Fort Collins Transit Funding Study

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TRANSFORT

City of Fort Collins

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Introduction

Transfort's ridership was growing rapidly prior to the pandemic, and the agency has an ambitious list of projects and plans to expand transit service following the 2019 Transit Master Plan. However, Transfort's current funding sources are limited and obligated to existing service levels. This project considers how to establish new sources of funding to support Transfort and investigates new fare structures, new revenue sources and the implications of a fare-free system.

According to the Transit Master Plan, the long-term vision for transit is expanding service, improving frequency, and investing in regional transit enhancements. These transit improvements would be supported by implementation of new capital projects. To fulfil this vision, Transfort must expand staffing, invest in capital facility improvements, build new bus rapid transit (BRT) corridors, and add to the vehicle fleet, which requires new funding streams.

This report includes the following chapters:

Chapter 2: Stakeholder Outreach

- Summary of stakeholder outreach, including input from business, social services, city, and non-profit organizations carried out in the beginning of the project.

Chapter 3: Current Funding Analysis and Future Funding Needs

- Analysis of existing and forecasted funding needs. Funding needs include expenses for both existing and future operations and maintenance (O&M) as well as capital expenses. Forecasts are based on achievement of the 2040 vision established in the 2019 Fort Collins Transit Master Plan.

Chapter 4: Local Funding Need Estimates and Phasing for Operations and Capital Projects

- Presentation of the estimated local portion only and associated phasing to support implementation of service improvements and capital projects through 2040.

Chapter 5: Fare-Free Analysis

- Analysis of the potential benefits and tradeoffs of converting Transfort to fare-free to inform a strategic decision regarding transit fares in Fort Collins.

Chapter 6: Fare-Free Survey Findings

- Summary of the findings from stakeholder and community outreach conversations about implementing fare-free system-wide and long-term.

Chapter 7: Future Funding

- Presentation of potential new funding sources to support expanded operations and capital projects, as well as evaluation of the suitability and practicality for implementation

02 Stakeholder Outreach

This chapter summarizes initial and ongoing stakeholder outreach activities and input received from the business community, educational institutions, non-profits, and governmental and municipal stakeholders.

Key Stakeholder Input

To solicit input on the challenges, needs, and opportunities for developing the Fort Collins Transit Funding and Fare Free Study, the project team interviewed key stakeholders from throughout the Fort Collins community. The process included a presentation to stakeholders, the creation of key questions, and conversations with stakeholders.

Presentation to Stakeholders

The project team informed a variety of stakeholders, as shown in **Figure 1,** via a presentation describing the purpose and anticipated outcomes of this Transit Funding and Fare Free Study. It presented the current ridership and funding context, followed by an understanding of the needs and benefits of the funding and fare-free study. Between the vision already set forth by the 2019 Transit Master Plan and the identified operating, maintenance, and capital project needs, it is evident that increased funding will be required to achieve the goals of the Transit Master Plan and meet the expectations of the community.

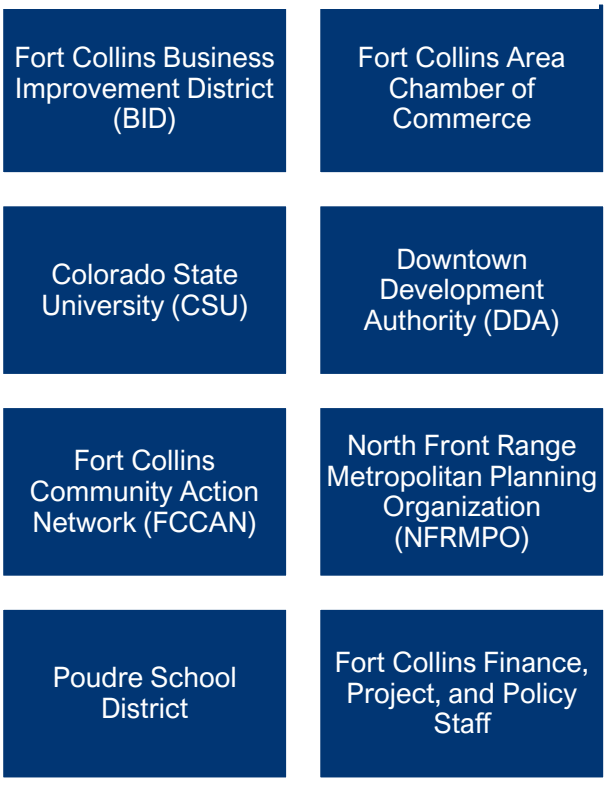
Stakeholder Interviews

Stakeholders were interviewed for their input related to their specific points of view. The interview questions sought to understand stakeholder's perception of current Transfort services and potential social and economic opportunities. Specifically, project staff asked which routes need most improvement and how people feel about different funding efforts such as the creation of new taxes or the transition to a fare-free system. Staff also asked how interviewees prioritize transit needs compared to other community needs to determine importance of transit to members of the Fort Collins community.

Stakeholder Responses

Stakeholders gave a variety of useful input that helped guide the planning process. The following sections summarize key themes and input from stakeholder groups:

Figure 1. Primary Stakeholders



Input from Business Stakeholders

Midtown Business Improvement District (BID)

Members of the Midtown BID believe that Transfort needs to serve all demographics, especially those predominately found in Fort Collins like students of all ages (grade school to college students). They also believe that there needs to be more frequent bus service and buses serving more places. Finally, a concern that the BID has with transit service, free or not, is use of the system by people with addiction issues or mental health instability and the impacts of safety of other riders (perceived or otherwise).

Downtown Development Authority (DDA)

Members of the DDA gave input on the need for transit development to coincide with development of walkable and transit-oriented development (TOD) environments. They see value in increasing access to transit services and would like ridership to return to pre-pandemic levels.

Fort Collins Area Chamber of Commerce

Members of the Chamber were very interested in the study and gave input on service quality, funding mechanisms, and community support. Many agreed that transit should be a priority for Fort Collins, but many chamber members feel that current service quality and availability do not meet the needs of the community, especially for employees of chamber members. They want Transfort to invest in better transit for local employees, as opposed to what they see as a current transit system set up to serve students. Several chamber members feel that the current system needs to be retooled to better serve commuters/business patrons before considering fare-free or a new tax. Most understand the ridership and convenience benefits of fare-free. Many members feel new taxation mechanisms should only be considered after the service demonstrates a stronger value for the entire community.

Input from Social Services and Education Institute Stakeholders

Colorado State University (CSU)

CSU staff see the value in expanding access through extending regional routes to the broader community and through the fare-free initiative. Transit services already connect many CSU students, staff, and facilities, and extending these services could benefit the communities that currently do not have direct access to the campus services. In fact, CSU is willing to partner with Transfort by providing transit infrastructure or facilities on campus

property. CSU also indicates a willingness to work with Transfort on continued partnership under a fare-free model, pending continued data sharing with CSU staff on student/staff ridership, as these data are valuable to CSU transportation planning.

Poudre School District

School district staff are in favor of free fares and see the benefit of expanding transit services and passes to their constituents. They indicate that the current fare-free program for students has benefited student mobility and access. Some of the main concerns they would like to see addressed include expanding services into all school areas to serve staff, school-of-choice students, and extracurricular activities.

Fort Collins Community Action Network (FCCAN)

Members of the FCCAN, a network of community organizations involved in justice, poverty, and equity, are strong proponents of keeping the Transfort system fare-free. In addition to the economic benefits that their community members receive from free fares and improved mobility and access, they believe that free fares also provide wider opportunities for the public to use transit services. FCCAN also offered to review plans that emerge from this study to ensure that they adequately address social equity and to distribute further surveys to their constituents.

Input from Municipal Stakeholders

Fort Collins Finance, Capital Projects, and Policy Staff

Project staff interviewed several key staff members of the City of Fort Collins Financial Services Department to understand possible funding opportunities for Transfort projects. From a municipal perspective, there are several options for additional Transfort funding including bonding, fees, sales tax, and excise taxes.

Interviewees are interested in how to incorporate the Transfort funding needs identified in this study into the current and evolving citywide conversation about funding needs for parks, housing, climate, and other pressing areas. Staff members are excited about the outcomes of this transit funding study, especially the updated funding needs for operating and capital projects. There may be opportunities for a dedicated funding source or to incorporate transit into new broad-based funding mechanisms that advance multiple city objectives. Whatever the mechanisms ultimately included in the outcomes of this study, staff believe it is important to involve the public in the decision-making process as early as possible.

North Front Range Metropolitan Planning Organization (NFRMPO)

NFRMPO staff advocate extending Transfort service regionally to accommodate commuters and visitors. To do so, they believe Transfort should increase frequency and reliability of services. Staff also noted that these initiatives can be extremely successful when they are brought to the public early, locally, and include efforts to combat greenhouse gas emissions.

Other City Officials, Boards, and Committees

Throughout the study, project staff informed members of various City of Fort Collins boards and committees about the study process and offered opportunities to provide input. These included the Transportation

Board, Finance Committee, Dial-a-Ride and Transit Advisory Committee (DARTAC), and Core Revenue Team. Project staff also presented to City Council twice during the study process.

STAKEHOLDER TAKEAWAYS

- **The business stakeholders support expanding services and eventually making them fare-free, pending walkable, affordable urban development. They believe Transfort should improve transit system services/access to support mobility for local employees before considering new revenue sources like taxes.**
- **The social service and education stakeholders favor a fare-free system, especially to serve students and under-represented populations. They believe that beyond addressing fares for students and low-income communities, transit services should also support access for staff, school-of-choice students, and to extracurricular activities and events.**
- **The municipal stakeholders see the benefit of a blended approach to funding, such as a fare-free for certain users coupled with a broad-based tax to support multiple city initiatives. These stakeholders wish to involve the public early and often during the process and incorporate the outcomes of this study into broader city efforts to diversify funding.**

03 Current Funding Analysis and Future Funding Needs

This chapter summarizes Transfort's existing and forecasted funding needs. Funding needs include expenses for both existing and future operations and maintenance (O&M) as well as capital expenses. Forecasts are based on achievement of the 2040 vision established in the 2019 Fort Collins Transit Master Plan.

Transfort Current Funding

Operating Budget

Table 1 shows Transfort's annual operating budget for the past seven years (2015 through 2021). The upper half of the table organizes annual operating revenue by source. The largest funding sources over the last several years include the City of Fort Collins, the federal government, and contributions from Colorado State University (CSU). The city funding is largely from the general fund, which partly explains the variance from year to year. Federal funding accounts for most of the remaining year-to-year variance and varies annually due to grants and other federal assistance programs.

The lower half of **Table 1** summarizes Transfort's annual operating expense by category. The operating budget includes revenue and expenses for all fixed-route (including MAX) and dial-a-ride services.

Table 1. Transfort Annual Operating Budget 2015-2021

	2015	2016	2017	2018	2019	2020	2021
Operating Revenues							
City of Fort Collins	$7,310,000	$7,206,000	$9,045,000	$8,289,000	$9,963,000	$2,700,000	$7,628,000
Federal	$3,357,000	$4,061,000	$7,842,000	$4,746,000	$5,525,000	$11,341,000	$1,730,000
Partnership Contributions (such as CSU, Private)	$832,000	$422,000	$2,381,000	$2,199,000	$2,287,000	$2,356,000	$2,153,000
Intergovernmental (COLT, FLEX, other)	$1,002,000	$1,100,000	$479,000	$696,000	$1,248,000	$972,000	$1,050,000
State Funding (CDOT)	$0	$37,000	$0	$365,000	$800,000	$200,000	$190,000
Fares and Passes	$566,000	$742,000	$707,000	$494,000	$508,000	$164,000	$10,000
Ads, Interest, Misc.	$302,000	$96,000	$330,000	$405,000	$492,000	$476,000	$618,000
Total Revenues	$13,369,000	$13,664,000	$20,784,000	$17,194,000	$20,823,000	$18,209,000	$13,379,000
Operating Expenses							
Compensation & Benefits	$7,756,000	$8,759,000	$9,281,000	$9,722,000	$9,666,000	$9,714,000	$8,857,000
Vehicle & Property Maintenance, Repair, Services	$2,596,000	$2,967,000	$3,141,000	$3,697,000	$3,650,000	$3,248,000	$3,002,000
Professional & Contract Services	$2,246,000	$2,399,000	$2,435,000	$2,710,000	$2,687,000	$1,876,000	$2,486,000
Fuel	$991,000	$1,042,000	$1,119,000	$1,162,000	$1,172,000	$928,000	$879,000
Office & Other Supplies	$116,000	$121,000	$127,000	$191,000	$172,000	$188,000	$114,000
Funding Transfers & Misc. Expenses	$733,000	$13,000	$244,000	$83,000	$401,000	$1,298,000	$1,245,000
Total Expenses	$14,438,000	$15,301,000	$16,347,000	$17,565,000	$17,748,000	$17,252,000	$16,583,000
Net	-$1,069,000	-$1,637,000	$4,437,000	-$371,000	$3,075,000	$957,000	-$3,204,000
Farebox Recovery	3.9%	4.8%	4.3%	2.8%	2.9%	1.0%	0.1%

Source: City of Fort Collins

Table 2 illustrates Transfort's annual capital budget for the past seven years (2015 through 2021). The upper half of the table organizes annual revenue by source and the lower half summarizes annual expenses by category. The Community Capital Improvement Program (CCIP) allocates a portion of the quarter-cent sales tax passed by voters in 2015 to bus stop improvements and will expire in 2025. Capital expenses include buses, bus stop improvements, and other transit facility improvements.

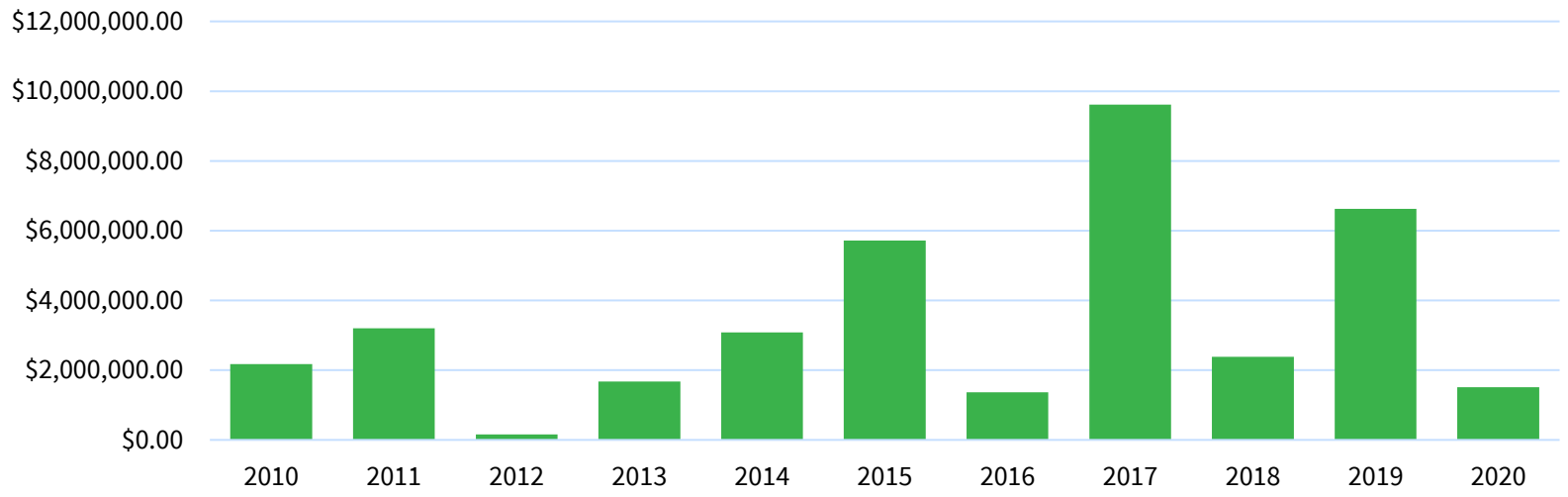
Table 2. Transfort Annual Capital Budget 2015-2021

	2015	2016	2017	2018	2019	2020	2021
Capital Revenues							
Federal	$4,143,000	$82,000	$631,000	$910,000	$4,067,000	$2,208,000	$1,171,000
CCIP	$0	$1,000	$172,000	$2,000	$217,000	$1,123,000	$548,000
Other Miscellaneous	$183,000	$11,000	$5,000	$42,000	$968,000	$16,000	$13,000
Total Revenue	$4,326,000	$94,000	$808,000	$954,000	$5,252,000	$3,347,000	$1,732,000
Capital Expenses							
Vehicles & Accessories	$4,843,000	$0	$0	$0	$5,510,000	$39,000	$1,764,000
CCIP	$0	$0	$172,000	$2,000	$149,000	$533,000	$454,000
Other Capital Outlay	$567,000	$896,000	$658,000	$1,183,000	$781,000	$877,000	$556,000
Total Expenses	$5,410,000	$896,000	$830,000	$1,185,000	$6,440,000	$1,449,000	$2,774,000
Net	-$1,084,000	-$802,000	-$22,000	-$231,000	-$1,188,000	$1,898,000	-$1,042,000

Source: City of Fort Collins.

Annual Transfort capital expenditures over the past decade varied considerably each year with no discernable pattern, as shown in **Figure 2**. In 2012, Transfort spent less than $200,000 on capital expenditures, while the agency spent nearly $10 million in 2017. This is not uncommon in the transit industry, as there may be a year with many rolling stock replacements or a large capital construction project. The largest total annual capital expenditure over the analysis period was $8.3 million in 2017 to build infrastructure. However, on average, Transport spent $3.4 million annually on capital expenditures during the 2010-2020 period.

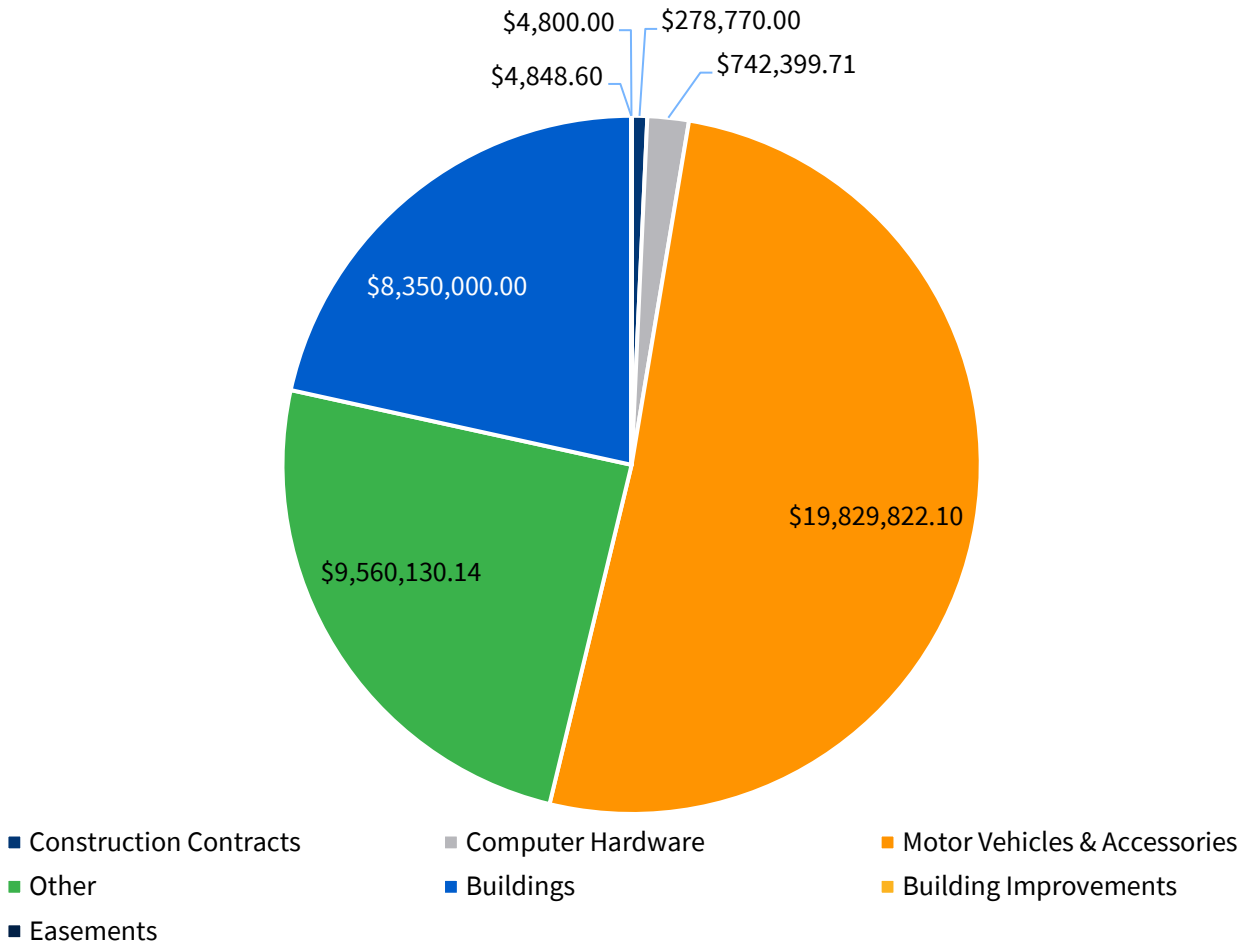
Figure 2. Transfort Capital Expenditures, 2010-2020



Source: City of Fort Collins.

As shown in **Figure 3** Transfort assigns all of its capital expenditures to one of seven different categories, including an "Other" category (parking, capital maintenance, etc.). Over half of the agency's capital expenditures during the 10-year period were for motor vehicles and accessories, with the remainder largely for construction contracts and other items (parking, capital maintenance, etc.).

