To access the Agenda and Backup Materials electronically, go to the City of Grand Junction Website. To participate or watch the meeting virtually register for the GoToWebinar.

CITY OF Grand Junction COLORADO

GRAND JUNCTION CITY COUNCIL
MONDAY, DECEMBER 2, 2024
SPECIAL WORKSHOP, 5:30 PM
FIRE DEPARTMENT TRAINING ROOM
625 UTE AVENUE

1. **Discussion Topics**

   a. Confluence Center of Colorado Funding Request

   b. EV Carshare - Readiness Study - Presentation, Discussion, and Council Direction

   c. Turf Limitation on Single Family and Duplex Lots and Water-Wise Landscape

   d. Water Wise Landscaping at Lilac Park

2. **City Council Communication**

   An unstructured time for Councilmembers to discuss current matters, share ideas for possible future consideration by Council, and provide information from board & commission participation.

3. **Next Workshop Topics**

4. **Other Business**

What is the purpose of a Workshop?

The purpose of the Workshop is to facilitate City Council discussion through analyzing information, studying issues, and clarifying problems. The less formal setting of the Workshop promotes conversation regarding items and topics that may be considered at a future City Council meeting.

How can I provide my input about a topic on tonight's Workshop agenda?
Individuals wishing to provide input about Workshop topics can:

1. Send input by emailing a City Council member (Council email addresses) or by calling 970-244-1504.

2. Provide information to the City Manager (citymanager@gjcity.org) for dissemination to the City Council. If your information is submitted prior to 3 p.m. on the date of the Workshop, copies will be provided to Council that evening. Information provided after 3 p.m. will be disseminated the next business day.

3. Attend a Regular Council Meeting (generally held the 1st and 3rd Wednesdays of each month at 6 p.m. at City Hall) and provide comments during "Citizen Comments."

Grand Junction City Council

Regular Session

Item #1.a.

Meeting Date: December 2, 2024

Presented By: Andrea Phillips, Interim City Manager

Department: Community Development

Submitted By: Tamra Allen, Community Development Director

Information

SUBJECT:

Confluence Center of Colorado Funding Request

RECOMMENDATION:

Staff recommends the city discuss this request and vote on the prepared resolution

EXECUTIVE SUMMARY:

The Confluence Center of Colorado, comprised of five local non-profits including RiversEdge West, One Riverfront, Colorado Canyons Association, the Colorado West Land Trust and Eureka! McConnell Science Museum is requesting $299,748.60 in funding to assist in the construction an approximately 10,700 square foot building within the RiverFront at Dos Rios. The building will be homes to this non-profit collaborative center and include office and meeting space (7,334 sq.ft), and early learning center (2,835 sq.ft) for their employees and the broader community.

BACKGROUND OR DETAILED INFORMATION:

The Confluence Center of Colorado, comprised of five local non-profits including RiversEdge West, One Riverfront, Colorado Canyons Association, the Colorado West Land Trust and Eureka! McConnell Science Museum is requesting $299,748.60 in funding to assist in the construction an approximately 10,700 square foot building within the RiverFront at Dos Rios. The building will be homes to this non-profit collaborative center and include office and meeting space, and Pre-K education and childcare for their employees and the broader community.

The request of $299,748.60 includes the price to purchase the .80 acres of land for the majority of their building site ($239,886) and the remainder reflects the cost of development-related fees including the application, TCP, Fire, Police, Water tap, sewer

tap, storm drainage and engineering inspection fees ($59,862.60). Additional information about their project and request can be found the attached letters.

FISCAL IMPACT:

The request of $299,748.60 includes the price to purchase the .80 acres of land for the majority of their building site ($239,886) and the remainder reflects the cost of development-related fees including the application, TCP, Fire, Police, Water tap, sewer tap, storm drainage and engineering inspection fees ($59,862.60). This amount is not currently budgeted and would require a supplemental appropriation from the 2024 General Fund Reserves. If Council directs, the first reading of the ordinance will be added to the December 4, 2024 agenda.

SUGGESTED MOTION:

Discussion and direction

Attachments

1. Confluence_Center_City_Request_2024.10.25
2. Site Plan
3. Building Elevation
4. Confluence Ctr 10.19.2023
5. Confluence Ctr 03.14.2024
6. Confluence Ctr Brochure

Members of the Grand Junction City Council – via email October 25, 2024

Dear City Council Members:

We are sending this letter as an updated request to the first two letters you received, the first was dated 10/19/2023, and the second was dated 04/01/2024.

Design completion and formal submission for our building permit will conclude at the end of this month. The Confluence Center, Grand Junction Community Development, and May Reigler Properties have been working together since our last correspondence to detail the final property boundaries and determine values for the land in question. The following narrative and attached exhibit describe how the parcels of land will be conveyed, combined, and acquired for the Confluence Center Project:

The City of Grand Junction will sell May Riegler .313 acres for ~$90,436. This value is calculated on a $288,934 per acre price. The blue hatch area in the attached exhibit shows this area. This cost would be deducted from the contractual sell price of the City's existing Lot 5 to May Riegler.

To create the Lot for the Confluence project, the .313 City-owned property needs to be combined with .49 acres of property currently owned by May Reigler, the parcel was formerly the 'Sunshine Polishing Lot' and is shown in the yellow hatch on the attached exhibit. The value of this property is ~ $149,450. This value is calculated on a $305,000 per acre price.

May Riegler plans to convey to the Confluence project a larger area of .91 acres. However, this additional acreage (.11 acres) will eventually be needed to accommodate the remaining May Reigler development in this area. So there will be no funding request for this portion of the lot.

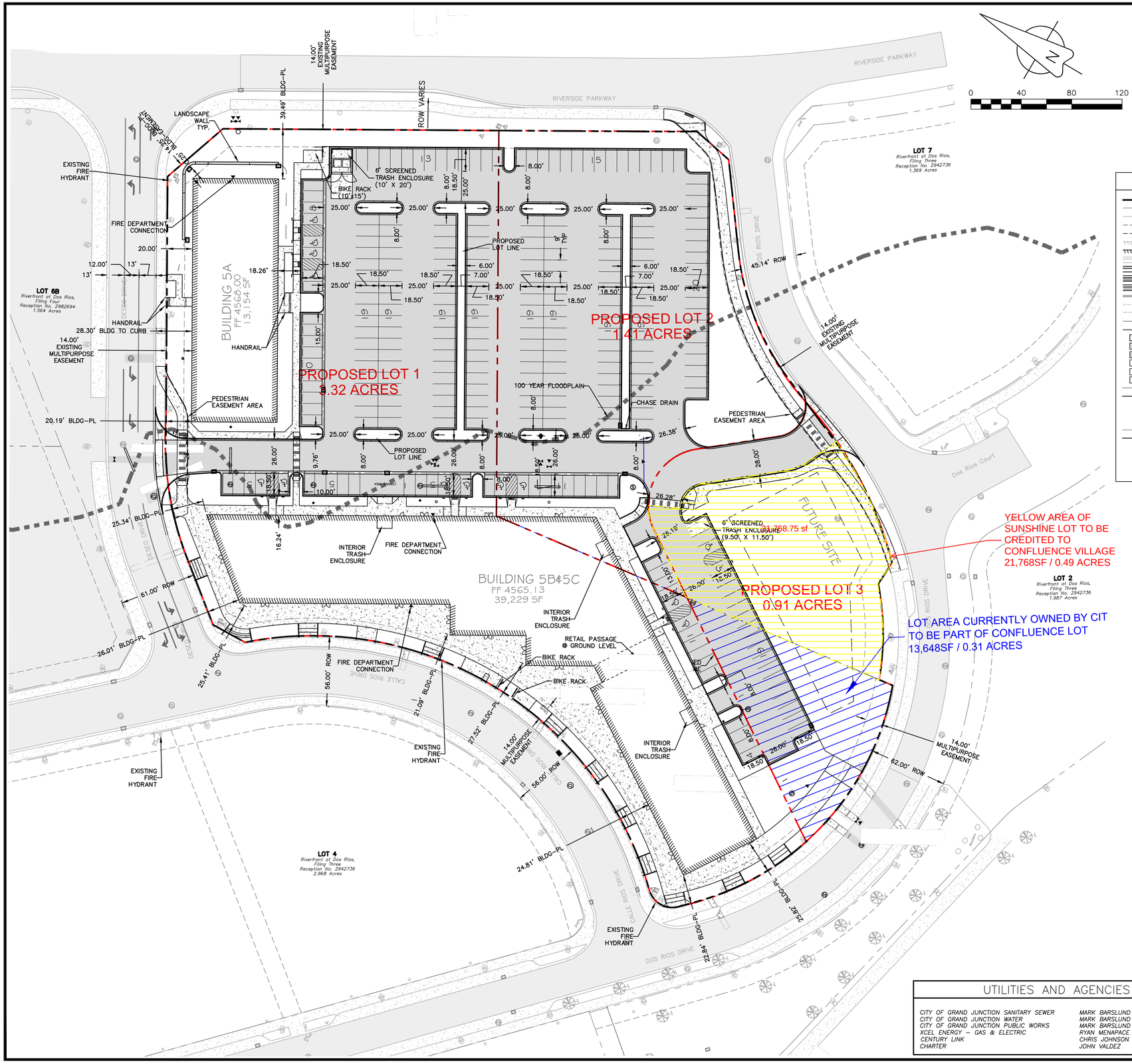
Our formal request from the City of Grand Junction is to fund the acquisition of .80 acres of the .91 acre lot, the proposed lot 3 that is outlined in red in the attached exhibit, for the amount of $239,886. We're also requesting payment for all development-related fees. This includes the application, TCP, Fire, Police, water tap, sewer tap, storm drainage, and the engineering inspection fee for a combined value of $59,862.60. The cumulative value of our formal request is **$299,748.60**.

The local organizations that are partnering to make this a project a reality are: RiversEdge West, EUREKA! McConnell Science Museum, Colorado West Land Trust, One Riverfront, Colorado National Monument Association, and Colorado Canyons Association. These organizations all share the values of land and water conservation, stewardship, community, collaboration, education, and science. They all believe the Confluence Center will raise the visibility of these issues in the community to the benefit of the partners' missions.

Thank you for your consideration, we're confident that this project will greatly benefit the Grand Junction community for years to come.

Don't hesitate to reach out with any questions!

Sincerely,
Rusty Lloyd, Confluence Center Board President
Jenn Moore, Confluence Center Board of Directors
Michele Rohrbach, Confluence Center Board of Directors



YELLOW AREA OF SUNSHINE LOT TO BE CREDITED TO CONFLUENCE VILLAGE 21,768SF / 0.49 ACRES

LOT AREA CURRENTLY OWNED BY CIT TO BE PART OF CONFLUENCE LOT 13,648SF / 0.31 ACRES

DRAFT SUB
OCT 4, 2024

LEGEND

- PROPOSED PROPERTY LINE
- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING BUILDING
- PROPOSED BUILDING
- EXISTING CURB/GUTTER
- PROPOSED CURB/GUTTER
- PROPOSED SPILL CURB/GUTTER
- PROPOSED TRANSITION CURB/GUTTER
- EXISTING RETAINING WALL
- EXISTING 1-FT CONTOUR
- EXISTING 5-FT CONTOUR
- PROPOSED 1-FT CONTOUR
- PROPOSED 5-FT CONTOUR
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED HEAVY DUTY ASPHALT
- EXISTING CONCRETE
- PROPOSED CONCRETE
- PROPOSED HEAVY DUTY CONCRETE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER CLEANOUT
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING STORM SEWER INLET
- PROPOSED STORM SEWER INLET
- EXISTING STORM SEWER MANHOLE
- PROPOSED STORM SEWER MANHOLE
- PROPOSED INLINE DRAIN
- EXISTING 8" WATER MAIN
- PROPOSED 2" DOMESTIC SERVICE
- PROPOSED 4" FIRE LINE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER METER
- PROPOSED WATER METER
- PROPOSED METER/BACKFLOW VAULT
- PROPOSED IRRIGATION MANHOLE
- PROPOSED FENCE
- EXISTING FENCE
- PROPOSED TRAFFIC FLOW
- GRADE BREAK
- ROOF DRAIN (RD)
- STREET LIGHT POLE
- FIRE DEPARTMENT CONNETION
- PARKING LOT LIGHT
- PROPOSED BUILDING LIGHT
- POWER POLE
- FL FLOWLINE
- EOP EDGE OF PAVEMENT
- TOC TOP OF CONCRETE
- TW TOP OF WALL
- BW BOTTOM OF WALL
- TBW TOP BACK OF WALK
- TC TOP OF CURB
- BOC BACK OF CURB
- TOS TOP OF SLAB
- RETAINING WALL
- FO E UTILITY PEDESTALS

UTILITIES AND AGENCIES

CITY OF GRAND JUNCTION SANITARY SEWER	MARK BARSLUND	201-1362
CITY OF GRAND JUNCTION WATER	MARK BARSLUND	201-1362
CITY OF GRAND JUNCTION PUBLIC WORKS	MARK BARSLUND	201-1362
XCEL ENERGY - GAS & ELECTRIC	RYAN MENAPACE	244-2671
CENTURY LINK	CHRIS JOHNSON	244-4333
CHARTER	JOHN VALDEZ	245-8750

Know what's below. Call before you dig. 811

SCALE VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET
ADJUST SCALES ACCORDINGLY

NO	DESCRIPTION	DATE	BY
1	SITE PLAN REVIEW COMMENTS 1	10/30/23	JC

A · C · G
AUSTIN CIVIL GROUP, INC.
Land Planning ▪ Civil Engineering ▪ Development Services
129 North 7th Street, Suite 300 ▪ Grand Junction, Colorado 81501
(970) 242-7540

RIVERFRONT @ DOS RIOS LOT 5

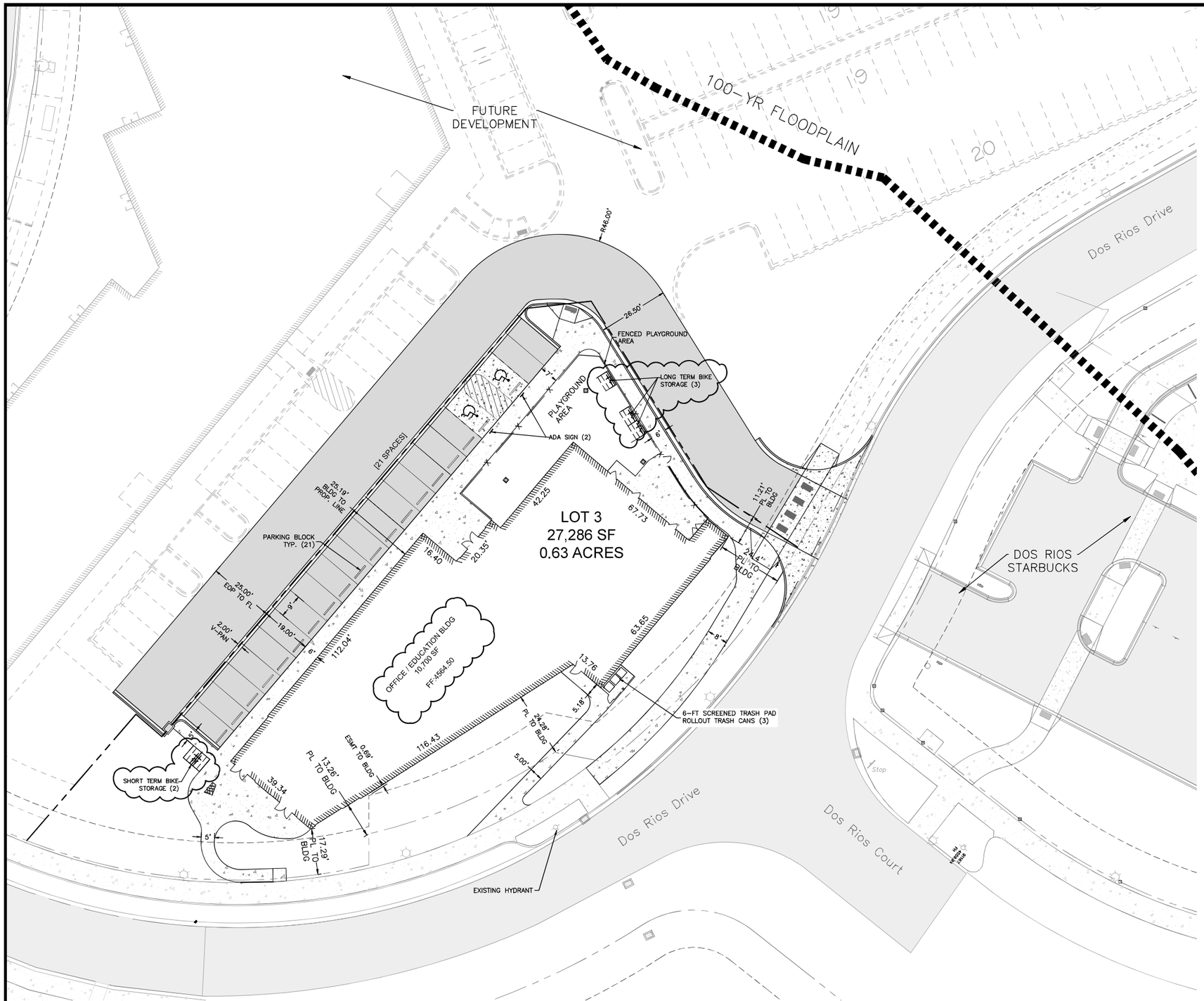
description: SITE PLAN - LOT 5
750 Calle Del Rio, GJ, Colorado

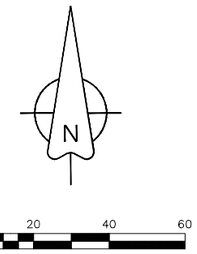
prepared for: DR LAND LLC

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
JWC	JWC	MRA	MRA

JOB NUMBER: 1433.0005
DATE: 1-15-2024
SCALE: 1"=40'
SHEET NO: C-4

P:\1433.0005 - Lot 5 Padsite\Dwg\C3d\Production Dwg\PROD-LOT5-CONFLUENCE CHANGES 2024-10-04.dwg, 10/4/2024 10:45:46 AM, DWG To PDF.pc3





GENERAL NOTES:

1. CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION MEETING WITH CITY OF GRAND JUNCTION CONSTRUCTION INSPECTION AND MESA COUNTY STORMWATER BEFORE DOING ANY WORK ON THE SITE.
2. ALL PARKING SPACES ARE 9-FT WIDE X 19-FT LONG UNLESS OTHERWISE NOTED.
3. ALL SIDEWALK CROSSINGS AND RAMPS ARE TO BE BUILT PER PAGE C-13 OF THE CITY OF GRAND JUNCTIONS STANDARD CONCRETE DETAILS AND FOLLOW ADA GUIDELINES.
4. OBTAIN WORK IN RIGHT OF WAY PERMITS FROM THE CITY OF GRAND JUNCTION BEFORE DOING ANY WORK ALONG PUBLIC RIGHT OF WAY AREAS
5. (2EA) "U" STYLE BIKE RACK FOR 4 TOTAL BIKE PARKING SPACES
6. ADA PARKING SPACES SHALL BE SIGNED AND STRIPPED PER CITY OF GJ STANDARD C-24..

LAND USE SUMMARY		
USE	SQUARE FT	PERCENT
BUILDINGS	10,700	39.2%
LANDSCAPE	12,029	44.3%
ASPHALT/PKG/CONC	4,557	16.5%
ROW DEDICATION	0	0%
TOTAL	27,286	100%

PARKING SUMMARY
Pre-School: 5,325 SF = 1 sp/Classroom = 2 Classrooms=2
Office: 17,323 SF @ 1SP/400SF = 44 Spaces @ 25%=11
Total Parking Required = 13 Spaces
Total Parking Provided On Site = 21 Spaces

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING BUILDING
- PROPOSED BUILDING
- EXISTING CURB/GUTTER
- PROPOSED CURB/GUTTER
- PROPOSED SPILL CURB/GUTTER
- PROPOSED TRANSITION CURB/GUTTER
- EXISTING RETAINING WALL
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- PROPOSED STORM SEWER
- EXISTING STORM SEWER INLET
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- TOC TOP OF CONCRETE
- TOW TOP OF WALL
- BOW BOTTOM OF WALL
- TBW TOP BACK OF WALK
- TC TOP OF CURB
- BOC BACK OF CURB
- LS LANDSCAPE AREA
- UTILITY PEDESTALS

COLORADO REGISTERED 37718 PROFESSIONAL ENGINEER 9/6/24

PROJECT BENCHMARK:
MAG NAIL IN SIDEWALK
ALONG RIVERSIDE PARKWAY
N: 32987.10
E: 89615.50
EL: 4570.46

UTILITIES AND AGENCIES

CITY OF GRAND JUNCTION SANITARY SEWER	MARK BARSLUND	970-201-1362
CITY OF GRAND JUNCTION WATER	MARK BARSLUND	970-201-1362
GRAND VALLEY IRRIGATION COMPANY	PHIL BERTRAND	970-242-2762
CITY OF GRAND JUNCTION PUBLIC WORKS	MARK BARSLUND	970-201-1362
XCEL ENERGY - GAS & ELECTRIC	RYAN MENAPACE	970-244-2671
CENTURY LINK	CHRIS JOHNSON	970-244-4333
CHARTER	JOHN VALDEZ	970-245-8750
MESA COUNTY STORMWATER	JOSH MARTINEZ	970-683-4206

ACCEPTANCE BLOCK
THE CITY OF GRAND JUNCTION REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE CITY'S DEVELOPMENT STANDARDS, SUBJECT TO THESE PLANS BEING SEALED, SIGNED, AND DATED BY THE PROFESSIONAL OF RECORD. REVIEW BY THE CITY DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN. THE CITY NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD.
CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF PLAN SIGNATURE.

CITY DEVELOPMENT ENGINEER DATE

CITY PLANNER DATE

Know what's below. Call before you dig. 811

SCALE VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET
ADJUST SCALES ACCORDINGLY

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1.	BLDG SF CHANGE	7/15/24	rro
2.	LONG/SHORT TERM BIKE STORAGE ADDED	9/6/24	rro

A • C • G
AUSTIN CIVIL GROUP, INC.
Land Planning • Civil Engineering • Development Services
123 North 7th Street, Suite 300 • Grand Junction, Colorado 81501
(970) 242-7540

CONFLUENCE CENTER @ DOS RIOS
Description
SITE PLAN
2600 Dos Rios Drive, Grand Jct, Colo.
prepared for
Chamberlin Architects

DRAWN BY: rro
DESIGNED BY: rro
CHECKED BY:
APPROVED BY: MRA

JOB NUMBER: 1019.0071
DATE: 05-30-24
SCALE: 1"=20'
SHEET NO: C150

P:\1019.0071 - Confluence Building\Dwg\C3d\Production Dwg\PROD-SITE-Confluence rra.dwg, 9/6/2024 11:28:26 AM, DWG To PDF.pc3

8/27/2024 12:48:53 PM

GENERAL EXTERIOR MATERIAL KEYNOTES

(#)
1. GRADE, RE: CIVIL
2. STUCCO - DARK GRAY
3. STUCCO - TAN
4. STUCCO - DARK TAN
5. STUCCO - LIGHT TAN
6. PRE FINISHED MTL PARAPET COPING
7. PERFORATED PRE FINISHED DECORATIVE MTL PANEL
8. CORRUGATED PRE-FINISHED MTL WALL PANEL 1
9. CORRUGATED PRE-FINISHED MTL WALL PANEL 2
10. CORRUGATED PRE-FINISHED MTL WALL PANEL 3
11. CORRUGATED PRE-FINISHED MTL WALL PANEL 4
12. ELECTRICAL PANEL, RE: ELEC
13. PRE FINISHED MTL OVERFLOW SCUPPER
14. ROOF TOP UNIT, RE: MECH
15. EXTERIOR LIGHT, RE: ELEC
16. STL COLUMNS CLADDED W/ MTL PANELS
17. GAS METER, RE: PLUMB
18. INSULATED HM FRAME DOOR & FRAME, (PNT)
19. ALUMINUM DOOR & FRAME, (DARK BRONZE ANODIZED ALUMINUM)

ACCEPTANCE BLOCK

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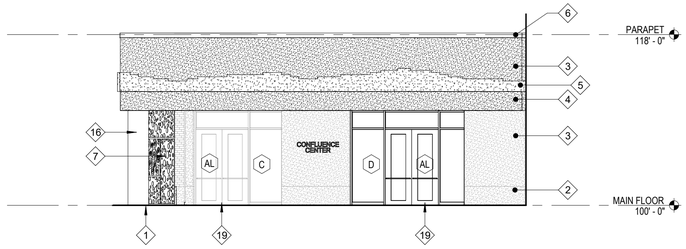
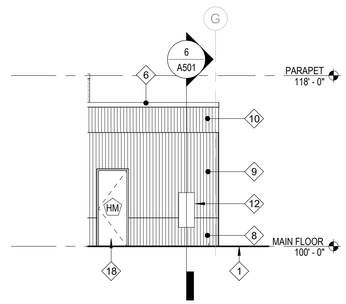
CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF PLAN SIGNATURE.

