2020 plus 601,000 in 2021 plus \$81,000 in 2022.

REGIONAL BIKESHARE PLAN

- RFTA would not need any additional operating funding beyond its contribution to the existing system, the operating funding available as part of D2040, and the accumulated 2020/2021/2022 D2040 operating funds.
- The City of Aspen would need to find approximately \$66,000 beyond its existing contribution in 2023 to cover local match for new capital for expanded service into the Buttermilk / ABC area, capital replacement on the existing equipment, and local service operations. This would reduce to between \$20,000 and \$30,000 per year between 2024 and 2029 to cover local service operations and the local match portion on capital replacement.
- Pitkin County does not currently provide direct funding to the program. Existing service in the Mid-Valley and expanded service in Pitkin County in the Aspen Area as part of D2040 would require funding be provided by Pitkin County. This is approximately \$14,000 in 2023 to cover local service operations and capital replacement on the existing equipment in the Mid-Valley and then \$32,000 to \$40,000 per year between 2024 and 2029 to cover local service operations and capital replacement. An additional approximately \$50,000 would also be needed towards the local match on new capital to expand into the Buttermilk / ABC area in 2024.
- The Town of Snowmass Village does not currently provide direct funding to the program. Existing and expanded service in the Town would require funding be provided by the Town. This is approximately \$14,000 in 2023 to cover local service operations and capital replacement on the existing equipment. Expanding the system into Downtown Snowmass Village in 2024 would require approximately \$54,000 in local match towards new capital and approximately \$71,000 to \$86,000 per year between 2024 and 2029 to cover local service operations (including the establishment of a local operations center) and capital replacement.
- Eagle County would need to find approximately \$35,000 in 2023 to cover new capital for expanded service in the Eagle County portion of the Mid-Valley system as part of D2040; but in subsequent years would require only modest increases (approximately \$1,000 to \$1,500 per year) in its existing contribution (if scaled by 3% per year).
- Existing service in the Town of Basalt is currently under-funded and would be exacerbated by increasing the service period from 6- to 9-months. This would require the Town to increase its existing contribution to the program by approximately \$46,000 to \$56,000 per year to maintain current service levels.
- Opening service in the Town of Carbondale will require the Town to provide annual funding towards local service operations. Assuming the current scale of the opening system (15 stations) and 12-month operations, this would require \$123,000 for new capital in 2023 and approximately \$125,000 to \$150,000 per year for operations.
- Opening service in the City of Glenwood Springs will require the City to provide annual funding towards local service operations. Assuming the current scale of the opening system (16 stations) and 12-month operations, this would require \$144,000 for new capital in 2024 and approximately \$232,000 to \$269,000 per year for operations.

There are several ways that local agencies can reduce their costs. These include:

- Applying for RFTA's First/Last Mile Reserve (FLMR) funding: the FLMR currently identifies a 50% local match so can effectively halve the local agency's funding need.
- Providing in-kind contributions to offset program costs: for example, providing low- or no-cost rent for office and shop space to WE-cycle.

REGIONAL BIKESHARE PLAN

- Service level changes to reduce operating costs: for example, this could include reducing from 9- or 12-month service to 6- or 9-month service. The costs above currently assume 6-month operations in the Upper Valley, 9-month service in the Mid-Valley, and 12-month service in the Lower Valley.
- Identifying permanent station locations so that WE-cycle does not incur costs for moving and storing equipment.
- Reducing the size of expansion phases or opening systems: note that operating cost reductions are not proportional to the reduction in system size, e.g., reducing the opening system from 15 to 10 stations in Carbondale (a 33% reduction) reduces 2023 operating costs by only 7% because there is a significant amount of upfront costs associated with launching opening service.

OUTSIDE OF DESTINATION 2040

The Bikeshare Expansion Plan includes cost estimates for the development of a robust regional bikeshare system. However, additional RFTA and local funding, will be required to support expansion outside of the “Destination 2040 Implementation + Upper Valley Service Expansion”. At this time, RFTA is not in a position to make any commitments regarding its capability to fund bikeshare expansion beyond 2040 Implementation + Upper Valley Service Expansion.

Based on the current unit capital cost schedule (see Appendix C) and depending on the timing of future expansion, the capital funding needs for the “Outside of Destination 2040” plan could be up to:

- Total Capital: \$3.7 million.
 - » New capital and capital replacement: \$3.6 million.
 - » Start-up or expansion equipment: \$0.1 million.

Local jurisdictions could make funding requests for RFTA’s First/Last Mile Reserve (FLMR), although depending on the scale and timing of bikeshare expansion in the region, it may become necessary for RFTA to supplement funding in the FLMR. Capital funding could also come from grants, local funding, development contributions, or incorporated into future capital infrastructure projects.

