Transit Board Meeting
AGENDA

AMES TRANSIT AGENCY
BOARD OF TRUSTEES

CYRIDE CONFERENCE ROOM – March 23, 2022

1. CALL TO ORDER: 4:00 p.m.
2. Approval of February 23, 2022, Minutes
3. Public Comments
4. Award of Contract for BEB Facility Improvements Project
5. HIRTA Contract and Annual Customer Survey
6. State Grant and Public Transit Infrastructure Grant (PTIG) Applications
7. Systemwide Fare Free Analysis
8. Monthly Report
9. Spring Meeting Dates / Times
    - April 27, 2022, 4:00 p.m.
    - May 25, 2022, 4:00 p.m.
10. Adjourn

Ames Transit Agency
Board of Trustees

February 23, 2022
AMES TRANSIT AGENCY BOARD OF TRUSTEES

The Ames Transit Agency Board of Trustees met on February 23, 2022, at 4:00 p.m. in the CyRide Conference room. Vice President Ludwig called the meeting to order at 4:04 p.m. with Trustees Beatty-Hansen, Cain, Clayburn, and Schainker present.

APPROVAL OF JANUARY 26, 2022, AND FEBRUARY 4, 2022, MINUTES: Trustee Beaty-Hansen made a motion to adopt January 26, 2022, and February 4, 2022, transit board minutes as presented, and Trustee Clayburn seconded the motion. (Ayes: 5 Nays: None) Motion carried.

PUBLIC COMMENTS: None.

NEW BOARD MEMBER: Director Neal welcomed Kit Clayburn as our new student board member. Kit is a sophomore at ISU majoring in Animal Ecology and Biology and is an off-campus senator.

SURFACE TRANSPORTATION BLOCK GRANT PROGRAM FUNDING REQUEST FY 2026: Director Neal requested approval to submit a Surface Transportation Block Grant (STBG) application to the Ames Area Metropolitan Planning Organization (AAMPO). The AAMPO receives approximately $1.8 million each year for transportation capital projects funded at 80% through the federal STBG grant program. If approved, the grant application for FY 2026, due March 31, 2022, would request $225,000 to upgrade a 40’ bus to a battery electric bus.

The Transit Director recommended approval of Alternative #1, to approve submitting a grant request for $225,000 in federal STBG funds from the AAMPO. If awarded, these federal funds would help with planned bus purchases and move CyRide toward a more efficient, sustainable fleet.

Trustee Beatty-Hansen made a motion to approve Alternative #1, approving a grant request of $225,000 in bus capital funds from the AAMPO for STBG federal funds in FY 2026. Trustee Clayburn seconded the motion. (Ayes: 5 Nays: None) Motion carried.

SUSTAINABLE TRANSIT FOR A HEALTHY PLANET STATEMENT AND GOALS: Director Neal requested approval of the healthy planet statement and goals. The board previously committed to developing a climate action or sustainability plan at the September 15, 2021, board meeting as part of the Federal Transit Administration’s (FTA) Healthy Planet Challenge; plans are due to the FTA by April 15, 2022.

Director Neal reviewed the policy statement and goals developed by staff to align with the FTA's goals and match the funding levels outlined in the Capital Improvements Plan (CIP). The plan utilizes information from The Zero Emissions Roadmap study done in 2019 by the Center for Transportation and the Environment (CTE) that determined the current facility and route structure could support 17 battery electric buses by 2050. She explained that the board could expand the commitments outlined in the plan, but a larger capital investment by the board would be required.

Director Neal provided an overview of the goals. The first goal is considered short-term, with a 3-5 year timeline. It focuses on replacing 7% of the fleet with battery electric buses, the use of biodiesel, installing solar-powered bus shelters where appropriate, using energy-efficient support vehicles, and maximum usage of cooling towers to heat and cool the facility. The second goal is considered long-term and includes replacing 18% of the fleet with battery electric buses by 2050. Other considerations were outlined in the third goal, including the exploration of alternative bus technology and fuels, facility improvements to reduce greenhouse gases (GHG), promotion of transit ridership in the community, installation of charging stations in the parking lot, and the programming of other sustainable projects as funding becomes available.

The Transit Director recommended approval of Alternative #1 or #2, stating that Alternative #1 would be ideal as it keeps spending within the framework of the board and City council approve CIP and aligns with the Zero Emissions Roadmap developed by CTE. Either choice formally demonstrates CyRide's commitment to sustainability to the FTA.