Figure 3. Transfort Capital Outlays by Category, 2010-2020



Transfort Performance Metrics

Ridership Metrics & Trends

Table 3 shows annual ridership, expenses, revenue hours, revenue miles, and associated ridership metrics for the entire Transfort system from 2015 to 2020, including both fixed-route and dial-a-ride services. This data stems from data reported to the federal National Transit Database (2021). Data was provided by Transfort and only includes ridership metrics for fixed-route service, not dial-a-ride.

Table 3. Transfort Annual Performance and Operating Costs 2015-2021

	2015	2016	2017	2018	2019	2020	2021
Ridership	3,297,091	4,112,808	4,378,724	4,444,532	4,503,616	1,796,952	
Operating Expenses (reported to NTD)	$13,710,996	$15,217,405	$15,872,345	$17,025,121	$17,086,490	$14,075,860	
Revenue Hours	137,071	143,942	147,605	150,065	150,555	126,023	
Revenue Miles	1,706,151	1,810,797	1,815,737	1,870,828	1,876,398	11,516,609	
Trips per Hour	24.1	28.6	29.7	29.6	29.9	14.3	#DIV/0!
Trips per Mile	1.9	2.3	2.4	2.4	2.4	0.2	#DIV/0!
Cost per Hour	$100	$106	$108	$113	$113	$112	#DIV/0!
Cost per Mile	$8.04	$8.40	$8.74	$9.10	$9.11	$1.22	#DIV/0!
Cost per Passenger	$4.16	$3.70	$3.62	$3.83	$3.79	$7.83	#DIV/0!

Source: National Transit Database.
*2021 numbers provided by Transfort and ridership, revenue hours, and revenue miles does not include Dial-a-Ride. However, expenses are for the entire system. No data are available for 2021 cost per hour, cost per mile, or cost per passenger.

Table 4 summarizes the ridership and productivity measures (such as cost per hour and cost per passenger) for each route Transfort operated in 2019, the last full year of service before the COVID-19 pandemic disrupted service and ridership patterns.

Table 4. 2019 Ridership and Productivity by Route

Route	Ridership (one-way passenger trips)	Revenue Hours	Revenue Miles	Trips per Hour	Trips per Mile	Cost per Mile	Cost per Passenger
2	219,974	5,805	75,279	37.9	2.9	$8.75	$3.00
3	403,615	6,042	53,227	66.8	7.6	$12.88	$1.70
5	91,119	5,368	49,162	17.0	1.9	$12.39	$6.69
6	98,896	6,000	89,703	16.5	1.1	$7.59	$6.89
7	160,556	7,721	94,721	20.8	1.7	$9.25	$5.46
8	213,058	5,610	57,134	38.0	3.7	$11.14	$2.99
9	42,281	1,993	28,019	21.2	1.5	$8.07	$5.35
10	34,426	1,957	23,264	17.6	1.5	$9.55	$6.45
11	13,746	739	14,785	18.6	0.9	$5.67	$6.10
12	51,211	4,592	67,239	11.2	0.8	$7.75	$10.18
14	91,158	3,271	49,789	27.9	1.8	$7.46	$4.07
16	123,010	7,668	97,321	16.0	1.3	$8.94	$7.07
18	106,617	3,871	38,046	27.5	2.8	$11.55	$4.12
19	88,765	4,302	54,867	20.6	1.6	$8.90	$5.50
31	383,573	4,396	29,659	87.3	12.9	$16.82	$1.30
32	153,126	2,903	34,343	52.7	4.5	$9.59	$2.15
33	11,036	1,827	22,025	6.0	0.5	$9.41	$18.78
81	88,436	3,124	31,916	28.3	2.8	$11.11	$4.01

Route	Ridership (one-way passenger trips)	Revenue Hours	Revenue Miles	Trips per Hour	Trips per Mile	Cost per Mile	Cost per Passenger
92	3,983	69	907	57.9	4.4	$8.60	$1.96
Flex	205,315	12,874	300,304	15.9	0.7	$4.87	$7.12
Gold	7,710	834	15,139	9.2	0.5	$6.25	$12.27
Horn	417,512	10,717	106,327	39.0	3.9	$11.44	$2.91
MAX	1,448,495	30,576	314,203	47.4	4.6	$11.04	$2.40
Total	**4,457,618**	**132,260**	**1,647,378**	**33.7**	**2.7**	**$9.11**	**$3.37**
Specials*	10,288	202	1,287	50.9	8.0	$17.83	$2.23
Total w/ Specials	**4,467,906**	**132,462**	**1,648,666**	**33.7**	**2.7**	**$9.12**	**$3.36**

Source: City of Fort Collins.
* Specials are non-reoccurring routes for special events, extra service needs, and overload buses.

Future Conditions & Needs

This section describes the methodology and findings of Transfort's annual capital and operating cost forecast through the year 2040. This includes costs to operate the current system, fill unmet staffing needs, complete major capital projects, and expand the system to achieve the service levels envisioned for 2040 in the 2019 Transit Master Plan.

Operations & Maintenance

The methodology to forecast annual operations and maintenance costs includes four basic elements:

1. Baseline cost to operate pre-pandemic services.
2. Cost of the current unmet staffing need identified by Transfort.
3. Cost of gradually growing service levels to meet the 2040 vision of the Transit Master Plan.
4. Forecasted annual inflation.

The following sections detail specific steps in the forecast.

2022 Baseline Operations Cost Estimates

Transfort reduced service on its transit system in 2020 due to the disruptions in travel behavior caused by the COVID-19 pandemic. Current 2022 service levels are still below pre-pandemic levels largely due to a persistent driver shortage. Transfort seeks to reestablish service but lacks sufficient drivers and staff. This staffing shortage is prevalent across most transit agencies (and many industries) across the country.

For long-range planning purposes, this analysis assumes a temporary reduction in service and, eventually, resumption of pre-pandemic service levels. Since 2019 was the last full year of operations pre-pandemic, 2019 service levels will represent the baseline operations for forecasting purposes. To estimate 2022 cost of operating service at 2019 levels, the analysis factors in inflation, which has increased by approximately 10% since 2019 (according to the U.S. Bureau of Labor Statistics inflation calculator), as shown in the formula below.

$$(2019\ Operating\ Expenses) \times (10\%\ inflation) = 2022\ Operating\ Expenses$$

$$\$17{,}748{,}000 * 1.1 = \$19{,}523{,}000$$

Using this methodology, the estimated cost of operating 2019 Transfort service levels in 2022 dollars is $19.52 million. This does not factor in Transfort's existing unmet staffing need, described below.

Unmet Staffing Needs

Transfort identified an existing unmet staffing need of 23 additional positions to support existing operations, planning, and a host of administrative-related needs.

Table 5 lists those positions, including the estimated cost of salary and benefits. The total estimated cost to fill existing unmet staffing needs is $2 million.

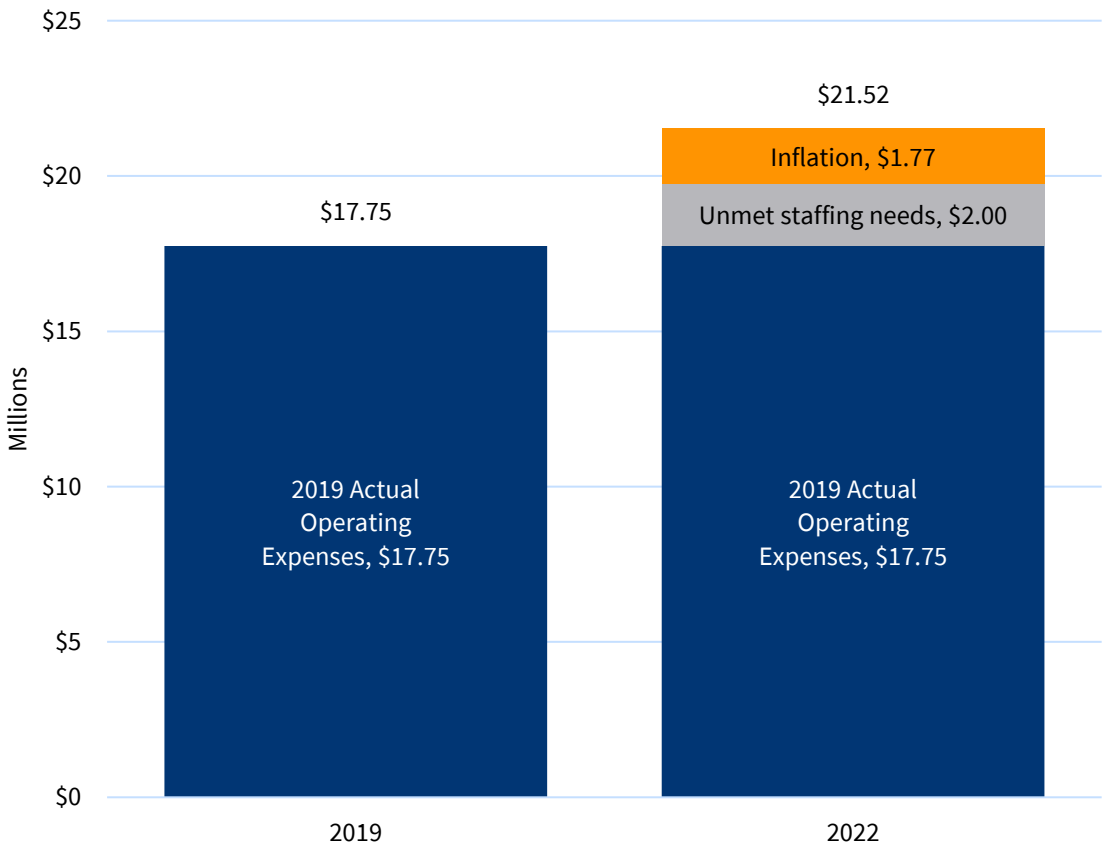
Table 5. Unmet Transfort Staffing Needs

New Position	FTE	Appx. Salary & Benefits
Supervisor	2	$100,000
Project Manager	1	$100,000
DAR Coordinator	1	$70,000
Analyst II, Data	1	$110,000
IT/Data Technician	2	$70,000
Planner, Transit	1	$90,000
TSO Supervisor	1	$90,000
TSO Trainer	2	$90,000
Officer II, Enforcement	4	$70,000
Coordinator	2	$70,000
Specialist, Customer Support	1	$80,000
Administration Senior Supervisor	1	$100,000
Senior Supervisor, Technology	1	$120,000
Database Administrator	1	$110,000
Assistant City Attorney I	0.5	$120,000
Buyer II	0.5	$90,000
Accountant II	1	$90,000
Total	23	

Source: Transfort.

Once factoring in both inflation and the cost of filling the unmet staffing needs, the estimated annual operating expense to provide 2019 transit service levels is $21.52 million (in 2022 dollars), as shown in **Figure 4.**

Figure 4. Estimated 2022 Adjusted Operating Expenses to Support 2019 Service Levels (in millions of dollars)



Operating Cost Allocation Model

To provide the baseline service that was in operation pre-pandemic, Transfort will have an estimated annual operating expense of $21.52 million. Building upon this figure, Fehr & Peers developed a cost allocation model to forecast the additional annual cost of gradually expanding the service through year 2040 to achieve the goals in the Transit Master Plan. This cost allocation model separates out variable operating costs that are needed whenever the agency increases service (such as drivers, mechanics, dispatchers, and fuel) from fixed costs, that grow at a much smaller rate in response to service expansion (such as planning, administration, overhead, etc.). Identifying costs in this manner provides a more accurate forecast that considers the efficiencies of growth within an already established transit system (e.g., some costs do not grow at the same rate as service expands).

Table 6 summarizes the inputs and outputs of the cost allocation model.

Table 6. Cost Allocation Model

Cost Allocation Model	
2019 Cost Per Revenue Hour	$117.88
Total 2019 Operating Expenses	$17,748,000
2019-2022 Inflation	10%
2022 Operating Expenses (2019 service levels)	$19,522,800
Funding Gap (2022 dollars)	$2,005,000
2022 Operating Expenses Target	$21,527,800
Percent Variable Cost 2022 Budget	69%
2022 Fixed Cost	$8,140,743
Total 2022 Variable Cost (2019 service)	$13,387,057
Total 2019 Fixed Route Revenue Hours	132,462
Total 2019 Demand Response Revenue Hours	18,093
Total 2019 Revenue Hours	**150,555**
2022 Variable Cost per Hour (2019 service)	**$88.92**
Fixed Cost Factor	**1.33**
Inflation Rate	**3%**

For this exercise, the City of Fort Collins estimated that approximately 69% of existing operating expenses relate to the variable cost of providing service, while 31% are for fixed costs. Therefore, this analysis multiplied the 2022 total operating expenses of $19.52 million, excluding the unmet need, by 0.69 to arrive at $13.39 million, which represents the variable cost in 2022 dollars of providing service at the 2019 service levels.

$$2022\ Variable\ Cost\ (\$13.39\ mil.) = Operating\ Expenses\ (\$19.52\ mil.) \times Variable\ Cost\ Percent\ (69\%)$$

The 2022 variable cost was then divided by the total 150,555 revenue hours in 2019 to arrive at a variable operating cost per hour of $88.92, which was one figure used to forecast the cost of expanding service.

$$Variable\ Cost\ per\ Hour\ (\$88.92) = 2022\ Variable\ Cost\ (\$13.39\ mil.) \div 2019\ Service\ Hours\ (150{,}555)$$

The 2022 estimated fixed cost was calculated by taking the portion of operating expenses ($19.52 million) that are fixed costs (31%) and adding that to the estimated cost of the unmet staffing need ($2 million) as shown below:

$$\begin{aligned} &Fixed\ Cost\ (\$8.70\ mil.) \\ &= [\ Operating\ Expenses\ (\$19.52\ mil.) \\ &\times Fixed\ Cost\ Percent\ (69\%)] \\ &+ Unmet\ Staffing\ Need\ (\$2\ mil.) \end{aligned}$$

While the fixed cost is not greatly sensitive to small increases in additional service, over time, even those costs must grow to support expanded service. However, the rate of growth of fixed costs, called the ***fixed cost factor***, is smaller than the rate of growth of variable costs. Based on research of Transfort and other transit agencies, the analysis estimated a fixed cost factor of 1.33. For forecasting purposes, this means that fixed costs grow at a rate of 33% of variable costs.

The last input used to forecast operating expenses is inflation, which is estimated to be 1.5% - 3% annually.[1]

Forecast Operations Cost

This analysis estimated Transfort annual operating costs through 2040 by summing the cost of the following three elements: existing operations (2019 service levels), new service, and inflation.

Existing Operations

Existing operations were calculated as described above and include the cost to operate 2019 service levels in 2022 dollars along with the estimated cost to fill the existing unmet staffing need. This is estimated at $21.5 million.

Cost of New Service

The annual cost of providing new service represents the growth in both variable costs and fixed costs of adding new service. The growth in variable cost was calculated by multiplying the forecast growth in revenue service hours from the 2040 vision of the Transit Master Plan by the 2022 variable cost per hour of $88.92. The growth in fixed cost was calculated by growing the 2022 fixed cost at a rate of 33% of the rate of growth of the variable cost.

The Transit Master Plan provides both a five-year plan and a 2040 plan. To achieve the five-year plan, revenue service hours would need to grow by 34% from 2019 levels (excluding dial-a-ride service but including new micro-transit service). To achieve the 2040 Plan, revenue service hours would need to grow by 96% from 2019 levels (excluding dial-a-ride service but including new micro-transit service). It is assumed that given pandemic disruptions, Transfort would achieve the five-year plan by 2027.

[1] While 2021/2022 inflation is at historic highs, most surveys by the Federal government (Congressional Budget Office, Federal Reserve), forecast inflation to return to pre-pandemic levels (~2-3%) by 2024. https://www.cbo.gov/system/files/2020-07/56442-CBO-update-economic-outlook.pdf, https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/inflation-forecasts

Forecasted costs in this report were therefore developed for two planning years: 2027 and 2040. To estimate the total cost of new service in intermittent years, it was assumed that costs would grow at the same annual rate as the two respective horizon years, which results in linear average annual growth to each horizon year.

Chapter 4 provides a more detailed look at near-, mid-, and long-range funding needs, along with estimations of local funding only, in contrast to the analysis of averaged total revenue needs below.

Table 7 shows the growth in revenue hours, variable costs, fixed costs, and total costs for the two horizon years. Note that these growth percentages assume 2022 dollars and do not account for inflation.

Table 7. 2022-2040 Growth Rates for 2027 and 2040 Horizon Years

	2022 – 2027 Growth	2022-2040 Growth
Revenue Hours Growth	34%	96%
Variable Cost Growth	30%	84%
Fixed Cost Growth	9%	23%
Total Cost Growth	22%	61%

Inflation

Two forecast models were developed to show the variation in cost, depending on the average inflation rate through year 2040. The lower bound assumes an annual inflation rate of 1.5% and the upper bound assumes an annual inflation rate of 3%. The actual inflation rate is likely to fall somewhere in this range.

Summary

Based on these inputs, the annual operating cost to provide new Transfort service to achieve the vision in the 2040 Transit Master Plan is expected to be $4.8 million by 2027 and $13.1 million by 2040 in 2022 dollars.

When factoring in inflation the 2040 annual operating cost of providing existing (2019) service levels plus new service, is anticipated to be $43 million (if inflation is assumed to grow at 1.5% annually) to $54 million (if inflation grows by 3% annually) in 2040 dollars.

Table 8 summarizes the percent increase by 2040 in revenue hours and cost under the two inflation scenarios. **Figure 5** and **Figure 6** illustrate the annual operating cost estimate through 2040 to achieve the service levels in the 2040 master plan under the two inflation scenarios.

Table 8. 2022-2040 Growth Rates Assuming 1.5% and 3% Inflation

	2022-2040 Growth	2022-2040 Growth with 1.5% Inflation	2022-2040 Growth with 3% Inflation
Revenue Hours Growth	96%		
Variable Cost Growth	84%	141%	214%
Fixed Cost Growth	23%	34%	47%
Total Cost Growth	61%	99%	151%

Figure 5. Forecast Transfort O&M Expenses with 3% Inflation

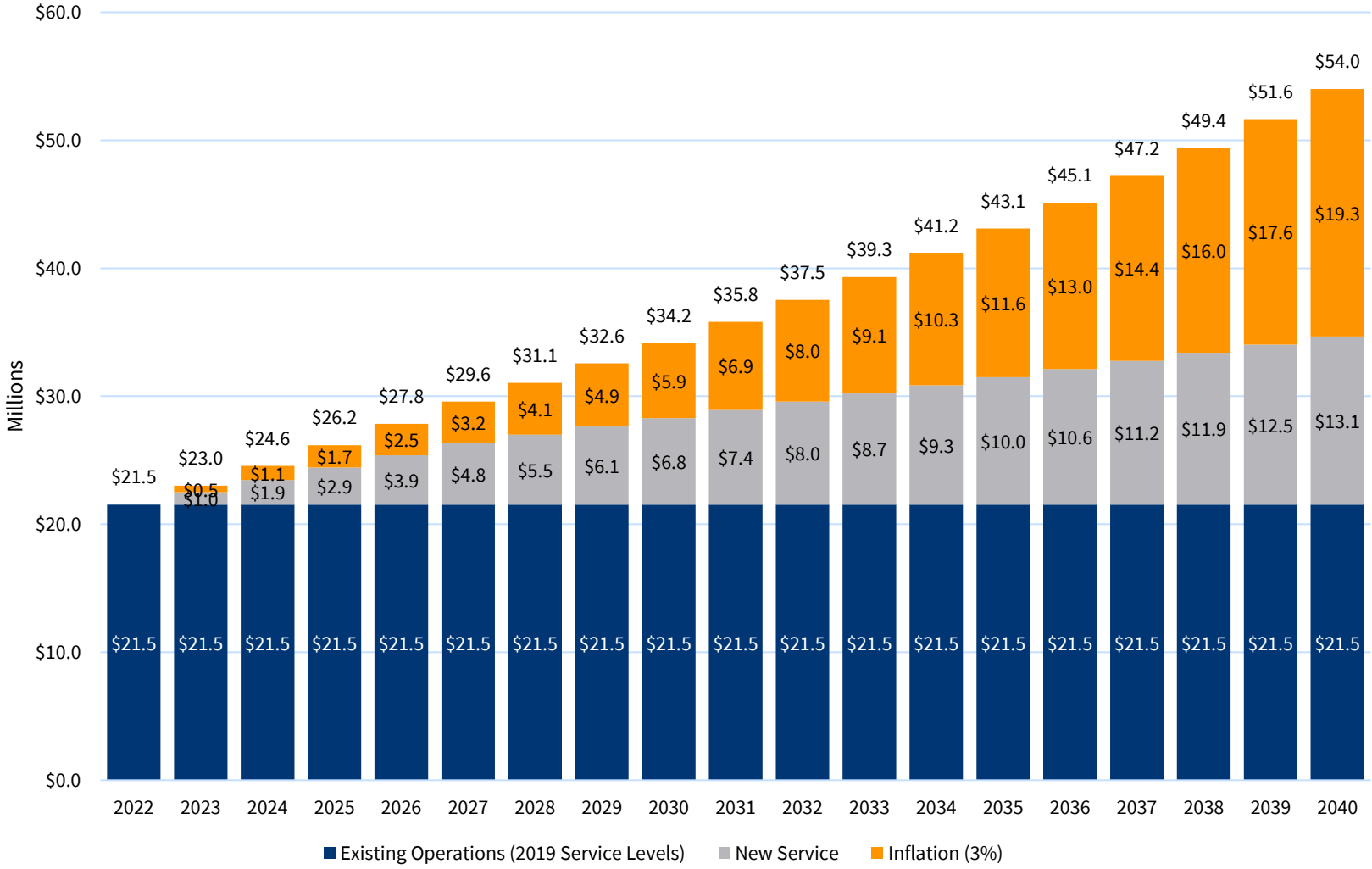
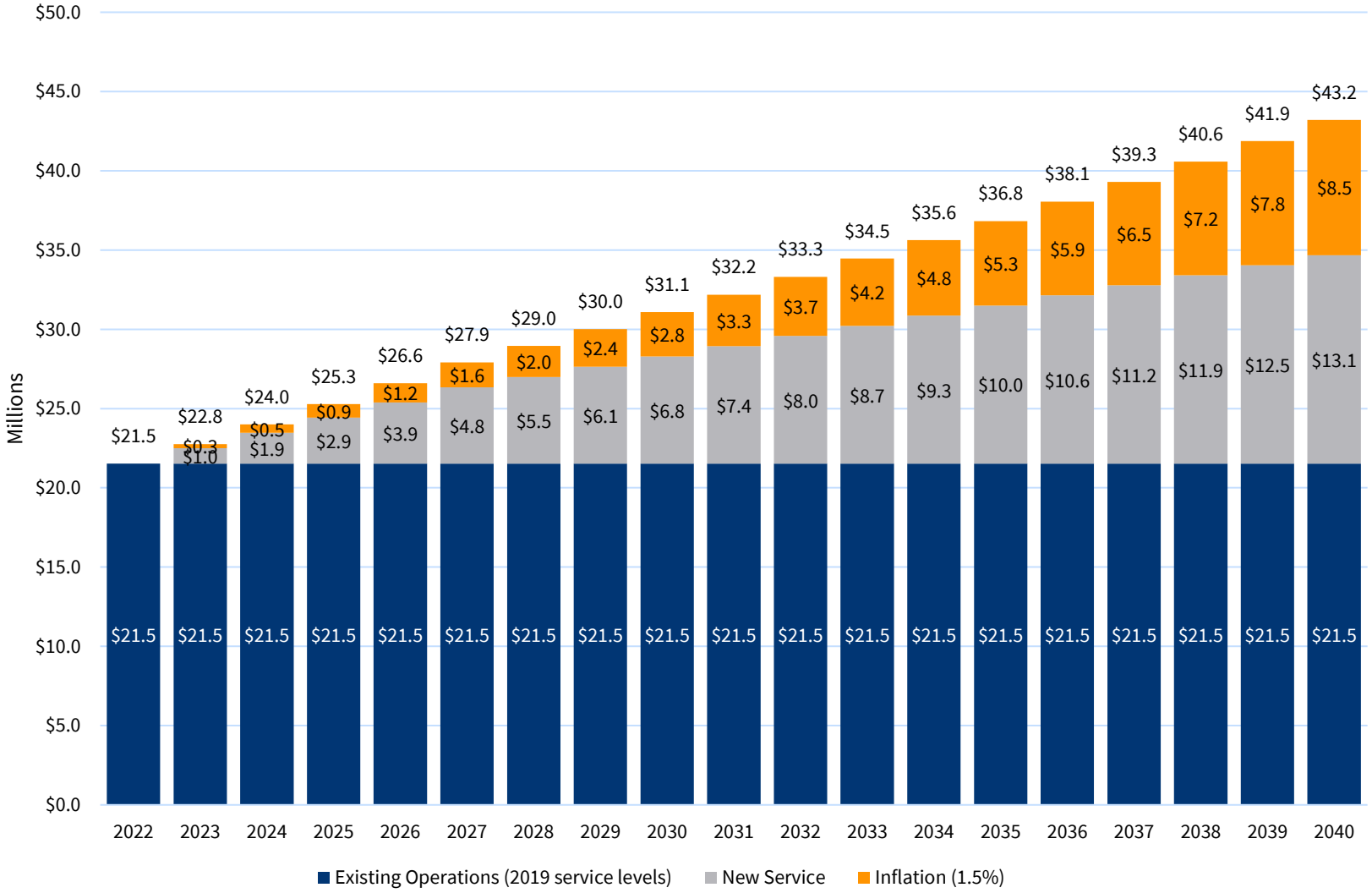