Based on the current unit operating cost schedule (see Appendix C) and depending on the timing of future expansion, the operating funding needs for the “Outside of Destination 2040” plan (not including potential in-kind and service level cost reductions) for the 7-year period between 2023 and 2029 could be up to:

- Total Operating (7-year total): \$2.1 million.
 - » \$2.0 million in system operations and start-up operations funding.
 - » \$0.1 million in system planning funding.

Local jurisdictions could make funding requests for RFTA’s FLMR, although depending on the scale and timing of bikeshare expansion in the region, it may become necessary for RFTA to supplement funding in the FLMR. The FLMR currently identifies a 50% local match. Funding requests should identify the amounts attributable to increases in core/trunkline service costs, local operating costs, and system planning costs.

APPENDICES



APPENDIX A: LIST OF STAKEHOLDERS

Stakeholder engagement included interviews and meetings to solicit input from the following organizations:

- RFTA Board
- RFTA Executive staff
- WE-cycle Board
- WE-cycle staff
- Staff from the Elected Officials Transportation Committee
- Staff from Eagle and Pitkin Counties
- Staff from the Cities of Aspen and Glenwood Springs
- Staff from the Towns of Basalt, Carbondale, New Castle, and Snowmass Village

Focus group meetings were conducted with the following groups:

- Active Transportation Advocacy Groups
- Community-Based Organizations
- Local Bike Shops

A list of organizations engaged as part of the Regional Bikeshare Plan and a summary of key observations from these meetings is included below.

Table 11. List of Active Transportation Advocacy Groups Engaged for the Regional Bikeshare Plan

Category	Organization/Office	Community
Advocacy	Aspen Cycling Club	Aspen
Advocacy	Trail Build group	Roaring Fork Outdoor Volunteers
Advocacy	Glenwood Springs Bicycle Advocates	Glenwood Springs
Commission	Carbondale Bike, Ped, Trail Commission	Carbondale
Commission	Carbondale Bike, Ped, Trail Commission	Carbondale
Commission	City of Aspen Open Space and Trails	Aspen
Commission	Pitkin County Open Space and Trails	Pitkin County
Commission	Parks, Open Space, Trails	Basalt
Department	Parks and Recreation Director	Snowmass
Department	Parks and Recreation Director	Snowmass
Nonprofit	Aspen Valley Community Foundation	Aspen

This meeting provided an opportunity for active transportation advocates to learn about the study, ask questions, and provide input about bikeshare and first-and-last mile mobility barriers. Participants were interested in learning and providing feedback on the planning process and gaining a better understanding of who was being engaged (and how). Participants noted a few concerns related to bikeshare, such as the need to carry items while commuting, differences in bikeshare user types in different communities, and concerns associated with e-bike users riding on

REGIONAL BIKESHARE PLAN

trails. Invitations to this focus group were sent to a dozen different organizations throughout the Valley and representatives from the following organizations attended the meeting:

- Glenwood Springs Bicycle Advocates
- Carbondale Bicycle and Pedestrian Trails Commission
- Roaring Fork Outdoor Volunteers
- Pitkin County Open Space and Trails
- Natural Resource and Open Spaces for the City of Aspen

Table 12. List of Community Organizations Engaged for the Regional Bikeshare Plan

Category	Organization/Office	Community
Housing Communities	El Jebel Mobile Home Park	El Jebel
Nonprofit	Defiende Nuestra Tierra (Wilderness Workshop)	Roaring Fork Valley
Nonprofit	Family Resource Center of the Roaring Fork School District	Roaring Fork Valley
Nonprofit	English in Action	Roaring Fork Valley
Nonprofit	Voces Unidas de las Montanas	Garfield, Eagle, Pitkin Counties
Nonprofit	Aspen Valley Community Foundation	Roaring Fork Valley
Arts and Culture	Garfield County Library	Garfield County
Arts and Culture	Carbondale Library	Carbondale
Housing Communities	Town of Snowmass Village	Snowmass
Housing Communities	El Jebel Mobile Home Park	El Jebel

This meeting included various local organizations and Latino non-profits. These organizations were able to provide live, detailed feedback that helped inform the project. The following organizations participated in the focus group:

- Voice Unidas
- Pitkin County Library
- Crawford Properties
- Garfield County Library
- Defiende Nuestra Tierra (Wilderness Workshop)

Key Observations from this meeting include:

- There is not enough bike infrastructure and safe bike parking and bike routes in some communities
- Some local circulator buses stop running early. Having bikeshare stations in these communities could aid in closing first-and last-mile mobility gaps
- No connection from I-70 to larger back end of towns like New Castle creates a barrier to accessing grocery stores and other necessary amenities
- There is little investment in campaigns targeted to Latino communities to know where transit services exist
- Lack of rideshare programs like Uber and Lyft in the valley create a need for more local transportation options