Trustee Beatty-Hansen asked if it was possible to know how far off this plan is from achieving similar goals to the city's Climate Action Plan, which set a target of 83% GHG reduction by 2030. Trustee Beatty-Hansen further inquired what additional expenses there would be to achieve the city's goal. Director Neal said that the 83% reduction of GHG is a very ambitious goal based on today's circumstances. She explained that the statement and goals being presented are a starting point that could be revised to have more ambitious goals in the future. Staff has been working with the city's consultant but believes that it may be beneficial for the board to hire their own consultant that would use transit data and tools evaluated by the American Public Transit Association (APTA) to have an accurate understanding of the impacts relevant to transit.

Trustee Beatty-Hansen said that no suggestions had been made to the City of Ames at this time. She added that the goal to increase ridership would help reduce carbon production and that the Ames City Council has set aside extra funding for climate action related projects. Trustee Schainker confirmed that $1.2 million had been budgeted for climate action projects.

Transit Planner Shari Atwood pointed out that 83% of the bus fleet is 74 buses. If all 74 buses are replaced in the next seven years, only between 7-21 buses might be federally funded, leaving the rest to be funded locally at approximately $900,000 each. Director Neal added that a new facility would be needed to accommodate the changing fleet, requiring approximately 20 acres of land and $40 million. Trustee Schainker said that he would like to revisit the plan after the City's Climate Action Plan suggestions were made.

Trustee Cain made a motion to approve Alternative # 1, approving CyRide's climate action statement and the three sets of goals for submission to FTA, with the understanding the plan would be reviewed in upcoming years. Trustee Clayburn seconded the motion. (Ayes: 5 Nays: None) Motion carried.

MONTHLY REPORT:

New Articulated Bus: A 60' articulated Nova bus was delivered earlier this month, replacing a 40' bus, increasing the articulated bus fleet to seven. The goal is to have 10 articulated buses on the Orange route since they have 50% more capacity than a 40' bus and require no additional operating costs.

Dial-A-Ride Survey and Contract: CyRide's Dial-A-Ride (DAR) service is contracted with Heart of Iowa Regional Transit Authority (HIRTA). Each year a customer satisfaction survey is conducted to evaluate the service. Staff is contacting DAR customers via phone to increase the number of responses. Once the results are tabulated, we will share this information with HIRTA and the transit board at a future meeting. Additionally, HIRTA will be contacted to confirm their interest in providing DAR services next year.

Valentine's Day: Special Valentine's Day messages were displayed on the bus destination signs and generated positive comments from the community.

Solar Panel on CyRide Roof: In response to an inquiry made by the City Council, staff has done a high-level review of the potential addition of solar panels on the roof of the CyRide building. Currently, the on-call Architecture and Engineering firm is being consulted to evaluate the solar panels' impact on energy consumption. Another factor that will need to be accounted for is the positive environmental value of the facility's existing white, reflective roof, which offsets GHG. The review process could take several months due to the A&E firm's workload, but the information will be shared with the board as it becomes available.

Fuel Contract: Fuel is currently purchased on a contract with Renewable Energy Group (REG) on an over or under cost of the market rate through June 30, 2022. Staff will be working with the Purchasing Department to release a new request for proposal (RFP) and exploring if our contract could be combined with other City of Ames departments to reduce costs. Results of the RFP will be presented to the board at a future meeting.

Trustee Ludwig inquired if there were concerns about the $2.75 per gallon that was approved in the budget and if any amendments to the budget were needed. Director Neal said that when $2.75 per gallon was put into the budget, fuel was averaging $2.50 per gallon. The past five loads of fuel averaged $2.77 per gallon, and the market rate today at the Department of Transportation is $2.84 per gallon. It was noted there have been some savings from not running as many extra buses. We will continue to monitor the fuel market and keep the board updated.

Infotainment Monitors: New buses are being equipped with infotainment monitors that display upcoming stops, transfer points for the route, and provides advertising revenues. In the past, the advertising contractor purchased tv screen type monitors for advertising in the six articulated buses, but these monitors are no longer functioning properly. Staff will be working with the Purchasing Department to issue an (RFP) to replace these units and will present the RFP results to the board.