Figure 6. Forecast Transfort O&M Expenses with 1.5% Inflation



Capital Costs

A key component of the Transit Funding Study was completion of a comprehensive assessment of Transfort's capital needs through 2040. As the agency considers potential changes to its revenue sources, it is essential to understand the financial resources necessary for Fort Collins to reach the vision laid out in the 2019 Transit Master Plan.

Updates to Capital Project List and Costs

The 2019 plan provided high-level implementation cost estimates for eleven major capital projects. This study assessed each of those projects in more detail to provide more refined cost estimates shown in

Table 9. The updated cost estimates also account for capital-related progress and decisions made by Transfort since adoption of the Transit Master Plan. The updated cost range for Transfort's major capital projects through 2040 is $333 million to $373 million, compared to the earlier estimate from the 2019 Transit Master Plan of $261 million to $298 million.

Table 9. Updated Project List & Costs

Project Description	Implementation Cost (2019 Master Plan Estimate)	Implementation Cost (2023 Funding Study Update)	Assumed Local Match Percentage	Implementation Timeframe
Transit Fleet Expansion & Renewal	$85 million - $95 million	$115 million	20%	Near/Mid/Long
Information Technology/Fare Integration Technology	$10 million - $20 million	$10 million - $20 million	20%	Near/Mid/Long
Operations & Maintenance Facility Expansion	$20 million - $30 million	Eliminated[2]	-	-
North Transit Center	-	$35 million - $65 million	50%	Near
Downtown Transit Center Upgrades	$3 million - $10 million	Eliminated	-	-
Mobility Hubs	$33 million	$2.5 million	50%	Near to Mid

[2] As of 2023, a Needs Assessment is underway to determine the need for expansion of the Operations & Maintenance Facility and to identify ways to improve safety procedures. Once the findings of the Needs Assessment are made, funding can be shifted from the North Transit Center to the Operations & Maintenance Facility as needed.

Bus Stop Enhancements	$5 million	$11 million	50%	Near/Mid/Long
North College BRT Corridor	$10 million	$21 million	50%	Mid to Long
West Elizabeth BRT Corridor	$28 million	$99 million	50%	Near
Harmony Road BRT Corridor	$53 million	$79 million	50%	Long
Speed & Reliability Improvements	$10 million	$5 million	50%	Near/Mid/Long
Total Costs of Items Above	$261 million - $298 million	$333 million - $373 million		

Source: Transfort, FHU.

On an annualized basis, a total average capital need of $353 million between 2023 and 2040 equates to $19.5 million in total capital costs per year. Chapter 4 presents a detailed analysis of capital funding needs and associated phasing.

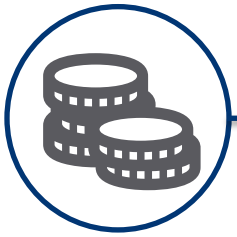
Conclusion

This chapter analyzes Transfort's current operating and capital budgets to forecast future operating and capital funding requirements to maintain pre-pandemic service levels and gradually grow service to achieve the levels identified in the Transit Master Plan by 2040. It considers the costs to address unmet staffing needs and gradually add new/expanded service, as well as the impact of inflation. This forecast of funding needs to cover operations and capital expenses in the future informs the strategy to identify dedicated funding streams. Based on the data and analysis presented in this section, the major takeaways include:

Baseline Operating Cost

It would cost Transfort $21.58 million to operate 2019 Transfort service levels in 2022 dollars, including $2 million to fill unmet staffing needs.

Future Operating Cost



Transfort annual operating costs through 2040 were estimated by adding the cost of following three elements: existing operations (2019 service levels), new service, and inflation. To achieve the vision in the 2040 Transit Master Plan, Transfort is expected to spend approximately $4.8 million by 2027 and $13.1 million by 2040 in 2022 dollars. When factoring in inflation, the cost of providing existing (2019) service levels, and the cost of new service, **the annual operating cost in 2040 is anticipated to be $43 million** (if inflation is assumed to grow at 1.5% annually) **to $54 million** (if inflation grows by 3% annually) in 2040 dollars. **Much of the cost increase derives from inflation**, which represents $8.5 to $19.3 million of the total forecasted operating expenditures in 2040.

Future Capital Cost

Due to new project details, this report updates the estimate of Transfort's capital costs through 2040 from the 2019 Transit Master Plan's estimated $271 million to $308 million to a higher range of **$333 million to $373 million**. A total capital need of $353 million between 2023 and 2040 equates to $19.5 million in average total capital costs per year.

04 Local Funding Need Estimates and Phasing for Operations and Capital Projects

This chapter summarizes of the estimated local portion only and associated phasing to support implementation of service improvements and capital projects identified in the 2019 Transit Master Plan through 2040.

Methodology for Local Funding Needs and Phasing of Operational Service Expansion

Several assumptions were made to estimate future operational costs, which build upon those detailed in the *Current Funding Analysis and Future Needs Chapter 3.*

Service Expansion Assumptions

To estimate costs by time frame, project staff made assumptions about specific improvements to the transit system that would be implemented over time based on guidance in the Transit Master Plan. Near-term expansion of service is based on the 5-Year Plan in the Transit Master Plan. Project staff divided the remaining service improvements identified in the Transit Master Plan into mid-term and long-term, with the overarching assumption that the North College Bus Rapid Transit (BRT) will be implemented mid-term (2028–2033) and the Harmony Road BRT will be implemented long-term (2034-2040).

Near-Term Service Expansion (2022 – 2027)

- West Elizabeth BRT replaces Route 3 & 32
- Add vehicle on Route 6 for reliability
- Increase frequency on Drake from 30 to 15 mins
- Increase frequency on North College from 30 to 15 mins
- Increase off-peak frequency on Shields from 60 to 30 mins
- Add new route with 30 min frequency on Lemay/Trilby
- New southeast microtransit service
- Add additional trips to City of Boulder on the FLEX
- Add regional service to the town of Wellington

Mid-Term Service Expansion (2028 – 2033)

- North College BRT replaces Route 8
- Increase frequency on Route 5 from 60 to 30 mins, realign
- Increase frequency on Taft/Laporte from 60 to 30 mins, combine to new route
- Increase frequency for CSU-DT-Lincoln Route from 30/60 to 15 mins
- Increase frequency on Horsetooth (Route 12) from 60 to 30 mins, realign
- Increase frequency on Route 14 from 60 to 30 mins, realign
- New southwest microtransit service

Long-Term Service Expansion (2034 – 2040):

- Harmony BRT replaces Route 16
- Increase frequency on Timberline/Prospect from 60 to 15/30 mins, restructure route 18
- Add new route to Mountain Vista at 15/30 min frequency
- Increase frequency on Shields from 30 to 15/30 mins
- New northwest microtransit service
- Add Saturday FLEX Trips to Boulder
- Increase frequency on the Poudre Express
- Add regional service to the town of Laporte

Operational Local Funding Needs

Assumptions

Three basic funding assumptions were made to estimate future local funding needed to implement the service expansion outlined below:

Base Year Funding: Transfort's estimated operating budget for 2023 is $20.63 million, which will provide funding for pre-pandemic service levels (and includes Dial-a-Ride). Note: This is $1.11 million more than the $19.52 million that was assumed for 2022 (which was the baseline year used in the *Current Funding Analysis and Future Needs Chapter)* and will be used as the adjusted number for estimating local needs in this chapter. It is assumed that funding for this 2023 service budget will continue to be provided in the future using existing funding sources (i.e., existing annual contributions from Local, State, Federal, partnerships, etc.).

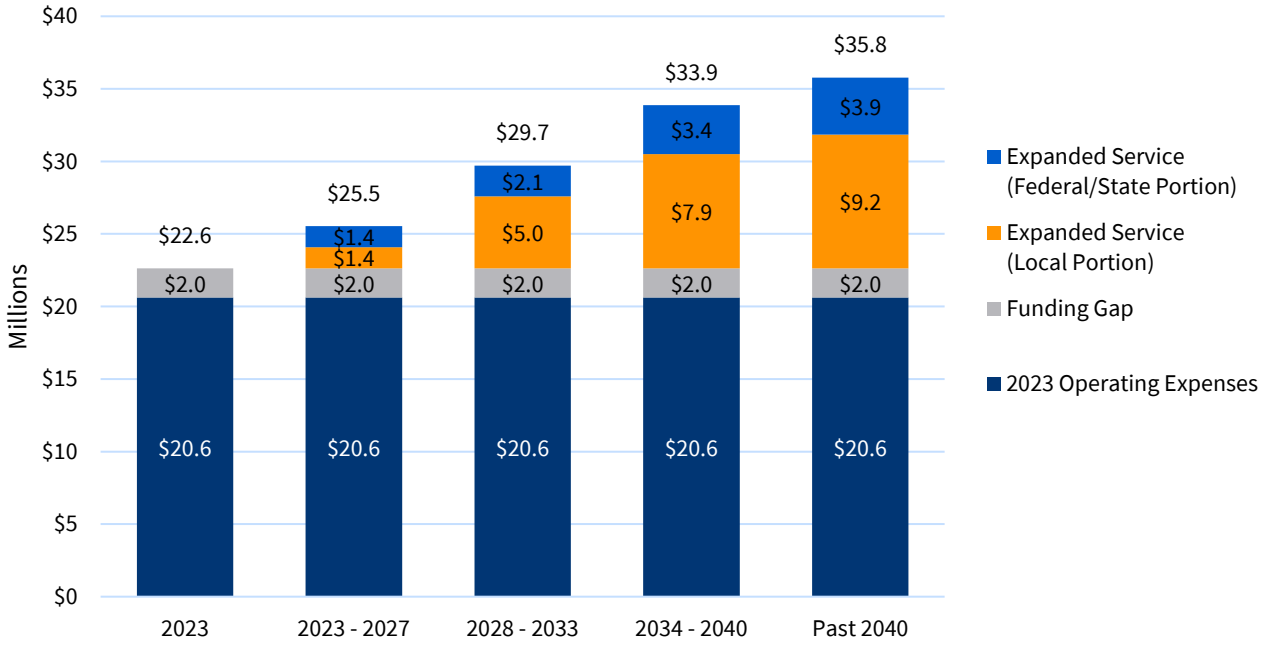
Funding Gap: As outlined in the *Current Funding Analysis and Future Needs Chapter*, Transfort identified a funding gap of $2 million to fund 20 unfilled positions to support current operations.

Federal Funding: Based on the recent federal funding packages, it was assumed that near-term, the federal government could fund about 50% of the operations cost of service expansion. This funding includes increases in Federal Transit Administration (FTA) 5307 small urban operating funding due to effects of population increases on the funding formula and increased funding in the recently passed Bipartisan Infrastructure Law. Mid-term and long-term (beyond 2027), it was assumed that the federal government could fund about 30% of the operations cost of service expansion based on historic precedent, meaning 70% of funds for the operating portion of service expansion would need to be provided from local sources.

Cost Estimates

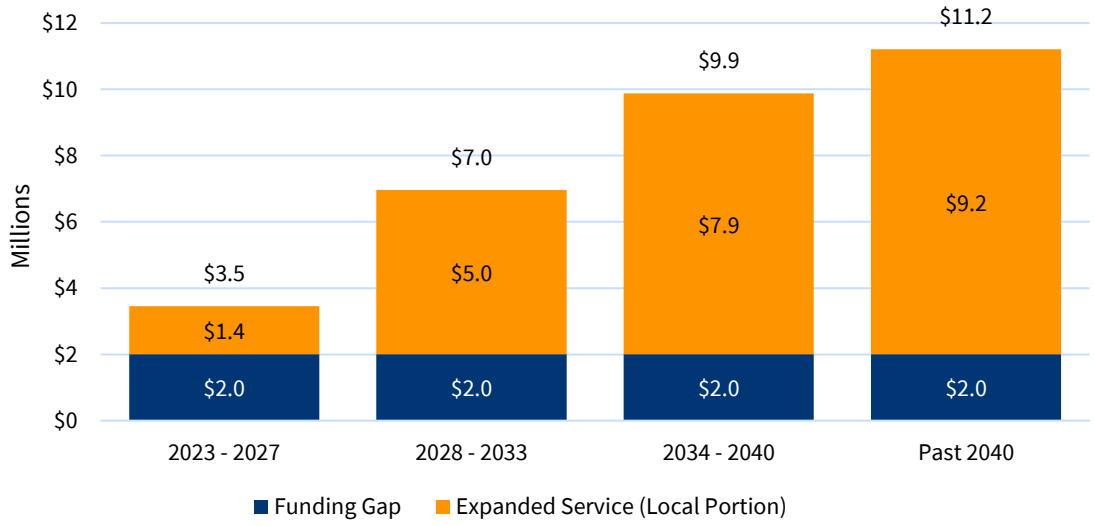
Figure 7 summarizes the total annual funding to support future transit operations by the four future time periods (near-, mid-, long-, and beyond 2040) to complete the Transit Master Plan. The average annual cost to fund operations of expanded transit service will increase from $22.6 million in 2023 to $35.8 million by 2040 (not including inflation). This increase in costs would cover gradual introduction of additional transit service through 2040. The cost estimates are organized into four categories.

Figure 7. Transfort Forecast Annual Operating Expenses by Time Period



Given that Fort Collins is most interested in understanding the additional local funding amount needed to implement the Transit Master Plan, **Figure 8** shows just the portion of new local operating funding that would be needed annually in each time period. This includes the existing funding gap of $2.0 million plus the local funding match to support expanded service which will increase over time as new service is added between now and 2040.

Figure 8. New Local Annual Operating Funds Needed for Future Transit Service Expansion



Near-term, it is estimated that Fort Collins will need an additional $3.5 million annually in local funding to support transit operations. By 2040, it is estimated that the city will need an additional $11.2 million annually in local funding to support operations of the transit system.

Methodology for Local Funding Needs and Phasing for Future Capital Projects

The methodology for forecasting local capital costs includes three basic elements:

1. Estimate required local match and federal participation shares.
2. Assign projects to near-, mid-, and long-term.
3. Project local share of capital needs between now and 2040.

Local Match Needs

To support an assessment of how much local match funding Transfort may be required to provide for the agency's planned capital investments through 2040, recent match percentages for various federal capital grant programs were reviewed to provide recommended match ratios to apply to Transfort's capital phasing plan. Federal capital grant program match ratio research focused on:

- Federal Transit Administration's (FTA) Small Starts Program – which provides federal funding for rail and bus rapid transit projects.
- FTA 5339(c) Low or No Emissions Vehicle Program - which provides funding for low or no emission bus equipment and supporting facilities and infrastructure.

FTA Small Starts Program

FTA recommended nine Small Starts projects for funding for Fiscal Years 2022 and 2023. These projects, which are all BRT corridors, range in total cost from $48 million to $290 million. Three of the nine projects were under $75 million and the other six projects were over $110 million.

- Average requested federal funding share across all the recommended projects was 54%, ranging from 45% to 65%.
- The three agencies proposing projects with total costs below $75 million each requested a federal funding share of over 60%.
- A total of 25 Small Starts projects (including the nine recommended for funding) are currently in the Project Development stage, which have identified a total cost and a federal funding request – the average request was 46%, with a range from 26% to 73%.

Recommended Federal/Local Funding Ratio for Transfort's Capital Phasing Plan

Based on the match ratios identified through our research, an assumed local match requirement of 50% should be applied to Transfort's three planned BRT corridors and other planned transit infrastructure projects in the capital phasing plan.

FTA 5339(c) Low or No Emissions Vehicle Program

Per FTA, the federal share for the cost of acquiring low- or no-emission bus equipment

and facilities through the 5339(c) Low or No Emissions Vehicle Program can be up to 90%.

Recent 5339(c) grants awarded to Colorado transit agencies included a 25% local match.

Transfort's 2021 FTA Low-No award was 91% federal and 9% local; however, the grant also leveraged other funding including CMAQ and CDOT Faster Funds with additional local match for each grant source. The resulting match for the total project was 14% (total project - $9,377,660, total local match - $1,287,797).

Recommended Federal/Local Funding Ratio for Transfort's Capital Phasing Plan

Based on the match ratios identified through our research, an assumed local match requirement of 20% should be applied to the rolling stock portion of the capital phasing plan.

Capital Project Phasing and Local Share

Based on the assumed local match percentages of 50% for infrastructure-focused projects and 20% for fleet expansion/renewal and technology upgrades, the near-, mid-, and long-term total and local share of capital funding needs are shown in **Table 10.**

The significant unevenness of capital funding needs between the three timeframes (over $180 million is required by 2027, with less than $40 million between 2028 and 2033) is largely driven by the West Elizabeth project, which is now anticipated in the near-term (by 2027), This unevenness creates a budgeting challenge in building enough local capital reserves to begin implementation of these two large capital projects in the near-term.