REGIONAL BIKESHARE PLAN

- Difficulty using technology and apps for the Latino community/ language barrier
- Need for credit card info for We cycle makes it hard for Latinos to participate
- Establishing workshops that allow community members to understand how to use transportation technology is needed. Local libraries could support this effort

Table 13. List of Local Bike Shops Engaged for the Regional Bikeshare Plan

Category	Organization/Office	Community
Rental Shop	Aspen Sports	Aspen and Snowmass Village
Rental Shop	Four Mountain Sports	Aspen and Snowmass Village
Rental Shop	Aspen Bicycles	Aspen
Rental Shop	ReCycle Art Aspen / Aspen Bicycles	Aspen
Rental Shop	Aspen Bikes	Aspen
Rental Shop	Aspen Bikes	Aspen
Rental Shop	Aspen Bikes	Aspen
Rental Shop	Aspen Bikes	Aspen
Rental Shop	Aspen Velo	Aspen
Rental Shop	Aspen/Basalt Bike and Ski	Aspen, Basalt, and Carbondale
Rental Shop	Hub of Aspen	Aspen
Rental Shop	Ute City Cycles	Aspen
Rental Shop	Silver City Cycles	Aspen
Rental Shop	Aspen Ski Co	Aspen
Rental Shop	Aspen Ski Co	Aspen
Rental Shop	Gene Taylor Sports	Snowmass
Rental Shop	Colorado Electric Bikes	Glenwood Springs
Rental Shop	Glenwood Adventure Company	Glenwood Springs
Rental Shop	Blue Sky Adventures	Glenwood Springs
Rental Shop	Blue Sky Adventures	Glenwood Springs
Rental Shop	Blazing Adventures	Glenwood Springs
Rentals + Retail	Sunlight Ski & Bike	Glenwood Springs
Rentals + Retail	Sunlight Ski & Bike	Glenwood Springs
Mobile Repair + High End Sales	Ride Aspen	Aspen
Mobile Repair	Road Runner Mobile Bike Service	Glenwood Springs
Second Hand	Replay Sports	Aspen
Online Bike/Component Retail	Sampson Sports	Glenwood Springs

REGIONAL BIKESHARE PLAN

This meeting provided an opportunity for bike shop staff to learn about the study, ask questions, and provide input or raise concerns related to bikeshare expansion. Staff who have worked with WE-cycle in the past noted the importance of maintaining direct communication and continuing to clarify the distinction and purpose of bikeshare vs bike rentals. Staff want to continue to ensure that bike shops are promoted through WE-cycle, such as at stations and on WE-cycle's website are interested in exploring opportunities for additional cross-promotion. Staff also acknowledged their support for continuing the current bikeshare pricing structure, which is free for the first 30 minutes, and then increases in cost over time so that riders are encouraged to use bike shops to rent bikes for long trips. Invitations to this focus group were sent to approximately 19 different bike shops and bike rental companies throughout the Valley and representatives from the following organizations attended the meeting:

- Sunlight Ski and Bike Shop
- Canyon Bikes
- Aspen Velo

APPENDIX B: POTENTIAL EXPANSION SCHEDULE

REGIONAL BIKESHARE PLAN

Table B1. Potential Phasing Schedule for System Expansion

Phase	System	Community	Year	Phase	Regular Kiosks	E-Charging Kiosks	Stations	New Map Panels	Replacement Map Panels	Regular Docks	E-Charging Docks	Docks	Station Plates	Regular Bikes	E-Bikes	Bikes	Dock-to-Bike Ratio
Existing System and Modernization	Aspen Area	Aspen	2021	Existing	21	1	22	0	0	244	11	255	70	119	13	132	1.9
	Aspen Area	Aspen	2022	Phase 2	0	5	5	0	6	0	71	71	19	0	13	13	5.5
	Snowmass	Snowmass	2021	Existing	2	0	2	0	0	30	0	30	8	15	0	15	2.0
	Mid-Valley	Basalt	2021	Existing	14	1	15	0	0	121	11	132	37	49	13	62	2.1
	Mid-Valley	Eagle Co. (Mid-Valley)	2021	Existing	8	0	8	0	0	70	0	70	20	28	0	28	2.5
	Mid-Valley	Pitkin Co. (Mid-Valley)	2021	Existing	2	0	2	0	0	17	0	17	5	7	0	7	2.4
	Mid-Valley	Basalt	2022	Phase 2	0	1	1	0	14	0	26	26	7	0	13	13	2.0
	Mid-Valley	Pitkin Co. (Mid-Valley)	2022	Phase 2	0	1	1	0	2	0	0	0	1	0	0	0	N/A
D2040 Implementation + Enhanced Upper Valley Service	Aspen Area	Aspen	2023	Phase 3	4	1	5	4	0	46	15	61	17	5	20	25	2.4
	Aspen Area	Pitkin Co. (Aspen)	2023	Phase 4	4	1	5	4	0	44	27	71	19	5	20	25	2.8
	Snowmass	Snowmass	2024	Phase 2	3	2	5	3	2	41	30	71	19	10	15	25	2.8
	Mid-Valley	Eagle Co. (Mid-Valley)	2023	Phase 3	4	0	4	4	8	42	0	42	12	15	17	32	1.3
	Carbondale	Carbondale	2023	Opening	12	3	15	12	0	112	55	167	46	50	25	75	2.2
	Glenwood Springs	Glenwood Springs	2024	Opening	14	2	16	14	0	190	46	236	63	50	30	80	3.0
Outside D2040	Aspen Area	Aspen	2027	D&I	4	0	4	4	0	36	0	36	10	10	5	15	2.4
	Aspen Area	Pitkin Co. (Aspen)	2027	D&I	3	0	3	3	0	29	0	29	8	10	5	15	1.9
	Mid-Valley	Basalt	2025	Phase 4	4	2	6	4	0	66	22	88	24	15	18	33	2.7
	Mid-Valley	Basalt	2027	D&I	4	0	4	4	0	44	0	44	12	20	0	20	2.2
	Mid-Valley	Eagle Co. (Mid-Valley)	2027	D&I	5	1	6	5	0	55	31	86	23	25	15	40	2.2
	Mid-Valley	Pitkin Co. (Mid-Valley)	2027	D&I	0	1	1	0	0	0	11	11	3	0	10	10	1.1
	Carbondale	Carbondale	2025	Phase 2	8	1	9	8	0	72	15	87	24	30	15	45	1.9
	Glenwood Springs	Glenwood Springs	2026	Phase 2	10	2	12	10	0	126	24	150	41	40	20	60	2.5
	Glenwood Springs	Glenwood Springs	2028	Phase 3	8	2	10	8	0	60	26	86	24	33	17	50	1.7
	New Castle	New Castle	2027	Opening	14	2	16	14	0	134	26	160	44	53	27	80	2.0
	Snowmass	Snowmass	2027	Phase 3	7	1	8	7	0	63	19	82	23	15	15	30	2.7
	Snowmass	Pitkin Co. (Snowmass)	2027	Phase 3	0	1	1	0	0	0	27	27	7	10	5	15	1.8
TOTAL					155	31	186	108	32	1642	493	2135	586	614	331	945	2.3

83% 17%

77% 23%

65% 35%

APPENDIX C: BIKESHARE CAPITAL BUDGET

**Destination 2040 Implementation +
Enhanced Upper Valley Service**

Appendix C: Bike Share Capital Budget "Destination 2040 Implementation plus Enhanced Upper Valley Service"