Transit Advertising Contract: CyRide currently contracts with Houck Transit Advertising to sell the advertising space on the interior and exterior of the buses. Since the contract expires on July 30, 2022, staff will be working with the Purchasing Department to issue an RFP Once completed, the results of the RFP will be presented to the board.

Ames Intermodal Facility Leases: Currently, Ames Police Department, Executive Express, and Jefferson Lines have leases at the Ames Intermodal Facility. Each year the lease rate for Executive Express and Jefferson Lines is negotiated with a proposed increase based on the Producer Price Index (PPI), which would be an increase of 0.8%. Due to the continued economic issues and the low PPI increase, no increase is being proposed. The Ames Police Department is interested in renewing their no-cost lease for an additional five years. Later this spring, all leases will be formally presented to the board for consideration.

Second Quarterly Report: A detailed system report for the second quarter of FY 2022 was summarized. Ridership is trending up. Trustee Cain asked if data from FY 2019 and FY 2020 could be included in future comparisons.

Spring meeting dates:

- March 23, 2022, 4:00 p.m.
- April 27, 2022, 4:00 p.m.
- May 25, 2022, 4:00 p.m.

Adjourn: Trustee Clayburn made a motion to approve adjourning at 4:32 p.m. Trustee Beatty-Hansen seconded the motion. (Ayes: 5 Nays: None) Motion carried.

Liz Jeffrey, President

Cheryl Spencer, Recording Secretary

March 23, 2022
Battery Electric Bus Facility Improvements - Award of Contract
CyRide Resource: James Rendall

BACKGROUND:

In preparation for adding battery electric buses (BEBs) into CyRide's fleet, CyRide, in coordination with the Purchasing Division, released an invitation to bid for the CyRide Electric Bus System Upgrades project (Bid No. 2022-096). This was released on February 8, 2022, with bids due March 9, 2022. The project budget was revised to $298,161 at the Transit Board meeting on February 4, 2022. The table below shows the specific funding available for this project.

Description	Federal Funds	Local Funds	Total
Facility Construction	$129,370	$22,830	**$152,200**
Depot Charger – Savings from Favorable Bid	$37,400	$6,600	**$44,000**
Transfer from Operations Fund Closing Balance	-	$101,961	**$101,961**
Total	**$166,770**	**$131,391**	**$298,161**

Plans and specifications call for installing a transformer pad for the 480-volt transformer, new facility switchgear and its associated platform, a charger platform, and installation of the purchased charging equipment. All new equipment will be installed at a height that reduces the risk of water damage during flooding and permits general facility maintenance. A single alternate was also included in the specifications to extend the charger platform to accommodate two additional chargers.

CyRide received two bids in response to the invitation to bid. The responses are listed below and are included in the attached bid tabulation.

Bidder	Base Bid	Alternate #1
Jaspering Electric Inc.	$ 282,800	$ 10,400
Van Maanen Electric Inc.	$ 299,000	$ 10,000

The low bid on the project was from Jaspering Electric Inc. of Ames, Iowa. The low bidder noted on their bid that the desired June 24, 2022, completion date could not be met due to supply chain issues with the main electrical switchgear. The expected delay for the switchgear is approximately 30 weeks, which aligns with research that the Architecture and Engineering (A&E) firm communicated to CyRide while the invitation to bid was open. The A&E firm has identified a temporary power solution that should allow the charger and dispensers to be functional when the electric buses arrive and enable the switchgear to be installed as the permanent solution upon delivery.

CyRide staff, in consultation with the A&E firm, has evaluated the bids received and believes that the base bid response is a good value for CyRide. The letter of recommendation from the A&E firm is attached to the board packet. Based upon the bid cost of Alternate #1, the potential of future chargers being supplied by a different manufacturer, and the need to leave contingency funding for change orders, staff do not believe selecting Alternate #1 would be in CyRide's best financial interest.

ALTERNATIVES:

1. Award the contract for the CyRide Electric Bus System Upgrades project to Jaspering Electric Inc. of Ames, Iowa for the base bid amount of $282,800 and reject bid alternate 1.

2. Reject the bids and direct staff to proceed according to Transit Board priorities.

RECOMMENDATION:

The Transit Director recommends approval of Alternative #1. Awarding the contract to Jaspering Electric Inc. will allow CyRide to proceed with facility improvements and alternations needed to support the battery electric buses at the best possible cost to the organization.