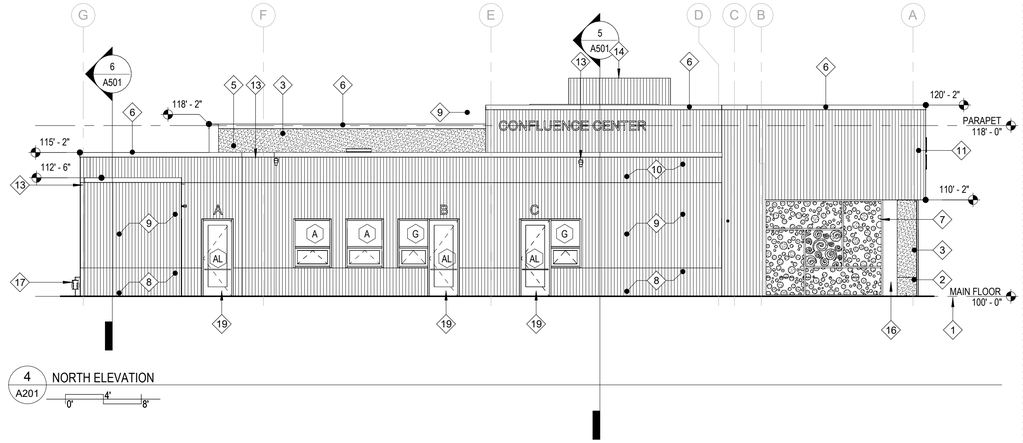
CITY PLANNER DATE



6 A201 SOUTH ELEVATION
0' 4' 8'



5 A201 SOUTH PRE-K ELEVATION
0' 4' 8'



4 A201 NORTH ELEVATION
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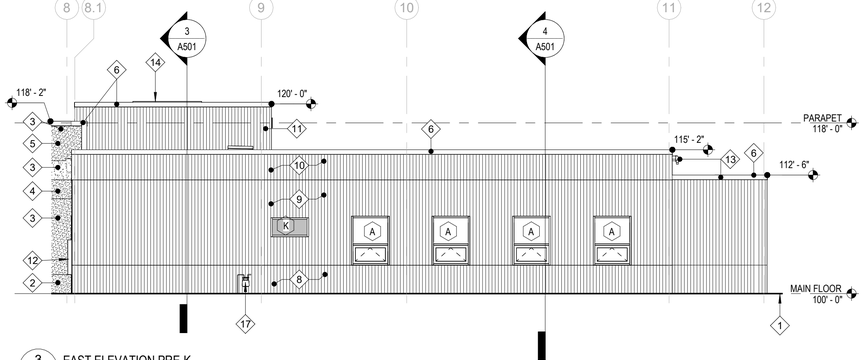
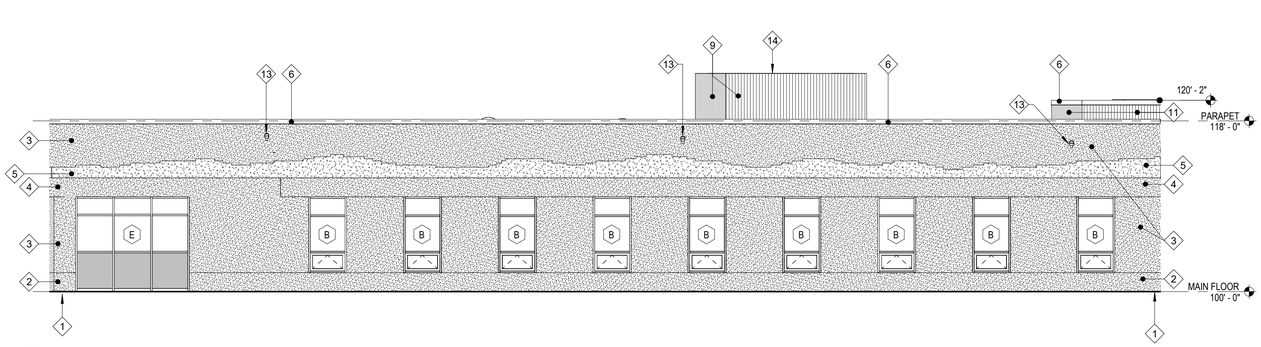
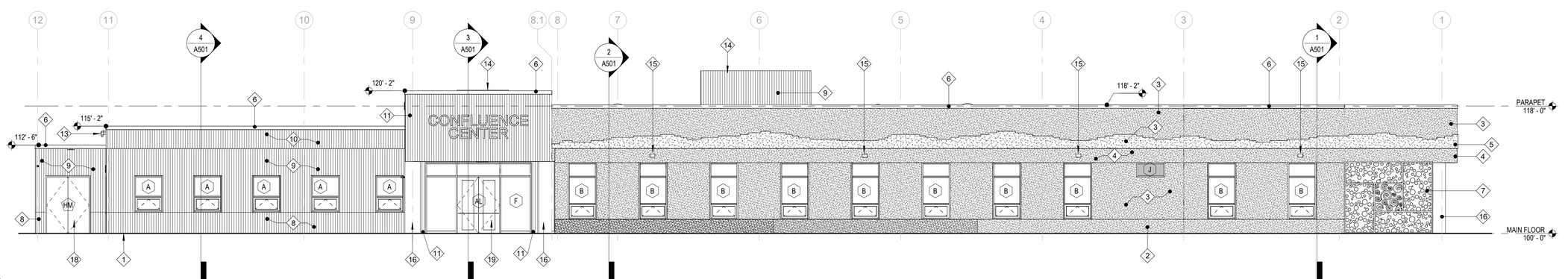


3 A201 EAST ELEVATION PRE-K
0' 4' 8'



2 A201 EAST ELEVATION
0' 4' 8'



1 A201 WEST ELEVATION
0' 4' 8'

chamberlin
437 Main Street
Grand Junction, CO 81501
970.242.6804
chamberlinarchitects.com

NOT FOR CONSTRUCTION

CONFLUENCE CENTER

2600 DOS RIOS DRIVE,
GRAND JUNCTION, COLORADO

EXTERIOR ELEVATIONS

NO:	ISSUED FOR:	DATE:
	REVIEW 2 - PLANNING SUBMITTAL	

DATE: **07/10/2024**
SHEET NO: **A201**
PROJECT NO: **2326**


CONFLUENCE CENTER
CONFLUENCE
CENTER


CONFLUENCE
CENTER

CONFLUENCE CENTER OF COLORADO

Members of the Grand Junction City Council October 19, 2023

Via E-mail

Dear City Council Members:

We are excited to bring to your attention an ambitious partnership involving five local organizations: RiversEdge West, Eureka! Science Museum, Colorado West Land Trust, One Riverfront, and Colorado Canyons Association. These organizations share a common commitment to land and water conservation, stewardship, community engagement, recreation, collaboration, education, and science. Together, we aim to transform the Confluence Center building at Dos Rios into a vibrant reality.

Our collective vision for the Confluence Center is to establish a non-profit center that offers collaborative office and meeting space, pre-K education and childcare for our employees and the broader community, and a focal point for the region on our shared values. The center will host conferences, public presentations, and countless other events to engage the community. We believe that the benefits of the center will extend far beyond the sum of its parts. By fostering community involvement and knowledge sharing, it will significantly enhance the support for each partner's missions.

To turn this vision into reality, approximately six million dollars will be needed for the center's construction. We respectfully request the City of Grand Junction to donate a portion of the land for the center as a way to support this effort, the organizations and our collective missions. The center will be an important anchor to the Dos Rios development and contribute to the character of the new neighborhood, helping to make it a vibrate place to live and work. We have broad community support and have engaged a consultant to lead our capital campaign.

We welcome the opportunity to meet with the council and share more details about the center's vision, benefits, timeline, and capital campaign. Please don't hesitate to reach out to us with any questions.

Sincerely,

Rusty Lloyd, Executive Director, RiversEdge West
Jenn Moore, Executive Director, Eureka! Science Museum
Rob Bleiberg, Executive Director, Colorado West Land Trust
John Gormley, Chair, Riverfront Foundation
Chris Herrman, Executive Director, Colorado Canyons Association

CONFLUENCE CENTER OF COLORADO

City of Grand Junction
250 N 5th Street
Grand Junction, CO 81501

March 14, 2024

Dear City Council,

We are writing to express excitement for a potential new gem to be built along the Colorado River in Grand Junction – the Confluence Center of Colorado. As the leaders tasked with bringing this project to reality, we are hopeful the City of Grand Junction will share in our enthusiasm for this project and consider supporting this with a gift of land to the organization. The city's partnership in this project is critical to our success.

We know the city shares a commitment to the redevelopment of the riverfront and has in fact partnered with our organizations in the past to help build trail systems and restore vital habitat along the river corridors. We have valued these partnerships and hope to continue that legacy with you in this new and exciting project. This project carries in the same spirit of past partnerships with the city by revitalizing our riverfront in the new Dos Rios redevelopment.

Confluence Center of Colorado was founded by five leading local non-profits: RiversEdge West, One Riverfront, Colorado Canyons Association, the Colorado West Land Trust and Eureka! McConnell Science Museum. Once built, the Confluence Center of Colorado will bring together mission-focused organizations working at the confluence of land and water science, education, agriculture, and stewardship. Together, the Confluence Center partners' united presence and unique location will increase science-based education and stewardship capability and magnify the long-term impact to shape our land and water future for the community. With support from leaders like the city of Grand Junction, we can realize our vision to construct this important place. These non-profits have a proven track record of successful projects and initiatives and are committed to collaboratively making this place a reality to make an even greater difference in the environmental and recreational landscape of this community.

Currently, the Confluence Center of Colorado has raised $2.8 million with a goal of $7.5 million. We have many community leaders and organizations that are engaging in this project, but it will take resources from leaders like the City Council to make the project a reality.

Enclosed with this letter you will find our case for support, which outlines in more detail the proposed project. We welcome the opportunity to discuss this project further and address any questions or concerns you may have.

Thank you for taking time to look at this incredible project and we are excited about the possibility of partnering with you to make a lasting impact on the long-term sustainability of our riverfront.

Sincerely,

Confluence Center Leadership Committee
Biff Messinger *Don Schuster* *Joe Higgins* *John Gormley* *Mary Thom* *Marian Heesaker*
Mike Perry *Randy Spydell* *Rebecca Frank* *Stefanie Harville* *Tawni Kelley*

THE CONFLUENCE CENTER

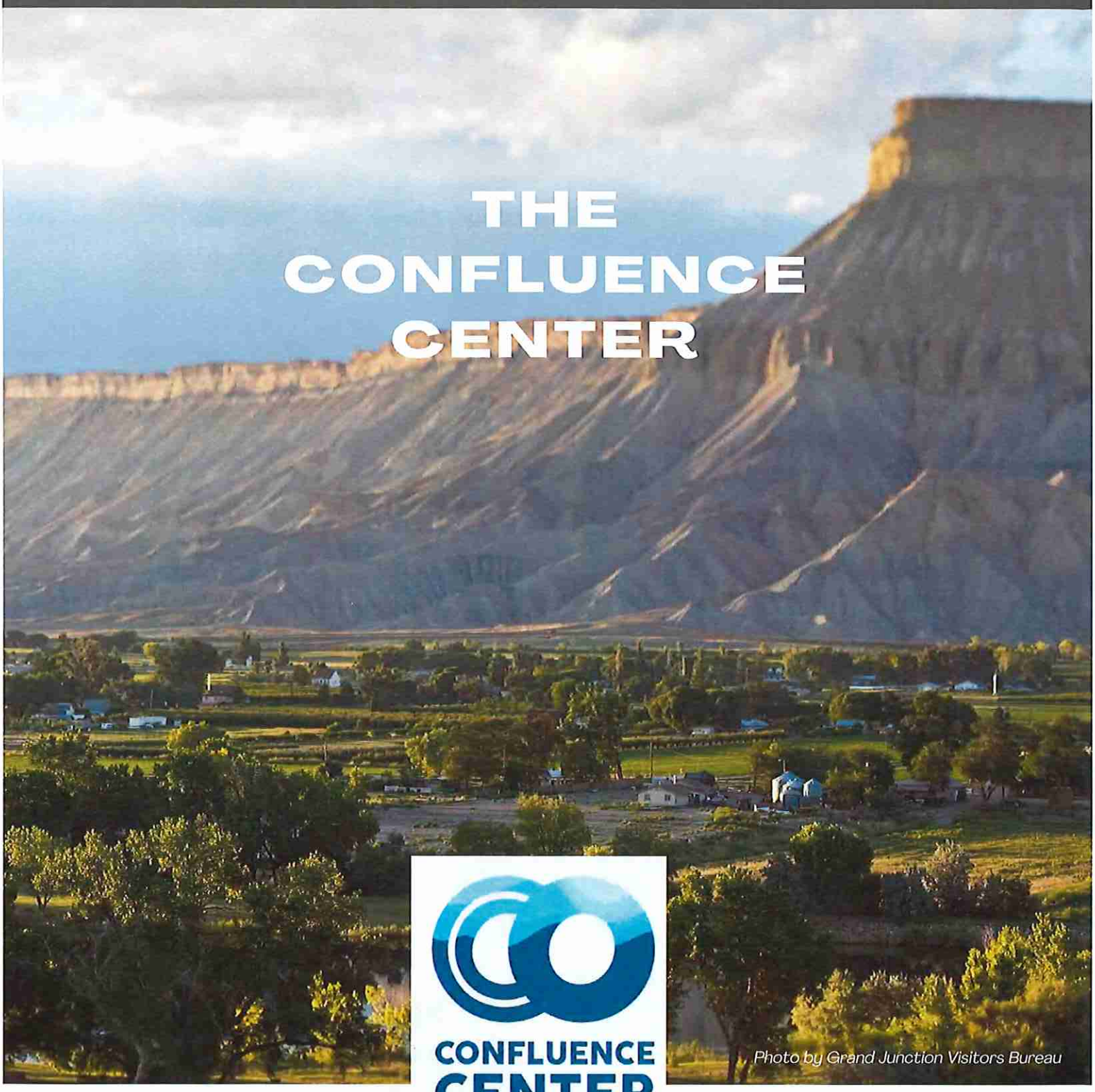


Photo by Grand Junction Visitors Bureau

CONFLUENCE CENTER OF COLORADO

Mission-focused nonprofit organizations coming together in one place to magnify their impact on our community, region, and nation's land and water future.

WHO WE ARE

The Confluence Center of Colorado is a nonprofit organization formed from a collaborative partnership of local nonprofits in Mesa County who are committed to the same mission-driven work of land and water stewardship, education, recreation, and restoration.

Unified around the values of stewardship, community, collaboration, connectivity and education, the founding partners include RiversEdge West; EUREKA! McConnell Science Museum; Colorado Canyons Association; One Riverfront, and Colorado West Land Trust.

Individually, each organization is contributing to western Colorado's sustainability through science-based education, water and land conservation, restoration, and stewardship efforts.

By combining each organization's work and expertise, the Confluence Center partners will skillfully meet the challenges that come with solving multifaceted issues related to land and water conservation. Cooperative partnerships and the center's unique location will lend themselves to natural economies of scale and transformative educational programming to help inspire devoted stewardship and long-lasting change.

FOUNDING NONPROFITS:

RiversEdge West
RESTORE + CONNECT + INNOVATE

McConnell Science Museum
EUREKA!

one river front
Discover • Inspire • Belong

COLORADO CANYONS ASSOCIATION

COLORADO WEST LAND TRUST

CAMPAIGN LEADERSHIP:

Biff Messigner
Don Schuster
Joe Higgins
John Gormley
Mary Thom
Marian Heesaker
Mike Perry
Randy Spydell
Rebecca Frank
Stefanie Harville
Tawni Kelley

PROMOTING COMMUNITY WELL-BEING AND INTERCONNECTIVITY

"The late Jim Robb, a Grand Junction attorney, state legislator, state parks board member, and founding member and co-chair of the Grand Junction/Mesa County Riverfront Commission, had a vision almost 40 years ago that exists today in the portion of the Colorado State Parks system that is named after him.

His vision was of the Colorado River as a sparkling necklace, with pearls of state parks and community river conservation initiatives interspersed along the water front, from Cameo to Fruita. He would be honored to know that the Confluence Center is the latest of these lovely pearls."

- Rebecca Frank
Confluence Center Leadership Team

PURPOSE

We believe every person is intrinsically connected to the health of our landscapes and has a vital role to play in order to maintain the inherent worth of our natural resources for future generations.

MISSION

We bring together mission-focused, nonpolitical organizations working at the confluence of land and water science, education, and stewardship to magnify our impact and ensure the longevity of our natural resources for future generations.

VISION

By coming together, our united presence and unique location will increase our science-based education and stewardship capability and magnify our long-term impact to shape our land and water future for the community, region, and nation.

COMING TOGETHER TO SHAPE OUR LAND + WATER FUTURE

The health of our rivers is more important than ever and the seven basin states and tribal nations understand this. **Decreasing snowpack, extended drought, and increased population are creating a drastically altered landscape.**

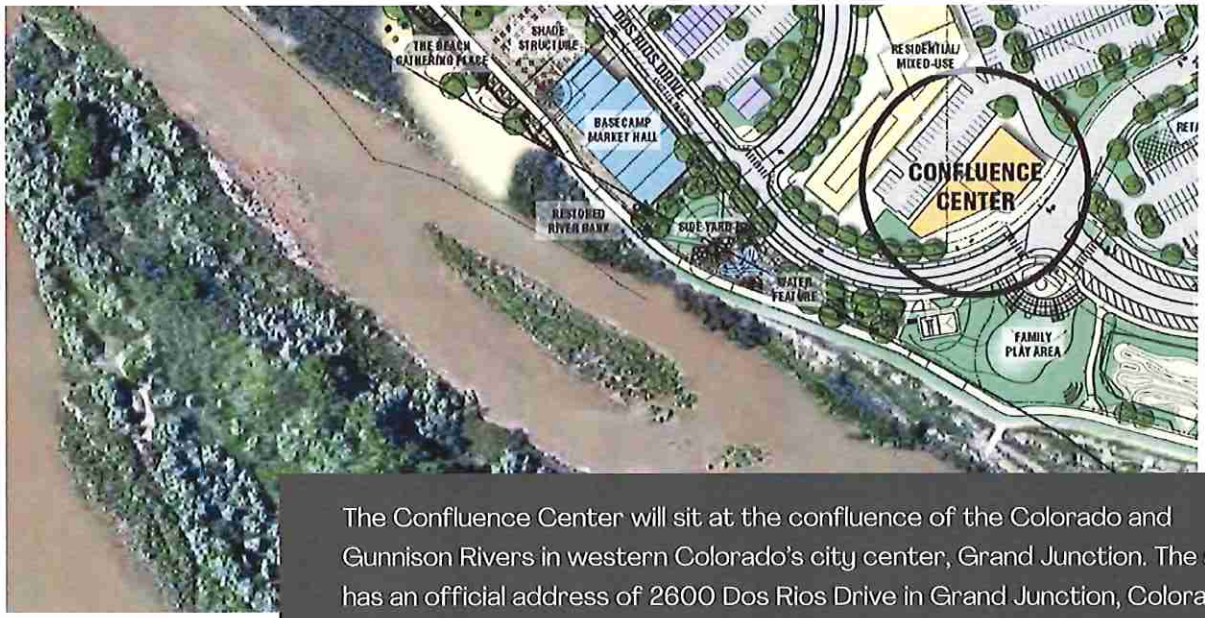
The Confluence Center will play a pivotal role in addressing these growing challenges for land and water resources in our region and community.

Nestled adjacent to the Colorado and Gunnison Rivers, this regional hub will provide a natural laboratory for like-minded partners to come together and converge their respective disciplines and science-based expertise.

The Confluence Center will become a distinctive fixture for land and water education, conservation, stewardship, restoration, and sustainable agriculture in our community, region and ultimately, nation.

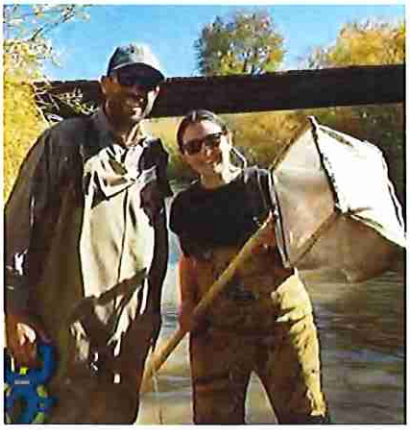
At a time of increasing drought conditions and relocation to the West, the potential to scale work through greater collaboration at the Confluence Center will lead to a magnified impact regionally and nationally.

LOCATION



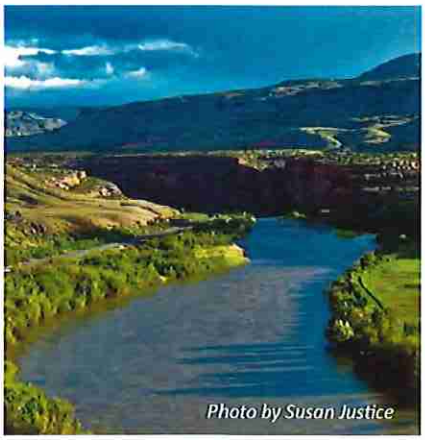
The Confluence Center will sit at the confluence of the Colorado and Gunnison Rivers in western Colorado's city center, Grand Junction. The site has an official address of 2600 Dos Rios Drive in Grand Junction, Colorado.

THE BUILDING WILL INCLUDE



LAND & WATER RESOURCE HUB

Serving as a collaborative and informational site for work on western river systems, the building will have educational and interpretive resources for the public to gain a better understanding of land, water, science, and recreational and agricultural resources of our region.



CO-WORKING & COMMUNITY SPACE

CHILDCARE CENTER & PRESCHOOL

The STREAM (Science, Technology, Rivers, Art, and Mathematics) Preschool and Childcare Center will offer 45 full-time preschool slots at the Confluence Center and expand upon STEAM learning to highlight river and water education.

This new employer-based childcare center and community preschool is envisioned to be a community asset, incentivizing workforce development, providing high-quality early childhood development and education with an early introduction to science learning, and supporting equitable access for underserved and underrepresented children with scholarship enrollment.

Providing this resource at the Center addresses early childhood learning and childcare access gaps in Mesa County while simultaneously supporting the broader mission of the Confluence Center by incorporating strong education and field-based learning principles enhanced by the Center's close proximity and access to the river and riverfront trail system.

STREAM Preschool

INTERACTIVE LOBBY

Landscapes come to life in the Confluence Center's interactive lobby. Visitors will be able to experience the power of the natural systems that give life to this region. Water, plant, and other exhibits will leave a memorable impression with guests and future stewards.

NONPROFIT WORKING SPACE

The Confluence Center will include working offices, shared conference rooms, and shared storage space for education and outdoor learning supplies that lends itself to enhanced collaboration among the nonprofit partners.

THE BUILDING

Architectural rendering of the potential building.


Architectural rendering of the potential building.


Architectural rendering of the potential building.

BUILDING DETAILS

The one-story building will house office space for all the partners, the preschool center, an interactive lobby that provides educational engagement for the public focusing on land and water science, conservation, and stewardship, conference and meeting rooms, classrooms, a kitchen, and open networking space for informal meetings.