	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Glenwood Springs										
Opening Service:										
Start-Up Equipment		\$ -	\$ -	\$ 153,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 153,000
New Capital		\$ -	\$ -	\$ 720,602	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 720,602
Capital Replacement (all phases)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39,172	\$ 40,347	\$ 79,520
Cost Subtotal		\$ -	\$ -	\$ 873,602	\$ -	\$ -	\$ -	\$ 39,172	\$ 40,347	\$ 953,122
Funding										
Local Capital	\$ -	\$ -	\$ -	\$ 144,120	\$ -	\$ -	\$ -	\$ 7,834	\$ 8,069	\$ 160,024
RFTA Capital	\$ -	\$ -	\$ -	\$ 729,482	\$ -	\$ -	\$ -	\$ 31,338	\$ 32,278	\$ 793,097
Glenwood Springs Subtotal	\$ -	\$ -	\$ -	\$ 873,602	\$ -	\$ -	\$ -	\$ 39,172	\$ 40,347	\$ 953,122
Stations (cumulative)	0	0	0	16	16	16	16	16	16	
Docks (cumulative)	0	0	0	236	236	236	236	236	236	
Bikes (cumulative)	0	0	0	80	80	80	80	80	80	
Snowmass Village	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Phase 2:										
Replacement map panels (2 units)		\$ 2,300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,300
Regular stations (3) and e-charging stations (2) plus regular bikes (10) and e-bikes (15 units)		\$ -	\$ -	\$ 267,691	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 267,691
Start-Up Equipment		\$ -	\$ -	\$ 85,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 85,000
Capital Replacement (all phases)		\$ -	\$ 3,587	\$ 3,695	\$ 3,806	\$ 3,920	\$ 4,038	\$ 18,757	\$ 19,319	\$ 57,122
Cost Subtotal		\$ 2,300	\$ 3,587	\$ 356,386	\$ 3,806	\$ 3,920	\$ 4,038	\$ 18,757	\$ 19,319	\$ 412,113
Funding										
Local Capital	\$ -	\$ 460	\$ 717	\$ 54,277	\$ 761	\$ 784	\$ 808	\$ 3,751	\$ 3,864	\$ 65,423
RFTA Capital	\$ -	\$ 1,840	\$ 2,870	\$ 302,109	\$ 3,045	\$ 3,136	\$ 3,230	\$ 15,005	\$ 15,455	\$ 346,691
Snowmass Village Subtotal	\$ -	\$ 2,300	\$ 3,587	\$ 356,386	\$ 3,806	\$ 3,920	\$ 4,038	\$ 18,757	\$ 19,319	\$ 412,113
Stations (cumulative)	2	2	2	7	7	7	7	7	7	
Docks (cumulative)	30	30	30	101	101	101	101	101	101	
Bikes (cumulative)	15	15	15	40	40	40	40	40	40	
Bikeshare Capital Costs	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
New Capital	\$ -	\$ 340,600	\$ 1,022,642	\$ 1,237,239	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,600,481
Start-Up or Expansion Equipment	\$ -	\$ -	\$ 221,000	\$ 246,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 467,000
Capital Replacement	\$ -	\$ -	\$ 72,780	\$ 74,964	\$ 77,213	\$ 102,545	\$ 160,867	\$ 233,073	\$ 240,065	\$ 961,508
Total	\$ -	\$ 340,600	\$ 1,316,422	\$ 1,558,203	\$ 77,213	\$ 102,545	\$ 160,867	\$ 233,073	\$ 240,065	\$ 4,028,989
Jurisdiction	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Aspen	\$ -	\$ 8,260	\$ 52,609	\$ 7,351	\$ 7,571	\$ 11,228	\$ 14,051	\$ 14,472	\$ 14,906	\$ 130,447
Pitkin County	\$ -	\$ 9,410	\$ 492	\$ 50,295	\$ 521	\$ 537	\$ 553	\$ 3,292	\$ 3,391	\$ 68,491
Basalt	\$ -	\$ 12,130	\$ 4,229	\$ 4,356	\$ 4,486	\$ 5,795	\$ 5,969	\$ 6,148	\$ 6,332	\$ 49,444
Eagle County	\$ -	\$ 1,860	\$ 37,964	\$ 2,041	\$ 2,102	\$ 2,165	\$ 4,078	\$ 4,200	\$ 4,326	\$ 58,737
Carbondale	\$ -	\$ -	\$ 123,074	\$ -	\$ -	\$ -	\$ 6,716	\$ 6,917	\$ 7,124	\$ 143,831
Glenwood Springs	\$ -	\$ -	\$ -	\$ 144,120	\$ -	\$ -	\$ -	\$ 7,834	\$ 8,069	\$ 160,024
Snowmass Village	\$ -	\$ 460	\$ 717	\$ 54,277	\$ 761	\$ 784	\$ 808	\$ 3,751	\$ 3,864	\$ 65,423
Subtotal Jurisdictions	\$ -	\$ 32,120	\$ 219,084	\$ 262,441	\$ 15,443	\$ 20,509	\$ 32,173	\$ 46,615	\$ 48,013	\$ 676,398
CMAQ	\$ 180,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 180,000
RFTA Funding	\$ 62,000	\$ 66,480	\$ 1,097,338	\$ 1,295,762	\$ 61,770	\$ 82,036	\$ 128,693	\$ 186,459	\$ 192,052	\$ 3,172,591
Total	\$ 242,000	\$ 98,600	\$ 1,316,422	\$ 1,558,203	\$ 77,213	\$ 102,545	\$ 160,867	\$ 233,073	\$ 240,065	\$ 4,028,989
Total Stations (cumulative)	49	56	85	106	106	106	106	106	106	
Total Docks (cumulative)	504	601	942	1249	1249	1249	1249	1249	1249	
Total Bikes (cumulative)	244	270	427	532	532	532	532	532	532	
RFTA Funding Sources			2023	2024	2025	2026	2027	2028	2029	Total
Destination 2040 Capital (Less 2021/2022 Expenditures)			\$ 1,144,520	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,144,520
RFTA Funding Need			\$ (47,182)	\$ 1,295,762	\$ 61,770	\$ 82,036	\$ 128,693	\$ 186,459	\$ 192,052	\$ 1,899,591
Total RFTA Funding Commitment			\$ 1,097,338	\$ 1,295,762	\$ 61,770	\$ 82,036	\$ 128,693	\$ 186,459	\$ 192,052	\$ 3,044,111