CITY OF AMES, IOWA mike.adair@cityofames.org **BID NO. 2022-096** CyRide Electric Bus System Upgrades	5% Bid Bond	Bidders Status Form	Buy America Requirements Form	Lobbying Form	Form 1: DBE Utilization	Form 2: DEB Letter of Intent	IA DOT Non-Collusion Binding Certification	Addenum #1 & 2	BASE BID	Add Alternate #1
BIDDERS										
Jaspering Electric Inc.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	$282,800.00	$10,400.00
Van Maanen Electric Inc.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	$299,000.00	$10,000.00

ASK STUDIO ARCHITECTS SCHIPPER KASTNER

March 11, 2022

Ms. Barbara Neal, Director of Transit
CyRide
601 N. University Boulevard
Ames, IA 50010

Ms. Neal,

There were two responsive bidders which submitted proposals for the CyRide Electric Bus System Upgrades. Of the two bids, there was one bid exceeding the Opinion of Probable Cost and one that was below it.

We recommend the acceptance of the bid proposal from Jaspering Electric Inc. to complete work associated with the base bid as described in the project specifications for $282,800.

Please note that the low bidder indicated that the proposed schedule in the design documents was not feasible due to supply chain issues. Accepting their bid would mean that they could not be held to the original schedule. However, the design team is willing to work with the selected contractor to deliver this project on a revised timeline that is acceptable to CyRide.

We believe the low bid will bring a good value to CyRide.

Regards,

Ryan M. Carter, AIA, NCARB

3716 Ingersoll Avenue, Suite A, Des Moines, IA 50312
P: 515.277.6707
ARCHITECTURE INTERIORS PLANNING

March 23, 2022
HIRTA Contract and Annual Customer Survey
CyRide Resource: Christine Crippen, Barbara Neal

BACKGROUND:

CyRide is required by the federal government to provide Americans with Disabilities Act (ADA) door-to-door bus service in the Ames community. In 2003, CyRide began contracting this Dial-A-Ride (DAR) service to a third-party Story County transit provider to operate DAR in conjunction with their regular service. Since 2012, the contract for DAR has been with Heart of Iowa Regional Transit Agency (HIRTA).

At the June 2018 Transit Board of Trustees meeting, the board approved a new three-year contract with HIRTA for DAR service, including an option to extend the contract for two additional years. FY 2023 would represent the fifth year of this agreement if the Transit Board approves a contract extension.

Annual Survey

CyRide annually conducts a DAR survey to gain input on overall customer impressions and gather specific suggestions to improve service. Data from this survey is used to provide feedback to the contractor regarding performance issues.

CyRide contacted DAR passengers who had ridden in 2021 to complete a customer satisfaction survey. In previous years, CyRide had contacted all eligible DAR passengers to conduct this survey. However, due to fewer riders during the pandemic, only passengers who had used the system in 2021 were surveyed. This survey was conducted by phone starting February 12, 2022. Though the response rate was lower than last year, the riders surveyed had utilized the service and could provide more detailed responses than in previous years. A total of 15 riders were willing to complete the survey by phone. Last year, CyRide received 28 responses in the previous year's survey, but 9 had not ridden in over a year and 7 quit riding after the pandemic started. The results from the past three years are attached, along with specific comments from this year.

The following are the general highlights from this year's survey and variations from the last two years:

- **Overall Satisfaction** - Overall satisfaction with the DAR service ("Satisfied" and "Very Satisfied") has increased over last year, with 100% satisfied or very satisfied, compared to 90.5% in 2021.
- **Service Improvement** - This year, 13.3% of respondents believed the service "had improved," compared to 38.1% in 2021.
- **Reservations** – There were five questions regarding different aspects of reserving/scheduling a trip. Call-taker professionalism increased from last year with 93.3% responding "always." Customers indicated they were able to schedule within 1 hour of their requested time, 66.7% of the time.
- **Driver Actions** – There was a decrease in driver satisfaction, with 80.0% satisfied this year compared to 95.2% last year. Drivers requesting the correct fare decreased from last year with 83.3%.
- **AMBLE App** – There are five respondents who use the AMBLE app, which is the same as last year.
- **General Comments / Suggestions** –There were longer comments and more dissatisfaction voiced, which was likely due to the survey being conducted over the phone.