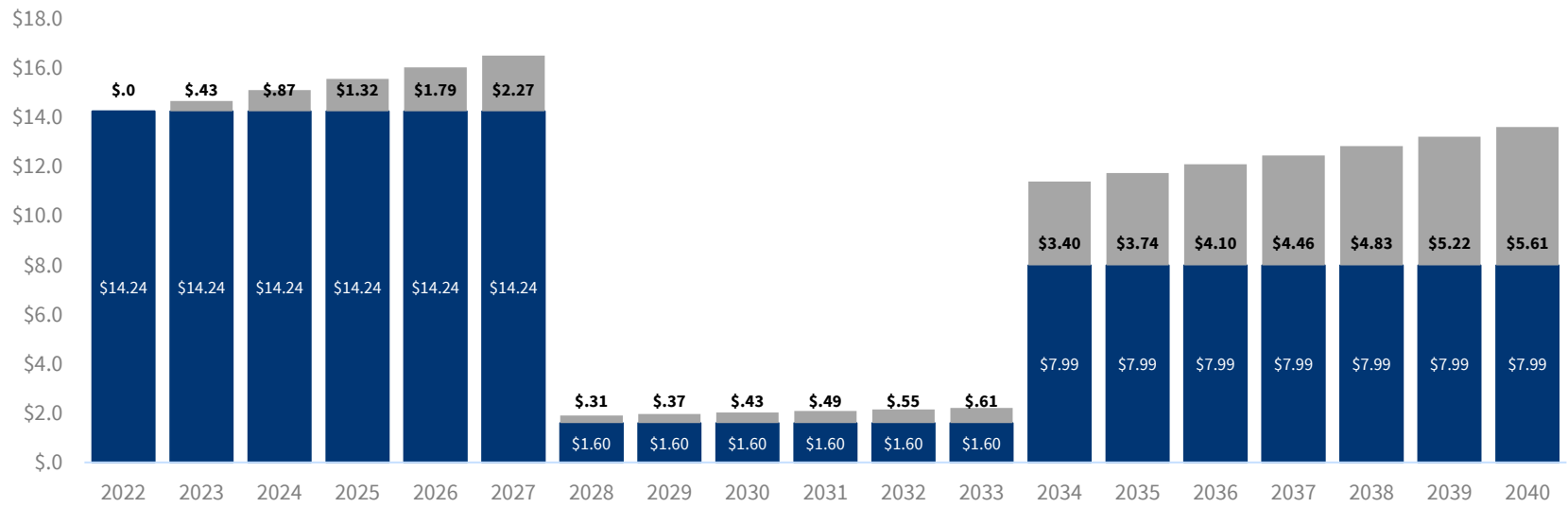
Table 10. Capital Funding Needs, Local Match, and Phasing

	Total Capital Need	Local Match (Current Dollars)	Local Match (w/ 3% Inflation)
Near-term (2023-2027)	$188.3 million	$85.4 million	$92.1 million
Mid-term (2028-2033)	$34.8 million	$9.6 million	$12.3 million
Long-term (2034-2040)	$130.5 million	$56 million	$87.3 million
Total	$353.6 million	$151 million	$191.7 million

Figure 9 and **Figure 10** show just the portion of new local operating funding that would be needed annually in each time period, in both 2022 dollars and adjusted for inflation.

Figure 9. Forecast Transfort Capital Needs (2022 Dollars)

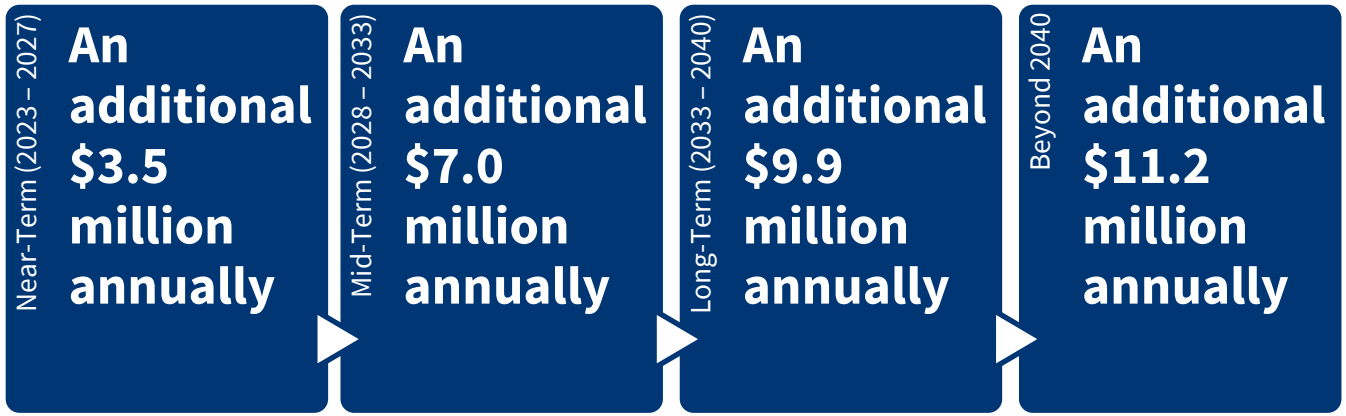
Figure 10: Forecast Transfort Capital Needs with 3% Inflation



Conclusion

Summary of Operating Needs

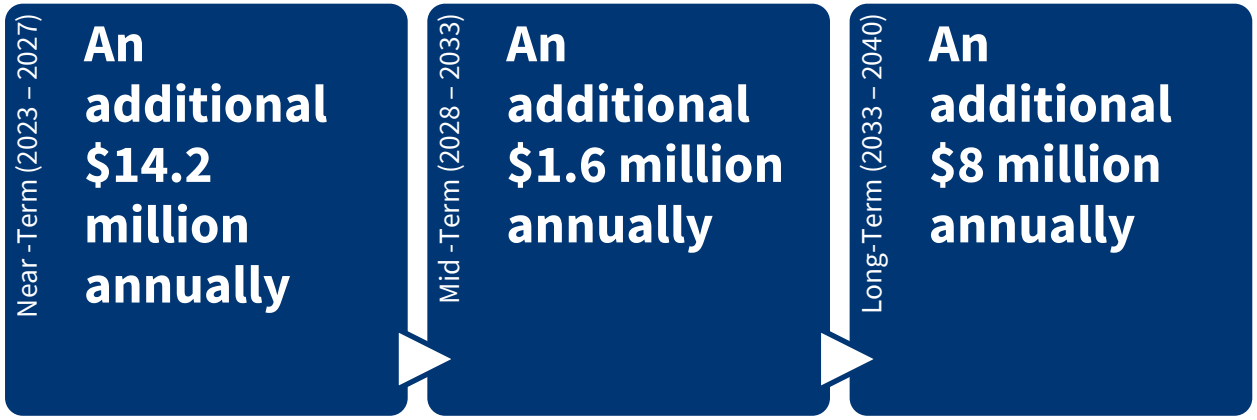
To cover the cost of operations for the expansion of the transit system in Fort Collins as identified in the Transit Master Plan, it is estimated that the additional local funds needed for operations of service improvements and expansions include:



These cost estimates are in addition to the existing funding sources that currently fund the transit system operations (estimated at $20.6 million total in 2023). They also assume a 50% match in federal operating funds for new service near-term and 30% match long-term (70% from local service).

Summary of Capital Needs

To cover the cost of implementing the necessary capital projects as identified in the Transit Master Plan and updated in this report, it is estimated that the additional local funds needed for these projects include:



These estimates are based on assumed local match percentages of 50% for infrastructure-focused projects and 20% for fleet expansion/renewal and technology upgrades.

Combined Needs

As shown in **Figure 11** and **Figure 12** the combined operating and capital needs are presented along with revenue assumptions and needs. For revenue, it is assumed that existing Transfort funding of $8.6 million from the general fund would continue. The city is currently exploring an additional sustainable revenue source to support a variety of city needs, including transportation, parks, climate, and housing. Early discussions have indicated that $8 million may be possible for Transfort. That leaves a gap of $6.7 million that will need to be filled in order to meet the goals and priorities of the TMP. Possible revenue sources are explored in Chapter 7.

Figure 12. Transfort Local Funding Needs

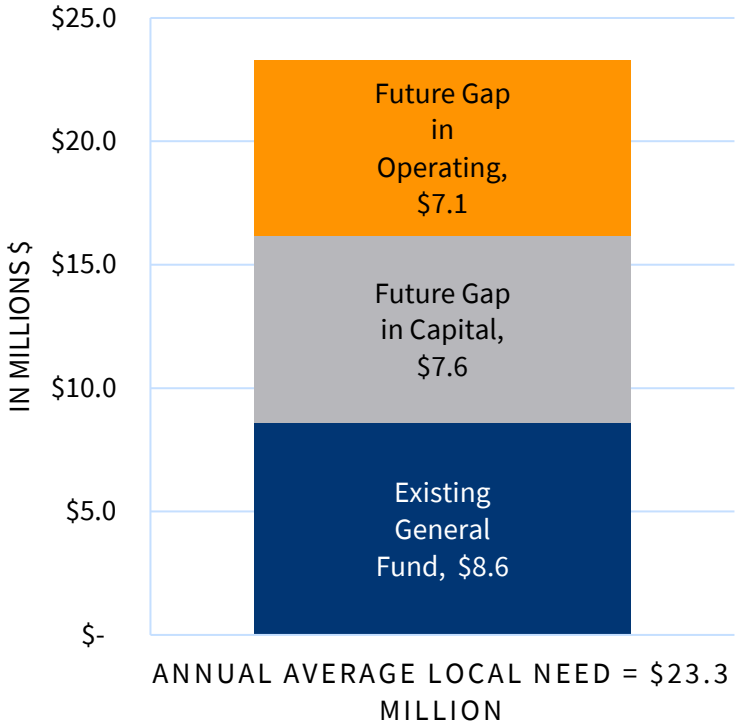
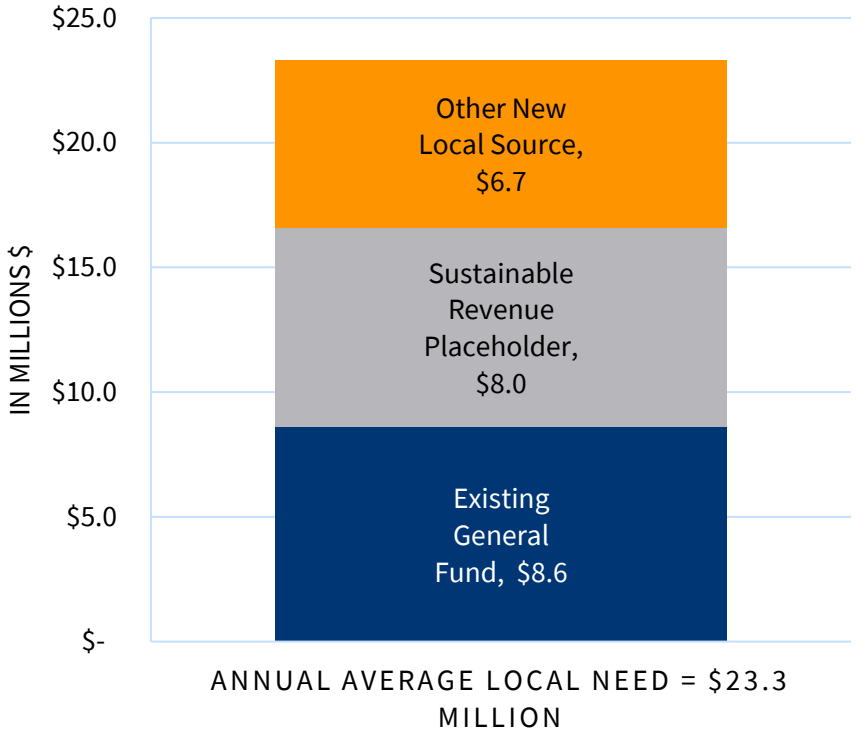


Figure 11. Transfort Local Revenue Possibilities



05 Fare-Free Analysis

The purpose of this chapter is to provide city staff and decision makers with enough information about the potential benefits and tradeoffs of converting Transfort to fare-free to inform a strategic decision regarding transit fares in Fort Collins.

Introduction

The City of Fort Collins initiated an analysis to evaluate the feasibility of converting the local transit system, Transfort, to fare-free. This chapter summarizes the analysis, including the potential benefits and barriers the city faces in converting to fare-free, cost implications, and potential strategies the city could use to mitigate those barriers. This chapter also summarizes other fare structure considerations, such as alternative fare policy strategies and coordination with regional transit service.

Background

A directive that emerged from the 2019 Fort Collins Transit Master Plan (TMP) was for the City of Fort Collins to explore converting the transit system to fare-free. The plan made this recommendation in part due to Transfort's low farebox recovery. That plan noted that in 2017, excluding the partnerships with Colorado State University (CSU) and others, fares only accounted for 3% of Transfort's operating budget. Thus, the cost of converting to fare-free could be minimal with numerous benefits including increased ridership, increased speed and reliability of service, administrative cost savings, and increased equity and access to transit. Potential barriers noted in the plan include lost fare-revenue, potential for lost partnership revenue, regional reciprocity, cost of fully funding dial-a-ride (paratransit), and political sensitivities about transit riders getting an outsized subsidy from the public. That plan also noted other potential models, such as Chapel Hill, North Carolina, that have successfully converted their transit to fare-free. The cost implications of converting to fare-free as well as potential benefits, barriers, and mitigation strategies are explored in more detail as part of this analysis, including additional barriers that have emerged since the 2019 TMP.

Existing Transfort Fare Policies

Prior to the fare and service changes that occurred due to the COVID-19 pandemic, Transfort charged a standard fare of $1.25 per bus trip within Fort Collins, including transfers, with discounted fares for seniors over 60, people with disabilities, or Medicare recipients. Transfort also offered daily, weekly, monthly, and annual passes as well as a bulk-rate discount pass, called Passfort, that businesses could purchase for their employees. Additionally, riders under the age of 18 could ride free with a Poudre School District student ID, as well as CSU students, faculty, and staff by tapping their RamCard when boarding. The same fare structure also applied to the regional FLEX bus to Loveland, Longmont, and Boulder. Transfort charged double the fixed-route fare for paratransit service, $2.50 per ride.

Riders could purchase their fare on the bus using cash, via a mobile application (that was initiated in 2019), at MAX ticket vending machines, or at one of the three major transit centers. Riders of the MAX bus rapid transit (BRT) service purchased a fare at the station before boarding and were subject to random fare checks while onboard.

Beginning in April 2020, Transfort suspended all fare collection of local transit service within Fort Collins as a social distancing measure due to COVID and has been operating transit service fare-free ever since. While not a perfect case study due to the many extraneous factors that also occurred because

of the COVID-19 pandemic, including dramatic changes to travel behaviors and society at large, the change to fare-free service since 2020 does provide some insights to the challenges and benefits of permanently switching to fare-free and lessons from the last two years are included in this analysis.

National Context

There are dozens of examples from around the country of transit agencies operating fare-free transit in some format. Examples include system-wide fare-free models, specific routes that are fare-free (such as the Free MallRide in Denver), zones of a network that are fare-free (such as downtown or on a university campus), or models where certain riders are eligible to ride fare-free (often youth or low-income populations). Examples of fare-free transit in Colorado include local transit in many mountain resort communities (including Winter Park, Summit County, Vail, Aspen, Steamboat Springs, Telluride, Estes Park, and Crested Butte), specific routes that are fare-free (including the Free Mallride in Denver and Hop in Boulder), and free local transit service in Longmont (funded by Boulder County).

Historically, agencies that operate fare-free systems typically fell into one of three categories[3]:

1. Small transit systems with relatively low ridership (often in rural areas)
2. Systems within resort communities, or
3. Systems in university dominated communities.

However, this has begun to change as larger transit agencies increasingly began experimenting with fare-free service. Fare-free transit has been a topic of conversation among cities and transit agencies for decades. As far back as the 1970s, Denver used a grant to commission a one-year fare-free transit pilot. In recent years, an increasing number of larger transit agencies around the U.S. have initiated fare-free pilot programs (among the largest are LA Metro for certain riders, Kansas City, and Albuquerque). Agencies cite anticipated environmental and equity benefits and the fact that revenue barely exceeds the cost of charging fares, especially for smaller agencies. The momentum for converting to fare-free began before the COVID-19 pandemic but increased as many agencies temporarily switched to fare-free during the pandemic (like Transfort) and the community and political leaders saw the benefits of fare-free transit. Namely, the pandemic brought to the forefront the equity benefits of fare-free transit and transit's role as an essential service for low-income workers became more widely recognized and valued.

Table 11 lists the larger transit agencies in the U.S. that operate fare-free transit service, either as part of a pilot program or permanently, and their key metrics compared

3 National Academics of Sciences, Engineering, and Medicine 2012. Implementation and Outcomes of Fare-Free Transit Systems. Washington, DC: The National Academic Press. http//doi.org/10.17226/22753.

to Transfort. All of the agencies that operate permanent fare-free transit service are in cities with large state universities similar to Fort Collins. The agency currently offering fare-free transit service most similar to the service area and pre-pandemic ridership of Transfort is Intercity Transit in Olympia, WA. Intercity Transit initiated a five-year fare-free transit pilot program in 2020 that they have since extended three additional years given the disruption to service and ridership levels caused by the pandemic.

Table 11. Existing Large Transit Agencies that Operate Citywide Fare-Free Transit

City	Transit Agency	Fare-free Program	Year Became Fare-free	2019 Service Area Population	2019 Ridership
Fort Collins, CO	Transfort	Temporary (COVID)	April, 2020	164,000	4.5 million
Chapel Hill, NC	Chapel Hill Transit	Permanent	2002	80,000	6.6 million
Corvallis, OR	Corvallis Transit System	Permanent	2011	54,000	1.1 million
Missoula, MT	Mountain Line	Permanent	2015	73,000	1.6 million
Olympia, WA	Intercity Transit	Pilot through 2028	January, 2020	186,000	4.7 million
Kansas City, MO	KC Regional Transit	Pilot through 2023	February, 2020	789,000	12.4 million
Albuquerque, NM	ABQ Ride	One-year pilot	January, 2022	662,000	9.4 million

Table 11 does not include the many transit agencies that temporarily switched to fare-free during the pandemic and are still operating fare-free but have not made a longer-term commitment, like Transfort. Examples include Tucson, AZ, Athens, GA and Alexandria, VA, among others. Montgomery County, MD and LA Metro had also been running fare-free since the pandemic but recently decided to resume charging fares. LA Metro resumed charging fares in January 2022 and Montgomery County resumed fare collection in August 2022.

Current Farebox Recovery

This section summarizes the cost and revenue of collecting fares over a four-year period between 2016 and 2019 (year 2020 and 2021 are also shown for comparison). In addition, since Transfort has not collected transit fares in over two years, the technology cost of restarting fare collection is predicted to be substantial, and those costs are also included in the analysis. Combined, this data estimates the financial implications to the City of Fort Collins if Transfort were to permanently convert to a fare-free system. Later sections of the report explore other considerations of converting to fare-free that may impact cost (such as meeting increased demand for service, addressing security concerns, and continuing partner support).

2016 to 2019 Fare Revenue Analysis

Table 12 summarizes all fare, pass, and partner contribution annual revenue Transfort collected since 2016. Revenue is divided into

that which came from fares and passes and that which came from private contributions, including CSU. In 2019, total fare revenue from fares and passes (excluding partner contributions) was just shy of $508,000. Thus, fare and pass revenue alone accounted for 2.9% of total operating budget. This is a decline from 4.3% in 2016.

Partner contributions were divided into three distinct sources:

1. Contributions from CSU, through the Associated Students of CSU (ASCSU), for students, faculty, and staff to ride Transfort for free
2. Contributions from CSU (ASCSU) to operate the Horn and Gold service, the Foothills Shuttle, and to provide increased service levels along West Elizabeth Street (routes 2, 3, 31, and 32).
3. Contributions from Bohemian for students (under age 18) to ride Transfort for free

Total partner contributions revenue totaled about $2.286 million in 2019. Combined with fare and pass revenue, 2019 revenue totaled about $2.795 million, which represents about 16% of Transfort 2019 operating expenses. Excluding the portion that CSU pays Transfort to operate specific services from the fare revenue total (as it is assumed this revenue source is not contingent on whether service is free), the total fare and pass revenue (including CSU and Bohemian contributions for free service to select groups) would be about $1,201,000, which represents about 6.8% of operating expenses. This amount and percentage are closest to the “true” farebox recovery that Transfort collected pre-pandemic.

Table 12. Transfort Fare, Pass, and Partner Contribution Revenue 2016-2021

Revenue Source	2016	2017	2018	2019	2020	2021
Fares & Pass Revenue						
Transfort Fees	$291,517	$354,121	$221,216	$179,203	$77,728	$23
Transfort Passes	$74,502	$72,377	$86,179	$116,059	$30,900	-
10-Ride Passes	$10,215	$8,078	$6,143	$14,342	$3,434	-
Senior Citizen Annual Passes	$23,383	$24,653	$25,275	$25,600	$5,025	-
Disabled Annual Passes	$17,057	$16,900	$17,613	$19,545	$4,300	-
Employers Annual Passes	$14,549	$2,232	$6,040	-	-	-
Dial-A-Ride Fees	$9,838	$77,365	$31,753	$37,970	-	-
Monthly Fares (DAR)	$41,158	$73,625	$42,630	$85,603	$33,668	$9,595
CFC-Annual Passfort	-	-	$150	-	-	-
General Annual Passfort	$46,783	$35,090	$39,508	$12,295	$4,500	-
Transfort Day Pass Sales	$9,341	$9,537	$8,634	$7,545	$1,554	-
CSU Semester Passes	-	-	$160	-	-	-
Transfort 7 Day Pass	$7,040	$8,361	$8,678	$9,580	$2,760	$20
Other Charges for Service	$13,451	$24,883	$1,567	-	-	-
Total Fare & Pass Revenue	$558,832	$707,221	$495,544	$507,741	$163,868	$9,638
Partner Contribution Revenue						
Contributions – ASCSU (student/staff access)	$414,217	$591,870	$600,748	$617,951	$632,300	$638,325
Contributions – ASCSU (operate service)		$1,779,136	$1,523,615	$1,593,975	$1,648,452	$1,439,316
Contrb/Donation Private Source	$8,171	$10,211	$75,000	$75,000	$75,000	$75,000
Total Partner Contribution Revenue	**$422,388**	**$2,381,216**	**$2,199,363**	**$2,286,925**	**$2,355,752**	**$2,152,641**
Total Farebox & Partner Contribution Revenue	**$981,219**	**$3,088,437**	**$2,694,907**	**$2,794,665**	**$2,519,619**	**$2,162,278**
Total Operating Expenses	$15,301,000	$16,347,000	$17,565,000	$17,748,000	$17,252,000	$16,583,000
Farebox Recovery Ex. Partner Contributions	**3.7%**	**4.3%**	**2.8%**	**2.9%**	**0.9%**	**0.1%**
Farebox Recovery with Contributions for Free Access	**N/A**	**8.0%**	**6.7%**	**6.8%**	**5.0%**	**4.4%**

Cost of Collecting Fares

The previous section described the revenue generated by fares and passes, including contributions for free access for CSU students and staff and youth under 18. The total 2019 revenue was $1.2 million. However, this does not represent the total revenue that Transfort would "lose" if they converted to fare-free, because Transfort would have savings from not having to incur the cost of collecting fares. This includes the cost to purchase and maintain fare collection equipment, vendor contracts to maintain equipment and transport cash, staff to enforce the fares, staff to collect and handle fares, and staff to administer fare policies among others. This section summarizes the estimated costs of collecting fares.