APPENDIX D: BIKESHARE OPERATING BUDGET

Destination 2040 Implementation + Enhanced Upper Valley Service

Appendix D: Bike Share Administration, Operations, and Planning Budget "Destination 2040 Implementation plus Enhanced Upper Valley Service"

Operating Rev./Exp.	2022	2023	2024	2025	2026	2027	2028	2029	Total
Carbondale									
Costs									
Regional Shared Costs - Allocated		\$ 193,924	\$ 161,405	\$ 195,707	\$ 201,581	\$ 207,610	\$ 213,798	\$ 220,151	\$ 1,394,175
Local Service Costs		\$ 125,885	\$ 129,661	\$ 133,551	\$ 137,558	\$ 141,684	\$ 145,935	\$ 150,313	\$ 964,587
Planning Costs		\$ 11,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,000
Start-Up Operations Costs		\$ 91,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 91,000
Cost Sub-Total		\$ 421,808	\$ 291,066	\$ 329,258	\$ 339,138	\$ 349,294	\$ 359,733	\$ 370,464	\$ 2,460,762
Funding									
Local Funds		\$ 125,885	\$ 129,661	\$ 133,551	\$ 137,558	\$ 141,684	\$ 145,935	\$ 150,313	\$ 964,587
EOTC		\$ 19,313	\$ 15,013	\$ 15,463	\$ 15,927	\$ 16,405	\$ 16,897	\$ 17,404	\$ 116,421
WE-cycle		\$ 35,921	\$ 27,924	\$ 28,761	\$ 29,624	\$ 30,513	\$ 31,428	\$ 32,371	\$ 216,543
RFTA D2040		\$ 119,550	\$ 92,933	\$ 95,721	\$ 98,593	\$ 101,551	\$ 104,597	\$ 107,735	\$ 720,681
Other RFTA Funding		\$ 121,140	\$ 25,535	\$ 55,761	\$ 57,436	\$ 59,141	\$ 60,876	\$ 62,641	\$ 442,529
Net RFTA Share		\$ 240,690	\$ 118,468	\$ 151,482	\$ 156,029	\$ 160,692	\$ 165,473	\$ 170,376	\$ 1,163,211
Carbondale		\$ 421,808	\$ 291,066	\$ 329,258	\$ 339,138	\$ 349,294	\$ 359,733	\$ 370,464	\$ 2,460,762
Stations (cumulative)	0	15	15	15	15	15	15	15	
% of Total Stations	0%	19%	14%	14%	14%	14%	14%	14%	
Docks (cumulative)	0	167	167	167	167	167	167	167	
Bikes (cumulative)	0	75	75	75	75	75	75	75	
Glenwood Springs									
Costs									
Regional Shared Costs - Allocated		\$ -	\$ 172,165	\$ 208,754	\$ 215,019	\$ 221,450	\$ 228,051	\$ 234,828	\$ 1,280,268
Local Service Costs		\$ -	\$ 231,716	\$ 238,668	\$ 245,828	\$ 253,203	\$ 260,799	\$ 268,623	\$ 1,498,836
Planning Costs		\$ 60,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,000
Start-Up Operations Costs		\$ -	\$ 99,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 99,000
Cost Sub-Total		\$ 60,000	\$ 502,881	\$ 447,421	\$ 460,847	\$ 474,653	\$ 488,850	\$ 503,451	\$ 2,938,104