In summary, customers are satisfied with their service compared to the survey last year. The pandemic changed how people were riding in 2020, and there was a decrease in rides during 2021.

DAR Performance Goals

The Transit Board and CyRide have developed goals for DAR service with HIRTA. The performance measures help ensure passengers receive a high level of service from HIRTA. CyRide will continue to monitor these performance measures regularly and work with HIRTA on improvements as needed. In FY 2021, HIRTA carried 6,348 passengers on the DAR service compared to 7,818 in FY 2020 and 8,380 in FY 2019.

HIRTA Performance Measures

Type of Measure	Performance Measure	Goal	FY 2021	FY 2020	FY 2019
Financial	Cost/Passenger**	$20.00	$20.36	$19.72	$18.97
Quality	Passengers/Comment	1,000	2,116	3,909	8,380
Quality	Passenger Rides Before/After Pickup Window	400	252	464	521
Efficiency	Passengers/Revenue Hour**	2.4	1.9	2.3	2.5
Safety	Passenger Injuries	0	0	0	0
Quality/Efficiency	On-Time Performance*	95.0%	96.1%	94.2%	94.8%

**Defined as 10 minutes before or after the scheduled pick-up time.*

***Based on end-of-year quarterly reports.*

Contract Renewal

CyRide began discussions with HIRTA regarding the renewal of the DAR contract for the FY 2023 budget year. HIRTA has indicated an interest in continuing to provide DAR service on behalf of CyRide, per the attached letter of interest. A comparison of current year rates versus proposed rates is described in the following table.

HIRTA Contract Rate for DAR Service

Rate Category	FY 2023 Rate	FY 2022 Rate	% Change
Weekday Trips	$18.20 per trip*	$17.00 per trip*	7.06%
Weeknight Trips	$51.38 per hour	$51.38 per hour	0%
Weekend Trips	$51.38 per hour	$51.38 per hour	0%

**Per trip rates are used Monday through Friday during the day when DAR and HIRTA passengers are combined on one bus. The per hour rate is used when only DAR service is operated on evenings and weekends.*

The increase proposed is within industry standards for transit operating contracts. While the percentage increase this year is higher than last year's increase (7.06% versus 3.0%), the costs per hour and per trip continue to be lower than CyRide's cost to provide the service directly.

For comparison to the proposed HIRTA rates, staff reviewed National Transit Database (NTD) information for several Iowa urban and regional systems. The following table shows the operating expense per unlinked passenger trip for these other demand-response services.

Agency/Region	2020	2019	2018
University of Iowa, Cambus, Iowa City, Iowa	$70.44	$50.47	$46.11
Des Moines Regional Transit Authority, DART, Des Moines, Iowa	$43.76	$37.73	$39.24
City of Dubuque, The Jule, Dubuque, Iowa	$23.94	$22.73	$21.83
Metropolitan Transit Authority of Black Hawk County, Met Transit, Waterloo, Iowa	$66.37	$37.79	$34.52
City of Sioux City, Sioux City Transit, Sioux City, Iowa	$27.23	$25.57	$27.83
Iowa Northland Regional Council of Governments, Waterloo, Iowa	$23.41	$19.61	$19.78
Siouxland Regional Transit System, SIMPCO, Sioux City, Iowa	$28.23	$25.36	$20.51
Region 6 Planning Commission, PeopleRides, Marshalltown, Iowa	$32.26	$21.89	$17.51
Delaware, Dubuque & Jackson County Regional Transit, Dubuque, Iowa	$21.81	$18.55	$17.15
Region XII Council of Governments, WITS, Carroll, Iowa	$19.11	$15.75	$14.98

Federal Financial Support

CyRide will receive approximately $370,000 in "Elderly and Disabled" (Section 5310) federal funding next year to support services that benefit seniors and individuals with disabilities, which includes operating costs for contracted DAR services. If CyRide operated the DAR service directly, Section 5310 funding could not be used for operating costs, and CyRide would need to fund services with 100% local dollars. However, if the service continues to be contracted, CyRide can utilize this federal funding for 80% of the operational cost of service, as well as purchase any necessary capital equipment at 85% to support its operation.

If the board does not desire to continue contracting with HIRTA for the next fiscal year and directly operate service instead, CyRide would need to hire additional staff and purchase a software program to schedule trips.