COSTS	
Working space dedicated to each nonprofit organization	$4,250,000
Land Acquisition	$750,000
Childcare center and preschool	$1,750,000
Co-working and community space, land and water conservation resources for individuals and organizations within the community	$750,000
TOTAL	**$7,500,000**

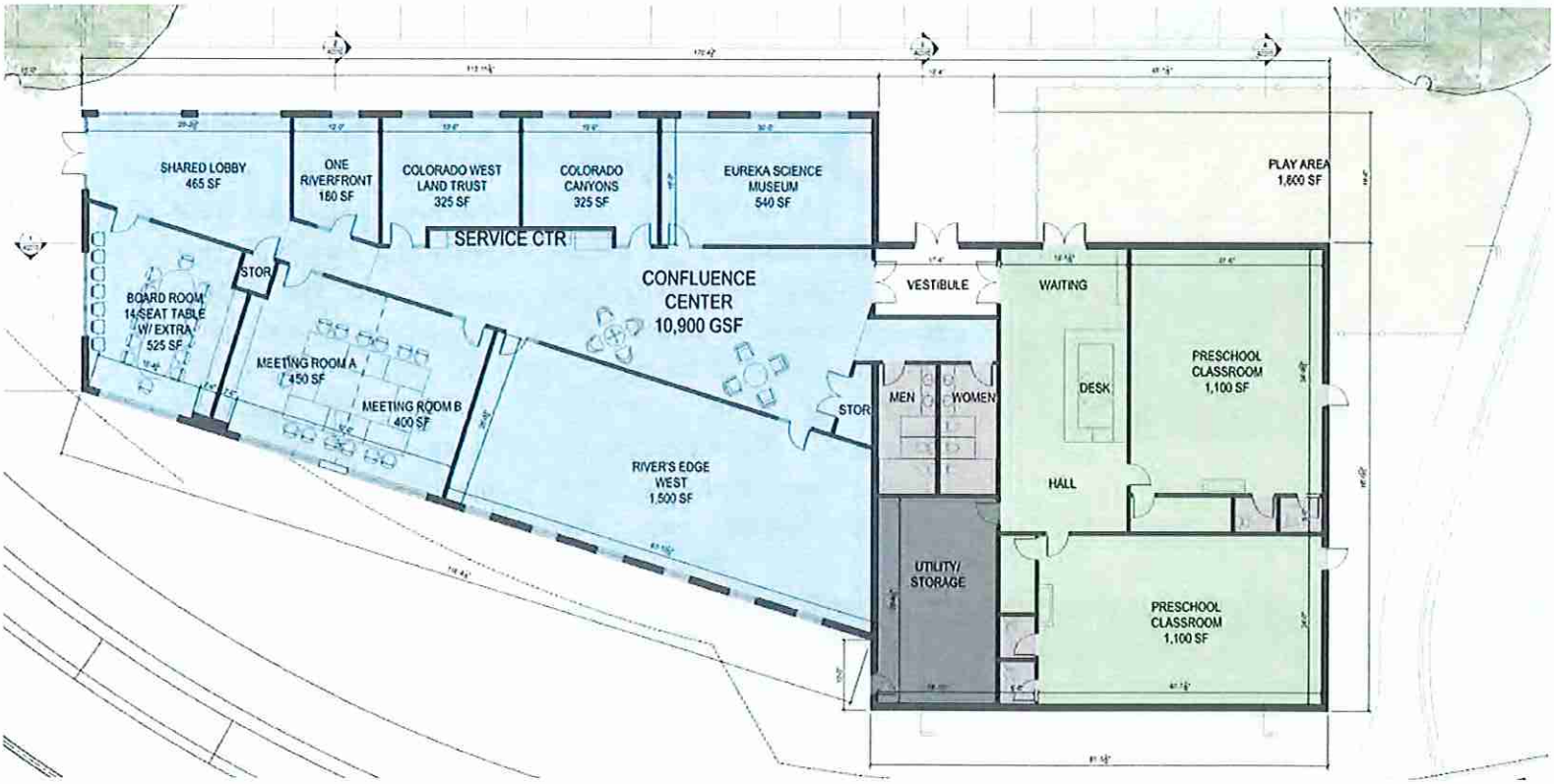


Photo by Kelly Sikkema

THE NEED

The total project cost of the Confluence Center is approximately $7.5 million.

To make this project a reality, it will take visionary leaders in the community like you who are willing to make a significant financial commitment to ensure its success.

The Confluence Center will magnify impact through our collective nonprofit missions to address the pressures on land and water resources, childcare, and the greater community.

Currently, nothing like the Confluence Center exists in the West. This is a rare and innovative opportunity for the Grand Valley community and for the nonprofit partners to connect people to the shared asset of our working landscapes. The Confluence Center will conserve and steward natural resources, catalyze economic growth, spur community development, and increase family resources along the Riverfront in Grand Junction.

This project will scale up the work of these organizations through greater collaboration. **Working under one roof will allow each partner organization to build upon current synergies and expand their programming with the natural efficiencies gained from economies of scale, shared expertise, and a magnified presence within the Western Slope community.**

"The Confluence Center is truly unique. It is wonderful to have like-minded organizations come together to create a new home where they can all grow and flourish under one roof, rather than needing multiple headquarters. It is also wonderful to see it happen at the confluence of the Colorado and Gunnison Rivers in an area that is revitalizing as a result of 40 years of hard work by these organizations and many others.

This project is worth supporting and I hope you will join us in making this dream a reality."

- John Gormley, Confluence Center Leadership Team

WAYS TO GIVE

Your gift can be made through a variety of methods that will directly help make the Center a reality for western Colorado and our region.

GIFTS OF CASH

MULTI-YEAR PLEDGE

Fill out the enclosed pledge form to have the most impact to the Confluence Center by making a multi-year commitment.

CHECK

Mail your check to:
Confluence Center of Colorado
1401 N. 1st St. Grand Junction, CO 81501

WIRE TRANSFERS

MATCHING GIFTS

Many companies allow employees the opportunity to multiply the impact of their personal contributions through matching gift programs. Check to see if your company sponsors a matching gift program.

GIFTS OF STOCK AND APPRECIATED SECURITIES

Giving of long-term appreciated securities can be more tax advantageous than giving cash. Capital gains taxes can be avoided on gifts of appreciated assets.

To donate stock to the Confluence Center, please use the following information:
Wells Fargo Advisors Brokerage
Account: #82655709

IRA CHARITABLE GIFTS

If you are 70.5 years of age or older, you can make a qualified charitable distribution of up to $105,000 directly or use your Required Minimum Distribution to the Confluence Center of Colorado from your traditional Individual Retirement Account (IRA) to avoid reporting income and paying tax on the distribution. Talk with your IRA custodian about their procedures and guidelines on making a qualified charitable distribution.

TAX INCENTIVES

Your gift may also qualify for additional tax benefits. Email ConfluenceCenterCO@gmail.com to discuss your gift.

Photo by Lee Gelatt Photography

CONTACT US

For more information or questions on gift processes, please email
ConfluenceCenterCO@gmail.com
IRS Federal EIN #: 93-3159806

RECOGNITION LEVELS

THANK YOU FOR CREATING A LASTING IMPACT ON OUR LAND AND WATER FUTURE!

Gifts of $5,000 and above will be recognized in the Confluence Center's art installation. Other recognition opportunities are listed below:

PLATEAU CREEK

$5,000 +

- Recognition in art installation

KANNAH CREEK

$50,000

- Recognition in the outdoor play area
- Recognition in art installation

EAGLE RIVER

$100,000

- Naming of meeting space (2 available)
- Recognition in art installation

DOLORES RIVER

$250,000

- Naming of the board room (1 available)
- Recognition in art installation

YAMPA RIVER

$500,000

- Naming of the Outdoor Educational and Event Space (1 available)
- Recognition in art installation

GUNNISON RIVER

$750,000

- Naming of the Interpretive Lobby (1 available)
- Commemorative bench
- Recognition in art installation

COLORADO RIVER

$1M+

- Naming of the Confluence Center and/or preschool (2 available)
- Commemorative bench
- Recognition in art installation

NONPROFIT PARTNERS

RiversEdge West

RESTORE + CONNECT + INNOVATE

RiversEdge West (formerly Tamarisk Coalition) was founded in 1999. A leader in collaborative river restoration efforts, RiversEdge West (REW) focuses on riparian (riverside) forest and floodplain health in the American West to address impacts from invasive riparian plants such as Russian olive and tamarisk, challenges associated with climate change and habitat fragmentation, as well as stressors that may result in diminished biodiversity and ecosystem services. Invasive plants negatively impact wildlife, recreation, and agricultural production, all of which our local community and economy depend upon.

RiversEdge West works alongside the conservation, recreation and agricultural communities, sensitively acknowledging the varied knowledge-base and interests of those impacted by these river health issues, while encouraging education and awareness in order to produce meaningful change.

By providing clear and concise information on managing invasive riparian plants and reestablishing native plant communities, REW is establishing river stewardship for generations. Ensuring accessibility to current information on restoration practices and transparency of new findings is a priority in maintaining active stewardship.

Opportunities increase when visibility increases and the Confluence Center would give RiversEdge West a physical identity and a means to increase its community and youth education programs. Recognizing The Confluence Center as the very namesake of our community, REW believes this collaboration to be a valuable asset to help solve larger problems; in part by identifying initiatives that can be magnified through collaboration with the partner organizations in order to strategically achieve individual and collective goals.

NONPROFIT PARTNERS

EUREKA! McConnell Science Museum is a nonprofit organization founded in 1999 by physicist John McConnell, who taught scientific principles to kids through self-invented, hands-on demonstrations. The program was affectionately called SITHOK, "Science In The Hands Of Kids," and served 5,000 students annually before finding its first home in the New Emerson Elementary School building.

Today, EUREKA! serves over 30,000+ students and adult learners annually through 210 STEAM (Science, Technology, Engineering, Arts, and Math) programs, with an impressive interactive facility located on Colorado Mesa University's campus. Its mission created in its earliest beginnings remains constant—EUREKA! is dedicated to bringing learning to life by inspiring a passion and respect for STEAM education. STEAM promotes critical thinking and awareness of our environment in hopes to redefine the way people think about, learn about, and interact with science and technology.

EUREKA! recognizes the value of further collaboration with the Confluence Center's active partners to expand and diversify programmatic offerings. If given the opportunity to build the center, programming would expand to include the creation of STREAM, a science-based preschool and employer-based childcare center in the Confluence Center.

EUREKA! projects 45-full time preschool slots at The Confluence Center with the intent to expand STEAM curriculum to highlight rivers and water education. This new preschool will be a community asset, incentivizing workforce development while offering preschool children an early introduction to science-based learning. Additionally, EUREKA! will house its Environmental Institute, storage, and six employees at the new center with one dedicated classroom space for education and programming.

NONPROFIT PARTNERS

Discover • Inspire • Belong

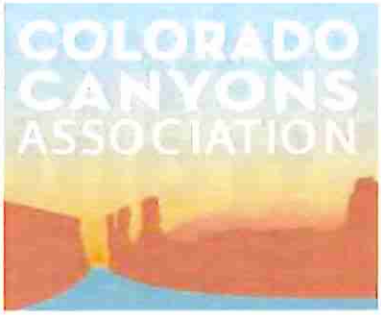
One Riverfront is a volunteer board created in 1987 and charged with the connectivity, conservation, and community stewardship of the Colorado and Gunnison Rivers corridor trail system in western Colorado. The junction of these two mighty rivers provides a beautiful and rich habitat for wildlife and riparian vegetation in an otherwise arid region and One Riverfront protects access to it.

Collectively referred to as One Riverfront, One Riverfront is two-pronged in its organizational structure; made up of The Colorado Riverfront Commission (RFC), as well as its nonprofit arm, The Colorado Riverfront Foundation. Through private funding and community stewardship with various partners, trail systems were made possible and constructed with funding from public and private partnerships and various partners.

Although One Riverfront has connected 54 miles of trail along the river and helped conceptualize and establish 217 miles of urban trails, including detached trails, bike lanes, bike routes, park paths, soft surface trails and sidewalk trail connections to the main Colorado River corridor, areas of the trail still remain bifurcated and disconnected. The volunteer board hopes to one day fully realize a completed and connected trail system in Mesa County, as well as the development of a statewide trail system that will link communities via rivers and historic transportation routes.

When the Confluence Center is complete, One Riverfront will have an increased community presence through its office located within the center, an appropriate and fitting headquarters. As a nonpolitical partner committed to the values of collaboration, service, respect, communication and our river's legacy, One Riverfront looks forward to the day when The Riverfront Trail System connects to several other trails within the Grand Valley. Until that day comes, One Riverfront remains steadfastly dedicated to maintaining, revitalizing, and providing public access to the Colorado and Gunnison Rivers through the Riverfront Trail System.

NONPROFIT PARTNERS



Colorado Canyons Association (**CCA**) fosters community stewardship, education, and awareness of our National Conservation Lands with a focus on McInnis Canyons, Dominguez-Escalante, and Gunnison Gorge National Conservation Areas (NCAs) in western Colorado. Dedicated to deepening the connection between the land and its visitors, CCA outreach programs focus on both the scientific significance and cultural heritage of the National Conservation Areas they steward, remarkably all of which are situated within sixty miles of Grand Junction.

CCA's land and river programs have a positive impact on the community, offering unique, place-based experiential education to students and adults from diverse backgrounds throughout Colorado's western slope. Turning NCAs into outdoor classrooms, and collaborating with the Bureau of Land Management (BLM) and like-minded partners, CCA makes these programs available to school districts and organizations at an affordable rate. CCA believes that all people, regardless of socioeconomic background, should have the opportunity to experience our wild backyards and the natural world. Over half of the students who participate in CCA's programs qualify for free or reduced school lunch and often come from families who do not have the resources or time to actively engage in our public lands.

National Conservation Areas are home to some of the most pristine landscapes in western Colorado and CCA recognizes the great responsibility that comes in stewarding the land and protecting it for future generations to experience and enjoy. Collaborative by nature, Colorado Canyons Association may expand its presence to the Confluence Center and is confident that a shared space alongside other like-minded organizations on the forefront of land and water stewardship would provide incredible value.

NONPROFIT PARTNERS

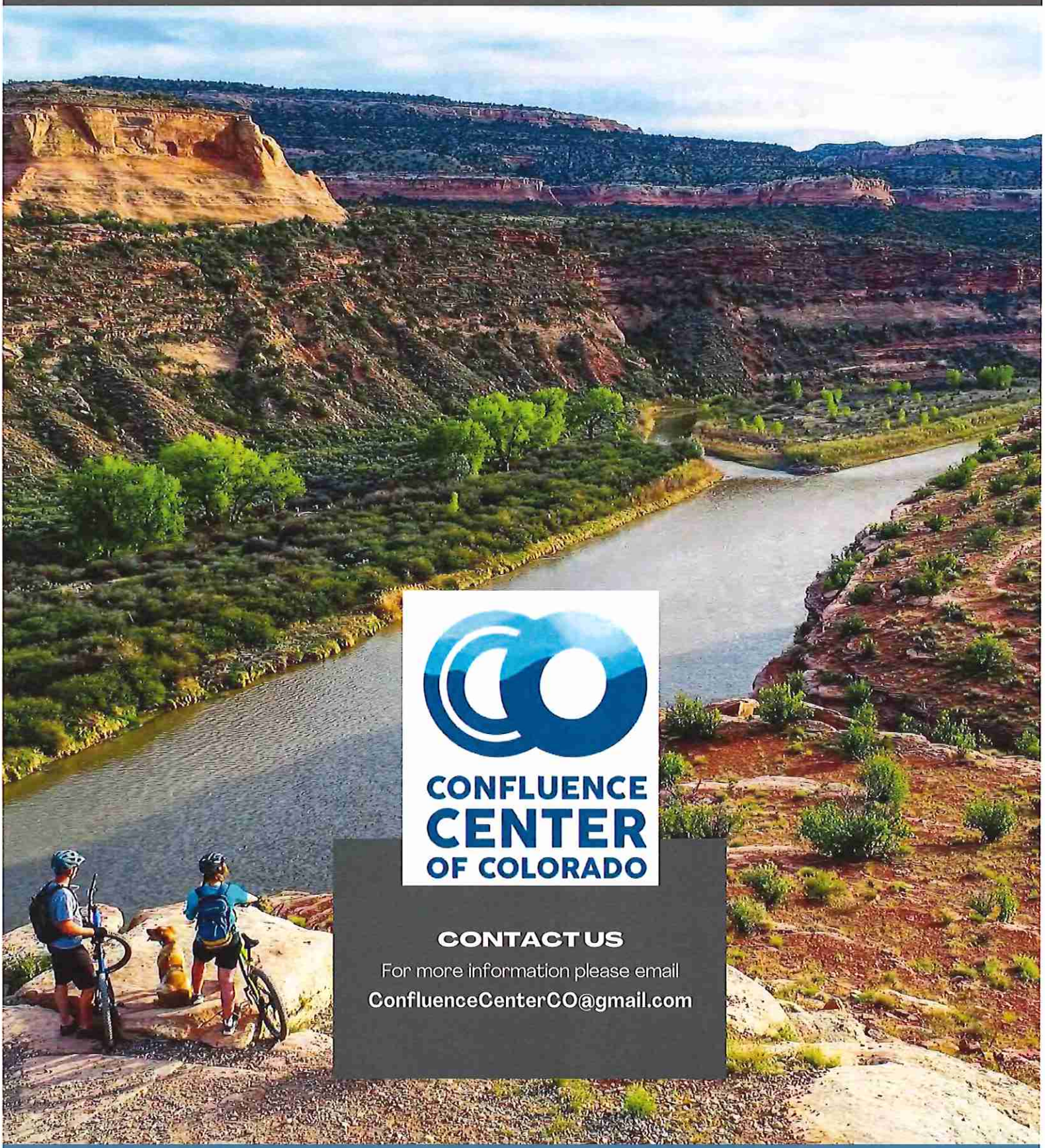
COLORADO WEST
LAND TRUST

Colorado West Land Trust (**CWLT**) conserves the iconic landscapes that make western Colorado a wonderful place to call home and helps connect the community to nature. CWLT works with private property owners to protect and enhance agricultural land, wildlife habitat, recreational areas, and scenic lands in six western Colorado counties, as well as Grand County, Utah.

The organization traces its roots to 1980 when a group of Palisade farmers created CWLT to protect the area's famed fruit lands threatened by oil shale development. CWLT was established in 2020 through a merger between Mesa Land Trust and the Montrose-based Black Canyon Regional Land Trust. Today, CWLT protects more than 126,000 acres of land through more than six hundred conservation agreements.

CWLT pursues its mission through land protection, stewardship, outreach, and education programs. Through these channels, the organization serves the farming and ranching community, preserves wildlife and riparian habitat, expands land and trails for recreationists, protects views and open space, and helps ensure the availability of local food.

CWLT primarily works on private lands that are complementary to the public lands that the other partner organizations serve. CWLT will continue to operate out of its current space but may expand its presence to the Confluence Center because a collaborative presence will allow for more coordinated work and magnified impact.



CONFLUENCE CENTER OF COLORADO

CONTACT US

For more information please email

ConfluenceCenterCO@gmail.com

EIN 93-3159806

1401 N. 1st St. Grand Junction, CO 81501

Grand Junction City Council

Workshop Session

Item #1.b.

Meeting Date:	December 2, 2024
Presented By:	Henry Brown, Mobility Planner, Tamra Allen, Community Development Director
Department:	Community Development
Submitted By:	Henry Brown, Mobility Planner

Information

SUBJECT:

EV Carshare - Readiness Study - Presentation, Discussion, and Council Direction

EXECUTIVE SUMMARY:

The Grand Junction Electric Vehicle (EV) Carshare Feasibility and Readiness Study evaluates community needs and identifies opportunities to implement an EV carshare service in the City of Grand Junction and the surrounding area. Carshare is a car rental service, typically booked hourly or daily, that helps community members access vehicles on an as-needed basis, without the costs and responsibilities associated with car ownership. A carshare program in Grand Junction can address a wide range of transportation challenges facing community members, particularly within disproportionately impacted communities and those who are transportation insecure. Combining the multifaceted benefits of a carshare program with the greenhouse gas emission reduction and air quality benefits of an EV fleet can help deliver impactful change to the community.
Each of the study phases culminated in a report:

- Phase I Needs Assessment Report
- Phase II Technical Readiness Report

The Phase II Technical Readiness Report (draft attached) recommends pilot implementation of an EV carshare program at a minimum, at one top identified location. This report analyzes a range of similar carshare programs and recommends a model that best suits the needs of Grand Junction community members, as identified during Phase I. The Technical Readiness Report also analyzes carshare program pilot implementation scenarios and potential costs, and finally, the report provides implementation recommendations related to funding opportunities, RFP development,

and carshare program expansion.

Should the direction of council be to advance opportunities for implementation, staff will explore future and forthcoming grant opportunities. The lead candidate for pilot funding is an Implementation Grant from the Colorado Energy Office/Community Access Enterprise as a Community Accelerated Mobility Project (CAMP). Staff anticipate grants up to $1.5M being available before June 30, 2025. A minimum 5% local match requirement includes the existing $6,000 spent as match for the CAMP grant that funded this Readiness study. The remainder could draw from city funds, city or partner staff time, and possibly infrastructure investment. Scaling up from the recommended minimal pilot implementation would open up the program to larger populations and could reveal economies of scale to help the team understand more about how full implementation would look.

BACKGROUND OR DETAILED INFORMATION:

The following carshare program pilot model is proposed based on the community feedback and Carshare Index analysis from the Phase I report, which was combined with an analysis of five carshare program case studies documented in this report.

- **Carshare Program Location:** The Grand Junction Housing Authority's 2814 community (2814 Patterson Road in Grand Junction).
- **Carshare Program Users:** A private carshare model serving residents of the 2814 community.
- **Carshare Program Model:** A round-trip model with vehicles parked at 2814 at the start and end of each trip.
- **Carshare Program Vehicles**
- **Vehicle count:** Two electric vehicles.
- **Vehicle types:** All-Wheel Drive Hatchback EV (Nissan Leaf or similar), All-Wheel Drive Crossover EV or Mid-Size SUV EV (Chevy Equinox EV or similar).
- **EV Charging Infrastructure Requirements:** A dual-port Level 2 charger is needed to serve the two EVs recommended for the EV carshare program pilot. There are two existing dual-port Level 2 chargers at 2814; it is to be determined if one charger can be used exclusively for the carshare program, or if a new charger needs to be installed.
- **Carshare Program User Pricing Model:** Pricing model decisions will be informed by the amount of funding available to defray carshare program member costs. Based on recent research by non-profit carshare program operator Forth Mobility, $5 per hour is the price that most community members find to be reasonable for carshare services.
- **Initial registration fee**: Typically in the $25 to $50 range (includes a driving history check and administrative fees)
- Pricing options include:
- Free unlimited trips for carshare program members
- A limited number of free hours per month, after which, the carshare program member pays either a discounted price or the full price for the rest of their trips

- Carshare program member pays full price for all trips
- Some membership tiers include a monthly fee, while others do not. A monthly fee can encourage program utilization in some situations.
- **Carshare Program Operator:** A third party carshare program operator model is the recommended approach for development of the EV carshare program in Grand Junction. Third party operators have expertise in deploying a variety of carshare programs, including the affordable housing model proposed in Grand Junction.

Forth Mobility. Best Practices for EV Carsharing Programs (2024). https://forthmobility.org/storage/app/media/Reports/2024-Best-Practice-Papers/Best-Practices-for-EV-Carsharing-Programs-2024.pdf.

FISCAL IMPACT:

Feasibility Study cost: $60,000
Community Accelerated Mobility Program (state) grant funding: $54,000
City match: $6,000

Recommended minimal pilot implementation: $300,000 for three years' service

SUGGESTED ACTION:

Discussion only

Attachments

1. Grand Junction EV Carshare Feasibility and Readiness Study_Phase II Report_11222024_FINAL

Electric Vehicle Carshare Feasibility and Readiness Study

Phase II: Technical Readiness Report

Prepared for:

City of Grand Junction
250 North 5th Street
Grand Junction, CO 81501

Prepared by:

Felsburg Holt & Ullevig
6400 S. Fiddlers Green Circle, Suite 1500
Greenwood Village, CO 80111
303.721.1440

FHU Reference No. 124025-01

November 2024

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Appendices

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Executive Summary

The Grand Junction Electric Vehicle (EV) Carshare Feasibility and Readiness Study evaluates community needs and identifies opportunities to implement an EV carshare service in the city of Grand Junction and the surrounding area.

Carshare is a car rental service, typically booked hourly or daily, that helps community members access vehicles on an as-needed basis, without the costs and responsibilities associated with car ownership. A carshare program in Grand Junction can address a wide range of transportation challenges facing community members, particularly within disproportionately impacted communities and those who are transportation insecure. Combining the multifaceted benefits of a carshare program with the greenhouse gas emission reduction and air quality benefits of an EV fleet can help deliver impactful change to the community. The Study culminated in two major reports: Phase I Needs Assessment Report and Phase II Technical Readiness Report.