Operating Cost of Fare Collection

Table 13 shows the estimated annual cost associated with fare collection under pre-pandemic conditions. The costs encompass staff time and vendor costs. Staff time estimates time to handle fares, maintain equipment, administer fare policy, and enforce fare compliance (mostly on the MAX). The vendor costs include the annual contract costs to maintain fare collection equipment, vendor fees, and transporting cash. The total annual operations cost of collecting fares using the fare equipment in place in 2019 is estimated at $296,000.

Table 13. Transfort Annual Estimated Cost (O&M) of Collecting Fares Pre-Pandemic

Category	Expense	Estimated Cost	Assumptions/ Description
Staff Time	Collect & Administer Fares	$9,000	3 hrs/week for two staff to handle, count, and secure fare revenue, plus 16 hrs/quarter to collect fares from ticket vending machines at a rate of $25/hr.
	Maintenance of Fare Collection Equipment	$10,000	Estimated at 10% of one full time IT staff.
	Develop Fare Policy	$5,000	Estimated at 5% of one full time planning staff.
	Fare Enforcement	$59,000	Estimated at 10% of nine full time transit security officers. [4]
	Total Labor Cost	$83,000	
Vendor Fees	Ticket Stock	$5,000	Cost of printing tickets, passes, and receipts.
	Farebox Equipment Maintenance	$13,000	Genfare contract to maintain farebox equipment.
	Transfort etickets App and CSU Tap Card	$36,000	Masabi contract based on scans of JustRide App and CSU RamCard
	Ticket Vending Machines & Bill Collectors	$129,000	Sheidt & Bachman contract for maintenance of the ticket vending machines for MAX.
	Armored Vehicle Transport Services	$30,000	Contract with Dunbar to transport cash fare.
	Total Vendor Cost	$213,000	
Total	Total Annual Cost	$296,000	

[4] Transfort currently employs four full-time transit security officers (TSOs) but has identified a need for six more. For purposes of analyzing long-term financial savings, ten TSOs were assumed.

Alternative Point of Sale (POS) Fare Collection Option

Transfort is considering converting to a new fare payment system that would replace the ticket vending machines currently at MAX stations with a new cloud-based point of sale (POS) system that would rely on smart cards and the Transfort etickets app. Cash customers would retain the current option to pay on buses or reload their Transfort etickets app using a mobile device. Users could purchase Smartcards at any transit center or local 7-11 and Walgreens stores. The new system would eliminate one of the most expensive costs of collecting fares, which is the maintenance of the ticket vending machines at MAX stations. The estimated annual costs of operations and maintenance to collect fares under the proposed new POS system is $193,000 as shown in **Table 14**, which could save Transfort about $100,000 annually compared to the previous system. One yet-to-be-determined element of the new system is the payment method for current cash customers on the MAX who do not pre-pay via the Transfort etickets app and are not boarding at one of the end stations with a transit center given there is no onboard fare payment option.

Table 14. Transfort Alternative Annual Estimated Cost (O&M) of Collecting Fares with Proposed New Point of Sale (POS) System

Category	Expense	Estimated Cost	Assumptions/ Description
Staff Time	Collect & Administer Fares	$8,000	3 hrs/day for two staff to handle, count, and secure fare revenue.
	Maintenance of Fare Collection Equipment	$10,000	Estimated at 10% of one full time IT staff.
	Develop Fare Policy	$5,000	Estimated at 5% of one full time planning staff.
	Fare Enforcement	$59,000	Estimated at 10% of nine full time transit security officers. [5]
	Total Labor Cost	$82,000	
Vendor Fees	Smart Cards	$4,000	Cost of blank smart cards and printing.
	Farebox Equipment Maintenance	$13,000	Genfare contract to maintain farebox equipment.
	Transfort etickets App, CSU Tap Card, and Smart Card Taps.	$57,000	Masabi contract based on estimated scans of Transfort etickets App, CSU RamCard, and smart cards, plus annual support.
	POS System Support & Fees	$9,000	Annual support to maintain new POS system.
	Armored Vehicle Transport Services	$30,000	Contract with Dunbar to transport cash from cash fare purchases.
	Total Vendor Cost	$113,000	
Total	Total Annual Cost	$195,000	

[5] Transfort currently employs four full-time transit security officers (TSOs), but has identified a need for six more. For purposes of analyzing long-term financial savings, ten TSOs were assumed.

Capital Cost of Fare Collection

In addition to annual operating and maintenance costs of collecting fares, there is also periodic capital cost of purchasing new equipment and making upgrades. Given that Transfort has not collected fares since March 2020, there are costs associated with restarting the old system, which includes repairing and upgrading their ticket vending machine equipment at MAX stations and replacing fareboxes on the entire bus fleet (as shown in **Table 15)**. The one-time capital costs for repairing the ticket vending machines and replacing onboard fareboxes are approximately $1,855,000.

Table 15. Estimated One-Time Capital Cost to Restart Ticket Vending Machines

Expense	Estimated Cost
Upgrade Software on Ticket Vending Machines	$220,000
Repair 21 Ticket Vending Machines to Functional Status	$935,000
Replace onboard fareboxes on 50 buses @ $14K each	$700,000
TOTAL ESTIMATED COST	**$1,855,000**

As mentioned, Transfort is also considering replacing the ticket vending machines with a new point of sale (POS) system. Conversion to this new payment system would also incur a one-time startup capital cost of approximately $229,000 as shown in **Table 16**. Transfort would also need to replace onboard fareboxes in this scenario, resulting in a total estimated capital cost of $929,000. It is possible that CSU might cover part the cost of adding validators to dial-a-ride buses and that Homeward Alliance would cover part of the cost of smart card integration. If these partners were able to cover some of these costs, the one-time capital cost of converting to the new POS system would be reduced from $229,000 to $85,000.

Table 16. Estimated One-Time Capital Cost to Convert to Proposed New POS System

Expense	Estimated Cost
Implementation of new POS system	$60,000
Account Based Ticketing	$21,000
Add Validators to Dial-a-Ride and Foothills Shuttle Vehicles	$123,000
Smart Card Integration with Homeward Alliance	$25,000
Total Cost of New POS System Start Up	**$229,000**
Replace onboard fareboxes on 50 buses @ $14K each	$700,000
TOTAL ESTIMATED COST	**$929,000**

Annual Capital Plus Operating Costs

For planning purposes, it was assumed that the capital expenses of replacing and upgrading equipment would need to occur every 10 years.[6] Thus, the analysis divided the capital costs by 10 to estimate annual cost of collecting fares. **Table 17** summarizes the estimated annual capital and operating cost of collecting fares under both the old system (with ticket vending machines at MAX stations) – estimated at $482,000 – and the new proposed point of sale (POS) system, estimated at $288,000.

Table 17. Estimated Annual Transfort Capital + O&M Cost of Collecting Fares

Expense Category	Current System (with TVMs)	Proposed New POS System
Annual Operating and Maintenance	$296,000	$195,000
Capital ([total cost] / [10 years])	$186,000	$93,000
TOTAL Annual	$482,000	$288,000

Net Farebox Recovery

The net farebox recovery equals the net of the revenue received from fare collection minus the cost of collecting fares and represents the estimated net revenue lost by Transfort if they opt to convert to fare-free.

The farebox revenue includes revenue from fares and passes as well as ASCSU contributions for free access for CSU students and staff and Bohemian contributions for free access for youth under 18. The 2019 total revenue from these three sources was $1,201,000 as shown in **Table 18**.

Table 18. 2019 Transfort Farebox Revenue by Source

Farebox Revenue Source	2019 Revenue
Fares & Passes	$508,000
CSU for Free Access for Students & Staff	$618,000
Bohemian for Free Access for Youth Under 18	$75,000
TOTAL Farebox Revenue	**$1,201,000**

[6] The average manufacturer/industry standard useful life of a fare box when applying FTA minimal asset calculations is 10 years: https://www.drpt.virginia.gov/media/burc3vmc/merit_life-standards-for-fta-grants.pdf

The net farebox revenue was estimated by subtracting the costs of collecting fares (see Table 17) from the 2019 farebox revenue (see Table 18).

Table 19 shows net farebox revenue for both fare payment scenarios Transfort has considered. The total net annual farebox revenue using the old system is approximately $720,000 and the total net annual farebox revenue with the proposed new POS system is approximately $913,000. If Transfort were able to maintain the existing partnership contributions under a fare-free model, the net farebox recovery would be $27,000 annually under the current fare payment system and $220,000 annually with the proposed new POS system. The net farebox recovery would be about 1.2% of overall annual operating expenses in 2019 with the new POS system when excluding partner contributions (and would be 0.1% with the old fare payment system).

Table 19. Estimated Net Farebox Recovery

Revenue & Expenses	Option 1: Maintain Old System with TVMs	Option 2: Convert to New POS System
2019 Farebox Revenue	$1,201,000	$1,201,000
Annual Cost of Fare Collection	$482,000	$288,000
Net Farebox Recovery (Average Annual)	$720,000	$913,000
Net Farebox Recovery Percent	4.1%	5.1%
Net Farebox Recovery Excluding Contributions	$27,000	$220,000
Net Farebox Recovery Percent Excluding Contributions	0.1%	1.2%

Potential Benefits of Fare-Free

This section describes several potential benefits to Transfort if the agency converted to a fare-free transit, including those related to larger citywide mobility and climate action goals. It is assumed as part of this analysis that all transit within the boundaries of the city of Fort Collins would become free, including future micro-transit service.

Cost Savings

Converting to fare-free would eliminate the costs associated with collecting fares. This includes staff time (to collect and secure fares, maintain fare collection equipment, administer fare policies, and enforce fare payment) that can be repurposed to other essential duties, annual contract costs to vendors (to maintain fare collection equipment and software, and transport cash), the periodic capital cost to replace and upgrade fare collection equipment, as well as printing and equipment cost savings (which would also positively impact the environment). The analysis in the previous section of this report showed that converting to fare-free would save Transfort annual average fare collection costs of approximately $480,000 under the current fare collection system and $290,000 under the proposed new point of sale system.

The net savings would still result in a loss due to elimination of fares, of either $720,000 annually under the current system or $910,000 annually under the new system, assuming ridership at 2019 levels. However, if Transfort were able to maintain the contributions from CSU and Bohemian that currently provide free access for CSU students/staff and youth under 18 with a fare-free model, there would be net loss in revenue of $27,000 annually under the current fare payment system or a net loss of $220,000 annually with the proposed new POS system. Potential mitigation strategies to maintain the contract with CSU are discussed later in this section. The cost savings estimates also do not include potential savings from speed and reliability improvements. A separate effort is exploring additional revenue generating strategies to offset lost revenue and implement TMP improvements, such as leveraging new taxes or fees or using revenue from paid parking.

Equity & Increased Access to Transit

Perhaps the leading case for making Transfort fare-free is the benefit to social equity. Transit is disproportionally used by those without convenient access to a vehicle. This includes the most vulnerable population groups such as low-income residents, youth, seniors, and people with disabilities. The cost of fares is most burdensome to these groups.

Free transit would remove that barrier and improve community access to jobs, services, stores, restaurants, and social interaction with others in the community. Surveys of transit riders in areas with fare-free transit find that ridership increases are dominated by people most sensitive to transit prices, including seniors and students, and many of the new

trips would otherwise not have occurred.[7] These examples show that fare-free transit would allow more people to participate in the economy and increase quality of life particularly for vulnerable populations (although the entire community would experience these benefits). Better access to jobs for more people makes it easier for employers in Fort Collins to hire employees and for businesses to connect with customers.

In Fort Collins, because youth (under 18) and university students and staff already ride free, fare-free transit would likely most benefit low-income individuals, seniors, and people with disabilities. In this way, providing free transit service would also align with one of the city's core goals of increasing equitable access to city services. It should be noted that equity benefits could be less substantial if Fort Collins replaced lost fare revenue through a regressive tax, such as sales tax.

Ridership Growth

Following conversion to a fare-free system, there is almost always a noticeable increase in transit ridership, typically between 20% and 60%, and sometimes higher.[2] The increase in ridership is not just from more people riding because transit is more affordable (as explained above), but also because of the convenience. For some, the barrier of fares is not just the cost, but the process of paying, including having exact change, knowing how much it costs, and knowing how to pay.

In Fort Collins, given that a relatively high percentage of the ridership already effectively rides fare-free, there may be a less significant ridership increase from transitioning to fare-free compared to other communities. In 2019, CSU students, staff, and faculty accounted for about 51% of Transfort ridership, not including youth under 18 who rode free and PassFort holders. However, even if ridership increased by just 20% (as opposed to 60%) that would result in nearly one million additional transit trips on Transfort in 2019.

Growing transit ridership would align with several of the city's goals identified in the City Plan and Transit Master Plan, including increasing transit ridership, reducing vehicle miles traveled (VMT), and reducing greenhouse gas (GHG) emissions. Additionally, growing ridership helps Transfort better compete for state and federal funding.

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[7] National Academics of Sciences, Engineering, and Medicine 2012. *Implementation and Outcomes of Fare-Free Transit Systems.* Washington, DC: The National Academic Press. http//doi.org/10.17226/22753.

Operating Fare-Free During Pandemic

Transfort has operated fare-free since March 2020, and despite this change, transit ridership during the pandemic declined in Fort Collins as it did across nearly every other transit system in the United States due to the disruption in commuting and other travel patterns. In fact, ridership in Fort Collins fell significantly during the pandemic. In 2021, ridership on Transfort was just 31% of pre-pandemic conditions. Because CSU so heavily influences ridership, the disruption to normal university activities may have been amplified in Fort Collins compared to other non-university-dominated communities. The decline in ridership in Fort Collins was steeper than most other bus transit systems in the U.S., but more similar to (although still steeper than) other fare-free transit systems in university dominated communities as shown in **Table 20**.

The decline in transit ridership almost certainly would have been greater if service was not free. Transfort should expect a drop in ridership if the city resumes charging fares. Based on past fare elasticity examples from other transit agencies and the ridership profile of Transfort users (e.g. the high percentage of people who already can ride free), Transfort could experience a 10% to 30% decrease in ridership with resumption of fare collection.

Table 20. Ridership Decline in University Dominated Fare-free Transit Communities from Pandemic

City	2020 Transit Ridership as a Percent of 2019 Ridership	2020 Service Hours as a Percent of 2019 Service Hours
Fort Collins, CO	26%	84%
Chapel Hill, NC	31%	81%
Logan, UT	51%	113%
Missoula, MT	53%	91%
Corvallis, OR	87%	123%

Transit Speed & Reliability Improvements

Operating fare-free can reduce the time for passengers to board, which for certain types of routes can significantly increase transit speed and reliability. Speed and reliability improvements are most beneficial on high ridership routes, particularly where there are stops with a high number of boardings.

Off-board fare payment, used on the MAX, is a key feature of BRT specifically because of associated speed and reliability benefits. Fare-free would eliminate the wasted time of passengers fumbling for change or negotiating with the driver. It would also give Transfort the option to board buses using all doors, which would further reduce dwell times at high ridership stops by allowing more passengers to board at once. LA Metro converted to fare-free service for nearly two years during the pandemic and dwell times at bus stops fell 10%.[8]

Faster transit service could also reduce operating costs by allowing shorter run times on buses and therefore requiring fewer buses to serve the same route. A more detailed analysis of operations by route would be needed to determine if and by how much Transfort could save in operating cost by reducing dwell time with fare-free service. Since Transfort implemented fare-free service during the pandemic, anecdotally, staff have not noticed a significant change in transit speed and reliability, but there were also many other factors at play during the same time that could also have impacted speed and reliability, including changes in traffic volumes, ridership, and service levels.

Variation by Route Characteristics

Notably, depending on the route, some agencies that instituted fare-free pilots also experienced a reduction in speed and reliability primarily due to increased ridership. These instances appeared to be on historically lower ridership routes with closely spaced stops. These routes experienced an increase in ridership, particularly an increase in shorter distance trips that cause buses to stop more frequently than before, minimizing the time savings gained from faster boarding.[9]

Thus, low ridership routes that often skip stops (because nobody is boarding or alighting at the time the bus goes by) may see no improvement or a decline in speed and reliability. However, routes with higher ridership are likely to benefit since the delay from more frequent stops and more riders would be outweighed by faster per person boarding. The same study also noted that operators of existing fare-free transit agencies in college towns with high ridership stops said they would not be able to offer the same speed and reliability if fares were required.

8 https://www.curbed.com/2022/01/los-angeles-metro-free-transit-buses.html

9 National Academics of Sciences, Engineering, and Medicine 2012. Implementation and Outcomes of Fare-Free Transit Systems. Washington, DC: The National Academic Press. http//doi.org/10.17226/22753.

Thus, the characteristics of individual routes impact the scale of speed and reliability improvements from fare-free. Low ridership routes with closely spaced stops are less likely to experience a speed and reliability benefit from converting to fare-free (and may see a decline) as compared to higher ridership routes with fewer stops, which would likely see a more significant improvement. Transfort could address this challenge on routes with more frequent stops by eliminating stops, running more service, and boarding using all doors.

Transit Master Plan & Climate Action Goals

Many of the benefits of permanently converting Transfort to fare-free would align with the City of Fort Collins mobility and climate action goals identified in Fort Collins City Plan and the Fort Collins Transit Master Plan. This includes:

Increased Equity – Fare-free service would improve equitable access to goods and services, particularly for the low-income population. This is a core goal of the City Plan.

Reducing VMT and GHG Emissions – In every example of a community that has converted to fare-free, ridership has grown. And studies show that 10% to 30% of these riders are people who would otherwise drive.[5] This would reduce VMT and GHG emissions, a core climate action goal in City Plan. For example, if transit ridership grew by 20% when converting to fare-free, that would equal about 900,000 additional annual riders (based on 2019 ridership). If 20% of these new trips are by people who otherwise would drive, and assuming an average of five miles per trip[10], that equates to an annual reduction of 900,000 VMT.[11]

Improving Transit Speed and Reliability – Faster boarding from fare-free would improve speed and reliability of service, at least on heavily used routes, and would support goals to improve the quality of service identified in the Transit Master Plan.

Barriers & Mitigation Strategies

Conversations with Transfort staff, analysis of the existing Transfort revenue structure, and review of other communities' experience converting to fare-free revealed the three

10 An average of five miles per trip is based on an average daily VMT per capita of 20 from the Transportation Master Plan, and an average of four trips per person per day as reported in the 2017 National Household Travel Survey.

11 Note: The estimated reduction of 900,000 VMT per year from converting transit to fare-free is a high-level estimate based on the assumptions stated, and more detailed analysis would be needed to corroborate this estimate.

most significant potential barriers/concerns for Transfort to consider when permanently converting to fare-free:

1. How to retain partnerships
2. Onboard safety and security concerns
3. Increased demand for paratransit

This section discusses these and a few additional potential considerations that other agencies experienced when converting to fare-free (such as political pushback from riders "not paying their fair share" or challenges meeting increased ridership demand). Potential mitigation strategies to counter these barriers are identified for each potential barrier.

Barrier 1: Maintaining Partnerships

Transfort partnerships built around free access to transit, such as from CSU and Bohemian Foundation, help support Transfort. In 2021, CSU made an investment in Transfort of approximately $2,427,000[12] to operate specific services and for free access to the transit system citywide for all CSU students and employees. This represented about 15% of the total operating cost of $16.6 million for Transfort in 2021.

However, most of this revenue from CSU covers the cost for Transfort to operate specific services, including: the Horn Shuttle, Gold Route, Foothills Campus Shuttle, expanded service on West Elizabeth, 365 (daily) service, and a portion of the Flex and Poudre Express services. In total, the cost assessed to CSU for operating these services was approximately $1,794,000 in 2021. It is assumed that if Transfort converted to fare-free, CSU would continue to pay to operate these specific routes or enhanced service.

The revenue that Transfort has historically received from CSU to provide free access to the bus system citywide for all students and employees would need to be restructured under a fare-free model. In 2021 this was approximately $638,000, which represented about 4% of Transfort's total operating cost in 2021. Under fare-free, the partnership for CSU student and employee access would have to change from being based on covering fares to another model. There are examples of transit systems in university communities that converted to fare-free that were able to maintain funding from the local university to support transit services include Mountain Line in Missoula, MT and Chapel Hill Transit in Chapel Hill, NC. In each, the transit agency and university worked together to establish an agreed-upon funding partnership based on the mutual benefit they provide to each other.

Potential Mitigation Strategies

Two potential mitigation strategies for Transfort to explore to preserve the portion of revenue they receive from CSU for free transit

12 The CSU contract runs from July 1 of each year to June 30 of the following year. The 2021 cost was calculated by adding half of the 2020 – 2021 contract (which was for $2,349,611) plus half of the 2021 – 2022 contract (which was $2,503,485).

access for students and employees are detailed below.

Negotiate a Partnership Agreement

Transfort and CSU mutually benefit from the partnership they have established and developed over the years. Transfort benefits from a reliable revenue source that partially funds the transit system in Fort Collins and provides over half the systemwide ridership. CSU benefits from a citywide transit system that connects students and employees to its multiple campuses and to services and opportunities across Fort Collins and neighboring communities. Additionally, the City of Fort Collins benefits by supporting their mobility goals of providing alternative options to driving a private vehicle. With this understanding of mutual benefit, it is possible that Transfort and CSU could come to an agreement to preserve partnerships funding even if Transfort went completely fare-free. Two examples are provided below of how this has worked in other university communities.