ALTERNATIVES:

1. Approve continuing the contract with Heart of Iowa Regional Transit Agency (HIRTA) for FY 2023 at a 7.06% increase for weekday trips.

2. Direct staff to proceed according to Transit Board priorities.

RECOMMENDATION:

The Transit Director recommends approval of Alternative #1, to continue the contract with HIRTA to provide DAR service for the next fiscal year. Continuing this contract supports the federally required complementary paratransit system for the Ames community, keeps service consistent for passengers, and avoids the high cost of CyRide directly operating the DAR service.

Dial-A-Ride Survey Comparison of 2020, 2021, 2022

Question/Response	2022	2021	2020
1. How many times over the last 12 months have you ridden Dial-A-Ride services?			
1. I have not ridden	6.7%	32.1%	9.1%
2. Less than 4 times a year	13.3%	14.3%	13.6%
3. Once a month	6.7%	10.7%	9.1%
4. Twice a month	13.3%	14.3%	22.7%
5. Once a week	13.3%	14.3%	13.6%
6. Several times a week	46.7%	14.3%	31.8%
2. Overall, over the past twelve months, how satisfied are you with the service you have been provided by DAR service?			
1. Very dissatisfied	0.0%	0.0%	4.6%
2. Dissatisfied	0.0%	0.0%	4.6%
3. Somewhat Satisfied	0.0%	9.5%	9.1%
4. Satisfied	40.0%	14.3%	36.4%
5. Very Satisfied	60.0%	76.2%	45.5%
3. Has Dial-A-Ride service improved this year?			
1. Improved	13.3%	38.1%	4.0%
2. About the same	86.7%	52.4%	16.0%
3. Not improved	0.0%	9.5%	1.0%
4. Please respond to the following questions by circling the number that best describes your experience in the last 12 months with service. (Respondents indicating "always")			
1. Reserve trips, professionally/politely greeted?	93.3%	85.7%	81.0%
2. When scheduling trips, received a busy signal?	0.0%	0.0%	10.0%
3. When scheduling trips, put on hold for more than 3 mins.?	28.6%	47.4%	33.3%
4. When calling on the weekend to reserve a trip, call returned by 8 pm on Sunday?	55.6%	45.5%	22.2%
5. Ride scheduled within 1 hour of time requested	66.7%	94.7%	50.0%
6. Bus/Van clean and in good working condition	92.9%	95.5%	76.2%
7. Bus driver polite and helpful	80.0%	95.2%	76.2%
8. Wheelchair is tied down and anchored securely to the floor	83.3%	75.0%	100.0%
9. Bus driver charged the correct fare	78.6%	94.1%	95.2%
10. ADA card processed promptly	83.3%	100.0%	100.0%
5. Do you utilize HIRTA's AMBLE app to schedule, cancel trips, manage trips or pay for trips?			
1. Yes	33.3%	27.8%	18.2%
2. No	66.7%	72.2%	81.8%
6. If the bus arrives early, do you feel that you are pressured to come out early to the bus?			
1. Yes	33.3%		
2. No	66.7%		

Dial-A-Ride Survey Comparison of 2020, 2021, 2022

Question/Response	2022	2021	2020
7. Has a request for a trip been turned down (excluding a same day ride request) by the HIRTA's staff this past year so that you were not able to take the trip using Dial-A-Ride? (ADA regulations allow trips to be negotiated in 1 hour blocks before/after the requested time. If the 'negotiated time' an hour before/after your request does not meet your expectations to book your trip, this is not a denial)			
1. Yes	13.3%	23.8%	52.4%
2. No	86.7%	76.2%	47.6%
8. If your trip request was turned down, what was the reason you were given by the person you talked with on the phone?			
AMBLE App buggy. During a stretch of two weeks, AMBLE was listing two trips as being canceled by the person requesting a ride. Customer explained that they did not cancel the ride but suggested that the app itself was buggy.			
Full for the day of calling, got one for the next day			
9. While requesting a ride or riding Dial-A-Ride service, have you ever felt you were personally being discriminated against because of your race, color, national origin (ancestry), or your lack of ability to speak English?			
1. Yes	6.7%	5.6%	0.0%
2. No	93.3%	94.4%	21.0%
10. If yes to the #9 question, please explain the situation below.			
Yes, with Dave in the Des Moines office. Bus never arrived and he was rude.			
11. Please check the reason you ride Dial-A-Ride service.			
1. Medical appointment	73.3%	91.7%	76.2%
2. Work/school	13.3%	25.0%	23.8%
3. Shopping (grocery or other)	60.0%	50.0%	52.4%
4. Personal appointments (such as to the beauty shop)	46.7%	16.7%	38.1%
5. Social trips (such as to visit a friend)	40.0%	41.7%	28.6%
6. Dining out	20.0%	33.3%	28.6%
7. Other (please list reason)	13.3%		
Bank	1		
Nursing home		1	
Church	1		3
Library, gym		1	
Library		1	
gym		1	
Volunteer			1