The Phase II Technical Readiness Report (this document) details pilot implementation of an EV carshare program at a top identified location. This report analyzes a range of similar carshare programs and recommends a model that best suits the needs of Grand Junction community members, as identified during Phase I. The Technical Readiness Report also analyzes carshare program pilot implementation scenarios and potential costs, and finally, the report provides implementation recommendations related to funding opportunities, Request for Proposals (RFP) development, and carshare program expansion.

EV Carshare Program Pilot: Proposed Model

The following carshare program pilot model is proposed based on community feedback and Carshare Index analysis from the Phase I report, which was combined with the analysis of five carshare program case studies documented in this report.

- **Carshare Program Location:** The Grand Junction Housing Authority's 2814 community (2814 Patterson Road in Grand Junction).
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- **Carshare Program Model:** A round-trip model with vehicles parked at 2814 at the start and end of each trip.

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- **Carshare Program User Pricing Model:** Pricing model decisions will be informed by the amount of funding available to defray carshare program member costs. Based on recent research by nonprofit carshare program operator Forth Mobility, $5 per hour is the price that most community members find to be reasonable for carshare services[1].
  - **Initial registration fee**: Typically in the $25 to $50 range (includes a driving history check and administrative fees)
  - **Pricing options**:
    - Free unlimited trips for carshare program members
    - Limited number of free hours per month, after which the carshare program member pays either a discounted price or the full price for the rest of their trips
    - Full price for all trips to be paid by carshare program members
    - Inclusion of a possible monthly fee, which can encourage program use in some situations[2].
- **Carshare Program Operator:** A third-party carshare program operator model is the recommended approach for development of the EV carshare program in Grand Junction. Third-party operators have expertise in deploying a variety of carshare programs, including the affordable housing model proposed in Grand Junction.

[1] Forth Mobility. Best Practices for EV Carsharing Programs (2024). https://forthmobility.org/storage/app/media/Reports/2024-Best-Practice-Papers/Best-Practices-for-EV-Carsharing-Programs-2024.pdf.
[2] Ibid.

EV Carshare Program Pilot: High Level Implementation Cost Estimates

Table 1 presents the three potential implementation scenarios identified for the carshare program pilot. The Cost Estimates Section of this report further details each scenario. Each scenario includes the high-level cost estimate by year to implement the carshare program pilot. Each scenario's line item cost estimates, cost estimate assumptions, and cost estimate data sources are also further detailed in the Cost Estimates Section.

Cost estimates do not include potential grants or incentives, which have the potential to fund a significant amount of carshare program pilot implementation. **Section 4, Program Implementation** discusses key grants and incentives that Grand Junction could consider for program funding support.

Table 1. Potential Carshare Program Pilot Scenarios and Cost Estimates

Program Year	Scenario 1: Turn-Key Service from Third-Party Carshare Operator	Scenario 2: Turn-Key Service from Third-Party Carshare Operator & New EV Charging Equipment	Scenario 3: Locally Funded Vehicle Costs & Turn-Key Service from Third-Party Carshare Operator
Estimated Program Cost: Year 1	$75,400	$101,400	$166,100
Estimated Program Cost: Year 2	$67,900	$67,900	$54,100
Estimated Program Cost: Year 3	$67,900	$67,900	$54,100
Estimated Program Cost: 3 Year Total	**$211,200**	**$237,200**	**$274,300**

This Phase II report provides a blueprint to implement the EV carshare program pilot, along with additional recommendations and resources that position the City of Grand Junction to further expand the program. Overall, this recommended EV carshare program will help accomplish key community goals established by the 2020 One Grand Junction Comprehensive Plan, which envisions a future with improved transportation access and mobility options for community members who use alternative fuels and EV technology. The carshare program will also help meet goals established by the Grand Junction EV Readiness Plan (2023), including an equitable approach to realizing the benefits of EV technology by expanding EV access to lower income community members living in multifamily developments. By implementing this EV carshare program, the City of Grand Junction will take a meaningful step toward achieving a more inclusive and sustainable transportation system that aligns with both community needs and established goals from previous plans.

1. Introduction

Through its EV Carshare Feasibility and Readiness Study, the City of Grand Junction and its partners are exploring a potential EV carshare service in Grand Junction and the surrounding area. Carshare is a proven model that addresses a range of community needs. Key benefits include reduced expense compared to car ownership, the convenience of a dependable vehicle when needed, increased ease of access to opportunity and key destinations for disproportionately impacted community members, and the opportunity for reduced parking demand and reduced requirements for developers and the city. The advantages of carshare, combined with the greenhouse gas emission reduction benefits of an EV fleet, help support many of Grand Junction's mobility and sustainability goals.

The 2020 One Grand Junction Comprehensive Plan serves as a blueprint for the vision of the city, providing guidance for the formulation of goals, strategies, and overall development in Grand Junction, including identification of improved transportation access and mobility options for all community members. Building on the Comprehensive Plan, Grand Junction developed an EV Readiness Plan in 2023. The EV Readiness Plan directly addresses Grand Junction's sustainable mobility goals by identifying a broad approach to EV implementation, with EV carshare enabling increased access to dependable transportation and providing a more equitable approach to realizing the benefits of EV technology. Specifically, the EV Readiness Plan identifies that owner-occupied single-family residences have fewer barriers to using EVs and associated charging infrastructure when compared to lower income community members who are more likely to be renters, live in multifamily housing units, and sustain operation of older, higher-emission vehicles. EV carshare is prioritized as a key strategy within the EV Readiness Plan's Community Adoption goal, ensuring that all Grand Junction area residents have equitable access to electric mobility options that help break down the cost and charging infrastructure barriers associated with EV ownership.

Funded with the assistance of a Colorado Energy Office (CEO) Community Accelerated Mobility Project (CAMP) grant, this Feasibility and Readiness Study seeks to understand the opportunities related to implementation of an EV carshare program, with a specific focus on addressing the transportation challenges of disproportionately impacted community members. The CAMP grant program provides funding for the development of community mobility plans with an electric mobility component, including assessing locations for community mobility projects, identifying who will benefit from a

community mobility project, conducting stakeholder engagement, and determining the feasibility and benefits of the proposed electric mobility solution.

Carshare Program Overview and Benefits

Carshare is an hourly or daily car rental service that helps community members access vehicles on an as needed basis without the costs and responsibilities associated with car ownership. Key considerations of a carshare program include the following:

- Carshare works as part of the broader transportation network to provide community members with on-demand access to a vehicle for various trip types. Users reserve vehicles online, pick up the vehicle at a designated location, and then return the vehicle after completing their trip.
- Carshare is typically used for shorter trips and errands around town, but some carshare services also permit vehicles to be used for longer trips or multi-day trips.
- Carshare programs typically have various vehicle parking locations and vehicle types available. Carshare programs commonly offer low- or no emission vehicles.
- Carshare programs may operate under:
  - A round-trip model, where a vehicle is picked up and returned to the same location every time, optimizing predictability.
  - A one-way model, where a vehicle may be returned to any available designated location, optimizing flexibility.
- Carshare rental fees include car insurance, fuel, and maintenance fees. Since carshare users pay only for the trips they take, there is the potential to save a significant amount of money per month compared to car ownership.

A carshare program in Grand Junction can address a wide range of transportation challenges facing community members, especially within disproportionately impacted communities and for those who are transportation insecure. Combining the multifaceted benefits of a carshare program with the greenhouse gas emission reduction and air quality benefits of an EV fleet can help deliver impactful change to the community.

Project Phases

The Study culminated in two major reports: Phase I Needs Assessment Report and this Phase II Technical Readiness Report. The Phase I Needs Assessment Report included an existing conditions analysis of current travel patterns, gaps, and barriers within the local transportation network (with a focus on low- and moderate-income/cost-burdened residents). It also summarized community input from surveys and focus groups completed summer 2024, along with the results of a Carshare Index analysis, which identified locations with high potential demand for EV carsharing services. Combined, these inputs identified three tiers of potential carshare locations that would be most beneficial to community members facing transportation challenges today.

This Phase II Technical Readiness Report carries these recommendations forward with the goal of an EV carshare program pilot implementation at a top identified location. This report analyzes a range of similar carshare programs and recommends a model that best suits the needs of Grand Junction community members identified during Phase I. This report also analyzes carshare program pilot implementation scenarios and potential costs, and the report provides implementation recommendations related to funding opportunities, RFP development, and carshare program expansion.

2. Carshare Program Case Studies

Section 2 includes case studies for five carshare programs that were developed to inform the recommended carshare program model for the City of Grand Junction. Each carshare model is unique, but the common thread among the first four case studies is that carshare programs exclusively serve residents of affordable housing communities. The fifth case study, the Colorado Carshare program, serves the general public but is useful to understand as a carshare model currently operating in Colorado. Each case study begins with a general program summary before providing additional details about specific program elements.

Carshare Program Case Study #1: Our Community Carshare (Sacramento, California)

Program Summary[3]

Sacramento, California, Total Population: 526,000

Operation Timeframe: 2016 to Present

Carshare Program Operator: Zipcar

Service Locations: 10 locations (9 multifamily affordable housing locations and a mobility hub)

Carshare Target Customers: Only available to residents of the affordable housing locations at which the service operates. The total population living in these 9 multifamily affordable housing locations is unknown.

Total Program Enrollment: 975 carshare program members. It is unknown how many potential members there are at the carshare program's 10 service locations.

Total Carshare Trips Completed: Over 50,000 reservations between program launch in 2016 and 2023.

Carshare Model: Round-trip; individual customer usage maximum of 4 hours per day or 12 hours per week.

Carshare Service Costs: Free from 2016 to 2022 (maximum 3 hours per day or 9 hours per week); $4/hour from 2022 to present (maximum 4 hours per day or 12 hours per week). Enrollment costs: Unknown.

Carshare Fleet: 16 Chevy Bolts (EVs); 2 Chrysler Pacifica minivans (Plug-in Hybrid)

Charging Infrastructure: 2 EV chargers per service location

Overall Funding: $7.6 million since program launch in 2016

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[3] **Case Study References:**

Our Community Carshare Sacramento Case Study. Shared-Use Mobility Center, Chicago, IL, 2020.
Boulder County Electric Vehicle Case Study. Boulder County, 2021.
LCTI: Our Community Carshare Sacramento Pilot Project. The California Air Resources Board. https://ww2.arb.ca.gov/lcti-our-community-carshare-sacramento-pilot-project.
Electrification for Equity: A Car Share Program in Sacramento. U.S. Department of Energy. https://afdc.energy.gov/case/3129.

Overview

Our Community Carshare Sacramento (OCCS) was one of the earliest EV carsharing programs serving residents of affordable housing developments in the United States. The pilot project was initiated in 2016 and launched in 2017, focusing on affordable housing sites in Sacramento, California. Since its launch, OCCS has sought to increase mobility and access and to improve air quality in low-income, disadvantaged communities and has proven to be a popular service. As of June 2023, 975 community members have made 50,560 carshare reservations for a total of 774,478 miles driven in EVs or hybrid shared vehicles.

Service Locations

The Phase 1 pilot program launched in May 2017 with carsharing deployed at four affordable housing sites and the Sacramento Valley Train Station during this phase. Launching in 2019, Phase 2 included three additional sites within Sacramento's disadvantaged and low-income neighborhoods (**Figure 1**). Phase 3 was originally scheduled to launch in 2020 but was delayed by pandemic shutdowns. It launched in 2023 and included two additional community sites and a mobility hub for community members to transfer with other transportation modes. OCCS operates within ten sites in 2024, including nine low-income communities and one mobility hub. At least two zero-emission vehicles (ZEVs) are available at each carshare community. Throughout the process, Sacramento Housing Redevelopment Authority (SHRA) and Mutual Housing helped identify site locations.

Fleet

In Phase 1, the project team purchased eight 2017 Kia Soul EVs. Later in Phase 2, the project replaced the Kia Souls with Chevy Bolts, which increased the driving range by 140 miles, and added Chrysler Pacifica plug-in hybrid minivans. Now the fleet is made up of 18 EVs, including 16 Chevy Bolts 2 Chrysler Pacifica plug in hybrid minivans. All operating vehicles are All-electric vehicles (BEVs) or Plug-in hybrid electric vehicles (PHEVs).

Figure 1. Our Community Carshare Sacramento Phase 2 Service Location Map

Carshare Model and Operation

Carshare Service Provider/Operator

Zipcar manages the carshare program for all locations.

Carsharing Program Model

OCCS is a round-trip carsharing service, where a vehicle is picked up and returned to the same location every time. Vehicles can be reserved for up to 4 hours per day or a total of 12 hours per week, and vehicles must be returned to their designated charging location.

Each site has dedicated parking/charging spaces for carshare vehicles. A charge card in each vehicle allows customers to charge the car at other charging stations while on a trip, if needed.

Cost to Customer and Equity Considerations

The membership-based program was initially free to community members at the nine low-income subsidized housing developments. Customers could reserve ZEVs for up to 3 hours a day or a total of 9 hours per week without any cost. It transitioned to a cost share model in February 2022. Membership is free, but members now share in the cost of rides, paying $4/hour. Kiosks were installed at all sites for people who do not have access to smartphones. OCCS has launched the Community Carshare Representative (CCR) program, which connects CCRs with community members who cannot drive but need rides through shared EVs. Transit Incentive Card (TIC) provides a monthly transportation subsidy to eligible low-income program members for transit, ride-hail, paratransit, or others.

Funding Sources and Key Partners

The program has received $5.8 million in California Air Resources Board (CARM) grants over multiple phases and $1.8 million additional funding from other government agencies.

The program is a collaborative effort involving local governments, the housing authority, private sector partners, and nonprofit organizations. Sac Metro Air District is the local agency leading the project. Zipcar operates the program, and SHRA and Mutual Housing helped choose site locations and hired site managers to assist residents. SHRA, Mutual Housing, and the City of Sacramento helped provide the necessary parking spaces at the sites. Policy in Motion partnered to help craft the structure of the program. The program partnered with Breathe California to encourage increased carshare usage by providing community representatives to enhance onsite outreach. The program is actively seeking additional partners.

Carshare Program Case Study #2: Citizens West Carshare Program (Salt Lake City, Utah)

Program Summary[4]

Salt Lake City, Utah, Total Population: 209,600

Operation Timeframe: 2021 to Present

Carshare Program Operator: Envoy (a subsidiary of Blink Charging)

Service Locations: Citizens West affordable housing community, an 80-unit multifamily development in Salt Lake City, Utah

Carshare Target Customers: Available only to residents of Citizens West; Citizens West does not disclose how many residents currently live in the 80-unit development

Total Program Enrollment: Approximately 25 active users currently

Total Carshare Trips Completed: Approximately 3,000 trips between program launch in 2021 and May 2024

Carshare Model: Round-trip; individual reservation maximum of 48 consecutive hours

Carshare Service Costs: Free for residents and no enrollment costs

Carshare Fleet: 2 Chevy Bolts (EVs)

Charging Infrastructure: Eight Level 2 chargers (used by both the carshare fleet and private vehicles)

Overall Funding: Unknown

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[4] Case Study References:

Electric Residential Carshare Program: Final Report + Replication Toolkit. Giv Mobility, Salt Lake City, Utah, 2024.
Citizens West Carshare Program. Giv Group. https://citizenswest.com/carshare.

Overview

Citizens West Carshare Program is a free EV carshare program available to residents of the Citizens West affordable multifamily housing development in Salt Lake City, Utah. This model is unique in that the property developer (Giv Group) developed and led the carshare program to serve their new Citizens West multifamily development. Giv Group focuses on affordable residential development and has been constructing all-electric housing with charging infrastructure since 2017. After Giv identified the community need for improved transportation options, the carshare pilot program was launched in 2021. As of May 2024, the carshare program has helped residents complete more than 3,000 trips. Usage of the program was especially high among refugee families who had no other dependable or affordable transportation options. Giv has looked to expand their EV carshare program to other properties they own or are developing. They aim to have two vehicles available at Giv's Project Open development by the end of 2024.

Service Locations

Citizens West is an affordable housing development located on the edge of downtown Salt Lake City. It has 80 residential units with a mix of studio and 3-bedroom floorplans. Two-thirds of these residences are reserved for those with household incomes from 20 percent to 50 percent of area median income.

Fleet

Two Chevy Bolts are available in the Citizens West parking garage.

Carshare Model and Operation

Carshare Service Provider/Operator

Envoy, an electric car sharing service company, handles the daily operation of the program. However, the program plans to gradually replace Envoy with their own software solution and sufficient staffing, as Envoy's out-of-state location has caused delays in problem-solving and communication gaps, resulting in vehicle unavailability and disrupted data collection.

Carsharing Program Model

Citizens West Carshare Program is a round-trip carshare service, where a vehicle is picked up and returned to the same location at Citizens West every time. Residents can reserve the carshare vehicles for up to 48 consecutive hours.

Cost to Customer and Equity Considerations

The carshare program is free of cost to Citizens West residents. After studying neighborhood transportation needs during the development process for Citizens West, Giv decided to establish this program. In the local neighborhood, 49 percent of the population lives at or below 200 percent of the federal poverty level, and 18 percent of households do not own vehicles. Area residents also spend an average of 21 percent of their income on transportation.

Funding Sources and Key Partners

Citizens West Carshare Program was supported by contributions from the WattSmartEV@Scale initiative, U.S. Department of Energy, Pacificorp, Giv Group, Goldman Sachs, Utah Clean Air Partnership, and Rocky Mountain Power.

Envoy manages the program's operation and car reservation with the help of an on-site team. The property management company for Citizens West was initially responsible for vehicle insurance and maintenance, but this responsibility has been transitioned to Giv Group. In addition, Merge Fleet helps to select and manage charging and telematics technology and collect data, Utah State University has provided critical data, implementation, and advisory support; and General Motors' OnStar Fleet Vehicle Insights helped provide data for one vehicle from March to May 2024.

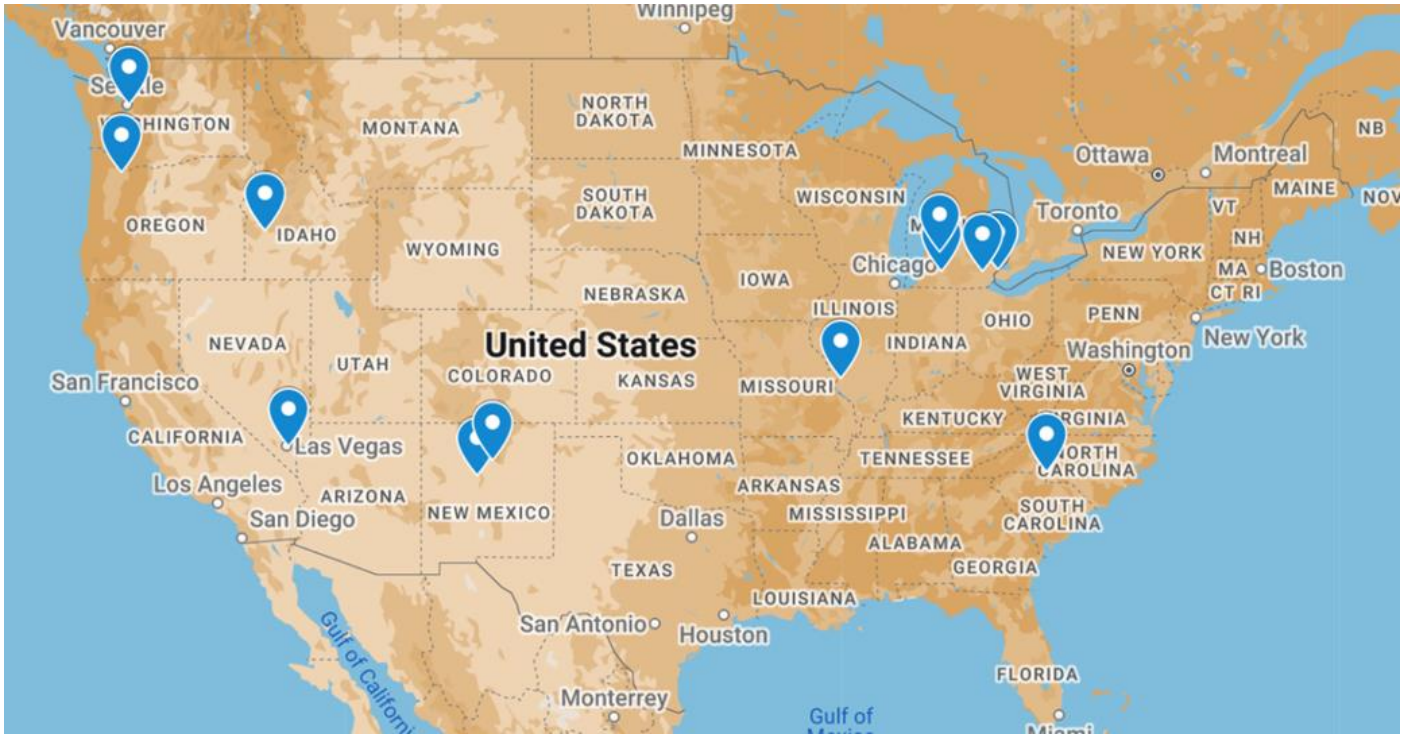
Carshare Program Case Study #3: Affordable Mobility Platform (AMP) National Program Overview and Kalamazoo, Michigan, Program Summary

Affordable Mobility Platform: Program Summary[5]

The Affordable Mobility Platform (AMP) is a national initiative with the goal of increasing access to EVs by making low-cost EVs available to underserved communities. AMP, primarily funded by the U.S. Department of Energy's Vehicle Technology Office (DOE-VTO), is operated by Forth Mobility. Launched in 2023, AMP plans to deploy 50 shared EVs across 18 sites and to install charging stations at 14 locations in underserved communities in 8 states by the end of 2025 (one of the currently operating AMP locations in Kalamazoo, Michigan, is featured, as shown on **Figure 2**). Forth Mobility is working with multiple partners, including utilities and community-based organizations, to establish EV carsharing at affordable housing sites.

[5] **Case Study References:**
Affordable Mobility Platform. Forth. https://forthmobility.org/amp.
Michigan Carshare. Mobility Development Operations (MDO). https://mdocarshare.org/michigan/.
The Affordable Mobility Platform. Michigan Clean Cities. https://www.michigancleancities.org/all-projects/the-affordable-mobility-platform/.
Forth Annual Report 2023. Forth, Portland, OR.

Figure 2. Affordable Mobility Platform Program Operational Locations



Kalamazoo, Michigan, Program Summary

Kalamazoo, Michigan, Total Population: 76,100

Operation Timeframe: December 2023 to Present

Carshare Program Operator: Forth Mobility

Service Locations: The carshare vehicles and chargers are located at two affordable housing communities in Kalamazoo: Spring Manor Apartments (107 units) and The Creamery (48 units). The carshare program is available both to residents of these communities and to the general public.

Carshare Target Customers: The program is open to all Kalamazoo residents 21 years or older with a valid drivers' license, clean driving record, and valid credit, debit, or pre-paid card.

Total Program Enrollment: Unknown

Total Carshare Trips Completed: Unknown

Carshare Model: Round-trip

Carshare Service Costs:

- One-time nonrefundable application fee: $10 (covers the cost of checking the applicant's driving record)
- Hourly Rate: $5 plus tax
- Daily Rate: $50 plus tax
- Mileage: First 150 miles are included; $0.40/mile for additional miles

Carshare Fleet: 1 Chevy Bolt EV; 1 Nissan Leaf EV

Charging Infrastructure: EV charger at each service location.