Model from Mountain Line Transit

Prior to going fare-free in 2015, the University of Montana contracted with Mountain Line Transit in Missoula for students and staff to ride transit for free, similar to the existing partnership between CSU and Transfort. As part of Mountain Line's conversion to fare-free, the transit agency established a Zero Fare Partnership whereby they solicit contributions from local organizations to offset the lost fare revenue (approximately $470,000 in 2014[13]). They currently acknowledge 26 organizations that contribute to free rides[14], including from their largest contributor, the University of Montana. This model has the advantage of not singling out the university as the sole private contributor (while everyone else gets a "free ride") but makes the partnership more equitable by allowing funding contributions from many partners across the community that benefit from fare-free transit. The partner agencies receive name recognition by supporting a popular community amenity and help to maintain free transit that benefits the agency. Mountain Line requires a three-year partner commitment from each contributor, which provides funding continuity.

Transfort could adopt this model (soliciting contributions every three years from a variety of organizations) to maintain at least some portion of CSU funding, while potentially expanding funding from other organizations. Soliciting and managing contributions would require some staff time but would likely be similar to staff time needed today to facilitate existing partner contributions. Partner organizations may include large employers, human services providers, and other government agencies such as Larimer County or the North Front Range Metropolitan Planning Organization (MPO).

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[13] Iowa City Transit Study – Fare Study. https://transportation.uiowa.edu/sites/transportation.uiowa.edu/files/2021-06/Appendix%20D%20Fare%20Study_20210422.pdf

[14] https://mountainline.com/sustainability/zero-fare/

Model from Chapel Hill Transit

Chapel Hill Transit pioneered converting to fare-free, making the leap in 2002, and until the pandemic was the largest transit agency (in terms of ridership) nationwide to be completely fare-free. Chapel Hill Transit's model relied on a partnership with the University of North Carolina (UNC) as part of going fare-free. Simply, Chapel Hill Transit would not have gone fare-free without the university's financial support.

To address the issue of equity, Chapel Hill Transit often refers to their service as "pre-paid transit" as opposed to "fare-free," given their funding model. In a recent news article on the subject, the transit director stated, "The university is paying for all their employees and students to ride, including hospital and healthcare staff. The town of Chapel Hill and Carrboro are pre-paying their fares via property tax and vehicle registration fee."[15]

In practice, UNC covers about 38% of operating cost, the Town of Chapel Hill and Carrboro cover 25%, and the remainder comes mainly from state and federal assistance. Prior to converting to fare-free UNC provided financial contributions to Chapel Hill Transit to pay for students and staff to ride free. When UNC converted to fare-free in 2002, they agreed to increase their annual funding to help support a 20% increase in service and aid in the conversion to fare-free.[16]

Transfort could adopt a similar strategy to acknowledge CSU's financial contribution, whereby CSU would continue to "pre-pay" for student and employee access to transit, while the City of Fort Collins uses other tax or funding models to "pre-pay" for its resident and employer access to free transit.

Present Investment Scenario to CSU

An alternative strategy would be for Transfort to develop an investment scenario for CSU's consideration that could show how continued and perhaps increasing investments in Transfort could help the development and evolution of better transit services connecting CSU with all of Fort Collins and beyond. Transfort could use this investment model for other community partnerships for investments from businesses, employers, non-profit organizations, or social service organizations.

For example, the historical CSU fare-free access partnership with Transfort has supported about 5,000 revenue hours of bus service per year, or about 4% of Transfort's system-wide operating cost. If Transfort could present a compelling case for increased investment in Transfort services, CSU would see the benefits of further investments through improved service. As an example, a doubling of CSU's current investment would

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15 Paolicelli, Laurie. " How Free Transit Works in Chapel Hill and Carrboro." The Local Reporter, April 6, 2021, https://thelocalreporter.press/how-free-transit-works-in-chapel-hill-and-carrboro/#:~:text=The%20town%20of%20Chapel%20Hill,definitely%20not%20a%20free%20system.%E2%80%9D Accessed 21 June 2022.

16 Jaffe, Eric. "How Free Transit Works in the United States." Bloomberg, March 6, 2013. https://www.bloomberg.com/news/articles/2013-03-06/how-free-transit-works-in-the-united-states. Accessed 26 September 2022.

increase Transfort system-wide service levels by 4%, which is equivalent to doubling frequency on one to two 30-minute routes or two to three 60-minute routes.

Barrier 2: Onboard Safety & Security Concerns

One perceived concern of the community over the conversion to fare-free may be an increase in people using the bus for shelter and an increase in disruptive behavior from people under the influence of drugs or alcohol or people with mental illness.

Experience of Other Agencies Pre-Pandemic

Studies and surveys of other agencies with fare-free systems or that have conducted fare-free pilots reveal mixed results related to an increase in disruptive behavior/decrease in personal safety associated with fare-free transit systems.[17] A few systems, mostly in major cities that piloted fare-free decades ago, reported an increase in disruptive behavior. However, most smaller systems in the same study did not report that this was a major issue and stated that their experience is no worse than systems that charge fares. Several agencies reported that teenagers cause the most disruption, which would not be any different if Transfort went fare-free given that youth under 18 already can ride free. Many agencies have “zero tolerance” policies or other policies that they use to enforce and mitigate disruptive behavior.

Some agencies also reported a decrease in passenger-driver conflict, given that most conflicts arise over fares, and in many agencies that provide fare-free service drivers were happy not to have to enforce fares. Since Kansas City went fare-free in 2020 they have reported a 35% decrease in safety incident rates on their transit system, primarily because 85% of prior incidents had been over fare disputes.[18]

Pre-pandemic, transit agencies in several other university communities in Corvallis, Missoula, and Chapel Hill reported no notable increase in disruptive behavior or personal safety concerns after converting to fare-free.[19] Each of these agencies adopted policies to manage potential issues, which may have helped and are discussed in the mitigation section.

Transfort Experience During the Pandemic

Since Transfort went fare-free with the onset of the COVID-19 pandemic in March 2020, staff have anecdotally reported a change in

17 National Academics of Sciences, Engineering, and Medicine 2012. Implementation and Outcomes of Fare-Free Transit Systems. Washington, DC: The National Academic Press. http//doi.org/10.17226/22753.

18 Bergal, Jenni. " Tackling Social Inequity, Some Cities May Ditch Bus, Subway Fares." Stateline, June 10, 2021, https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2021/06/10/tackling-social-inequity-some-cities-may-ditch-bus-subway-fares Accessed 21 June 2022.

19 Iowa City Transit Study – Fare Study. https://transportation.uiowa.edu/sites/transportation.uiowa.edu/files/2021-06/Appendix%20D%20Fare%20Study_20210422.pdf

the rider profile, with a higher percentage of unhoused people and people with mental illness using the bus which increased safety concerns among passengers.

While the conversion to fare-free may have contributed to this change, many other variables also changed during this time, including a dramatic reduction in ridership, primarily among office-based commuters and college students, as well as an increase in homelessness and addictive illegal drug use across the country.

Some, but not all, other transit agencies that converted to fare-free during the pandemic also reported an increase in riders exhibiting unsafe behavior during the pandemic, but it is unclear the degree to which that was caused by the pandemic (as opposed to the drop in fare-paying riders making those with disruptive behaviors more visible). The City of Tucson reported an increase in assaults on drivers from 21 in 2019 to 64 in 2021 after going fare-free and a doubling of vandalism incidents, although there is disagreement as to how much that has been caused by the conversion to fare-free versus other pandemic-related factors.[20]

In both the case of Transfort and the City of Tucson, it is difficult to separate how much an increase in safety issues on transit is related to fare-free versus larger societal issues. Evidence from other large transit agencies around the country that kept their fare policy in place also saw a spike in crime rates and other safety issues, including in Chicago, Philadelphia, New York, and San Francisco. This suggests that at least some and potentially much of the increase disturbances on transit in places like Tucson and Fort Collins may have been more heavily influenced by other factors, including a skyrocketing opioid epidemic, increase in drug and alcohol abuse during the pandemic, a national overhaul on policing practices, a housing crisis, and a mask policy on transit during much of the pandemic that also led to increased conflicts.

Potential Mitigation Strategies

Considering many of Transfort's security issues likely relate to larger societal issues, such as homelessness, drug abuse, mental health, and poverty, effective mitigation will also need to come from other entities and larger societal changes as these issues are beyond a transit agency's purview. However, there are some strategies Transfort could consider to mitigate onboard safety concerns. These strategies have been employed by agencies with and without fare collection.

Only allow boarding at front door.

Both Corvallis Transit and Mountain Line (in Missoula) limit boarding to the front door in part because it allows drivers to manage passenger boarding. The tradeoff to this policy would be negating the speed and reliability

20 Ramon, Diana. "Fare-free transit will continue until the end of the year." The Arizona Daily Star. June 22, 2022. https://www.masstransitmag.com/technology/fare-collection/news/21271867/az-farefree-transit-will-continue-until-the-end-of-the-year Accessed 23 June 2022.

benefits of all-door boarding allowed by a fare-free model, which would be beneficial at high ridership stops.

Adopt policy of destination-based use.

Chapel Hill Transit, Corvalis Transit, and Mountain all adopted similar policies that dictated "one-trip" per rider to discourage people riding the bus for shelter. This allows the driver discretion to enforce when needed, although it has rarely been an issue in these communities.[21]

Work with human service providers.

Many of the disturbances on transit are related to people experiencing homelessness, with mental illness, or struggling with drug addiction. Transfort could work with local human services providers to increase the presence of uniformed resource officers at major transit stations and bus routes to connect people to services and reduce the number of people relying on the bus system for shelter. Metropolitan Atlanta Rapid Transit Authority (MARTA) initiated such a program in 2020 called the MARTA HOPE Program[22] to connect people to resources, mitigate the need for police involvement, combat homelessness, and improve the transit experience for customers.

Increase transit security presence.

Transfort could also increase the presence of transit security officers (TSOs) to mitigate conflicts before they happen and respond to situations faster. However, Transfort has struggled to hire and retain transit security due to the nature of the position, the current job market, and the long training process. Transfort currently has four TSOs, short by six from their current goal of ten TSOs. One option is to hire community service officers (CSO) similar to Metro Transit in Minneapolis.[23] CSOs are not fully trained officers, but could increase security presence, connect people experiencing homelessness, drug addiction, or mental illness to resources, issue tickets, and contact the police when needed. Focusing TSOs on routes like the MAX could also preserve the benefits of all-door boarding.

Barrier 3: Increased Demand for Paratransit

A primary concern for Transfort with respect to fare-free is the potential cost to meet increased demand for its Dial-A-Ride paratransit service. All transit agencies that are federally funded must provide door-to-door paratransit service within three quarters of a mile of its fixed-route service for people with special mobility needs that cannot use traditional fixed-route transit service.

By law, transit agencies must meet 100% of demand for paratransit service. The mandate also sets the maximum fare for paratransit at twice the fare of the equivalent fixed-route service. Thus, under a fare-free model,

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21 Iowa City Transit Study – Fare Study. https://transportation.uiowa.edu/sites/transportation.uiowa.edu/files/2021-06/Appendix%20D%20Fare%20Study_20210422.pdf

22 https://www.itsmarta.com/marta-hope-program.aspx

23 https://www.metrotransit.org/Data/Sites/1/media/police/mtpdsheets_cso.pdf

paratransit must also be fare-free. Because of the nature of the service, paratransit has a high cost per rider to operate. For example, in 2019 the cost to operate paratransit in Fort Collins was $40 per rider compared to $4 per rider for fixed-route bus.[24] Therefore, even a small increase in demand for paratransit service could have an outsize impact on operating cost.

While overall ridership on Transfort remains well below pre-pandemic levels, demand for paratransit in the first half of 2022 rebounded to near 2019 levels. Other transit agencies in university communities that went fare-free also experienced an increase in paratransit use when they converted to fare-free.[25] After going fare-free, paratransit ridership in Chapel Hill increased by 20%, in Corvallis it increased by 30%, and in Missoula it gradually increased close to 100% over four years. Some of these agencies undertook initiatives to both mitigate demand and increase services, as explained more in the mitigation strategies section below. It is possible that Transfort could also see a similar increase in demand for paratransit service under a fare-free model, some of which could be mitigated using the strategies below.

Potential Mitigation Strategies

There are several strategies Transfort could apply to mitigate the impacts of increasing demand for paratransit with fare-free, several of which have been used by other agencies:

Stricter enforcement of paratransit eligibility.

One way to minimize demand for paratransit is to more strictly enforce eligibility for people and for trip destinations. Both Chapel Hill Transit and Mountain Line Transit (in Missoula) applied this strategy when it converted to fare-free. Chapel Hill Transit more strictly enforced the rule that paratransit will only serve locations within three quarters of a mile of fixed route transit.[26] However, this policy could further limit mobility among a vulnerable population that is already severely mobility limited.

Increase funding/service levels.

Transfort may need to increase the budget and fleet for paratransit service. Transit agencies in both Chapel Hill and Missoula increased their staff and revenue hours of paratransit after converting to fare-free to meet increased demand.[18]

Provide additional training to potential users.

In tandem with applying stricter enforcement, Transfort could provide additional training to population groups that could use fixed-route buses, but are hesitant to do so, including seniors and people with a disability. Mountain Line increased its marketing budget when it converted to fare-free to educate users on use

24 National Transit Database City of Fort Collins Agency Profile

25 Iowa City Transit Study – Fare Study. https://transportation.uiowa.edu/sites/transportation.uiowa.edu/files/2021-06/Appendix%20D%20Fare%20Study_20210422.pdf

26 Iowa City Transit Study – Fare Study. https://transportation.uiowa.edu/sites/transportation.uiowa.edu/files/2021-06/Appendix%20D%20Fare%20Study_20210422.pdf

of the fixed-route system to limit demand to paratransit.

Collaboration with human services transportation providers.

A strategy used by transit agencies to minimize paratransit demand is collaboration with local human services transportation providers that can meet the demand for some existing paratransit trips. Potential agencies may include Senior Access Points of Larimer County, Heart & Soul Paratransit, and Ride NoCo. Routt County applied this strategy and Grand Valley Transit in Mesa County is also exploring a rider brokering program to meet increasing paratransit demand.[27]

Many paratransit trips are for medical purposes or to grocery stores. There are non-profit agencies and human service transportation providers that also provide transportation for people with special needs to these services. Working collaboratively with these agencies to determine what trips they can serve and connecting potential paratransit users to these services could mitigate paratransit demand. Potential partner agencies in Fort Collins may include Senior Access Points of Larimer County, Heart & Soul Paratransit, and Ride NoCo.

Other Potential Barriers to Fare-Free Transit

Two additional barriers to converting Transfort to fare-free that are less likely to be an issue in Fort Collins, but that other agencies have experienced include: political pushback that transit users do not pay their fair share and challenges meeting demand from increased ridership.

Potential Political Pushback

Other concerns aside, political pushback to converting to fare-free based on the idea that the users should pay for the service could derail an effort to convert to fare-free. This is more likely to be an obstacle for larger agencies where a more substantial portion of the revenue comes from fares and where the community may be asked to bear a larger share of the cost of operating transit. In the case of Fort Collins, only a small percentage of Transfort's operating cost is from fares (just 3%, or 7% if CSU contributions are included) and even less when the cost of collecting fares is factored (potentially near 0%).

If this figure along with the benefits mentioned in this report are clearly articulated to political leaders and community members that may be concerned about users paying their fair share (including the equity, environmental, and economic benefits of a high-functioning transit system), then the political pushback in of itself

27 Mesa County Coordinated Transit and Human Services Transportation Plan. Fehr & Peers. February 24, 2020. https://rtpo.mesacounty.us/globalassets/rtpo/plans-reports--studies/transit/2045-coordinated-transit--human-services-transportation-plan.pdf. Accessed July 29, 2022.

is not likely to be a significant barrier in Fort Collins.

Meeting Demand of Increased Ridership

Some agencies that have converted to fare-free or experimented with fare-free service reported a significant increase in ridership that led to capacity challenges and a degradation of service. While the potential for this to occur on certain routes is possible in Fort Collins, its less likely to be an issue for several reasons:

First, over 50% of Transfort riders pre-pandemic already ride for free, including CSU staff and students, youth under 18, and PassFort holders. Thus, Transfort is not likely to experience the dramatic increase in ridership that some other agencies experienced that led to capacity issues.

Second, studies consistently show that the highest increases in ridership from fare-free service typically occur during off-peak times when there is more capacity on buses. This is because ridership during peak times is often dominated by commuters that are less sensitive to price changes. The Utah Transit Authority (UTA) piloted a fare-free service in February 2022, and found that ridership increased by 16% on weekdays, 58% on Saturdays, and 33% on Sundays.[28] Thus, it's likely that Transfort will be able to absorb an increase in ridership on much of its system with existing capacity.

Third, the routes that are most likely to see a higher increase in ridership are those where most passengers pay for the bus (i.e., routes with a low percentage of CSU student and staff riders). A review of CSU ridership by route in 2019 revealed that most of the routes with a high percent of fare paying customers (over 60%) are also some of the least productive in Transfort's system, meaning they exhibit a lower ridership per service hour than other routes. Thus, these routes are more likely to have extra capacity to handle an increase in ridership, including Routes 5, 6, 9, 10, 11, 12, 16, 19, and 92. Routes with moderate productivity (between 25 and 35 passengers per service hour) as reported by the Fort Collins Transit Master Plan include Routes 8, 14, 18, and 81, which could be at risk to experience long-term capacity challenges with conversion to fare-free.

Fourth, increasing ridership is a stated goal of the Fort Collins Transit Master Plan and the city is planning to increase transit service levels through 2040 as part of growing ridership. Growth in ridership would be a welcomed "problem" given the City's goals. Additionally, the increase in transit service would be aligned to provide sufficient capacity to meet increased ridership demand, including increased demand from converting to fare-free service.

Lastly, Transfort has been operating fare-free since March 2020 and is still operating reduced service. Ridership levels are still well

28 Free Fare February Final Report. Utah Transit Authority. April 2022. https://www.rideuta.com/Rider-Info/Free-Fare-February. Accessed July 7, 2022.

below pre-pandemic conditions. Thus, the risk that there would be a significant enough increase in ridership to generate capacity challenges that Transfort could not meet, even long-term, from converting to fare-free is likely small.

Other Considerations of Fare-Free Transit

Regional Coordination

If the City of Fort Collins decides to move forward with converting the local transit system to fare-free, staff should also consider the fare structure of regional transit service. This includes the FLEX to Loveland, Longmont, and Boulder, and the Poudre Express to Windsor and Greeley. It is possible and common in many communities that provide fare-free service, for the local service to be fare-free while the regional service is not. Thus, staff can independently make the decision about whether to convert regional transit to fare-free independently of the local Fort Collins transit system. Any decision regarding the regional service should also be made in conjunction with the communities that support funding for that service. As part of early discussions on the matter, representatives of Longmont, the City of Boulder, and Boulder County expressed support to continue free access to the FLEX that began during COVID-19 onset long-term.

If regional service were to become fare-free, the partner communities may be asked to cover their portion of the lost fare revenue. Early discussions with the partner agencies suggest that those agencies would also be interested in understanding the cost savings from not having to collect fares and having that factored into the partner funding request.

Figure 13: Summary Of Mitigation Strategies For Fare-Free

Potential loss of CSU revenue	• Negotiate a partnership agreement uncoupled from fare-based • Create funding scenarios linked to service levels • Look to other national examples
Safety and security perception concerns	• Front door boarding only • Policy of destination-based use • Work with health and human community resource providers • Enhance transit security presence
Increased demand for paratransit	• Follow/update eligibility policies • Travel training to encourage fixed route use • Collaboration with human service transportation providers • Increase service levels and funding
Political concerns	• Educate on true farebox recovery • Articulate benefits of fare free • Link to established city priorities
Increased demand	• Quantify that large percentage of existing riders already ride free • Educate on off-peak ridership gains vs. peak ridership gains • Understand which routes ridership gains are likely (most have excess capacity)

06 Fare-Free Survey Findings

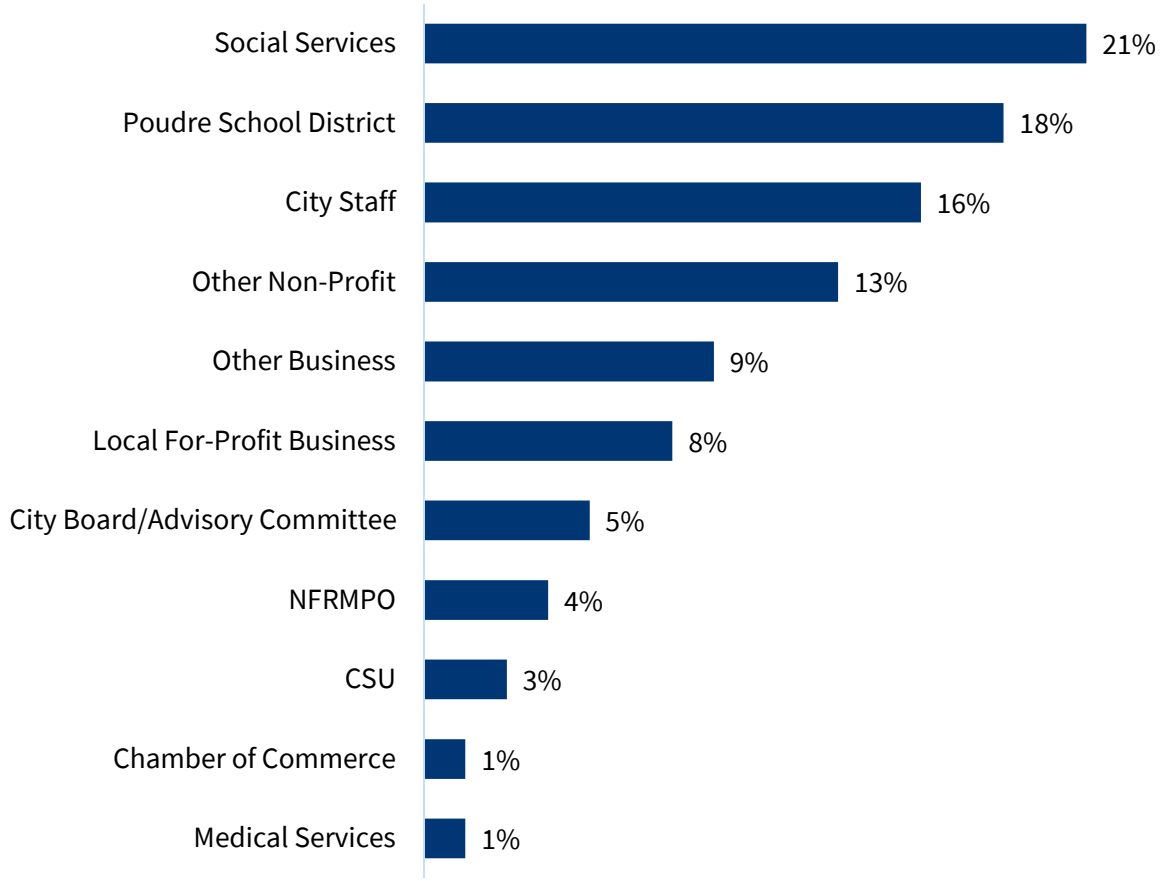
This chapter summarizes findings from stakeholder and community outreach conversations about implementing fare-free system-wide and long-term.