12. Please indicate your race.			
1. White	93.3%	100.0%	80.0%
2. African American	6.7%	0.0%	10.0%
3. Asian	6.7%	0.0%	0.0%
4. Native American or Pacific Islander	0.0%	0.0%	5.0%
5. American Indian or Alaskan Native	6.7%	0.0%	5.0%

Question/Response	2022	2021	2020
6. Hispanic	0.0%	0.0%	5.0%
7. Does not wish to answer	6.7%		
8. Other	0.0%	0.0%	5.0%

13. Please provide us with any comments/suggestions you have for improving Dial-A-Ride service.

Overall very happy with their experience using Dial-A-Ride. However, with moving to Gilbert, service was limited during the pandemic and isn't able to utilize the service.
Loves the service
Happy with service
Please don't order more back-loading busses, they seem to complicate things for wheelchair users (but she's never had issues)
Excellent service
Some of the drivers tend to drive fast and brake hard. Other than that, the service is great.
In regards to medical transportation with HIRTA or Dial-A-Ride, there are times where Medicaid is supposed to pay for this passenger's fare and other times where they have to pay for it on their own. They have noticed that there were times where they would get charged by Dial-A-Ride when they weren't supposed to. They think that maybe the drivers or Dial-A-Ride are confused with Medicaid paying here and there. -They like when the lift is already deployed before they arrive to the bus instead of having to wait for the driver to do so in freezing cold weather. Most drivers don't deploy the lift until they see them come out of their apartment, even when the bus is completely empty. The passenger understands that the drivers are trying to stay warm, but at the same time, it would make it a lot easier for this passenger if they didn't have to wait around when it could have been ready ahead of time. They also mentioned that they always come out right on time. -The drivers are really fast at hooking up the wheelchair on Dial-A-Ride. Passenger mentioned that they are a lot faster and better at it compared to CyRide's regular buses. They feel as if the drivers on the 40 foot buses tend to not know what they are doing and that they have to help/guide the drivers.
Wishes that Dial-A-Ride drivers knew the exact fare to ride. They would get a different answer every time they got on. -Very happy with the service because everyone is very nice, courteous, and helpful. -Glad that they live in Ames because HIRTA is a very good service that helps them get to their medical appointments, friend's houses, and even to get haircuts. -Wants printed brochures available on the buses for passengers and drivers so that it's easier to know the exact fare and so that questions are answered correctly more often. -Noticed big improvement in Dial-A-Ride compared to 2 to 3 years ago.

Heart of Iowa Regional Transit Agency
HIRTA Public Transit

Boone, Dallas, Jasper, Madison, Marion, Story, and Warren Counties

3/18/2022

Barb Neal:

The Heart of Iowa Regional Transit Agency (HIRTA) is interested in continuing to contract with CyRide to provide Complimentary ADA Paratransit services in the City of Ames. We feel this is a successful partnership and look forward to continuing work with CyRide in Fiscal Year 2023.

HIRTA is requesting an increase in compensation for daytime hours:

1) $18.20 for day time hours (6:30am-6:00pm)
2) No increase requested for evening/weekend hours (after 6:00pm and weekends) $51.38
3) No increase requested - Fuel surcharge to remain the same at a base rate for fuel being $2.30 and monthly percentage based on fuel price range schedule.
4) $7.00 No-show fee

This requested increase is due to an increase in ridership for Dial-A-Ride (39% of HIRTA's overall ridership in FY2021 to 61% in FY2022), an increase in fees for HIRTA's trip scheduling software and the 2023 COLA estimated to be 7.6%. We will also continue to have higher expenses beyond our control due to COVID and supply chain issues. This includes PPE/cleaning costs, maintenance, insurance, employee benefits, and rising costs of fuel, just to name a few.