Overall Funding: Unknown for the Kalamazoo location specifically; in total AMP program has $10 million in funding

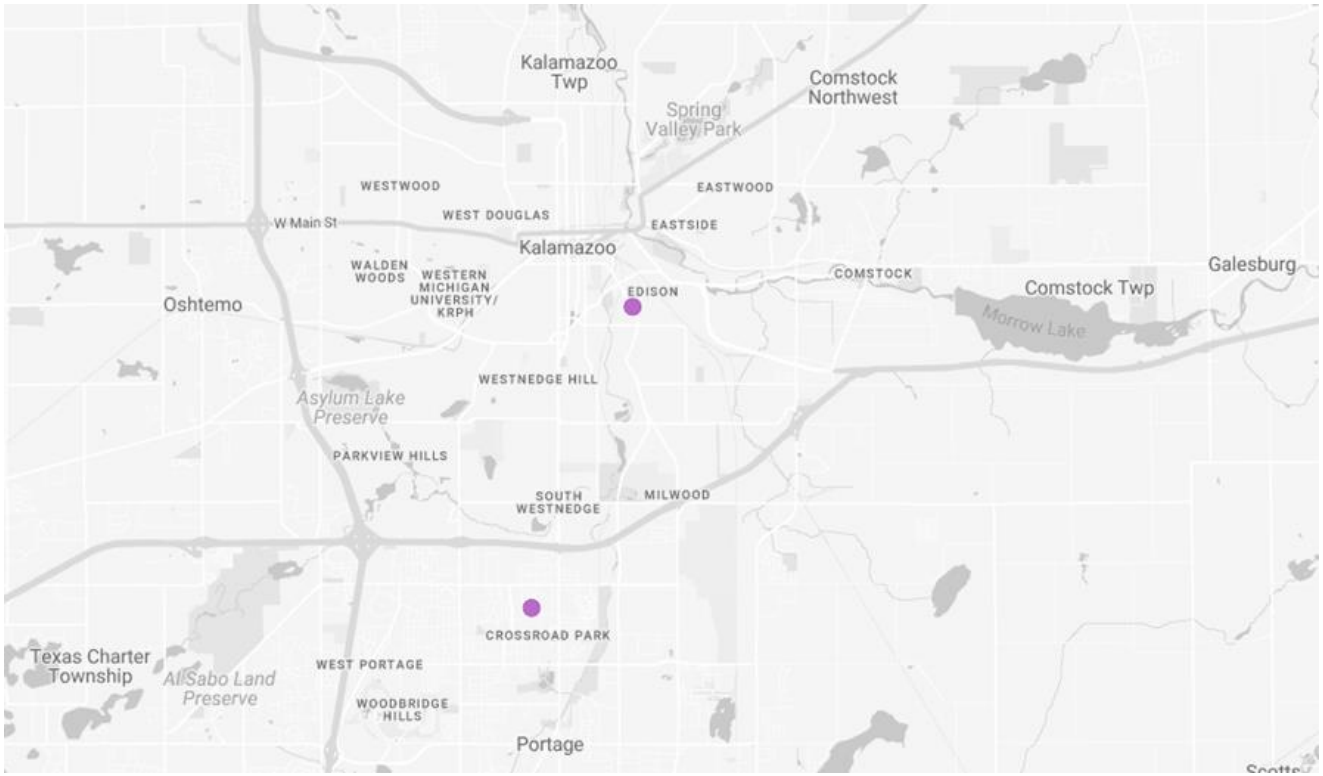
Overview

The EV carshare program in Kalamazoo, Michigan, is part of the Michigan Carshare program that launched in 2023. This carshare program aims to deliver affordable and clean transportation with a focus on disproportionately impacted communities in need of more transportation options. Michigan Carshare has been launched in three cities, including Kalamazoo, Detroit, and Ann Arbor. The program also plans to launch in Grand Rapids in late 2024. Funded by the U.S. Department of Energy, Michigan Carshare is a partnership among Forth, Mobility Development, Michigan Clean Cities, Elevate Energy, and local community partners.

Service Locations and Fleet

In the city of Kalamazoo, there are two service locations: The Creamery and Spring Manor Apartments, as shown on **Figure 3**. Both locations are affordable housing communities. One carshare vehicle is available at each location.

Figure 3. Electric Vehicle Carshare Program Service Locations in Kalamazoo, Michigan



Carshare Model and Operation

Carshare Service Provider/Operator

Forth, a nonprofit organization, operates the EV carshare program in Kalamazoo and other cities in Michigan through the AMP initiative.

Carsharing Program Model

The EV carshare program in Kalamazoo is a round-trip carsharing service, where a vehicle is picked up and returned to the same location every time. Customers can reserve a vehicle in advance using the app or website.

Cost to Customer and Equity Considerations

Anyone who is 21 years or older with a valid drivers' license, clean driving record, and valid credit, debit, or pre-paid card can apply to use the program. The cost includes three components:

1. One-time nonrefundable application fee: $10 (covers the cost of checking an applicant's driving record)
2. Hourly rate: $5 plus tax, or daily rate: $50 plus tax for first 150 miles of reservation
3. Mileage fee: $0.40/mile for additional miles outside 150 miles.

In Kalamazoo, more than 10 percent of households have no access to a personal vehicle, according to the U.S. Census American Community Survey. The program increases access to affordable ZEVs for low-income residents.

Funding Sources and Key Partners

The U.S. Department of Energy funds the Michigan Carshare program, implemented through collaboration between several organizations. Forth Mobility is the program operator through the AMP initiative in Michigan and nationwide. Mobility Development provides a carshare platform including a smartphone app, operational support, and other resources to help customers use carshare services smoothly. Michigan Clean Cities helps advance the program through market research and development, closely collaborating with Elevate Energy.

Carshare Program Case Study #4: Clean Rural Shared Electric Mobility (CRuSE) Project (Hood River, Oregon)

Program Summary[6]

Hood River, OR Total Population: 8,350

Operation Timeframe: 2019 to 2023 (a multi-year demonstration project)

Carshare Program Operator: Forth Mobility

Service Locations: Two affordable housing locations (24 units at Wyeast Vista and 54 units at Upper Rio Bella), two locations near City of Hood River municipal buildings, and a location near the riverfront

Carshare Target Customers: A mix of affordable housing residents and the general public. Two carshare locations at affordable housing developments reserved for residents of these buildings only; the other three carshare locations available to the general public.

Total Program Enrollment: Unknown

Total Trips: Unknown

Carshare Model: Round-trip; individual customer can reserve vehicles up to seven days in advance

Carshare Service Costs: $5 per hour (general public); $2 per hour (for residents of the affordable housing communities)

Carshare Fleet: Five Nissan Leaf EVs

Charging Infrastructure: One EV charging station installed per service location

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[6] Case Study References:

Clean Rural Shared Electric Mobility (CRuSE). Forth. https://www.energy.gov/sites/default/files/2021-06/ti112_yearick_2021_o_5-13_509pm_LR_ML.pdf.
Non-Profit Launches Electric Carshare Pilot, Hood River, OR, 2021. Mobility Learning Center. https://learn.sharedusemobilitycenter.org/overview/non-profit-launches-electric-carshare-pilot-hood-river-or-2021/.
Forth Launches CRuSE Program in Hood River. Forth. https://mailchi.mp/forthmobility.org/cruse.
Transportation Efficiency Case Studies for Small Local Governments. American Council for an Energy-Efficient Economy. November 2022.

Overall Funding: $1.15 million for four years. However, during the first project budget period (October 2019 to June 2021), only $305,000 of the estimated $424,000 was spent. The project budget also included development of a carshare program toolkit, promotion of the study at conferences, regional workshops, and other items beyond the scope of a carshare program in Grand Junction [7].

Introduction

The Clean Rural Shared Electric Mobility (CRuSE) Project was a four-year electric carshare demonstration program from October 2019 to June 2023 in Hood River, Oregon. CRuSE was intended to provide a new mobility solution in a community where public transit is not always a reliable transportation choice. The program sought to demonstrate that round-trip plug-in electric vehicle (PEV) carsharing can serve rural communities in a financially sustainable way, while benefiting low-income residents, government and local businesses, and tourists.

Service Locations

Five locations were identified through the collaboration among Forth, local governments, and community organizations. The selected sites were intended to prioritize carshare access for affordable housing residents, city employees, and tourists. Two carshare sites were near affordable housing sites that are underserved by existing public transportation. Two sites were near City of Hood River property to encourage use by city employees. One site was located near the waterfront to promote access to recreation. **Figure 4** shows a map of all five service locations.

[7] Clean Rural Shared Electric Mobility (CRuSE). Forth. https://www.energy.gov/sites/default/files/2021-06/ti112_yearick_2021_o_5-13_509pm_LR_ML.pdf.

Figure 4. Clean Rural Shared Electric Mobility Project Service Locations in Hood River, Oregon

Fleet

Five Honda Clarity vehicles (plug-in hybrids) were originally used, but five 2022 Nissan Leaf EVs replaced these Honda vehicles once the vehicle lease timeframe was up for the Hondas.

Carshare Model and Operation

Carshare Service Provider/Operator

Forth, a nonprofit organization and carshare service provider, led and operated the CRuSE project.

Carsharing Program Model

CRuSE was a round-trip carsharing service, where a vehicle was picked up and returned to the same location every time.

Cost to Customer and Equity Considerations

Initially cars were available for $8 per hour or $64 per day, paid through a smartphone app. Program costs were then reduced to $5 per hour for the general public and $2 per hour for residents of the affordable housing communities where carshare vehicles were located. To relieve cost burdens, customers were charged in one-minute increments rather than for the whole hour. A Spanish language version of the carshare app was also available to users, and alternative payment mechanisms were provided to meet the needs of those without access to credit cards or bank accounts.

Funding Sources and Key Partners

CRuSE was funded by a mix of federal grants and matching funds: $548,540 came from a U.S. DOE-VTO grant to accelerate advanced vehicle technologies research, and $610,123 came in the form of matching funds from local, regional, and national groups.

Forth partnered with various organizations, including American Honda, Pacific Power, Envoy Technologies, OpConnect, Pacific Northwest National Laboratory (PNNL). American Honda loaned five post-lease Clarity EVs to the project. Pacific Power, the local utility, provided technical support and $100,000 in funding for the project through the Oregon Clean Fuels Program. Envoy Technologies provided the carsharing platform that enabled users to reserve and access vehicles via a smartphone, paying by the minute or hour, and returning the car to its home base. OpConnect provided the EV charging infrastructure for the program and shared data with partners. PNNL tracked usage and cost over time and created models that were used to improve efficiency and inform the team how to optimize the program.

Forth also worked with the City of Hood River, Hood River Columbia Area Transit, Port of Hood River, and Ride Connection, as well as several community organizations such as Columbia Cascade Housing Corporation (an affordable housing provider) and Mid-Columbia Economic Development District to assess transportation needs and establish the carsharing program at locations that met community needs. The program website does not detail why the CRuSE program did not continue to operate after the funding period ended in 2023.

Carshare Program Case Study #5: Colorado Carshare (Summit County, Colorado)

Program Summary[8]

Summit County, Colorado, Total Population: 30,500

Operation Timeframe: 2023 to present in Summit County, Colorado. *Note: Since 1997, Colorado Carshare also operated elsewhere, including in Denver, Boulder, and Longmont; however, their Summit County program is the focus of this case study.*

Carshare Program Operator: Colorado Carshare

Service Locations: Four locations in the towns of Breckenridge, Frisco, and Dillon

Carshare Target Customers: All residents and visitors

Total Program Enrollment: Unknown

Total Trips: Unknown

Carshare Model: Round-trip; vehicle reservations ranging from as little as 15 minutes to multiple day reservations. Reservations can be made up to four months in advance.

Carshare Service Costs: One-time application fee ($25), monthly membership fee ($4 to $12 per month), and variable hourly rates ($6.50 to $9.95 per hour) and mileage rates ($0.40 to $0.45 cents per mile, or 150 miles included with

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[8] Case Study References:

Carshare Launches in Summit County & Breckenridge. Colorado CarShare. https://carshare.org/carshare-launches-in-summit-county-breckenridge/.

Carshare Rate. Colorado CarShare. https://carshare.org/individual-rates/.

Electric Carshare Program Launches in Frisco. Town of Frisco. https://www.friscogov.com/news/electric-carshare-program-launches-in-frisco/.

In bid to expand transit, Breckenridge launches electric vehicle sharing program. Summit Daily. https://www.summitdaily.com/news/in-bid-to-expand-transit-breckenridge-launches-electric-vehicle-sharing-program/.

EV Readiness in Summit County, Colorado: Guidance for Local Communities and Businesses. Summit County. https://cms3.revize.com/revize/summitcoco/Documents/Services/Sustainability/Electric%20Vehicles/Summit%20EV%20Readiness%20Plan%20-%20FINAL.pdf.

higher hourly rate plans) depending on the plan selected. Colorado Carshare also provides reduced rates for residents who are registered with qualified affordable housing programs.

Carshare Fleet: 5 EVs, including 2 Toyota BZ4Xs, 1 Kia Niro EV, 1 Chevy Bolt EUV, and 1 Hyundai Ioniq5

Charging Infrastructure: EV chargers at each service location

Funding Source: Xcel Energy and local municipalities where the service operates

Introduction

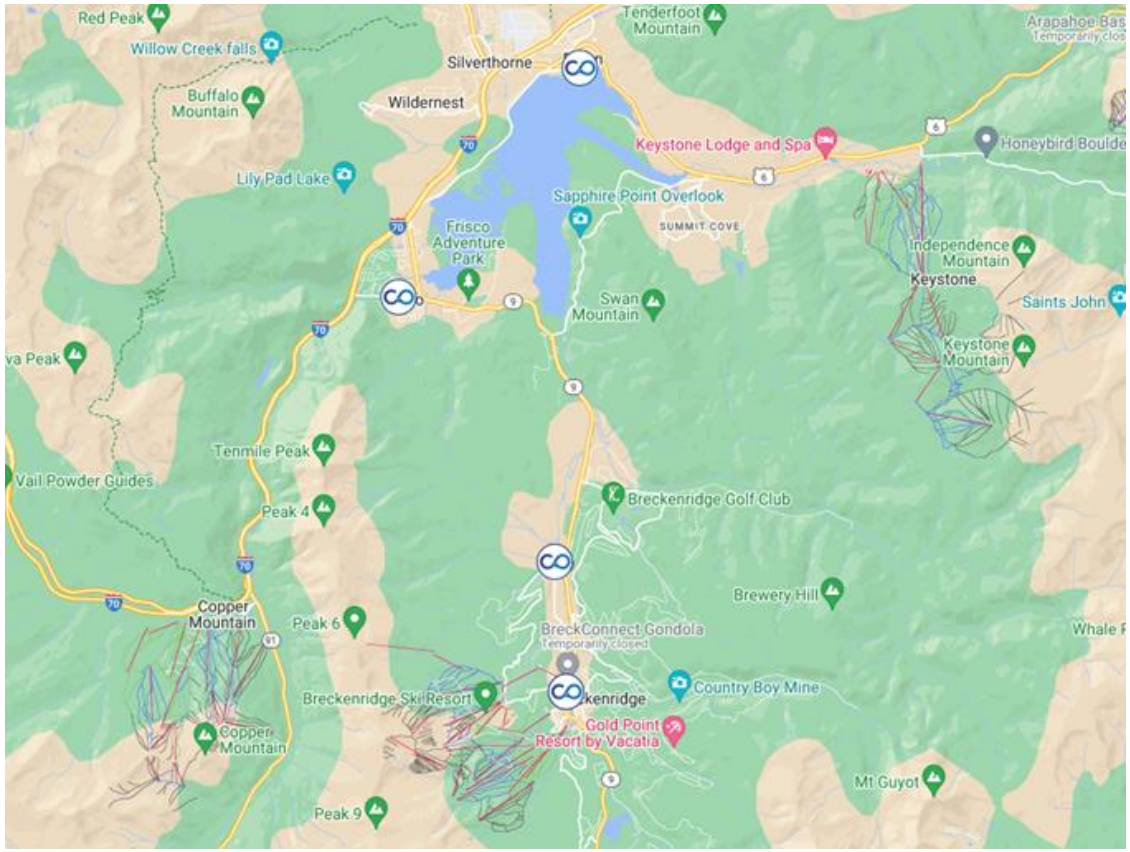
Summit County has committed to transitioning the community to 100 percent ZEVs by 2050. The plan has several strategies, such as expanding EV charging infrastructure and converting the public transit fleet into EVs. The county has also planned to explore the feasibility of hosting EV rideshare programs locally.

In June 2023, Summit County launched its first EV carshare program in the town of Breckenridge, in collaboration with Xcel Energy and Colorado Carshare. In mid-2024, the program expanded into Frisco and Dillon.

Service Locations

As of October 2024, there are four service locations for the Colorado Carshare Program in Summit County (**Figure 5**). In the town of Breckenridge, shared EVs are available at the South Gondola parking garage and Colorado Mountain College Breckenridge. In the town of Frisco, carshare service is located at the Frisco Community Center near Main Steet. The fourth carshare location is at Colorado Mountain College in Dillon.

Figure 5. Colorado CarShare Program Locations in Summit County



Fleet

The carshare fleet consists of five EVs. A Kia Niro and Toyota BZ4X are available at the South Gondola parking garage, a Chevy Bolt EUV is available at Frisco Community Center, a Toyota BZ4X is available at Colorado Mountain College-Breckenridge, and a Hyundai Ioniq5 is available at Colorado Mountain College-Dillon. The carshare vehicles are equipped with snow tires and ski racks during the winter and a bike rack during the warmer months.

Carshare Model and Operation

Carshare Service Provider/Operator

Colorado Carshare, a nonprofit carshare organization, operates the carshare program in Summit County, Colorado. Colorado Carshare started in Boulder in 1997 as "The Little Red Car Co-op"; they now serve Boulder, Denver, and Summit County.

Carsharing Program Model

Colorado Carshare Program in Summit County is a round-trip carsharing service, where a vehicle is picked up and returned to the same location every time. Vehicle reservations can range from as little as 15 minutes to multiple day reservations. Reservations can be made up to four months in advance.

Cost to Customer and Equity Considerations

The service charges include four components: a one-time $25 application fee, a monthly membership fee, an hourly rate, and a mileage rate. **Table 2** shows the different rates for each membership plan.

Table 2. Colorado Carshare Program Plan Rate

Charge	Plan 1: Peace of Mind	Plan 2: Free Wheelin'	Plan 3: Simply Hourly
Membership Fee	$4/month	$12/month	$12/month
Hourly Rate	$8.95/hr or $79 maximum per day	$6.50/hr or $69 maximum per day	$9.95/hr or $89 maximum per day
Mileage Rate	$0.45/mile	$0.40/mile	150 miles per day included $0.40/mile after 150 miles

Source: Carshare.org

The carshare program provides flexible plans and subsidized rates for low-income residents registered in a qualified affordable housing program. Students and staff at universities do not have to pay the $25 application fee, and they receive a $20 driving credit when registered with their university email address. Colorado Carshare also provides group service for businesses and nonprofits, with a $6.50 hourly rate, $0.40 mileage rate, and $25 account set-up fee. Nonprofits using the service receive another 25 percent off the standard business rates detailed previously.

To promote program kickoff in Summit County, promo codes were provided to waive the application fee and preload a vehicle rental credit to each account for the first 100 users who signed up.

Funding Sources and Key Partners

Colorado Carshare in Summit County received funding from Xcel Energy to help with the purchase cost of EVs, and Xcel also provided funding for the installation of EV charging infrastructure. The Town of Breckenridge is also providing a total of $5,000 in subsidies for their residents to use the carshare vehicles at a reduced rate.

Colorado Carshare operates the car sharing service, owns the vehicles, provides the payment and processing platform, and supports program branding and awareness. Each town helps implement the carshare program locally and hosts outreach events to promote the program.

Case Study Analysis Conclusion

These five case studies offer valuable lessons that will help inform the proposed carshare program model for Grand Junction. The following represent key findings and trends across these programs:

- These case studies prove the viability of EV carshare programs that primarily serve residents of affordable housing communities. This is a proven model that Grand Junction can adapt to meet the needs of local community members.
- Each case study program implemented a round-trip model where each vehicle is picked up and dropped off at the same designated location. Using this model helps reduce operational costs and ensures that vehicles are available on a dependable basis.
- Most of the case study programs had two vehicles available per location. Multiple vehicles help increase program uptime if one of the vehicles is out of service temporarily.
- There is not one common cost model for carshare usage. Based on funding availability, various cost models can be implemented. These models range from a free service for residents of affordable housing communities to completely subsidized pricing to a service where pricing increases after a certain amount of weekly usage.
- Local partners primarily contract with third-party carshare program operators (both nonprofit and for-profit) to operate their respective programs. The expertise of a third party is critical to program success, but the operator must also be familiar with the service area and willing to provide a local presence. Giv Group (Case Study #2) had issues with their original program operator due to no local presence. Giv is now working to develop their own local carshare program operation. The preference to contract with a third-party operator was further reinforced during the analysis of several carshare program RFPs (additional details about RFPs are in the Program Implementation section of the report).

3. Proposed Carshare Model for Pilot Implementation

The following carshare program pilot model is proposed based on the community feedback and Carshare Index analysis from the Phase I report, along with the featured carshare program case studies.

- **Carshare Program Location:** Grand Junction Housing Authority 2814 community (2814 Patterson Road in Grand Junction)
- **Carshare Program Users:** A private carshare model serving residents of the 2814 community
- **Carshare Program Model:** A round-trip model with vehicles parked at 2814 at the start and end of each trip
- **Carshare Program Vehicles:**
  - **Vehicle count**: Two EVs
  - **Vehicle types**: All-wheel drive hatchback EV (Nissan Leaf or similar), all-wheel drive crossover EV, or mid-size SUV EV (Chevy Equinox EV or similar)
- **EV Charging Infrastructure Requirements:** A dual-port Level 2 charger to serve the two EVs recommended for the EV carshare program pilot. There are two existing dual-port Level 2 chargers at 2814. It is to be determined if one charger can be used exclusively for the carshare program or if a new charger needs to be installed.

- **Carshare Program User Pricing Model:** To be informed by the amount of funding available to defray carshare program member costs. Based on recent research by nonprofit carshare program operator Forth Mobility, $5 per hour is the price that most community members find to be reasonable for carshare services[9].
  - **Initial registration fee**: Typically in the $25–$50 range (includes a driving history check and administrative fees)
  - **Pricing options:**
    - Free unlimited trips for carshare program members
    - Limited number of free hours per month, and then the carshare program member pays either a discounted price or the full price for the rest of their trips
    - Full price for all trips to be paid by carshare program member
    - Inclusion of a possible monthly fee, which can encourage program use in some situations [10]
- **Carshare Program Operator:** A third-party carshare program operator model is the recommended approach for development of the EV carshare program in Grand Junction. Third-party operators have expertise in deploying a variety of carshare programs, including the affordable housing model proposed in Grand Junction.

Pilot Implementation Cost Estimate

The project team developed initial cost estimates for the proposed carshare program pilot implementation at 2814 Patterson. The goals of this cost estimate are to:

- Help the City of Grand Junction understand estimated costs for various carshare program pilot elements
- Help inform partnership and cost share discussions with key pilot program stakeholders
- Help understand grant awards and local match funding necessary to cover program costs
- Inform carshare program operator RFQ/RFP development by having a comprehensive list of program elements and estimated costs

[9] Forth Mobility. Best Practices for EV Carsharing Programs (2024). https://forthmobility.org/storage/app/media/Reports/2024-Best-Practice-Papers/Best-Practices-for-EV-Carsharing-Programs-2024.pdf.
[10] Forth Mobility. Best Practices for EV Carsharing Programs (2024). https://forthmobility.org/storage/app/media/Reports/2024-Best-Practice-Papers/Best-Practices-for-EV-Carsharing-Programs-2024.pdf.

Cost Estimate Sources and Key Assumptions

Carshare program cost estimates were primarily informed by two recent carshare program case studies that developed detailed cost breakdowns for the operation of carshare programs at affordable housing communities[11, 12]. Because the cost breakdowns from these studies were similar to the proposed program at 2814 (a small-scale EV carshare program with two vehicles, serving a single affordable housing community), they serve as a useful reference point. To further inform these cost estimates, the project team also conducted discussions with the report authors from Forth Mobility and Giv Group, and gathered cost data from other sources, including the U.S. Department of Energy Alternative Fuels Data Center's Vehicle Cost Calculator[13] and Colorado's Vehicle Registration Fee Estimator[14].

The following assumptions were used to develop the carshare program pilot cost estimate:

- **Number of carshare program vehicles**: Two EVs
- **Type and quantity of EV charging infrastructure to install**: One Level 2 dual-port charger (pedestal style). Note that not all scenarios will require new EV supply equipment (see details in **Carshare Program Pilot Cost Elements and Program Implementation Scenarios**)
- Certain types of utility equipment like new transformers were not included in the carshare cost estimates; It is assumed that the existing transformers at the multifamily developments will be able to meet the power needs of a single Level 2 dual-port charger for the carshare program, but if that is not the case, additional utility infrastructure expenses may be required.

[11] Giv Mobility. Electric Residential Carshare Program: Final Report + Replication Toolkit (2024). https://www.liveelectric.org/static/media/Giv_Mobility_Carshare_Final_Report_2024.017d224a.pdf.
[12] Forth Mobility. Best Practices for EV Carsharing Programs (2024). https://forthmobility.org/storage/app/media/Reports/2024-Best-Practice-Papers/Best-Practices-for-EV-Carsharing-Programs-2024.pdf.
[13] U.S. Department of Energy Alternative Fuels Data Center: Vehicle Cost Calculator. https://afdc.energy.gov/calc/.
[14] Colorado Department of Revenue. Vehicle Registration Fee Estimator. https://mydmv.colorado.gov/_/.