Funding									
Local Funds		\$ -	\$ 231,716	\$ 238,668	\$ 245,828	\$ 253,203	\$ 260,799	\$ 268,623	\$ 1,498,836
EOTC		\$ -	\$ 16,014	\$ 16,494	\$ 16,989	\$ 17,498	\$ 18,023	\$ 18,564	\$ 103,582
WE-cycle		\$ -	\$ 29,785	\$ 30,679	\$ 31,599	\$ 32,547	\$ 33,524	\$ 34,529	\$ 192,663
RFTA D2040		\$ -	\$ 99,129	\$ 102,103	\$ 105,166	\$ 108,321	\$ 111,570	\$ 114,918	\$ 641,206
Other RFTA Funding		\$ 60,000	\$ 126,237	\$ 59,478	\$ 61,265	\$ 63,084	\$ 64,934	\$ 66,817	\$ 501,816
Net RFTA Share		\$ 60,000	\$ 225,366	\$ 161,581	\$ 166,431	\$ 171,405	\$ 176,504	\$ 181,735	\$ 1,143,022
Glenwood Springs		\$ 60,000	\$ 502,881	\$ 447,421	\$ 460,847	\$ 474,653	\$ 488,850	\$ 503,451	\$ 2,938,104
Stations (cumulative)	0	0	16	16	16	16	16	16	
% of Total Stations	0%	0%	15%	15%	15%	15%	15%	15%	
Docks (cumulative)	0	0	236	236	236	236	236	236	
Bikes (cumulative)	0	0	80	80	80	80	80	80	
Snowmass Village									
Costs									
Regional Shared Costs - Allocated		\$ 25,857	\$ 75,322	\$ 91,330	\$ 94,071	\$ 96,884	\$ 99,773	\$ 102,737	\$ 585,974
Local Service Costs		\$ 13,147	\$ 70,538	\$ 72,654	\$ 74,833	\$ 77,078	\$ 79,391	\$ 81,773	\$ 469,414
Planning Costs		\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000
Start-Up Operations Costs		\$ -	\$ 94,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 94,000
Cost Sub-Total		\$ 69,004	\$ 239,860	\$ 163,984	\$ 168,904	\$ 173,963	\$ 179,163	\$ 184,510	\$ 1,179,388
Funding									
Local Funds		\$ 13,147	\$ 70,538	\$ 72,654	\$ 74,833	\$ 77,078	\$ 79,391	\$ 81,773	\$ 469,414
EOTC		\$ 2,575	\$ 7,006	\$ 7,216	\$ 7,433	\$ 7,656	\$ 7,885	\$ 8,122	\$ 47,892
WE-cycle		\$ 4,790	\$ 13,031	\$ 13,422	\$ 13,825	\$ 14,239	\$ 14,667	\$ 15,107	\$ 89,080
RFTA D2040		\$ 15,940	\$ 43,369	\$ 44,670	\$ 46,010	\$ 47,390	\$ 48,812	\$ 50,276	\$ 296,468
Other RFTA Funding		\$ 32,552	\$ 105,916	\$ 26,022	\$ 26,804	\$ 27,599	\$ 28,409	\$ 29,233	\$ 276,534
Net RFTA Share		\$ 48,492	\$ 149,285	\$ 70,692	\$ 72,814	\$ 74,990	\$ 77,221	\$ 79,509	\$ 573,002
Snowmass Village		\$ 69,004	\$ 239,860	\$ 163,984	\$ 168,904	\$ 173,963	\$ 179,163	\$ 184,510	\$ 1,179,388
Stations (cumulative)	2	2	7	7	7	7	7	7	
% of Total Stations	4%	3%	7%	7%	7%	7%	7%	7%	
Docks (cumulative)	30	30	101	101	101	101	101	101	
Bikes (cumulative)	15	15	40	40	40	40	40	40	