Survey Findings

The city conducted a survey from December 2022 to February 2023 to understand perceptions of transit and use of transit in Fort Collins following the COVID-19 pandemic and to solicit input on a permanent transition to fare-free transit in Fort Collins. The survey was open to the public and sent to specific organizations in Fort Collins with a stake in transit service. Over 1,600 respondents completed the survey, including 70 representatives of organizations.

This section summarizes the key findings of the portion of the survey that asked respondents to weigh in on fare-free transit in Fort Collins. **Figure 13** outlines responses by organization type.

Figure 14. What Organization Do You Represent?

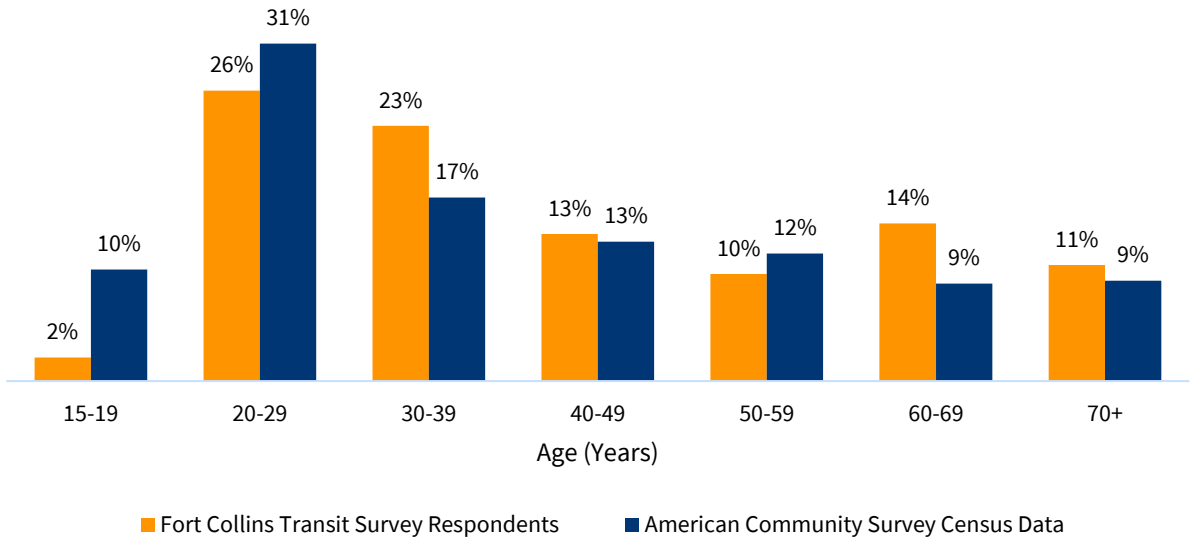


Demographics of Survey Respondents

Age

People from a wide range of age groups responded to the survey, as shown in **Figure 15.** Compared to the citywide age distribution, people in their 30s and 60s were slightly overrepresented and people in their teens and 20s were slightly underrepresented.

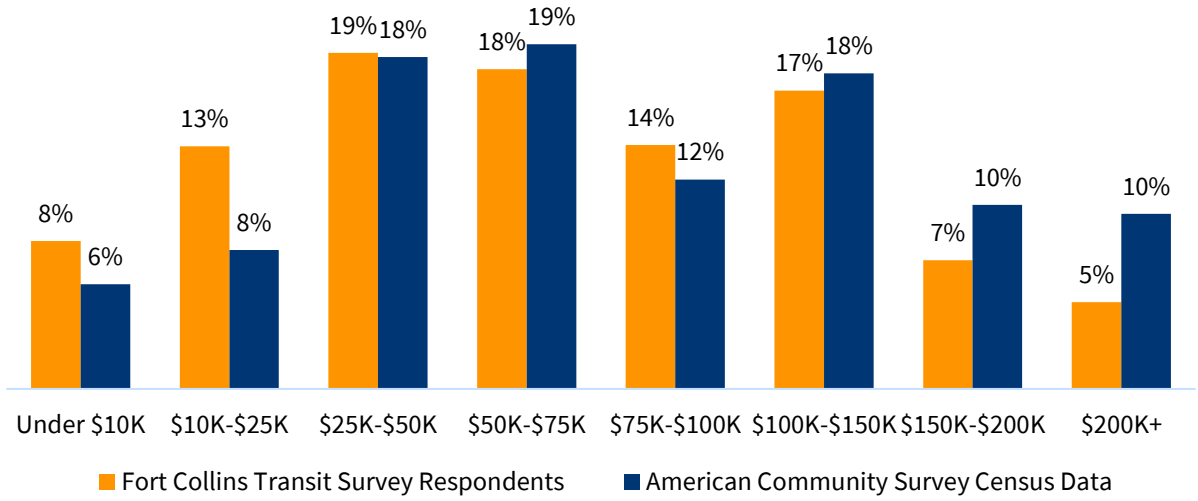
Figure 15. Age Distribution of Survey Respondents



Household Income

Over 80% of respondents provided their range of average household income. Household incomes of survey respondents were fairly well distributed (as shown **in** Error! Reference source not found.); t hus responses represent individuals with a broad range of incomes. Compared to the citywide median household income distribution, people with an annual household income of less than $25,000 were slightly overrepresented and people with an annual household income of over $150,000 were slightly underrepresented.

Figure 16. Average Household Income of Survey Respondents



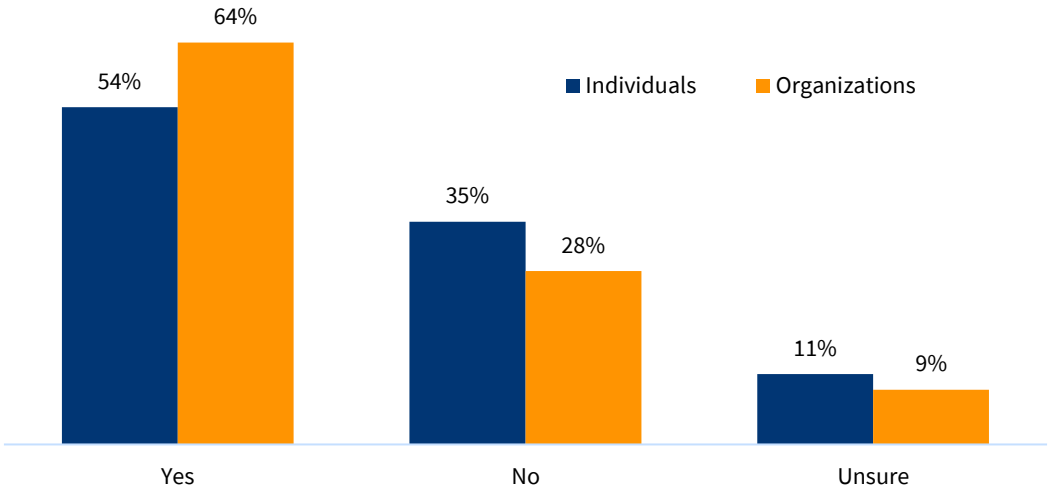
32% of Survey Respondents Represent K-12 or College Students & Staff

Nearly two thirds of survey respondents identified themselves as a student or staff at Colorado State University, Poudre Valley School District, or Front Range Community College.

Fare-Free Survey Findings

Just over half of survey respondents from the public said that charging a fare for Transfort would be a financial burden or barrier to themselves, their clients/constituents, or to their employees (see **Figure 17**). A greater percentage (64%) of the 70 organizations that responded to the survey said charging a fare would be a barrier to their clients/constituents or employees.

Figure 17. Is Charging a Fare to Ride Transfort a Financial Burden/Barrier for You, Your Clients, or Employees?



The vast majority of respondents (nearly 80%) felt that keeping Transfort fare-free would increase their mobility or that of their clients/constituents, employees, or colleagues (see **Figure 18**). The responses were similar from individuals and organizations.

Figure 18. If Transfort Were to Remain Fare-Free Permanently, Would it Increase Your Mobility or that of Your Clients, Employees, or Colleagues?

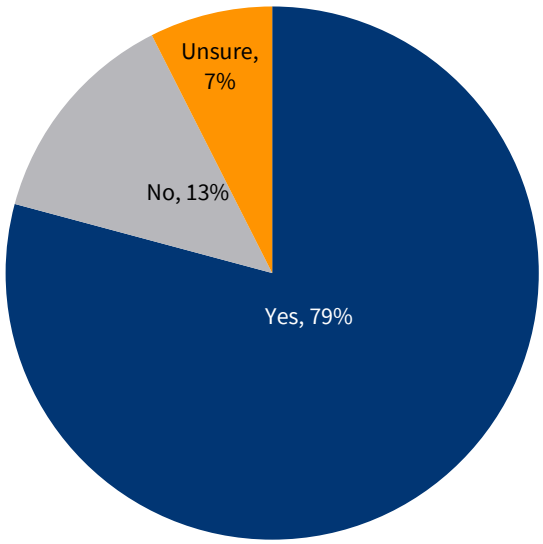
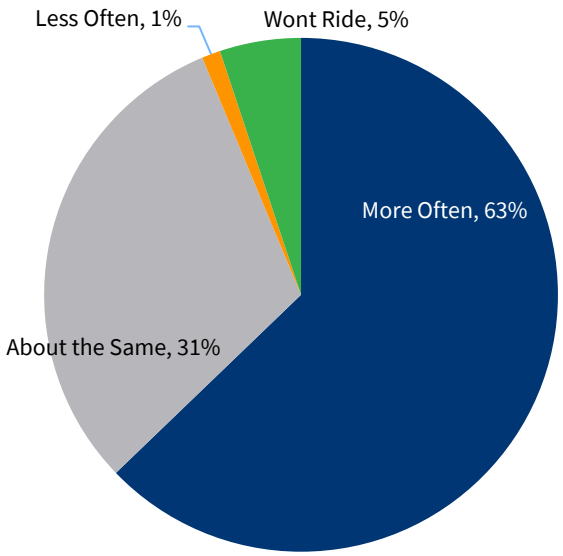


Figure 19 shows that over 60% of survey respondents would ride Transfort more often if it is kept fare-free permanently. Only one percent of respondents said they would ride less often.

Figure 19. How Often Would You Ride Transfort in the Future if it is Permanently Free to Ride?



When asked how often respondents would ride Transfort in the future if they had to pay a fare, over 50% of respondents said they would ride less often or not at all, and only 3% said they would ride more often (**Figure 20**).

Figure 20. How Often Would You Ride Transfort in the Future if You Had to Pay a Fare?

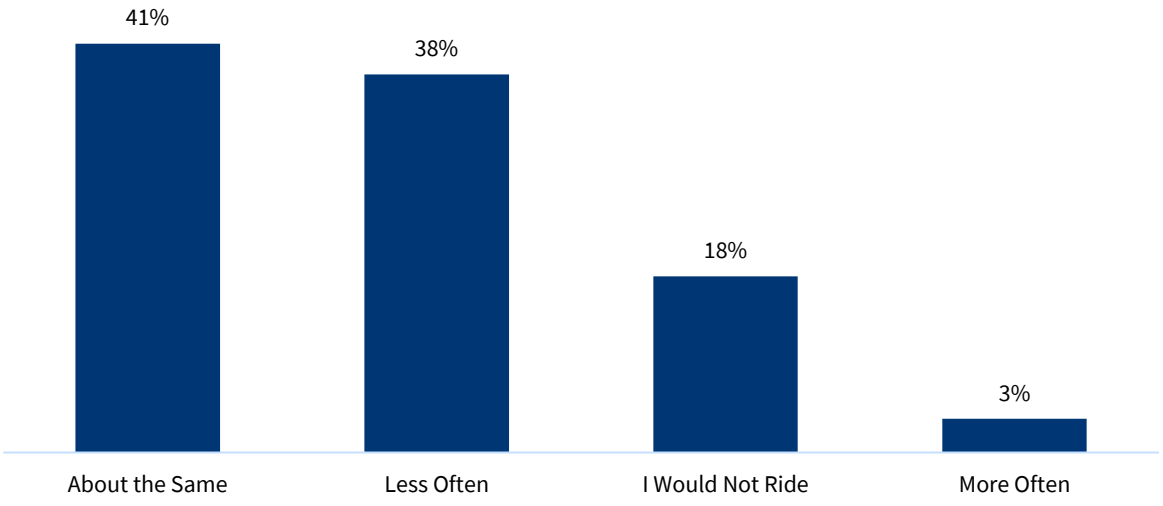
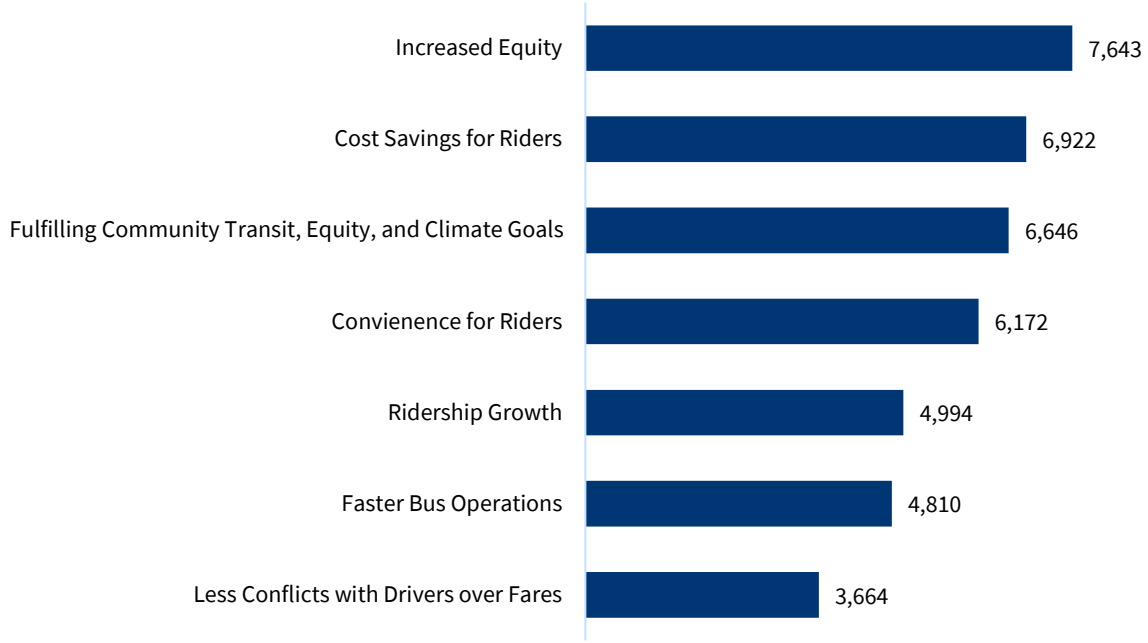


Figure 21 shows how respondents ranked the impact of each of the seven benefits of fare-free service identified in this study against each other. Respondents feel the most impactful benefit will be equity and access to transportation. The cost savings to riders, fulfilling key community goals related

to transit, equity, and climate, and the convenience were also ranked as more impactful than the others.

Figure 21. How Respondents Ranked the Benefits of Fare-Free Transit (by Score)



Respondents were asked if there were other benefits to Transfort going permanently fare-free than those that were identified in the study. Over 400 people responded, and the responses were grouped into common themes, with the top themes shown in **Figure 22.**

The top theme by far was the equity benefit, especially that fare-free transit provides mobility to people for whom the cost of the fare is a significant barrier. The second highest theme was also one identified by the project team – the ease of use due to removal of the barrier of knowing what the fare is, how to pay, or making sure one has exact change. The top two of the most listed benefits outside of those identified by the project team include reduced traffic and improved safety due to less drunk driving. Other benefits that survey respondents commonly identified include quality of life/connectedness to the community/city pride, a boost to the local economy and businesses, increased tourism and visitor mobility, and environmental benefits.

Figure 22. Additional Benefits of Fare-Free Transit Cited by Survey Respondents

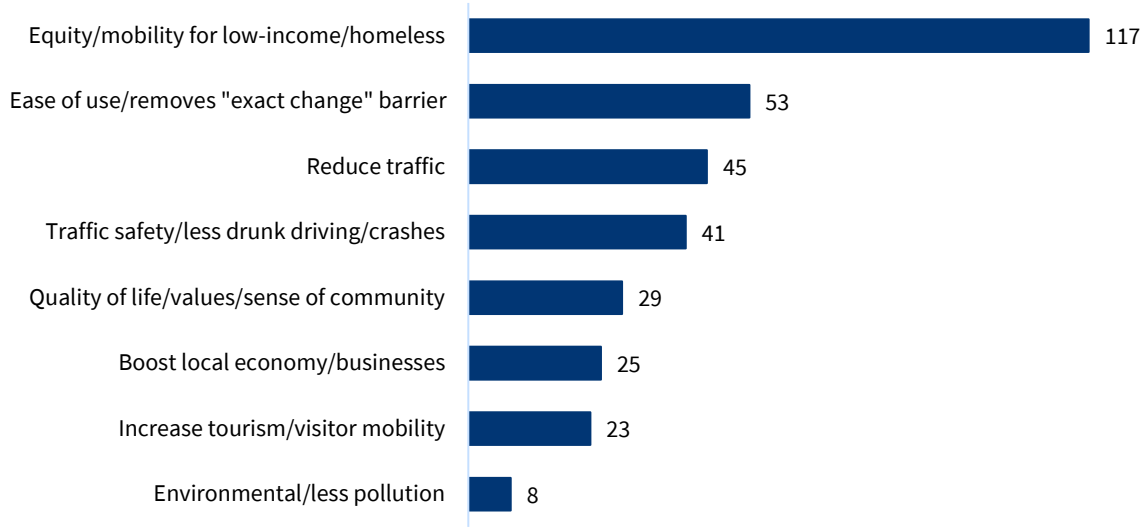


Figure 23 shows how respondents ranked the four barriers to implementing fare-free service identified in this study against each other in order of the most concerning. The findings show that respondents feel that safety/security are the most concerning of the four barriers identified in this report, followed by potential loss of revenue.

Figure 23. Respondents Rank of the Most Concerning Barrier of Fare-Free Transit (by Score)

Respondents were asked if there were other barriers to Transfort going permanently fare-free than those that were identified in the study. Over 300 people responded and the responses were grouped into common themes, with the top themes shown in **Figure 24**. The two greatest concerns for going to fare-free were: 1) The impact to safety/cleanliness due to a concern of increased use by the unhoused population or those with substance abuse issues as well as from reduced perceived value of transit if people don't directly pay a fare; and 2) Loss of funding with other ramifications. The concerns over loss of funding varied from inability to expand transit service/additional service cuts, inability to pay/attract/retain drivers, loss of CSU funding, and increased taxes. Lastly, a significant

number of respondents also felt that none of the barriers listed were real barriers to going fare-free, and many also had political concerns or were worried about the barrier from political concerns over how transit is funded, etc.