- **Carshare service estimated trips per day and estimated vehicle mileage per year**:
  - 3 round-trips per vehicle, per day (6 total trips daily). This is based on Giv's observed carshare program travel patterns from over 3,000 trips. There will likely be a ramp-up period of several months to meet this assumed trip per day count.
  - **Average round-trip, non-work trip distance in Grand Junction**: 6.0 miles[15].
  - **Annual distance driven per vehicle** = 8,570 miles per year; assuming 3 round-trips per day at 6.0 miles per round-trip = 6,570 miles annually for local trips + 2,000 miles for long-distance highway trips.
- **Program timeframe:** 3-year pilot program timeframe because it aligns with the timeframe for CEO CAMP Implementation Grants, one of the primary funding sources available for carshare program operations in Colorado.
- **Carshare program costs to customers**: Several potential revenue models for the program (as detailed in **Section 2**). Therefore, no revenue dollars were included to offset annual program costs; however, some example revenue figures are cited in **Program Pilot Implementation Scenarios: Detailed Cost Estimates**.

Carshare Program Pilot Cost Elements and Program Implementation Scenarios

The major program pilot costs are vehicles, electric vehicle supply infrastructure (EVSI), and program operations. These costs are organized into three possible implementation scenarios for the carshare program pilot. The implementation scenarios break these costs out by year and identify whether they are up-front capital costs or recurring operations costs. This implementation scenario approach was taken because it is still unclear which path the City of Grand Junction will take to develop the carshare program pilot. The scenarios analyze several top options.

[15] Replica Transportation Model

Scenario 1: Turn-Key Service from Third-Party Carshare Operator

Vehicles: Costs are built into annual carshare operator service fee.

EVSI: No new EVSI installation is required.

Program Operations: A third-party operator is paid to operate the carshare program pilot. A local staff member (from City of Grand Junction or another local partner) will also be required to coordinate with the carshare program operator.

Scenario 1 reflects how carshare programs serving affordable housing communities are run, where a third-party carshare program operator is paid to run the program, and capital costs (the carshare vehicle costs) are built into the operator's service fee rather than the local partners having to purchase and supply the vehicles for the program themselves. Scenario 1 also assumes that the carshare program will have exclusive access to one of the existing Level 2 dual-port chargers at 2814—meaning that no additional EV charging equipment will have to be purchased and installed.

Scenario 2: Turn-Key Service from Third-Party Carshare Operator and New EV Charging Equipment

Vehicles: Costs are built into annual carshare operator service fee.

EVSI: An additional Level 2 dual-port charger is purchased and installed for exclusive use by the carshare program. This up-front capital cost would be required before carshare program operations commence.

Program Operations: A third-party operator is paid to operate the carshare program pilot. A local staff member (from City of Grand Junction or another local partner) will also be required to coordinate with the carshare program operator.

Although similar to Scenario 1, Scenario 2 adds additional expenses for the purchase and installation of an additional Level 2 dual-port charger to serve the carshare program. This is a possible scenario because the two existing Level 2 chargers at 2814 were financed and installed for the use of any community resident, not just those who are using a carshare program. It is possible that one of these existing EV charging stations can be made available for the carshare program; however, Scenario 2 considers the additional EVSI expenses if an existing charging station cannot be made

available for the carshare program or if an additional charging station is required to meet program demand. Scenario 2 also applies if enough funding is available to develop a second pilot location, such as Colorado Mesa University.

Scenario 3: Locally Funded Vehicle Costs and Turn-Key Service from Third-Party Carshare Operator

Vehicles: City of Grand Junction or a local partner purchases the EVs for use in the carshare program pilot. A third-party operator would still operate these vehicles and the carshare program as a whole.

EVSI: Consistent with Scenario 2, an additional Level 2 dual-port charger is purchased and installed for exclusive use by the carshare program. This up-front capital cost would be required before carshare program operations commence.

Program Operations: Third-party operator is paid to operate the carshare program pilot. A local staff member (from City of Grand Junction or other local partner) will also be required to coordinate with the carshare program operator.

Scenario 3 includes the up-front capital costs for the purchase of EVs by the City of Grand Junction or another local partner. This is a departure from a full carshare-as-a-service model, where the carshare program operator provides the vehicles and passes along their costs as part of a monthly fee. Scenario 3 should be considered in the current funding environment with significant tax credits and grants available for the purchase of EVs (as further detailed in **Section 4, Program Implementation**). Discounted up-front purchases of vehicles would lead to lower recurring costs for program operations.

Before the City of Grand Junction pursues Scenario 3, it is critical that the City determine if potential third-party carshare program operators would be willing to operate vehicles that they do not own. Giv Group in Salt Lake City was able to realize cost savings by purchasing used EVs for operation by a third-party carshare program operator. However, Giv is phasing out their third-party operator and transitioning to a model where Giv both owns the vehicles and operates the program. In addition, Giv struggled to find carshare insurance coverage, and insurance now represents a major recurring expense for the program. Given the challenges associated with securing cost-effective vehicle insurance in Scenario 3, this is not a recommended approach for Grand Junction.

Program Pilot Implementation Scenarios: Detailed Cost Estimates

Table 3 shows the high-level costs by year for each proposed scenario. Key details about these cost estimates include:

- Each scenario's line item cost estimates, cost estimate assumptions, and cost estimate data sources are further detailed below this summary table.
- Felsburg Holt & Ullevig will also provide the detailed cost estimates in an editable Excel spreadsheet so that the City of Grand Junction can further refine assumptions as program development continues.
- These costs do not include potential grants or incentives; any potential grants and incentives have been incorporated in **Section 4, Program Implementation**.

Table 3. Potential Carshare Program Pilot Scenarios and Cost Estimates

Program Year	Scenario 1: Turn-Key Service from Third-Party Carshare Operator	Scenario 2: Turn-Key Service from Third-Party Carshare Operator & New EV Charging Equipment	Scenario 3: Locally Funded Vehicle Costs & Turn-Key Service from Third-Party Carshare Operator
Estimated Program Cost: Year 1	$75,400	$101,400	$166,100
Estimated Program Cost: Year 2	$67,900	$67,900	$54,100
Estimated Program Cost: Year 3	$67,900	$67,900	$54,100
Estimated Program Cost: 3-Year Total	**$211,200**	**$237,200**	**$274,300**

Line Item Cost Estimate – Scenario 1: Turn-Key Service from Third-Party Carshare Operator

Table 4. Scenario 1 Line Item Cost Estimate

Initial Program Startup Costs	Estimated Cost	Assumptions/Source
Vehicle 1 Onboarding (Vehicle Registration, Sales Tax, Installation of Telematics Software, Carshare Program Wraps/Graphics)	$3,500	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) Giv Mobility: Electric Residential Carshare Program Final Report (2024) Colorado DMV Vehicle Registration Calculator
Vehicle 2 Onboarding (Vehicle Registration, Sales Tax, Installation of Telematics Software, Carshare Program Wraps/Graphics)	$4,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) Giv Mobility: Electric Residential Carshare Program Final Report (2024) Colorado DMV Vehicle Registration Calculator
Subtotal	***$7,500***	–
Annual Recurring Costs		
Vehicle "Lease" from Carshare Program Provider	**Estimated Cost**	**Assumptions/Source**
EV 1: 2024 Nissan Leaf EV	$5,800	DOE Alternative Fuels Data Center's Vehicle Cost Calculator; does not include potential vehicle tax credits Annual payment on vehicle purchase ($29,000), assuming vehicle was financed over 5 years = $5,800 annually
EV 2: 2024 Chevy Equinox AWD EV	$10,000	DOE Alternative Fuels Data Center's Vehicle Cost Calculator; does not include potential vehicle tax credits Annual payment on vehicle purchase ($49,500), assuming vehicle was financed over 5 years = $10,000 annually
Subtotal	***$15,800***	–

Carshare Program Operations (Note: Most of these line items would typically be rolled up into a service fee from the program operator)	**Estimated Cost**	**Assumptions/Source**
Local staffing	$15,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes 600 hours per year at $25/hour*
Insurance	$8,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes $6,000 annually for insurance (2 vehicles)* Giv Mobility: Electric Residential Carshare Program Final Report (2024) *Assumes $11,525 annually for insurance (2 vehicles)* *The estimated cost to the left was a middle ground between the two estimates from Giv and Forth*
Maintenance, Repairs, Etc.	$800	Source: DOE Alternative Fuels Data Center Assumptions ($0.04 per mile for EV maintenance * 8,570 miles per year per vehicle; additional 15% added to total for misc. repairs)
Bi-weekly vehicle cleaning	$4,800	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes a bi-weekly cleaning charge of $92 per vehicle*
Telematics Platform	$1,100	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Forth Assumes a monthly charge of $62.50 per vehicle for telematics platform* Giv Mobility: Electric Residential Carshare Program Final Report (2024) *Giv Mobility assumes a monthly charge of $25 per vehicle for telematics platform*
Customer support	$7,500	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes 24/7 access to a customer service call center; $50 per hour with 150 hours of annual customer service time allotted*
Marketing & Promotion	$500	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024)
Overhead and General/Administrative Expenses	$12,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes ~30% of annual recurring costs for carshare program operations*
Subtotal	***$49,700***	–

EV Charging and Infrastructure: Recurring Costs	Estimated Cost	Assumptions/Source
Electricity Cost	$800	DOE Alternative Fuels Data Center's Vehicle Cost Calculator: Chevy Equinox annual electricity cost for charging: $392 (assumes 8,570 miles driven/year) Nissan Leaf annual electricity cost for charging: $338 (assumes 8,570 miles driven/year)
Charger Network Fees	$1,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024)
Warranty and/or Maintenance	$600	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024)
Subtotal	***$2,400***	
Initial Program Startup Costs	**$7,500**	–
Recurring Annual Costs	**$67,900**	–
Total Cost: Year 1	$75,400	Does not include any vehicle purchase or infrastructure installation grants/discounts. Does not include any potential revenue from carshare program operations *(as a reference, 6 trips per day @ $10 each = $21,900 in annual revenue)*
Total Cost: Year 2	$67,900	
Total Cost: Year 3	$67,900	
Estimated Program Cost: 3 Year Total	**$211,200**	–

Line Item Cost Estimate - Scenario 2: Turn-Key Service from Third-Party Carshare Operator and New EV Charging Equipment

Table 5. Scenario 2 Line Item Cost Estimate

Initial Program Startup Costs		
Carshare Program Vehicles	**Estimated Cost**	**Assumptions/Source**
Vehicle 1 Onboarding (Vehicle Registration, Sales Tax, Installation of Telematics Software, Carshare Program Wraps/Graphics)	$3,500	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) Giv Mobility: Electric Residential Carshare Program Final Report (2024) Colorado DMV Vehicle Registration Calculator
Vehicle 2 Onboarding (Vehicle Registration, Sales Tax, Installation of Telematics Software, Carshare Program Wraps/Graphics)	$4,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) Giv Mobility: Electric Residential Carshare Program Final Report (2024) Colorado DMV Vehicle Registration Calculator
Subtotal	***$7,500***	–
Charging Infrastructure: Level 2 Dual Port Charging Station	**Estimated Cost**	**Assumptions/Source**
Level 2 Dual Port EV Charging Station	$6,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) Giv Mobility: Electric Residential Carshare Program Final Report (2024)
Installation	$20,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) Giv Mobility: Electric Residential Carshare Program Final Report (2024)
Subtotal	***$26,000***	**–**

Annual Recurring Costs

Vehicle "Lease" from Carshare Program Provider	Estimated Cost	Assumptions/Source
EV 1: 2024 Nissan Leaf EV	$5,800	DOE Alternative Fuels Data Center's Vehicle Cost Calculator; does not include potential vehicle tax credits Annual payment on vehicle purchase ($29,000), assuming vehicle was financed over 5 years = $5,800 annually
EV 2: 2024 Chevy Equinox AWD EV	$10,000	DOE Alternative Fuels Data Center's Vehicle Cost Calculator; does not include potential vehicle tax credits Annual payment on vehicle purchase ($49,500), assuming vehicle was financed over 5 years = $10,000 annually
Subtotal	***$15,800***	-

Carshare Program Operations *(Note: Most of these line items would typically be rolled up into a service fee from the program operator)*	**Estimated Cost**	**Assumptions/Source**
Local staffing	$15,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes 600 hours per year at $25/hour*
Insurance	$8,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes $6,000 annually for insurance (2 vehicles)* Giv Mobility: Electric Residential Carshare Program Final Report (2024) *Assumes $11,525 annually for insurance (2 vehicles)* *The estimated cost to the left was a middle ground between the two estimates from Giv and Forth*
Maintenance, Repairs, Etc.	$800	Source: DOE Alternative Fuels Data Center Assumptions ($0.04 per mile for EV maintenance * 8,570 miles per year per vehicle; additional 15% added to total for misc. repairs)
Bi-weekly vehicle cleaning	$4,800	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes a bi-weekly cleaning charge of $92 per vehicle*
Telematics Platform	$1,100	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Forth Assumes a monthly charge of $62.50 per vehicle for telematics platform* Giv Mobility: Electric Residential Carshare Program Final Report (2024) *Giv Mobility assumes a monthly charge of $25 per vehicle for telematics platform*

Carshare Program Operations *(Note: Most of these line items would typically be rolled up into a service fee from the program operator)*	**Estimated Cost**	**Assumptions/Source**
Customer support	$7,500	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes 24/7 access to a customer service call center; $50 per hour with 150 hours of annual customer service time allotted*
Marketing & Promotion	$500	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024)
Overhead and General/Administrative Expenses	$12,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes ~30% of annual recurring costs for carshare program operations*
Subtotal	***$49,700***	–

EV Charging and Infrastructure: Recurring Costs	**Estimated Cost**	**Assumptions/Source**
Electricity Cost	$800	DOE Alternative Fuels Data Center's Vehicle Cost Calculator: Chevy Equinox annual electricity cost for charging: $392 (assumes 8,570 miles driven/year) Nissan Leaf annual electricity cost for charging: $338 (assumes 8,570 miles driven/year)
Charger Network Fees	$1,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024)
Warranty and/or Maintenance	$600	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024)
Subtotal	***$2,400***	–

Initial Program Startup Costs	**$33,500**	–
Recurring Annual Costs	**$67,900**	
Total Cost: Year 1	$101,400	Does not include any vehicle purchase or infrastructure installation grants/discounts. Does not include any potential revenue from carshare program operations *(as a reference, 6 trips per day @ $10 each = $21,900 in annual revenue)*
Total Cost: Year 2	$67,900	
Total Cost: Year 3	$67,900	
Estimated Program Cost: 3 Year Total	**$237,200**	–

Line Item Cost Estimate - Scenario 3: Locally Funded Vehicle Costs and Turn-Key Service from Third-Party Carshare Operator

Since Scenario 3 is not a likely implementation option for a carshare program in Grand Junction, the line item details for Scenario 3 are located in **Appendix D**.

Program Pilot Cost Elements – Conclusion

As described in Scenarios 1 and 2, the third-party carshare program operator model is the recommended approach for development of the EV carshare program in Grand Junction. Third-party operators have expertise in deploying a variety of carshare programs, including the affordable housing model proposed in Grand Junction. In addition, using vehicles provided by the third-party carshare program operator can help avoid any vehicle insurance issues for the City. It still needs to be determined whether or not the carshare program pilot can use one of the existing EV chargers at 2814 or if a new charger dedicated to the carshare program needs to be installed. Once this question is resolved, the actual cost estimate for the program pilot will become more clear.

4. Program Implementation

The City of Grand Junction is already exploring local partnerships that will be critical to implementing the EV carshare program pilot. Other key next steps for implementation include identifying grants and tax incentives to help reduce program costs and to develop a RFP to solicit a third-party carshare program operator once all partnerships and funding sources are in place.

Carshare Program Grants and Incentives

Three major categories of carshare program grants and incentives have been identified to fund carshare program implementation:

- Grants to install EV supply equipment
- Grants to fund carshare program operations
- Tax incentives for the purchase of EVs

Appendix C presents a detailed list of grants and incentives, along with additional information about each program.

Seventeen federal, state, and utility grants and incentives were identified to address these major program implementation categories. Six of these grant programs were screened out because an EV carshare program does not meet the specific grant requirements or the program pilot is not at a project scale that is competitive. Of the remaining 11 grant programs, **Table 6** identifies the best options for the City of Grand Junction to pursue given alignment of the EV carshare program with grant goals and the advantageous local match criteria for these programs.

Table 6. Grant Program Opportunities for Grand Junction

Grant Program	EVSI Funding (Y/N)	Carshare Program Operations Funding (Y/N)	EV Funding (Y/N)	Maximum Award	Local Match Requirement
CAMP Grant (Colorado Energy Office)	Y	Y	Y	$1.5M	5% match[16]
Charge Ahead Colorado (Colorado Energy Office)	Y	N	N	$250,000 per round (3 rounds per year, or rolling grants for installation of 6 or fewer Level 2 charging ports)	10% for installation at income qualified multifamily housing; 20% for other projects
Fleet Zero (Colorado Energy Office)	Y	N	N	$500,000 standard grant and $50,000 rolling grant	10% for government entities and nonprofit applicants
Community Charging Hubs Program (Xcel Energy)	Y	N	N	$8,880 for up to four Level 2 EV chargers	None (Higher Emissions Communities and low income communities qualify for this grant)[17]
ReCharge Colorado EV and Infrastructure Coaching Service (Colorado Energy Office)	Y	N	Y	Provides in-kind CEO staff hours advising local partners on EV and EVSI needs	None

[16] Awardees of CAMP Technical Readiness Planning grants (including the City of Grand Junction) who successfully apply for and receive funding for Implementation grants will have their match amount from the CAMP Technical Readiness Planning Phase reduced from the match requirement in the CAMP Implementation Phase. This assumes that the match requirement will not change for future funding rounds.

[17] 2814 Patterson is not within the Grand Junction HEC designation zone, but several other Tier II and Tier III sites are (as indicated in **Appendix A**)

Grant Program Key Takeaways

A CEO CAMP Implementation grant is the most comprehensive funding opportunity to implement the carshare program pilot. This grant could provide funding for all major program categories—operations, EVSI, and EVs. The CAMP Implementation grant also provides a large amount of funding with the lowest local match requirement. The City of Grand Junction will further benefit from the match requirement parameters because it will be able to roll over its local match funding ($6,000) from this CAMP Technical Readiness Planning grant to reduce the match requirement for an Implementation grant. Due to the advantages of the CAMP grant, it is also likely this will be the most competitive grant for which Grand Junction would be applying.

Beyond the CAMP grant, Grand Junction should consider the other EVSI grant programs for installation of future EVSI as the carshare program expands beyond the pilot implementation. Grand Junction should also take advantage of the CEO's ReCharge program, which provides in-kind advisory services that can help identify the best methods for packaging and funding multiple EVSI installations to expand the carshare program beyond the pilot.

Because it is not recommended that Grand Junction purchase vehicles (as detailed in the previous Scenario 3 discussion), the identified EV tax incentives are not further detailed here. However, these incentives may lead to carshare program operators passing along savings on the vehicle purchase price to Grand Junction as a customer. Grand Junction should coordinate with potential third-party carshare program operators to understand how these vehicle savings may be passed along.

Recommendation for Carshare Program Pilot Funding Request

A $300,000 CAMP Implementation grant request with a 5 percent local match from Grand Junction and other project partners would fund three years of carshare program pilot operations and a new Level 2 charger (if necessary), along with any other unexpected program startup and administrative costs. Since Grand Junction's $6,000 match from the Technical Readiness Planning grant would roll over to the Implementation Grant, only $9,000 of new local match funds would need to be identified for a $300,000 grant award. If Grand Junction has additional local match funding available, the City could apply for a larger grant amount to support additional EVSI installation and program operations funding for Tier II and Tier III carshare locations, or offer a larger local match amount to increase grant competitiveness. However, this depends on how quickly Grand Junction wants to expand the carshare system beyond a pilot program, as

each CAMP award must be spent within three years. It may be challenging to establish Tier II and Tier III carshare locations, install the necessary EVSI, and commence carshare program operations during this initial three-year award period. The carshare program pilot will provide an opportunity to showcase the carshare program and its benefits to the Grand Junction community and receive critical feedback on the program before further expanding it.

Funding Opportunities for Future Program Expansion

Expansion of the carshare program to Tier II and Tier III sites, along with any other potential locations, will require additional funding for EVSI installation and program operations. Almost all Tier II and Tier III sites do not currently have on-site EV chargers available for program use, with the exception of Mesa County Libraries' Central Library in Grand Junction. To install EVSI at these locations, Grand Junction should leverage the quarterly or rolling EVSI installation grants at the state and utility level (Charge Ahead Colorado, Fleet Zero, and Community Charging Hubs Program). The frequency and flexibility of these grants are a major benefit as compared to other less frequently available grants. For program operations, the CEO CAMP Implementation grant is still the most appropriate state level grant for funding EV carshare program operations. At the federal level, the U.S. DOE-VTO has funded multiple EV carshare projects in recent years[18], but VTO does not currently have any open funding opportunities related to carshare programs[19].

After investigating other federal grant opportunities for both EVSI and operations, the carshare program would not qualify for the Congestion Mitigation and Air Quality (CMAQ) Improvement Program[20] because Mesa County is not a current or former nonattainment area for ambient air quality standards for ozone, carbon monoxide, and/or particulate matter. In addition, the carshare program would not qualify for a Carbon Reduction Program (CRP)[21] grant because the program is not a public transportation project eligible under 23 U.S.C. 142 (public mass transportation systems operating buses on Federal-aid highways for the transportation of passengers). High level cost estimates for long-term carshare program implementation, which will help inform future funding needs, are further detailed in **Next Steps – Carshare Program Pilot Implementation**.

[18] See the Past Funded Projects Section: https://cleancities.energy.gov/project-lessons-car-share/
[19] VTO's Open Funding Opportunities: https://www.energy.gov/eere/vehicles/funding-opportunities
[20] CMAQ Overview: https://www.fhwa.dot.gov/environment/air_quality/cmaq/index.cfm
[21] CRP Overview: https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_fact_sheet.cfm

Next Steps – Carshare Program Pilot Implementation

This report has helped identify the recommended carshare program pilot model, pilot cost estimates, and grant funding sources. However, there are additional next steps that Grand Junction must complete before implementing the pilot. First, the City of Grand Junction must continue coordinating with program partners to determine responsibilities related to program liability, cost responsibilities for grant local match dollars, and/or operations expenses that may not be covered by a grant award, such as electricity costs to charge the carshare EVs.

The City will also have to develop an RFP to solicit a third-party operator to run the carshare program pilot. After reviewing publicly available carshare program RFPs[22], key RFP elements should include, but are not limited to:

- A general program scope, specifying the location of the pilot, and the number of EVs required.
- A program scope that specifies:
  - The carshare program operator is expected to supply the vehicles (fully insured and registered) and is responsible for all other vehicle operations, maintenance, and cleaning requirements.
  - The carshare program operator should deliver a turn-key solution to facilitate carshare program operations (provide and maintain a carshare app and web access for customers, deliver customer service, and develop promotional and marketing materials to promote the program).
- Submittal requirements:
  - Overview of the applicant's operational history and examples of other carshare programs currently being operated by the applicant.
  - Timeline for program deployment.
  - Details on the proposed carshare vehicle fleet, including vehicle types, maintenance plan, and considerations for seasonal and local community needs.

[22] Request for Proposals – Regional Carshare Program: https://www.vail.gov/Home/Components/RFP/RFP/214/189; Shafter Community Emissions Reduction Program: Car Sharing: https://ww2.valleyair.org/media/31dljr4u/shafter-car-sharing-rfp-092023.pdf; EV Charging Infrastructure, EV Car Share and Related Operations Services: https://newrochelleny.com/DocumentCenter/View/12679/RFP-NR--5335?bidId=

- Carshare program business model and rate structure, along with a complete program budget with line item details on all costs required to implement the program.
- Details of membership terms and the application process for carshare program members.
- Details of program insurance coverage, along with any limits or exclusions.
- Estimate of the amount of local assistance/support the third-party operator would require from City of Grand Junction staff.
- Overview of the app, technology, and data considerations for the carshare program, along with how the program operator will ensure that technology remains future-proofed.