**Appendix D: Bike Share Administration, Operations, and Planning Budget
"Destination 2040 Implementation plus Enhanced Upper Valley Service"**

Operating Rev./Exp.	2022	2023	2024	2025	2026	2027	2028	2029	Total
Bikeshare Operations Costs									
Regional Shared Costs	\$ 1,034,260	\$ 1,140,592	\$ 1,382,993	\$ 1,424,503	\$ 1,467,108	\$ 1,510,841	\$ 1,555,736	\$ 9,516,033	
Local Service Costs	\$ 437,325	\$ 756,507	\$ 779,203	\$ 802,579	\$ 826,656	\$ 851,456	\$ 876,999	\$ 5,330,725	
Planning Costs	\$ 101,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 101,000
Start-Up Operations Costs	\$ 91,000	\$ 193,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 284,000
TOTAL Operating Costs	\$ 1,663,585	\$ 2,090,099	\$ 2,162,196	\$ 2,227,081	\$ 2,293,764	\$ 2,362,297	\$ 2,432,736	\$ 15,231,758	
<i>Regional Shared Costs (%)</i>		62%	55%	64%	64%	64%	64%	64%	62%
<i>Local Service Costs (%)</i>		26%	36%	36%	36%	36%	36%	36%	35%
<i>Planning Costs (%)</i>		6%	0%	0%	0%	0%	0%	0%	1%
<i>Start-Up Operating Costs (%)</i>		5%	9%	0%	0%	0%	0%	0%	2%
Bikeshare Operations Funding									
Jurisdiction	2023	2024	2025	2026	2027	2028	2029	Total	
Aspen	\$ 168,495	\$ 173,550	\$ 178,756	\$ 184,119	\$ 189,643	\$ 195,332	\$ 201,192	\$ 1,291,087	
Pitkin County	\$ 13,580	\$ 31,338	\$ 32,278	\$ 33,246	\$ 34,244	\$ 35,271	\$ 36,329	\$ 216,285	
Basalt	\$ 72,427	\$ 74,599	\$ 76,837	\$ 79,143	\$ 81,517	\$ 83,962	\$ 86,481	\$ 554,966	
Eagle County	\$ 43,791	\$ 45,105	\$ 46,458	\$ 47,852	\$ 49,288	\$ 50,766	\$ 52,289	\$ 335,550	
Carbondale	\$ 125,885	\$ 129,661	\$ 133,551	\$ 137,558	\$ 141,684	\$ 145,935	\$ 150,313	\$ 964,587	
Glenwood Springs	\$ -	\$ 231,716	\$ 238,668	\$ 245,828	\$ 253,203	\$ 260,799	\$ 268,623	\$ 1,498,836	
Snowmass Village	\$ 13,147	\$ 70,538	\$ 72,654	\$ 74,833	\$ 77,078	\$ 79,391	\$ 81,773	\$ 469,414	
Subtotal Jurisdictions	\$ 437,325	\$ 756,507	\$ 779,203	\$ 802,579	\$ 826,656	\$ 851,456	\$ 876,999	\$ 5,330,725	
EOTC	\$ 103,000	\$ 106,090	\$ 109,273	\$ 112,551	\$ 115,927	\$ 119,405	\$ 122,987	\$ 789,234	
WE-cycle	\$ 191,580	\$ 197,327	\$ 203,247	\$ 209,345	\$ 215,625	\$ 222,094	\$ 228,757	\$ 1,467,975	
RFTA D2040	\$ 637,601	\$ 656,729	\$ 676,431	\$ 696,724	\$ 717,625	\$ 739,154	\$ 761,329	\$ 4,885,593	
Existing RFTA Funding Commitment to WE-cycle	\$ 195,700	\$ 201,571	\$ 207,618	\$ 213,847	\$ 220,262	\$ 226,870	\$ 233,676	\$ 1,499,544	
Unspent D2040 Operation Funding from 2020, 2021, and 2022	\$ 98,379	\$ 171,875	\$ 186,424	\$ 192,037	\$ 197,668	\$ 203,318	\$ 208,988	\$ 1,258,688	
Subtotal of RFTA Funding	\$ 931,680	\$ 1,030,175	\$ 1,070,473	\$ 1,102,607	\$ 1,135,555	\$ 1,169,342	\$ 1,203,992	\$ 7,643,825	
Total Operating Rev./Exps.	\$ 1,663,585	\$ 2,090,099	\$ 2,162,196	\$ 2,227,081	\$ 2,293,764	\$ 2,362,297	\$ 2,432,736	\$ 15,231,758	
<i>Total Stations (cumulative)</i>	56	80	106	106	106	106	106	106	
<i>Total Docks (cumulative)</i>	601	871	1249	1249	1249	1249	1249	1249	
<i>Total Bikes (cumulative)</i>	270	402	532	532	532	532	532	532	
RFTA Funding Sources	2023	2024	2025	2026	2027	2028	2029	Total	
Net RFTA Regional Indirect Operations/Operations Startup/Planning Expenses	\$ (931,680)	\$ (1,030,175)	\$ (1,070,473)	\$ (1,102,607)	\$ (1,135,555)	\$ (1,169,342)	\$ (1,203,992)	\$ (7,643,825)	
Designated Destination 2040 Operation Funding	\$ 637,601	\$ 656,729	\$ 676,431	\$ 696,724	\$ 717,625	\$ 739,154	\$ 761,329	\$ 4,885,593	
Existing RFTA WE-cycle Annual Support	\$ 195,700	\$ 201,571	\$ 207,618	\$ 213,847	\$ 220,262	\$ 226,870	\$ 233,676	\$ 1,499,544	
Subtotal D2040 and Existing Bikeshare Funding	\$ 833,301	\$ 858,300	\$ 884,049	\$ 910,570	\$ 937,888	\$ 966,024	\$ 995,005	\$ 6,385,137	
D2040 Operating and Existing RFTA WE-cycle Funding Revenue Shortfall	\$ (98,379)	\$ (171,875)	\$ (186,424)	\$ (192,037)	\$ (197,668)	\$ (203,318)	\$ (208,988)	\$ (1,258,688)	
Accumulated Unspent D2040 Operation Funding from 2020, 2021, and 2022	\$ 1,265,495	\$ 1,167,116	\$ 995,241	\$ 808,817	\$ 616,780	\$ 419,112	\$ 215,794	\$ 6,807	
Balance of Accumulated Unspent D2040 Operation Funding	\$ 1,167,116	\$ 995,241	\$ 808,817	\$ 616,780	\$ 419,112	\$ 215,794	\$ 6,807	\$ (1,251,882)	

APPENDIX E: LOCAL JURISDICTION FUNDING NEEDS

**Destination 2040 Implementation +
Enhanced Upper Valley Service**