Figure 24. Additional Barriers to Fare-Free Transit Cited by Survey Respondents

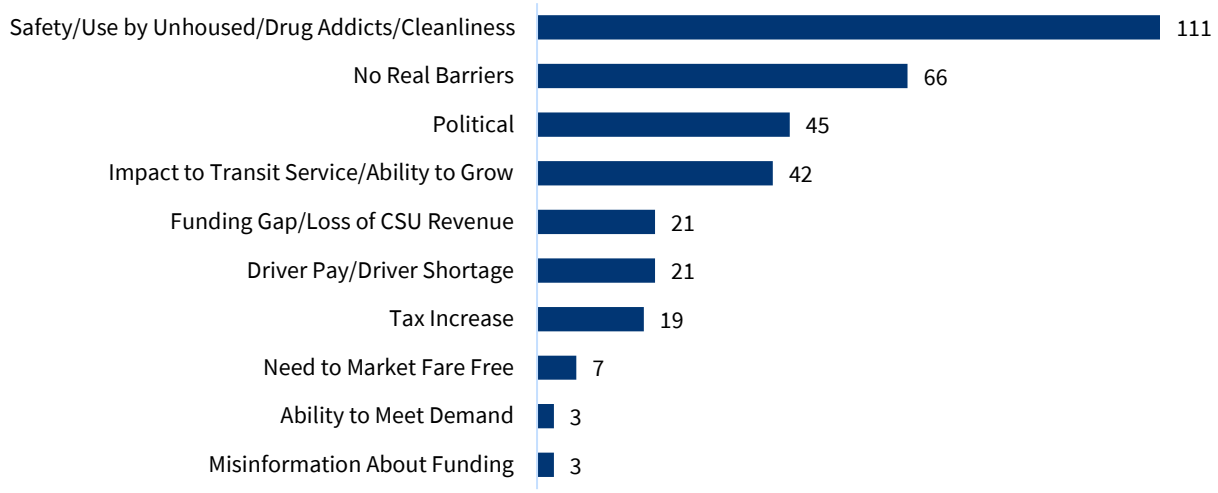
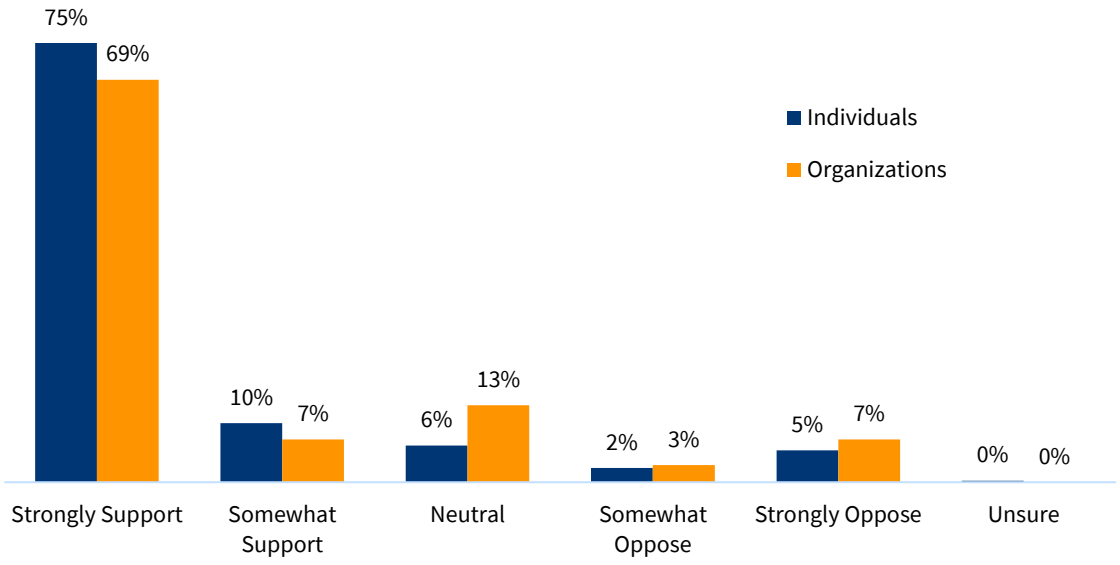


Figure 25 shows that survey respondents overwhelmingly support Transfort remaining fare-free. Seventy five percent of respondents strongly support continuing fare-free service, and 85% overall support fare-free transit service. The responses among representatives of the 70 organizations that responded to the survey were similar.

Figure 25. How Much Do You Support or Oppose Transfort Remaining Fare-Free?



Conclusion

An analysis of the cost, benefits, and barriers of converting local transit service in Fort Collins to fare-free long-term suggests that there is a strong case to be made so long as Transfort can largely retain the existing partnership and funding arrangement with CSU. In 2021, CSU contributed close to $640,000 as part of their annual contract to provide free service to CSU students and staff, which represented about 4% of total Transfort operating revenue.

This study shows that when factoring in staff time associated with collecting, enforcing, and managing fare payment, as well as annual vendor fees to maintain and operate the equipment, and periodic upgrades and replacement of the fare collection infrastructure, Transfort operated at a marginal net gain from fare collection of about $30,000 in 2019 (the last full year fares were charged), excluding CSU contributions. Transfort is considering converting to a new cloud-based fare payment system that would have a lower estimated annual operating cost and capital cost. However, even with this new system, the estimated net fare revenue (assuming 2019 ridership) would be about $220,000 or about 1% of operating expenses.

This study examined peer examples of agencies that converted to fare-free and found several benefits to the community from converting to fare-free transit, including increased equity, particularly for low-income users, increased ridership, potential transit speed, reliability, and operational improvements, and reduced citywide vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions. All of these benefits would advance goals identified in adopted city plans, including increased equity, improved transit performance, and climate action.

The study identified several potential barriers to converting to fare-free, including potential loss of CSU funding, onboard safety and security concerns, and increased demand for paratransit services. For each of these potential barriers, several mitigation strategies were identified based, in part, on tools other transit agencies have used that could be implemented in Fort Collins. If Transfort uses these strategies to overcome these barriers, then the benefits of a fare-free system, including little to no change in net revenue, would make a strong case for converting Transfort to fare-free long-term.

A survey of over 1,600 community members and community organizations revealed overwhelming support by the community for Transfort to continue to provide fare-free transit service into the future. The survey also underscored the pronounced impact of increasing mobility and equity in the community via fare-free transit service.

07 Future Funding

This chapter presents potential new funding sources to support expanded operations and capital projects, as well as suitability and practicality for implementation.

Future Funding Options

This chapter evaluates funding sources and financing strategies for existing funding gaps as well as capital expansion projects and associated annual operating and maintenance (O&M) costs to achieve the vision of the TMP.

This analysis assumes continuation of existing funding from the city's general fund and considered new funding sources to meet current funding gaps as well as future funding needs associated with service expansion.

Alongside this effort, the City of Fort Collins has been pursuing new citywide funding sources for various community priorities, including transit. This analysis recognizes that effort and incorporates it within the scenario evaluation of various funding sources. Depending on citywide funding tools that may be passed, the most relevant funding sources for transit needs may change (for example, if an additional citywide sales tax is passed by voters and adopted, it would not be an appropriate near-term strategy for Transfort).

Funding Needs

Future funding needs for Transfort are considered on an O&M, capital, and overall (combined) basis. While needs vary from year to year, for the purposes of this analysis the average annual need is used.

As shown in **Table 21**, for O&M, needs range from $3.9 million to $10.3 million annually, and average $7.6 million over the plan horizon. For capital expenditures, needs range from $2.1 million to $11.6 million annually, averaging $6.5 million per year. Overall, the lowest annual need is $9.5 million (recognizing that the low-end capital and operations do not occur in the same year), and the highest annual need is $16.9 million, with an overall average annual need of $14 million.

These three averages - $7.6 million annually for O&M, $6.5 million annually for capital, and $14 million annually overall – form the basis of the funding analysis.

As noted, the City of Fort Collins has considered citywide funding tools that may include ongoing annual funding for Transfort. To capture that within this analysis, funding needs are considered both with this additional City funding (estimated at $8 million annually, for a net need of $6 million per year) and without (the full need of $14 million per year).

Table 21. Transfort Funding Needs

Description	Low End Annual Need	High End Annual Need	Average Annual Need
Additional Funding Required			
Operating	$3,900,000	$10,300,000	$7,600,000
Capital	$2,100,000	$11,600,000	$6,500,000
Overall Need[1]	$9,500,000	$16,900,000	$14,000,000
Average Annual Need (no citywide funding)			**$14,000,000**
LESS - Potential Citywide Funding			-$8,000,000
Average Annual Need (with citywide funding)			**$6,000,000**

1 Note: this represents the low and high years of combined capital and O&M, not the sum of operating and capital low and high (which may occur in different years)

Source: Fehr & Peers; FHU; Economic & Planning Systems

Initial Analysis

Forty-seven tools were initially considered, including Federal grants, Federal and State sources (formula & pass-through funds), State sources, and various local funding sources (including those providing ongoing revenue generation, districts, and other creative local options). Some of these tools are currently used by the City for transit, and if also used for future funding needs would represent an expansion of use. Other tools are currently used by the City for non-transit purposes and could be expanded to include transit funding.

Funding options were considered for capital and O&M both separately and together, to determine how revenue tools can best be utilized. Particularly for O&M, the stability of revenue on an annual basis was a key consideration.

Prioritized Analysis

The 47 tools were evaluated through six criteria: revenue yield, stability/reliability, legal parameters, ease of administration, equity impacts, and overall viability. Based on this evaluation, 29 funding sources were analyzed in further detail.

Revenue tools were grouped by three categories – grants and formula funding, existing revenue tools, and new revenue tools.

Grants and Formula Funding

Unless determined to be not applicable to Transfort needs, all grants and formula funds, as external sources of funding, were further considered. While these are typically one-time allocations for capital expenditures, administering these funding sources is generally within the administrative and regulatory capacity of the City and they provide funding that does not place a burden on local employees or residents (outside of

local match requirements). While these sources generally do not provide regular, ongoing revenue, they should always be considered for one-time capital expenditures as project eligibility allows.

Existing Revenue Tools

Six funding sources currently used by the City – whether for Transfort or for other purposes – were identified as potential funding tools for future Transfort needs. Of these six, three were included in the final analysis: special purpose sales tax, property tax, and agreements and partner contributions.

New Revenue Tools

New revenue tools were a focus of this analysis, and 11 potential new sources of funding were evaluated as part of the prioritized analysis. Of these, four were determined to have the greatest potential to meet Transfort's needs and were included in the final analysis.

Final Revenue Tools for Consideration

Based on the findings of the prioritized analysis, seven revenue tools were included in the final analysis. All of these funding sources are already within the City's authority to use (i.e., do not require state legislative changes in order to implement). The focus of the analysis was on those tools either not currently used or with capacity to be expanded.

1. Property tax
2. Special purpose sales tax
3. Excise tax/fee
4. Occupational privilege tax/fee[29]
5. Marijuana tax[30]
6. Scooter/bikeshare fees
7. Agreements and partner contributions

Table 22 summarizes revenue potential of these tools for a range of levies/levels that were deemed to be reasonable for implementation. As shown, a property tax or a special purpose sales tax can generate the greatest amount of revenue.

29 Existing programs in the state were implemented prior to the passage of the Taxpayer's Bill of Rights (TABOR) Amendment in 1992; this program may be able to function as a tax or a fee

30 The City of Fort Collins is currently interested in a regional approach to a marijuana tax; it is included here for reference as a potential longer-term strategy, but not included in scenarios

Table 22. Revenue Potential

Revenue Source and Rate	Estimated Annual Revenue
Property Tax	
1 mill	$3.5 million
2 mills	$7.0 million
3 mills	$11.0 million
4 mills	$14.5 million
5 mills	$18.0 million
Special Purpose Sales Tax	Each
0.10%	$3.6 million
0.20%	$7.2 million
0.25%	$9.0 million
0.30%	$10.8 million
0.40%	$14.4 million
0.50%	$18.0 million
Excise Tax	
0.25%	$2.5 million
0.50%	$5.0 million
Occupational Privilege Tax/Fee	of
$2/month	$2.0 million
$4/month	$4.0 million
$6/month	$6.0 million
Marijuana Tax	
3.0%	$3.0 million
4.0%	$4.0 million
5.0%	$5.0 million
Scooter/Bikeshare Fees	
$0.50/day per device	$128,000
$1.00/day per device	$256,000
$1.50/day per device	$383,000
Ageements and Partner Contributions	
Low	$0.5 million
Medium	$1.0 million
High	$1.5 million

Source: City of Fort Collins; Economic & Planning Systems

these tools was evaluated based on the six criteria (revenue yield, stability/reliability, legal parameters, ease of administration, equity impacts, and overall viability) described previously. **Table 23.** Final Revenue Tools – Evaluation Matrix **summarizes this evaluation**. As shown, property tax and sales tax have the highest revenue potential, while scooter/bikeshare fees and agreements & partner contributions have the least. Taxes provide the greatest stability; however, as they would require an election to be implemented, they all score lower on legal parameters. Ease of administration is ranked the highest for tools the City already uses, while those that would require setting up new systems to administer score lower. Whether a tool is currently used or not, need for voter approval, political environment, and other qualitative factors impact overall viability ratings.

Table 23. Final Revenue Tools – Evaluation Matrix

	1. Property Tax	2. Special Purpose Sales Tax	3. Excise Tax/Fee	4. Occupational Privilege Tax	5. Marijuana Tax	6. Scooter/ Bikeshare Fees	7. Agreements and Partner Contributions
Revenue Potential	High	High	Medium	Medium	Medium	Low	Low
Stability	High	High	High	High	High	Medium	Medium
Legal Parameters	Medium	Medium	Medium	Medium	Medium	High	High
Ease of Administration	High	High	Medium	Low	Medium	Medium	High
Equity	Medium	Medium	High	Low	Low	Medium	High
Viability	Low	Low	High	Low	Medium	Medium	High

Funding Scenarios

The seven tools outlined above were used as inputs into four funding scenarios. These are intended to be utilized as possible scenarios for meeting Tranfort's funding needs – due to several uncertain factors at the time of this study (most importantly the status of a citywide funding source), this document does not include specific recommendations. However, the revenue potential and other analysis of these revenue tools can be used hereafter to inform needed funding decisions.

The four scenarios considered include: two examining a single funding source to cover revenue needs (a special purpose sales tax or a property tax), one considering how the various funding sources can cover O&M needs only, and one considering how the various funding sources can cover capital needs only.

Scenario 1: Sales Tax

The first scenario considers a special purpose sales tax to fund Transfort's needs. As shown in **Table 24**, a 0.20% sales tax levy would generate enough revenue to cover needs (if a citywide tool contributes $8 million per year); with no funding from a citywide tool, a 0.40% sales tax will generate the required $14 million in annual revenue.

Table 24. Scenario 1 – Special Purpose Sales Tax

	Special Purpose Sales Tax	
	With Citywide Funding	No Citywide Funding
Funding Need	$6,000,000	$14,000,000
Levy	0.20%	0.40%
Annual Revenue	$7,200,000	$14,400,000
Net Position	**$1,200,000**	**$400,000**

Sales tax revenue potential is high and typically stable over long time periods; however, an election would be required to adopt a new tax and voter approval is likely to be challenging. Additionally, if a special purpose sales tax is pursued as part of the citywide funding initiative, a separate transit sales tax levy would not be a viable option for Transfort, at least in the immediate future.

Scenario 2: Property Tax

The second scenario considers a property tax as a standalone funding mechanism. As shown in **Table 25**, a 2.0 mill property tax levy can generate enough revenue to cover needs if a citywide tool contributes $8 million per year; with no funding from a citywide tool, a 4.0 mill property tax will generate sufficient revenue.

Similar to a sales tax, revenue potential is high and property tax revenue is typically stable over long time periods. However, as a new tax, a Taxpayer's Bill of Rights (TABOR) election would be required to implement this tool, and it may be challenging to pass a transit specific property tax in a general city-wide election. The same considerations of citywide funding tools apply – if a property tax is utilized as part of a citywide strategy it would become a longer-term consideration for Transfort. An additional consideration is that property taxes often significantly impact low-income homeowners when property values rise.

Table 25. Scenario 2 – Property Tax

	Property Tax	
	With Citywide Funding	No Citywide Funding
Funding Need	$6,000,000	$14,000,000
Levy	2.0 mills	4.0 mills
Annual Revenue	$7,000,000	$14,500,000
Net Position	**$1,000,000**	**$500,000**

Scenario 3: Operations Only

The third scenario considers a dedicated source of funding for O&M expenditures only, with revenue for capital needs coming from other city or external sources (e.g., federal and state grants). A dedicated source of operating revenues can provide stability and predictability to the transit system, compared to competing for a general fund allocation on an annual basis. As noted previously, annual O&M needs range from $3.9 million to $10.3 million annually, averaging $7.6 million per year. As shown in Error! Reference source not found., this funding goal can be achieved in several ways, using either a single revenue source or a combination of sources. If this strategy is pursued, key considerations in determining a funding approach will include the time to implement, likelihood of passage, and ease of implementation of the single or multiple tools used. To meet operating needs, an ongoing revenue source (or multiple ongoing sources) will be most relevant to ensure stability and predictability of funding.

Table 26. Scenario 3 - Operations Only

	Operating Needs			
	Option 1	Option 2	Option 3	Option 4
Funding Need	$7,600,000	$7,600,000	$7,600,000	$7,600,000
Tool and Levy	1 - Excise tax @ 5.0% 2 - Occupational Privilege Tax/Fee @ $4/month	1- Occupational Privilege Tax/Fee @ 2 - Scooter/Bikeshare Fees @ $1.50/day 3 - Partner Contributions @ $1 million/year	1 - Special Purpose Sales Tax @ 0.25%	1 - Property Tax @ 2.5 mills
Annual Revenue	$9,000,000	$7,380,000	$9,000,000	$9,000,000
Net Position	**$1,400,000**	**-$220,000**	**$1,400,000**	**$1,400,000**

Scenario 4: Capital Only

The fourth scenario considers a dedicated source of funding for capital expenditures, which would most likely be used to finance bonds for a package of capital improvements. Capital needs range from $2.1 million to $11.6 million annually, averaging $6.5 million per year. A dedicated capital funding source can make it easier to compete for external funding, such as grant opportunities, as local match or other needed funding does not have to found for each individual project. As shown in , similar to operating needs this funding goal can be achieved in a number of ways, using either a single revenue source or a combination of sources.

Key considerations in this funding approach are similar to the O&M-only approach. The time to implement, likelihood of passage, and ease of administration will be key factors in the success of a strategy and determining which funding tools to pursue. For those that require elections, project-specific funding needs may have a stronger case with voters and so taxes may be better suited to a capital funding strategy. Additionally, ongoing revenue tools such as sales tax or property tax can allow the City to issue bonds backed by the tax revenue, which can create a more predictable source of funding for capital projects. As noted, a capital-specific funding source would be most relevant in relation to a bond issuance. Likelihood of passage would be highest for specified package of high priority capital projects that have strong community-wide support.

Table 27. Scenario 4 – Capital Only

	Capital Needs			
	Option 1	Option 2	Option 3	Option 4
Funding Need	$6,500,000	$6,500,000	$6,500,000	$6,500,000
Tool and Levy	1 - Excise tax @ 5.0% 2 - Occupational Privilege Tax/Fee @ $2/month	1- Occupational Privilege Tax/Fee @ $6/month 2 - Scooter/Bikeshare Fees @ $1.50/day	1 - Special Purpose Sales Tax @ 0.20%	1 - Property Tax @ 2.0 mills
Annual Revenue	$7,000,000	$6,380,000	$7,200,000	$7,000,000
Net Position	**$500,000**	**-$120,000**	**$700,000**	**$500,000**

Future Funding Considerations

As noted, future funding decisions will be made in the context of any citywide revenue tools that are implemented, as well as determining priority needs (e.g. an operating-only or capital-only approach). In addition to the considerations outlined within the scenarios, future considerations may include regional solutions and financing approaches.

Regional Transportation Authority

While this effort focused on specific funding needs and opportunities for Transfort, there are also considerations of broader regional transportation improvements. A Regional Transportation Authority (RTA) can be formed by cities, counties, and MPOs to fund and build transportation infrastructure improvements and provide transportation services within a multijurisdictional area boundary. While an RTA is not an applicable tool for Transfort on its own, it could be a powerful tool to address regional needs, with the power to build, finance, operate, and maintain a regional transportation system. RTAs can generate revenue through multiple revenue sources including sales/use taxes, vehicle registration fees, lodging taxes, mill levies, bonds, and/or loans with other private or public entities.

RTAs are being used throughout Colorado to provide steady and reliable funding for transit and/or general transportation. Establishing an RTA can be administratively complex and requires voter support, however this is a significant mechanism to consider for implementing regional transit and transportation improvements in the future.

Financing Strategies

The use of revenue bonds is a strategy for leveraging a funding stream for an individual or package of high priority capital projects. As shown in **Table 28**, annual revenue of $3 million (approximately a 1 mill property tax or 0.10% sales tax) could generate nearly $15.2 million in bond proceeds over 10 years, while annual revenue of $18 million (a 5 mill property tax or 0.50% sales tax) can generate nearly $91.2 million. While this is approximately half of the revenue that would be available if these tools were used on a pay-as-you-go basis, issuing bonds enables Transfort/the city to access the funds when they are needed, without potentially having to wait multiple years to accrue enough funding to cover needs. This is particularly relevant for capital expenditures, where funding needs are much more irregular than ongoing operations and maintenance.

Table 28. Potential Bond Proceeds

Description	Factors	Low End				High End
Revenue Stream to be Bonded		**$3,000,000**	**$7,000,000**	**$10,000,000**	**$14,000,000**	**$18,000,000**
Estimated Net Revenue Available for Debt Service						
Total Annual Revenue		$3,000,000	$7,000,000	$10,000,000	$14,000,000	$18,000,000
Estimated Annual Administrative Costs[1]	1.00%	$30,000	$70,000	$100,000	$140,000	$180,000
Debt Coverage	1.20	$495,000	$1,155,000	$1,650,000	$2,310,000	$2,970,000
Net Revenue Available for Debt Service		**$2,475,000**	**$5,775,000**	**$8,250,000**	**$11,550,000**	**$14,850,000**
Estimated Total Bonds[2]		**$18,220,000**	**$42,500,000**	**$60,720,000**	**$85,010,000**	**$109,300,000**
Capitalized Interest	0 months	$0	$0	$0	$0	$0
Bond Reserve Fund	1 yr D/S	$2,480,000	$5,780,000	$8,250,000	$11,550,000	$14,850,000
Formation & Issuance Costs	3.00%	$550,000	$1,280,000	$1,820,000	$2,550,000	$3,280,000
Estimated Total Bond Proceeds (Net of Issuance Costs)[2]		**$15,190,000**	**$35,440,000**	**$50,650,000**	**$70,910,000**	**$91,170,000**

Note: Assumes the following bond assumptions: 10 year term and a 6% interest rate

[1]Assumed an administrative fee of 1 percent of the annual revenues available for debt service.

[2]Rounded to the nearest ten thousand.

Source: Economic & Planning Systems