Future Phase – Program Expansion

A high-level estimate of carshare program expansion costs has also been developed for the Tier II and Tier III carshare program locations. From the Phase I report, 12 Tier II and 9 Tier III locations were identified (see **Appendix A** for the full list and a map of the Tier II and III locations). The following assumptions were used to inform the cost estimate for expansion of the carshare program to all Tier II and Tier III locations:

- Two carshare vehicles will operate at each location.
- Each location will need a new EV charger installed for dedicated use by the carshare program. A standard cost was used, but EVSI installation costs can vary greatly depending on location.
- The same line item cost assumptions from the **Program Pilot Implementation Scenarios: Detailed Cost Estimates** section were used to develop the program expansion cost estimate.
- Some recurring carshare program operations costs will benefit from the economies of scale of program expansion, while other operational costs will not. To estimate this, each recurring operations cost was broadly categorized as having a high, medium, or no economies of scale benefit. While a detailed dollar amount for this future benefit cannot be estimated, an assumption of approximately a 25 percent reduction in annual operations costs per new location beyond the initial program pilot was used (full assumptions used can be found in **Appendix B**).

- Cost items that will benefit from economies of scale to varying degrees include local program staffing, the telematics platform subscription, customer support, and program marketing and promotion. Most other recurring cost line items are capital intensive and will lead to a 1:1 increase in costs with no economies of scale benefit.

As shown in **Table 7**, an EVSI purchase and installation cost estimate of $30,000 per level two charger was assumed, and the annual operations cost estimate (pro-rated based on the economies of scale assumptions) was estimated at $54,000 per location. This totals a Year 1 cost estimate of $84,000 (EVSI + annual operations) and then a recurring annual operations cost estimate of $54,000. This initial estimate can be used to help the City understand a general order of magnitude for program expansion costs, but this estimate will need to be refined as the City further understands program fees based on program pilot implementation.

Table 7. EV Carshare Program Expansion – High Level Cost Estimate

Cost Item	EVSI: Estimated Installation Cost Per Location	Annual Operations Cost Per Location *(Pro-rated based on economies of scale assumptions)*	Year 1 Cost Estimate (EVSI + Operations)	Year 2 and Onwards (Annual Operations Cost Estimate)
Individual Carshare Location: Estimated Costs	$30,000	$54,000	$84,000	$54,000
Tier II Estimated Subtotal (12 Locations)	***$360,000***	***$648,000***	***$1,008,000***	***$648,000***
Tier III Estimated Subtotal (9 Locations)	***$270,000***	***$486,000***	***$756,000***	***$486,000***
Tier II & III Estimated Total	**–**	**–**	**$1,764,000**	**$1,134,000**

Conclusion

This Phase II report provides a blueprint to implement the EV carshare program pilot, along with additional recommendations and resources that position the City of Grand Junction to further expand the program. Informed by the demographic analysis and community feedback from Phase I, this report identified key implementation considerations for the carshare program pilot and future program expansion. This report further solidifies the proposed operations model for the carshare program pilot based on learnings from existing programs, while also addressing local community needs. In addition, recently published cost estimates for similar carshare programs were used to develop a cost estimate for pilot implementation. An Excel spreadsheet of the cost estimates has also been shared with the City, allowing these estimates to be updated over time. Key grant funding opportunities were also identified to ensure that the program pilot has required funding to launch, and finally, critical components of a carshare operations RFP were identified.

Overall, this recommended EV carshare program will help accomplish key community goals established by the 2020 One Grand Junction Comprehensive Plan, which envisions a future with improved transportation access and mobility options for community members who use alternative fuels and EV technology. The carshare program will also help meet goals established by the Grand Junction EV Readiness Plan (2023), including an equitable approach to realizing the benefits of EV technology by expanding EV access to lower income community members living in multifamily developments. By implementing this EV carshare program, the City of Grand Junction will take a meaningful step toward achieving a more inclusive and sustainable transportation system that aligns with both community needs and established goals from previous plans.

Appendix A. Tier II and III Multifamily Locations Within Carshare Index Clusters

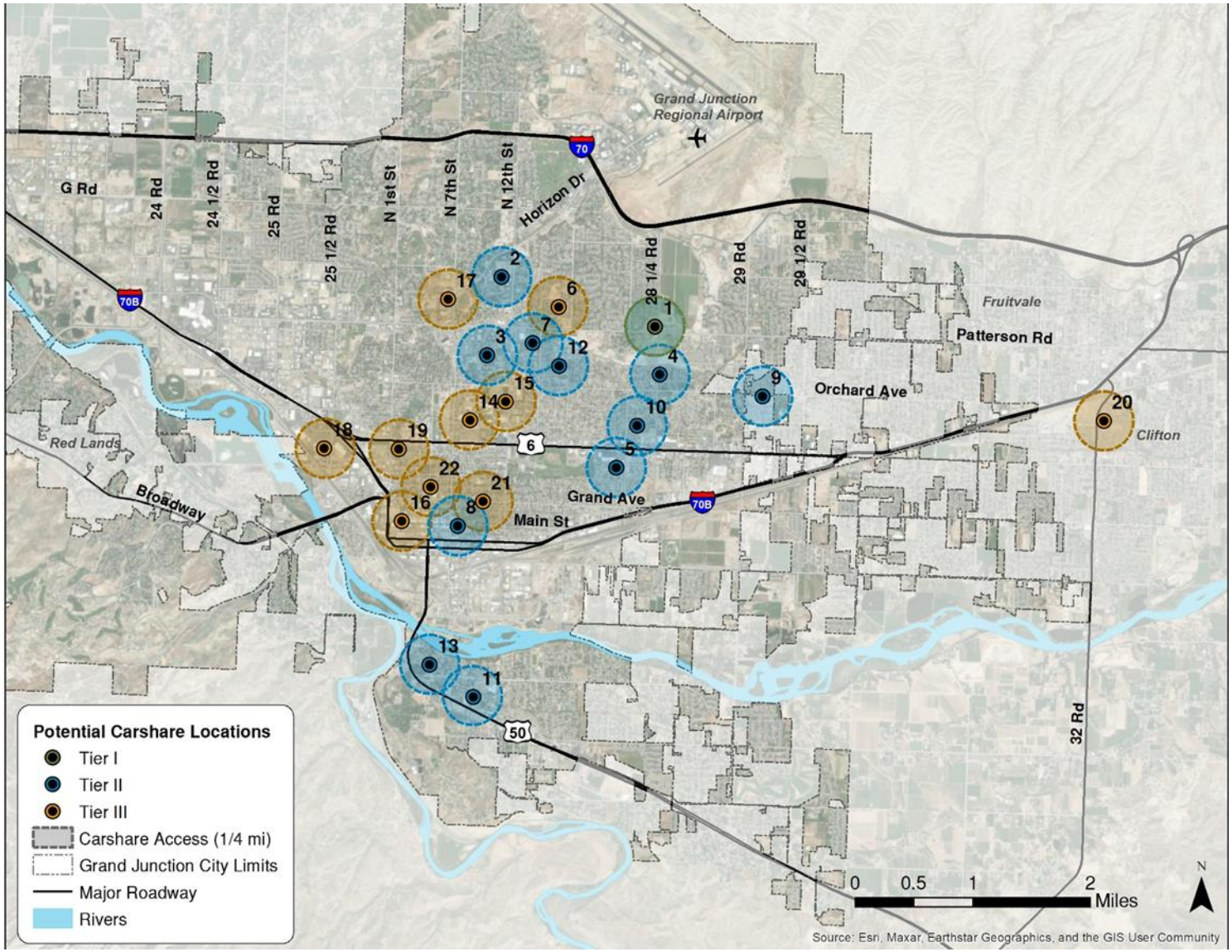
Table A-1. Tier II Recommendation Locations

Map ID (Figure A-1)	Location	Carshare Index	Affordable Housing Development	Existing EV Charger Location	Total Units (Percent Affordable Units)
2	Laurel House Apartments	5	Yes (Supportive Housing)	None	610 (18%)
3	Capella Grand Junction	6	Yes	None	415 (27%)
4	Grand Manor Mutual Housing	5	Yes	None	232 (48%)
5	Garden Villa Apartments	6	Yes	None (HEC)	191 (48%)
6	The Commons of Hilltop	5	Yes	Within ¼ mile	190 (100%)
7	Hilltop / Residential Youth Services	5	Yes (Supportive Housing)	None	180 (25%)
8	East Main Street (Ratekin Tower)	7	Yes (Housing Authority)	Within ¼ mile	171 (100%)
9	29 Mile Apartments	5	Yes	None	144 (100%)
10	Arbor Vista	6	Yes (Housing Authority)	None	108 (66%)
11	Linden Pointe Apartments Roses	4	Yes (Housing Authority)	None	100 (100%)
12	Walnut Park Apartments	6	Yes (Housing Authority)	None	90 (100%)
13	Crystal Brook Townhomes	4	Yes (Housing Authority)	None	40 (100%)

Table A-2. Tier III Recommendation Locations

Map ID (Figure A-1)	Location	Carshare Index	Affordable Housing Development	Existing EV Charger Location	Total Units (Percent Affordable Units)
14	West of CMU Campus	6	No	Within ¼ mile	1,465 (unknown)
15	East of CMU Campus	6	No	None	1,257 (unknown)
16	West Main Street	7	No	Within ¼ mile	345 (unknown)
17	Solstice Senior Living at Mesa View	5	No	None	235 (unknown)
18	Railyard at Rimrock	4	No	None	200 (unknown)
19	Pinyon Pines Apartments	6	No	None (HEC)	137 (unknown)
20	Willow Grove (Clifton)	5	No	None	119 (unknown)
21	The Lofts on Grand	7	No	None	85 (unknown)
22	Central Library	7	No	On-site	N/A

Figure A-1 Potential Carshare Locations by Recommendation Tier



Appendix B. Program Cost Estimate Details

The Program Cost Estimate spreadsheet was provided to the City of Grand Junction in a separate attachment.

Appendix C. Carshare Program Grant Opportunities

Table C-1. All Identified Grant and Incentive Opportunities

Program Name	Program Level (Federal, State or Utility)	Program Category	Grant/ Tax Credit Administrator	Electric Vehicle Funding	EV Infrastructure Funding	Operations Funding	GJ Carshare Program Meets Minimum Qualifications?	Notes
Clean Vehicle Tax Credit	Federal	Tax Credit	IRS	The maximum credit is $7,500 for qualified commercial clean vehicles with gross vehicle weight ratings of under 14,000 pounds and $40,000 for all other vehicles.	No	No	Yes	"Commercial fleets and tax-exempt organizations that buy a qualified commercial clean vehicle may qualify for a clean vehicle tax credit per vehicle (including all-electric, plug-in hybrid electric, or fuel cell EVs)."
Alternative Fuel Infrastructure Tax Credit	Federal	Tax Credit	IRS	No	The value of this credit is 6% of the cost of property subject to depreciation, with a maximum credit of $100,000 for each single item of property.	No	Yes	"If you purchase EV charging equipment for a business, fleet, or tax-exempt entity you may be eligible for this tax credit."

Program Name	Program Level (Federal, State or Utility)	Program Category	Grant/ Tax Credit Administrator	Electric Vehicle Funding	EV Infrastructure Funding	Operations Funding	GJ Carshare Program Meets Minimum Qualifications?	Notes
Charging and Fueling Infrastructure (CFI) Grant	Federal	Grant	FHWA	No	Up to $15,000,000 (with a 20% local match)	No	**No**; the infrastructure must be "accessible to all drivers" and located in a public location.	
Congestion Mitigation and Air Quality (CMAQ) Improvement Program	Federal	Formula Grant	FHWA; formula funds are distributed by state and local governments	No	Funding for vehicle refueling infrastructure that would reduce emissions	No	**No**; Eligible projects must be within a National Ambient Air Quality Standards (NAAQS) Nonattainment area, and Mesa County is not a designated Nonattainment area.	

Program Name	Program Level (Federal, State or Utility)	Program Category	Grant/ Tax Credit Administrator	Electric Vehicle Funding	EV Infrastructure Funding	Operations Funding	GJ Carshare Program Meets Minimum Qualifications?	Notes
Carbon Reduction Program (CRP)	Federal	Formula Grant	FHWA; Formula funds are distributed by state and local governments	No (vehicle funding not available for Class 1 vehicles)	A project that supports deployment of alternative fuel vehicles, including– acquisition, installation, or operation of publicly accessible EV charging infrastructure	No	**No;** the project is not a public transportation project eligible under 23 U.S.C. 142 (public mass transportation systems operating buses on Federal-aid highways for the transportation of passengers). In addition, the project would not install publicly-accessible EV charging infrastructure (it would be for the use of the carshare program vehicles only).	
Colorado's National Electric Vehicle Infrastructure (NEVI) Planning/CEO DCFC Plazas Program	State	Grant	CDOT/CEO	No	$57M over 5 years	No	**No**; grant focuses on DCFC chargers for public access along Designated Alternative Fuel Corridors.	

Program Name	Program Level (Federal, State or Utility)	Program Category	Grant/ Tax Credit Administrator	Electric Vehicle Funding	EV Infrastructure Funding	Operations Funding	GJ Carshare Program Meets Minimum Qualifications?	Notes
Charge Ahead Colorado	State	Grant	CEO	No	Up to $250,000 per round (only 10% match required for installation at income qualified multifamily housing; 20% match required otherwise)	No	Yes	
Colorado EV Tax Credit	State	Tax Credit	CEO	$7,500 tax incentive for each light duty EV purchased	No	No	Yes	
Clean Fleet Enterprise Clean Fleet Vehicle and Technology Grant Program	State	Grant	CDPHE (Clean Fleet Enterprise)	$30,000 (Class 3 vehicles) to $275,000 (Class 8 vehicles) in low/no emission fleet vehicle purchase incentives	No	No	**No**; only class 3-8 vehicles are eligible for grant program incentives.	

Program Name	Program Level (Federal, State or Utility)	Program Category	Grant/ Tax Credit Administrator	Electric Vehicle Funding	EV Infrastructure Funding	Operations Funding	GJ Carshare Program Meets Minimum Qualifications?	Notes
Fleet Zero	State	Grant	CEO	No	$500,000 standard grant and $50,000 rolling grant; 10% match for government entity or nonprofit applicants. Purchase and installation costs, plus 5 year networking and 3 year warranty costs	No	Yes	
ReCharge Colorado EV and Infrastructure Coaching Service	State	Assistance Program	CEO	In-kind hours	In-kind hours	No	Yes	
Electric Vehicle (EV) Charger Tax Exemption	State	Tax Credit	State of Colorado	No	An EV charging system is exempt from the levy and collection of property tax during the years of 2023 to 2029.	No	Yes	

Program Name	Program Level (Federal, State or Utility)	Program Category	Grant/ Tax Credit Administrator	Electric Vehicle Funding	EV Infrastructure Funding	Operations Funding	GJ Carshare Program Meets Minimum Qualifications?	Notes
CEO CAMP Grant	State	Grant	CEO	Up to $1.5M per applicant across all eligibility categories (with a 5% match required); eligible costs include EVs for an EV carshare program (including EV registration fees)	Up to $1.5M per applicant across all eligibility categories (with a 5% match required); eligible costs include charging infrastructure and related equipment; however, charging infrastructure cannot be the only grant component	Up to $1.5M per applicant across all eligibility categories (with a 5% match required); eligible costs include various operational costs, or hiring a third-party contractor to manage and develop the proposed Implementation Phase project	Yes	Awardees of CAMP Technical Readiness Planning grants who successfully apply for and receive funding for Implementation grants will have their match amount from the CAMP Technical Readiness Planning Phase reduced from the match requirement in the CAMP Implementation Phase. See the Implementation Phase RFA for more eligibility details.

Program Name	Program Level (Federal, State or Utility)	Program Category	Grant/ Tax Credit Administrator	Electric Vehicle Funding	EV Infrastructure Funding	Operations Funding	GJ Carshare Program Meets Minimum Qualifications?	Notes
Electric Vehicle (EV) Rebate - Xcel Energy	Utility	Utility Incentive	Xcel Energy	Income-qualified customers can receive $3,000 off a used or $5,500 off a new EV (this incentive is stackable with Colorado's state EV Credit).	No	No	**No**; only available to individual residential customers of Xcel.	
Xcel Community Hub EV Solutions: EV Supply Infrastructure Program	Utility	Utility Incentive	Xcel Energy	No	Selected projects have EVSI (dedicated EV meter cabinet with panel and conduit connector) provided at no cost through this program. However, costs may be incurred if a line extension is required. Any additional costs will be discussed during the Xcel advisory process.	No	Yes	To qualify, the EV chargers may have to be publicly accessible as well (not just for members of a carshare program). Projects must have a minimum of four ports to apply.

Program Name	Program Level (Federal, State or Utility)	Program Category	Grant/ Tax Credit Administrator	Electric Vehicle Funding	EV Infrastructure Funding	Operations Funding	GJ Carshare Program Meets Minimum Qualifications?	Notes
Xcel Multifamily Charging	Utility	Utility Incentive	Xcel Energy	No	Xcel offers programs for multifamily buildings where Xcel owns, installs, and maintains EV supply infrastructure and charging equipment for a monthly fee.	No	Yes; City of Grand Junction should contact Xcel's EV advisors to further discuss this project.	
Xcel Community Charging Hubs Program	Utility	Utility Incentive	Xcel Energy	No	Up to $8,800 for four Level 2 chargers	No	Yes; City of Grand Junction should contact Xcel's EV advisors to further discuss this project.	Higher Emissions Communities (HECs) and low income communities qualify (the project is located in a county or census block where 50% or more of households have incomes at or below 80% of area median income).

Appendix D. Scenario 3 Line Item Cost Estimate

Table D-1. Scenario 3 Line Item Cost Estimate

Initial Program Startup Costs		
Carshare Program Vehicles	**Estimated Cost**	**Assumptions/Source**
EV 1: 2024 Nissan Leaf EV	$29,000	DOE Alternative Fuels Data Center's Vehicle Cost Calculator; does not include potential tax credits
EV 2: 2024 Chevy Equinox AWD EV	$49,500	DOE Alternative Fuels Data Center's Vehicle Cost Calculator; does not include potential tax credits
Vehicle 1 Onboarding (Vehicle Registration, Sales Tax, Installation of Telematics Software, Carshare Program Wraps/Graphics)	$3,500	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) Giv Mobility: Electric Residential Carshare Program Final Report (2024) Colorado DMV Vehicle Registration Calculator
Vehicle 2 Onboarding (Vehicle Registration, Sales Tax, Installation of Telematics Software, Carshare Program Wraps/Graphics)	$4,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) Giv Mobility: Electric Residential Carshare Program Final Report (2024) Colorado DMV Vehicle Registration Calculator
Subtotal	***$86,000***	–
Charging Infrastructure Costs: Level 2 Dual Port Charging Station	**Estimated Cost**	**Assumptions/Source**
Level 2 Dual Port EV Charging Station	$6,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) Giv Mobility: Electric Residential Carshare Program Final Report (2024)
Installation	$20,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) Giv Mobility: Electric Residential Carshare Program Final Report (2024)
Subtotal	***$26,000***	–

Annual Recurring Costs

Carshare Program Operations (Note: Most of these line items would typically be rolled up into a service fee from the program operator)	Estimated Cost	Assumptions/Source
Local staffing	$15,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes 600 hours per year at $25/hour*
Insurance	$10,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes $6,000 annually for insurance (2 vehicles)* Giv Mobility: Electric Residential Carshare Program Final Report (2024) *Assumes $11,525 annually for insurance (2 vehicles)* *A higher end cost assumption was used for this scenario.*
Maintenance, Repairs, Etc.	$800	Source: DOE Alternative Fuels Data Center Assumptions ($0.04 per mile for EV maintenance * 8,570 miles per year per vehicle; additional 15% added to total for misc. repairs)
Bi-weekly vehicle cleaning	$4,800	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes a bi-weekly cleaning charge of $92 per vehicle*
Telematics Platform	$1,100	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Forth Assumes a monthly charge of $62.50 per vehicle for telematics platform* Giv Mobility: Electric Residential Carshare Program Final Report (2024) *Giv Mobility assumes a monthly charge of $25 per vehicle for telematics platform*
Customer support	$7,500	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes 24/7 access to a customer service call center; $50 per hour with 150 hours of annual customer service time allotted*
Marketing & Promotion	$500	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024)
Overhead and General/Administrative Expenses	$12,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024) *Assumes ~30% of annual recurring costs*
Subtotal	***$51,700***	

EV Charging and Infrastructure: Recurring Costs	Estimated Cost	Assumptions/Source
Electricity Cost	$800	DOE Alternative Fuels Data Center's Vehicle Cost Calculator: Chevy Equinox annual electricity cost for charging: $392 (assumes 8,570 miles driven/year) Nissan Leaf annual electricity cost for charging: $338 (assumes 8,570 miles driven/year)
Charger Network Fees	$1,000	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024)
Warranty and/or Maintenance	$600	Forth: Best Practices For Electric Vehicle Carsharing Programs (2024)
Subtotal	***$2,400***	–
Initial Startup Cost	**$112,000**	–
Recurring Annual Cost	**$54,100**	–
Total Cost: Year 1	$166,100	Does not include any vehicle purchase or infrastructure installation grants/discounts. Does not include any potential revenue from carshare program operations *(as a reference, 6 trips per day @ $10 each = $21,900 in annual revenue)*
Total Cost: Year 2	$54,100	
Total Cost: Year 3	$54,100	
Estimated Program Cost: 3 Year Total	**$274,300**	–

Grand Junction City Council

Workshop Session

Item #1.c.

Meeting Date:	December 2, 2024
Presented By:	Daniella Acosta, Senior Planner, Timothy Lehrbach, Senior Planner
Department:	Community Development
Submitted By:	Daniella Acosta Stine, Senior Planner and Tim Lehrbach, Senior Planner

Information

SUBJECT:

Turf Limitation on Single Family and Duplex Lots and Water-Wise Landscape

EXECUTIVE SUMMARY:

In the ongoing effort to stem water shortage issues, the Colorado General Assembly passed, and the Governor signed, legislation earlier this year restricting the installation of non-functional, artificial, and invasive turf. The bill requires that municipalities enact regulations in accordance with the new law on or before January 1, 2026. Compliance will entail that the City amend its landscaping requirements in the Zoning and Development Code. The need to amend this chapter creates an opportunity to evaluate it and to identify further changes which may advance City goals and policies.

This workshop will inform the City Council of the necessary changes for compliance with state law, present options for further regulating landscaping in support of City goals and policies, and request feedback from the City Council concerning these options. For purposes of this staff report cool-season non-functional turf will be referred to as turf.

BACKGROUND OR DETAILED INFORMATION:

SENATE BILL 24-005

On March 15, 2024, Governor Jared Polis signed into law Senate Bill 24-005 (SB 24-005), which bans the installation of non-functional turf, artificial turf, and invasive plant species on commercial, industrial, public/civic, and common interest community properties. With the exception of common interest community properties, the law does not address or apply to turf installation on residential (single-family, duplex, or multifamily) properties.

Functional turf, as defined in the bill, is "…turf that is located in a recreational use area

or other space that is regularly used for civic, community, or recreational purposes, which may include playground; sports fields; picnic grounds; amphitheaters; portions of parks; and the playing areas of golf courses, such as driving ranges, chipping and putting greens, tee boxes, greens, fairways, and roughs." Non-functional turf is all turf, which is not functional turf. The bill allows existing non-functional turf installed prior to January 1, 2026, to remain and be maintained. The bill exempts turf used for water quality treatment solutions as required by federal, state, or local water quality permitting standards from the definition of non-functional turf. The bill further exempts the installation of grass seed and sod that is native or has been hybridized for arid climates. Municipalities are required to adopt regulations which conform with SB 24-005 by January 1, 2026.

IMPACT ON EXISTING REGULATIONS

The City updated the landscape chapter of the Zoning and Development Code (ZDC) on January 23, 2023, to include the introduction of a 15 percent turf maximum for non-functional turf on non-residential and multifamily properties. Both the definition of non-functional turf and the allowance for it will need to be amended to implement the state's definition and ban of non-functional turf altogether.

The bill also bans artificial turf, which the City does not currently regulate. The City will also need to establish turf bans within common-interest community properties, which include homeowners' associations and property owners' associations' tracts within residential and non-residential subdivisions, such as street-frontage tracts for landscaping.

The City already prohibits the installation of invasive species and has several tools in place, such as the Suitable Plant List, to ensure staff can apply water-wise regulations in a standardized manner. The Suitable Plant List indicates which species meet the required minimums for water-wise and native plants. These standards require that:

- At least 25 percent of proposed shrubs are native or native alternative.
- At least 90 percent of proposed shrubs are xeric, xeric-low, xeric-medium, or low water.
- At least 50 percent of proposed trees have a "preferred planting" status.
- No more than 15 percent of proposed trees have a "limited" status.

Because SB 24-005 does not prevent a local entity from allowing the installation of grass seed or sod that has been hybridized for low water needs and arid conditions, there may be an opportunity to update the Suitable Plant List to include these hybrid species.

While single-family and duplex subdivisions adhere to these regulations as it relates to landscaping required along the perimeter street frontage(s) of a development, the ZDC does not currently regulate landscaping or limit turf on individual single-family and duplex lots. GJMC 21.07.030(a)(2) provides that "The landscaping requirements of this

Code shall not apply to a lot zoned for one or two dwelling units."

CITY OF GRAND JUNCTION GOALS

The City has adopted goals and strategies related to water conservation and tree canopy, which may be advanced by the adoption of water-wise or turf-limiting regulations.

The 2020 One Grand Junction Comprehensive Plan (Comprehensive Plan) includes Plan Principle 8: Resource Stewardship. Among its goals are "1. Promote water conservation and protect water quality" and "5. Manage the City's Urban Forest and Water Wise Landscaping within the City." Each goal includes strategies for the installation and maintenance of water-wise, drought-tolerant landscaping. The goals also call for the adoption or update of plans addressing water conservation and urban forestry management.

The 2022 Grand Junction Regional Water Efficiency Plan (WEP) was completed by the City in collaboration with Clifton Water District and Ute Water Conservancy District. Among its background findings is a dramatic difference in treated water demand between the summer and winter months. Within the City of Grand Junction water service area, for example, the demand for treated water in July is 2.9 times greater than January demand. This difference is attributed to lawn irrigation and the operation of home cooling systems during the summer months and may also be seen as a function of unregulated turf in single-family development. These demand totals do not account for the additional irrigation provided by the region's untreated ditch irrigation, which is unmetered.

The WEP sets a goal of 1.4 percent reduction in per-capita residential water demand each year. Objectives to achieve this goal include the City's turf replacement program, monitoring and controlling for service and main line leakage, updating the City's landscaping code (which occurred in 2023), and continuing efforts to reduce residential sector water demand. While the plan reflects optimism about the efficacy of its stated objectives, it can be expected that further limitations on turf installation (whether by the state alone or supplemented by City of Grand Junction regulations), would contribute significantly to meeting or exceeding the 1.4 percent reduction goal.

The City's Urban Forestry Management Plan (UFMP) sets targets for tree canopy citywide and within each land use category as defined by the Comprehensive Plan. Canopy goals for Residential Low (25 percent), Residential Medium (25 percent), and Residential High (20 percent), along with Parks and Open Space (20 percent), can be expected to be the largest contributors to the citywide canopy goal of 18 percent. As of 2019, citywide canopy was 13 percent, while canopy in the residential land use categories ranged from 12 percent in Residential High to 16 percent in Residential Low. The UFMP also includes goals to "invest in canopy growth where benefits are currently felt the least," which may include recent residential development.

The absence of tree, shrub, and groundcover planting requirements and the allowance of unlimited turf in single-family and duplex residential development may inhibit the growth and health of mature tree canopy to meet the City's goals. Among the regulatory

tools surveyed in other jurisdictions, there are several which support tree growth and health in addition to their water conservation benefits, including turf area limitations and mandating water-wise species. Trends towards water-wise landscape requirements and meeting water conservation goals may therefore present opportunities for advancing tree canopy goals. These goals may be mutually supportive but may also require the careful selection of regulatory, educational, and other tools.
The 2024 Sustainability and Adaptation Plan (SAP) includes five strategies relevant to turf limitations and water-wise landscape:

- Strategy I.2.d. Recover lost canopy through the planting of adaptive and climate-appropriate trees for shading, targeting census blocks below target canopy cover goals and underserved areas. Ensure a balance between maintaining healthy trees to reduce heat islands and lowering water use.
- Strategy V.10.b. Continue to coordinate with DRIP and Mesa Conservation District, including Irrigation 101, drought preparedness, water efficiency messaging, and education.
- Strategy V.10.c. Encourage water conservation in residential and commercial developments. Provide education around water-wise plant selection and irrigation practices.
- Strategy V.11.d. Continue to transition municipal landscaping to climate appropriate and/or native, drought-tolerant planting to reduce potable demand. Showcase water-wise gardens.
- Strategy V.11.e. Consider development standards that limit non-functional turf in new single family (attached and detached) development.

Generally, the strategies support initiatives to reduce water consumption and increase the installation of native, drought-tolerant, water-wise species. Specifically, turf limitations in single-family development are to be considered.

ALTERNATIVES
The passing of SB 24-005 is timely to reinitiate discussions about Grand Junction's approach to water conservation and provides an opportunity to assess whether a regulatory approach is necessary to add to the toolbox for implementing long-range goals. The new state law provides municipalities the flexibility to go beyond the minimum requirements. Staff recommends that the City Council consider expanding the state law's prohibition of non-functional turf to residential properties. Promotion of water-wise principles consistently across all development types will maximize the impact on several of the aforementioned goals. Staff has developed several regulatory alternatives that range from minimal to more comprehensive approaches. These alternatives are intended to apply to new residential development and redevelopment. As with the state's non-functional turf ban for non-residential properties, each of these alternatives would exempt existing turf installed prior to the adoption date of any new regulation. The alternatives are designed to apply to the front yard or any part of a yard visible from the public right-of-way, such as side yards on corner lots, and not rear yards.

- Business-As-Usual: This alternative would not introduce additional regulations on turf with regards to single-family and duplex lots or multifamily development. Any code changes would be limited to those necessary to comply with SB 24-005.
- Residential Turf Cap: This alternative would introduce a cap on turf in the front yard of single-family and duplex lots. Multifamily properties are currently capped at 15 percent for turf allowance. Under this alternative, this percentage can be retained, or a higher or lower percentage cap could be considered. The cap would not apply to functional turf.
- Residential Turf Prohibition: This alternative would introduce a prohibition on turf in the front yard of single-family and duplex lots, as well as prohibition on turf in multifamily properties. Like the Residential Turf Cap option, the prohibition would not apply to functional turf.
- Residential Turf Cap/Prohibition With Water-Wise Landscape Requirements: This alternative would either prohibit or set a maximum limit on turf in the front yards of single-family, duplex, and multifamily properties, while requiring landscaping in front yards. Existing landscaping standards for multifamily properties, as outlined in § 21.07.030(g) of the Zoning and Development Code, would remain in effect. For single-family and duplex lots, landscaping standards could either match multifamily standards for consistency and ease of administration or allow greater customization by requiring only a minimum percentage of vegetation coverage in visible front yards. This flexible approach would enable adjustments based on specific site opportunities and constraints.
- Exploring a range of options and carefully assessing the trade-offs and impacts of each approach is recommended.

EVALUATION

Implementing any of the above alternatives which extend beyond basic compliance with state law will have a positive effect towards the achievement of the aforementioned citywide goals.

Extending the prohibition of non-functional turf to the front yards of single-family and duplex residential properties, as well as all multifamily properties, or introducing a cap on non-functional turf, can be expected to reduce water demand and promote the installation of water-wise landscape. However, a turf ban alone may have unintended consequences. Any area which is not planted with turf could be covered with alternative materials or left bare. Absent any planting requirements in these areas, there may be inconsistent distribution of landscaping and general greenspace among and within neighborhoods. Developers/builders and property owners may choose to leave the ground unplanted or may opt to cover the area in rock or gravel, resulting in unintended consequences such as erosion and soil health degradation and reduced aesthetic and community appeal, increased heat retention and water usage due to effects of aridification.

The state's ban on non-functional turf for non-residential properties does not cause the same issues as it might for residential properties, since there are water-wise design guidelines and standards for non-residential properties existing in the Zoning and Development Code. These regulations require trees, shrubs, and groundcover from the City's Suitable Plant List to be planted in specific areas of new non-residential developments, ensuring these spaces are properly landscaped to provide adequate shading, temperature regulation, natural percolation, screening and buffering. Residential areas, however, do not have similar requirements, which can lead to barren or rocky landscapes without additional measures.

Adopting minimum landscape requirements for single-family and duplex development would mitigate the potential adverse consequences of a prohibition of non-functional turf, while further supporting the City's goals outlined above. The requirements could mirror those applied to multifamily and non-residential development, or they could be more limited. Among the factors to be considered with the introduction of planting requirements for single-family and duplex development are additional installation costs for developers and builders, reduced flexibility and necessary maintenance for homeowners, and implementation costs to the City. However, it is probable that mandating the installation of water-wise landscaping would yield savings for homeowners when compared with the costs of watering and maintaining turf. Likewise, any new regulations could be implemented by City staff with cost-neutral or low-cost procedures. Over the long term, the decrease in aggregate water demand and consumption may conserve existing water supply and delay or eliminate the need for new sources and infrastructure investment.

WORKSHOP DISCUSSION

Staff requests feedback from the City Council concerning alternatives for regulating turf and residential landscape in light of city adopted goals and the new State law.

FISCAL IMPACT:

None.

SUGGESTED ACTION:

For discussion only.

Attachments

1. Exhibit 1. Senate Bill 24-005 - Prohibition of Non-Functional Turf, Artificial Turf and Invasive Plant Species

An Act

SENATE BILL 24-005

BY SENATOR(S) Roberts and Simpson, Bridges, Hinrichsen, Buckner, Cutter, Exum, Fields, Jaquez Lewis, Marchman, Michaelson Jenet, Priola, Winter F., Fenberg;
also REPRESENTATIVE(S) McCormick and McLachlan, Amabile, Bacon, Bird, Boesenecker, Brown, Daugherty, deGruy Kennedy, Duran, Epps, Froelich, Garcia, Herod, Jodeh, Joseph, Kipp, Lieder, Lindsay, Lukens, Mabrey, Martinez, Marvin, Mauro, Ortiz, Parenti, Rutinel, Sirota, Snyder, Story, Titone, Valdez, Velasco, Weissman, Willford, McCluskie.

CONCERNING THE CONSERVATION OF WATER IN THE STATE THROUGH THE PROHIBITION OF CERTAIN LANDSCAPING PRACTICES.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. In Colorado Revised Statutes, **add** article 99 to title 37 as follows:

ARTICLE 99
Prohibition of Nonfunctional Turf, Artificial Turf, and Invasive Plant Species

37-99-101. Legislative declaration. (1) THE GENERAL ASSEMBLY

Capital letters or bold & italic numbers indicate new material added to existing law; dashes through words or numbers indicate deletions from existing law and such material is not part of the act.

FINDS THAT:

(a) AS COLORADO CONTINUES TO GRAPPLE WITH THE IMPACTS OF CLIMATE CHANGE, GREEN URBAN SPACES, SUCH AS URBAN TREE CANOPIES, ARE A VITAL ADAPTATION TOOL FOR MITIGATING THE IMPACTS OF CLIMATE CHANGE, ESPECIALLY FOR MITIGATING THE URBAN HEAT ISLAND EFFECT, WHICH CAN INCREASE ENERGY COSTS, AIR POLLUTION, AND HEAT-RELATED ILLNESSES AND DEATHS;

(b) HOWEVER, WATER SUPPLY IN THE WESTERN UNITED STATES IS UNDER INCREASING PRESSURE DUE TO CLIMATE CHANGE AND INCREASING DEMAND;

(c) MANY COMMUNITIES IN THE STATE OVERUSE NONNATIVE GRASS FOR LANDSCAPING PURPOSES, WHICH REQUIRES LARGE AMOUNTS OF WATER TO MAINTAIN;

(d) WHILE THERE ARE APPROPRIATE AND IMPORTANT USES FOR TURF, INCLUDING FOR CIVIC, COMMUNITY, OR RECREATIONAL PURPOSES SUCH AS USE IN PARKS, SPORTS FIELDS, AND PLAYGROUNDS, MUCH OF THE TURF IN THE STATE IS NONFUNCTIONAL, LOCATED IN AREAS THAT RECEIVE LITTLE, IF ANY, USE, AND COULD BE REPLACED WITH LANDSCAPING THAT ADHERES TO WATER-WISE LANDSCAPING PRINCIPLES WITHOUT ADVERSELY IMPACTING QUALITY OF LIFE OR LANDSCAPE FUNCTIONALITY;

(e) PROHIBITING THE INSTALLATION, PLANTING, OR PLACEMENT OF NONFUNCTIONAL TURF IN APPLICABLE PROPERTY IN THE STATE CAN HELP CONSERVE THE STATE'S WATER RESOURCES;

(f) INSTALLED VEGETATION THAT ADHERES TO WATER-WISE LANDSCAPING PRINCIPLES CAN HELP REDUCE OUTDOOR DEMAND OF WATER; AND

(g) ADDITIONALLY, ARTIFICIAL TURF CAN CAUSE NEGATIVE ENVIRONMENTAL IMPACTS, SUCH AS EXACERBATING HEAT ISLAND EFFECTS IN URBAN AREAS AND RELEASING HARMFUL CHEMICALS, INCLUDING PLASTICS, MICROPLASTICS, AND PERFLUOROALKYL AND POLYFLUOROALKYL CHEMICALS, INTO THE ENVIRONMENT AND WATERSHEDS.

(2) THE GENERAL ASSEMBLY THEREFORE DECLARES THAT

PREVENTING THE INSTALLATION, PLANTING, OR PLACEMENT OF NONFUNCTIONAL TURF, ARTIFICIAL TURF, AND INVASIVE PLANT SPECIES IN APPLICABLE PROPERTY IN THE STATE IS:

(a) A MATTER OF STATEWIDE CONCERN; AND

(b) IN THE PUBLIC INTEREST.

37-99-102. Definitions. AS USED IN THIS ARTICLE 99, UNLESS THE CONTEXT OTHERWISE REQUIRES:

(1) (a) "APPLICABLE PROPERTY" MEANS:

(I) COMMERCIAL, INSTITUTIONAL, OR INDUSTRIAL PROPERTY;

(II) COMMON INTEREST COMMUNITY PROPERTY; OR

(III) A STREET RIGHT-OF-WAY, PARKING LOT, MEDIAN, OR TRANSPORTATION CORRIDOR.

(b) "APPLICABLE PROPERTY" DOES NOT INCLUDE RESIDENTIAL PROPERTY.

(2) "ARTIFICIAL TURF" MEANS AN INSTALLATION OF SYNTHETIC MATERIALS DEVELOPED TO RESEMBLE NATURAL GRASS.

(3) "COMMERCIAL, INSTITUTIONAL, OR INDUSTRIAL" HAS THE MEANING SET FORTH IN SECTION 37-60-135 (2)(b).

(4) "COMMON INTEREST COMMUNITY" HAS THE MEANING SET FORTH IN SECTION 38-33.3-103 (8).

(5) "COMMON INTEREST COMMUNITY PROPERTY" MEANS PROPERTY WITHIN A COMMON INTEREST COMMUNITY THAT IS OWNED AND MAINTAINED BY A UNIT OWNERS' ASSOCIATION, SUCH AS ENTRYWAYS, PARKS, AND OTHER COMMON ELEMENTS AS DEFINED IN SECTION 38-33.3-103 (5).

(6) "DEPARTMENT" MEANS THE DEPARTMENT OF PERSONNEL CREATED IN SECTION 24-1-128 (1).

(7) "FUNCTIONAL TURF" MEANS TURF THAT IS LOCATED IN A RECREATIONAL USE AREA OR OTHER SPACE THAT IS REGULARLY USED FOR CIVIC, COMMUNITY, OR RECREATIONAL PURPOSES, WHICH MAY INCLUDE PLAYGROUNDS; SPORTS FIELDS; PICNIC GROUNDS; AMPHITHEATERS; PORTIONS OF PARKS; AND THE PLAYING AREAS OF GOLF COURSES, SUCH AS DRIVING RANGES, CHIPPING AND PUTTING GREENS, TEE BOXES, GREENS, FAIRWAYS, AND ROUGHS.

(8) "INVASIVE PLANT SPECIES" HAS THE MEANING SET FORTH IN SECTION 37-60-135 (2)(e).

(9) "LOCAL ENTITY" MEANS A:

(a) HOME RULE OR STATUTORY CITY, COUNTY, CITY AND COUNTY, TERRITORIAL CHARTER CITY, OR TOWN;

(b) SPECIAL DISTRICT; AND

(c) METROPOLITAN DISTRICT.

(10) "MAINTAIN" OR "MAINTAINING" MEANS AN ACTION TO PRESERVE THE EXISTING STATE OF NONFUNCTIONAL TURF, ARTIFICIAL TURF, OR AN INVASIVE PLANT SPECIES THAT HAS ALREADY BEEN INSTALLED, PLANTED, OR PLACED.

(11) "NATIVE PLANT" MEANS A PLANT SPECIES THAT IS INDIGENOUS TO THE STATE OF COLORADO.

(12) "NEW DEVELOPMENT PROJECT" MEANS A NEW CONSTRUCTION PROJECT THAT REQUIRES A BUILDING OR LANDSCAPING PERMIT, PLAN CHECK, OR DESIGN REVIEW.

(13) (a) "NONFUNCTIONAL TURF" MEANS TURF THAT IS NOT FUNCTIONAL TURF.

(b) "NONFUNCTIONAL TURF" INCLUDES TURF LOCATED IN A STREET RIGHT-OF-WAY, PARKING LOT, MEDIAN, OR TRANSPORTATION CORRIDOR.

(c) "NONFUNCTIONAL TURF" DOES NOT INCLUDE TURF THAT IS DESIGNATED TO BE PART OF A WATER QUALITY TREATMENT SOLUTION

REQUIRED FOR COMPLIANCE WITH FEDERAL, STATE, OR LOCAL AGENCY WATER QUALITY PERMITTING REQUIREMENTS THAT IS NOT IRRIGATED AND DOES NOT HAVE HERBICIDES APPLIED.

(14) "REDEVELOPMENT PROJECT" MEANS A CONSTRUCTION PROJECT THAT:

(a) REQUIRES A BUILDING OR LANDSCAPING PERMIT, PLAN CHECK, OR DESIGN REVIEW; AND

(b) RESULTS IN A DISTURBANCE OF MORE THAN FIFTY PERCENT OF THE AGGREGATE LANDSCAPE AREA.

(15) "SPECIAL DISTRICT" HAS THE MEANING SET FORTH IN SECTION 32-1-103 (20).

(16) "TRANSPORTATION CORRIDOR" MEANS A TRANSPORTATION SYSTEM THAT INCLUDES ALL MODES AND FACILITIES WITHIN A DESCRIBED GEOGRAPHIC AREA, HAVING LENGTH AND WIDTH.

(17) "TURF" HAS THE MEANING SET FORTH IN SECTION 37-60-135 (2)(i).

(18) "UNIT OWNERS' ASSOCIATION" HAS THE MEANING SET FORTH IN SECTION 38-33.3-103 (3).

(19) "WATER-WISE LANDSCAPING" HAS THE MEANING SET FORTH IN SECTION 37-60-135 (2)(l).

37-99-103. Prohibition of nonfunctional turf, artificial turf, and invasive plant species - local entities - construction or renovation of state facilities. (1) ON AND AFTER JANUARY 1, 2026, A LOCAL ENTITY SHALL NOT INSTALL, PLANT, OR PLACE, OR ALLOW ANY PERSON TO INSTALL, PLANT, OR PLACE, ANY NONFUNCTIONAL TURF, ARTIFICIAL TURF, OR INVASIVE PLANT SPECIES, AS PART OF A NEW DEVELOPMENT PROJECT OR REDEVELOPMENT PROJECT, ON ANY PORTION OF APPLICABLE PROPERTY WITHIN THE LOCAL ENTITY'S JURISDICTION.

(2) ON OR BEFORE JANUARY 1, 2026, A LOCAL ENTITY SHALL ENACT OR AMEND ORDINANCES, RESOLUTIONS, REGULATIONS, OR OTHER LAWS

REGULATING NEW DEVELOPMENT PROJECTS AND REDEVELOPMENT PROJECTS ON APPLICABLE PROPERTY IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION.

(3) THE DEPARTMENT SHALL NOT INSTALL, PLANT, OR PLACE, OR ALLOW ANY PERSON TO INSTALL, PLANT, OR PLACE, ANY NONFUNCTIONAL TURF, ARTIFICIAL TURF, OR INVASIVE PLANT SPECIES AS PART OF A PROJECT FOR THE CONSTRUCTION OR RENOVATION OF A STATE FACILITY, WHICH PROJECT DESIGN COMMENCES ON OR AFTER JANUARY 1, 2025.

(4) NOTHING IN THIS SECTION PROHIBITS:

(a) A LOCAL ENTITY FROM MAINTAINING, OR ALLOWING ANY PERSON TO MAINTAIN, ANY NONFUNCTIONAL TURF, ARTIFICIAL TURF, OR INVASIVE PLANT SPECIES INSTALLED, PLANTED, OR PLACED BEFORE JANUARY 1, 2026;

(b) THE DEPARTMENT FROM MAINTAINING, OR ALLOWING ANY PERSON TO MAINTAIN, ANY NONFUNCTIONAL TURF, ARTIFICIAL TURF, OR INVASIVE PLANT SPECIES INSTALLED, PLANTED, OR PLACED AT A STATE FACILITY BEFORE JANUARY 1, 2025;

(c) A LOCAL ENTITY OR THE DEPARTMENT FROM INSTALLING, OR ALLOWING ANY PERSON TO INSTALL, GRASS SEED OR SOD THAT IS A NATIVE PLANT OR HAS BEEN HYBRIDIZED FOR ARID CONDITIONS;

(d) A LOCAL ENTITY OR THE DEPARTMENT FROM ESTABLISHING PROHIBITIONS ON, OR REQUIREMENTS FOR, NONFUNCTIONAL TURF, ARTIFICIAL TURF, OR INVASIVE PLANT SPECIES THAT ARE MORE STRINGENT THAN THE REQUIREMENTS OF THIS SECTION; OR

(e) A LOCAL ENTITY OR THE DEPARTMENT FROM INSTALLING, OR ALLOWING ANY PERSON TO INSTALL, ARTIFICIAL TURF ON ATHLETIC FIELDS OF PLAY.

SECTION 2. Act subject to petition - effective date - applicability. (1) This act takes effect at 12:01 a.m. on the day following the expiration of the ninety-day period after final adjournment of the general assembly; except that, if a referendum petition is filed pursuant to section 1 (3) of article V of the state constitution against this act or an item, section, or part of this act within such period, then the act, item, section, or

part will not take effect unless approved by the people at the general election to be held in November 2024 and, in such case, will take effect on the date of the official declaration of the vote thereon by the governor.

(2) This act does not apply to projects approved by the department of personnel or a local entity before the effective date of this act.

Steve Fenberg
PRESIDENT OF
THE SENATE

Julie McCluskie
SPEAKER OF THE HOUSE
OF REPRESENTATIVES

Cindi L. Markwell
SECRETARY OF
THE SENATE

Robin Jones
CHIEF CLERK OF THE HOUSE
OF REPRESENTATIVES

APPROVED Friday March 15th 2024 at 2:15 pm
(Date and Time)

Jared S. Polis
GOVERNOR OF THE STATE OF COLORADO

Grand Junction City Council

Workshop Session

Item #1.d.

Meeting Date:	December 2, 2024
Presented By:	Ken Sherbenou, Parks and Recreation Director
Department:	Parks and Recreation
Submitted By:	Ken Sherbenou

Information

SUBJECT:

Water Wise Landscaping at Lilac Park

EXECUTIVE SUMMARY:

In line with the Council's strategic priority of resource stewardship, the Parks and Recreation Department has been planning to convert non-used turf areas into native and xeric landscaping. One of the lowest hanging fruits in the community is Lilac Park, a significantly underutilized space that absorbs tremendous water and maintenance resources. This workshop seeks Council input on preferences for investment in renovations to ensure a quality aesthetic achieved in a way that reduces water use and maintenance effort.

BACKGROUND OR DETAILED INFORMATION:

The Parks and Recreation Department has engaged a landscape architect, the Architerra Group, to complete three concept designs that include cost estimates to renovate, project water and labor savings, and project amount of time to pay for capital costs with water and maintenance savings. At 3.45 acres, Lilac Park costs almost $25,000 per year to water and about $7,000 a year to maintain. Working with staff, the landscape architect has defined three options, from minimalist conversion from turf to native to more involved and aesthetically pleasing improvements. All three options achieve significant water savings. These will be presented in the workshop for Council discussion, including renderings of what the landscape changes will look like after a couple of years to allow for successful establishment of native species. Input received may also inform future efforts at other similar sites maintained by the Parks and Recreation Department.

FISCAL IMPACT:

Cost estimates for three different options for turf to native conversion will be presented at the meeting.

SUGGESTED ACTION:

For discussion purposes only and possible direction.

Attachments

None