Thank you for your consideration. We look forward to continuing our partnership with CyRide and jointly serving the City of Ames. Please let me know if you have any questions or need additional information.

Sincerely,

Julia Castillo

Julia Castillo
Executive Director

Toll free: l-877-686-0029 • Fax: 515-777-2745 • 2824 104th Street, Urbandale, IA 50322 • www.ridehirta.com

April 27, 2022
State Grant and Public Transit Infrastructure Grant (PTIG) Applications
CyRide Resource: Shari Atwood

BACKGROUND:

CyRide annually submits grant applications to the Iowa Department of Transportation (Iowa DOT) to support operating and capital needs for the transit system. The following summarizes the proposed applications to be submitted by May 1, 2022, for funding during the 2022-2023 budget year, subject to Transit Board approval.

OPERATING	Funding Type	State / Fed %	Total	State / Federal	Local
State Transit Assistance[1]	STA	-	$894,378	$894,378	$0
Dial-A-Ride - ADA Service Contract with HIRTA	5310	80%	$262,625	$210,100	$52,525
Assistance for Vehicle Annunciator Annual Service Fees	5310	80%	$109,811	$87,849	$21,962
Subtotal Operating			**$1,266,814**	**$1,192,327**	**$74,487**

CAPITAL	Funding Type	State / Fed %	Total	State / Federal	Local
Signage (Infotainment) in Buses for Annunciators	5310	80%	$90,319	$72,255	$18,064
8 - 40' Heavy-duty Replacement Diesel Buses	5339	85%	$4,347,840	$3,695,664	$652,176
Shop Rehabilitation Improvements	PTIG	80%	$750,000	$600,000	$150,000
Subtotal Capital			**$5,188,159**	**$4,367,919**	**$820,240**

Total State Grant Application			$6,454,973	$5,560,246	$894,727

State Transit Assistance (STA)*:* The State Transit Assistance (STA) funding of $894,378 is assured funding with no local match requirement. This formula funding is provided by $16.7 million in vehicle registration fees and is available to all transit systems in the state. CyRide's FY 2023 budget estimated $800,000 in revenues from this source, as this figure can fluctuate throughout the year based on car sales.

[1] Estimate based on 5.35% of available funding for fixed route operations

Elderly and Disabled Section 5310 Funding*:* CyRide will receive approximately $370,000 in Section 5310 federal funding. The majority of this funding will be utilized to provide Dial-A-Ride services. The remaining funding will be allocated to infotainment bus signage and annual service fees to support the vehicle location & annunciator systems. Overall, the Section 5310 funding increased 30% from what CyRide typically receives. CyRide will be able to support Dial-A-Ride ridership increases in FY 2023 due to this apportionment increase. The average monthly ridership has doubled between FY 2021 (529 passengers) and FY 2022 (1,016 passengers thus far). CyRide anticipates costs to increase in FY 2023, as reflected in HIRTA's letter of interest to provide service for FY 2023.

The requests for Section 5310 funding are as follows:

- **Dial-A-Ride**: This funding will support CyRide's ADA service contract with HIRTA for FY 2023 as a traditional project for Section 5310 funding. The current FY 2022 Dial-A-Ride operating budget estimates approximately $184,315 ($15,360/month) in annual expenses. With higher system usage, expenses have averaged approximately $17,700 per month thus far in FY 2022. Therefore, CyRide recommends increasing the grant request and budget for FY 2023 to $262,625 ($210,100 federal) for FY 2023 to accommodate ridership increases in this program.

- **Automatic Vehicle Locator/Automatic Vehicle Annunciator (AVL/AVA) Annual Service Fees**: CyRide will continue to request annual automatic vehicle annunciator and annunciator licensing fees as a non-traditional project for the Section 5310 funding. The overall costs for these service fees are currently contained in the operating budget at $95,000 per year, which will be supported with 80% federal funding through Section 5310. In addition, the $109,811 total ($87,849 federal) in the normal Section 5310 allocation also provides preventive maintenance for the newly allocated automatic passenger counter (APC) units associated with the AVL/AVAs system. As a result, the $87,849 will provide local savings since the funding is already contained in the operating budget.

- **Signage Added to Bus Interiors (Infotainment) Displaying Arrival Predictions**: This more prominent signage will be added to additional buses to provide a visual display of approaching stops, combined with the existing automatic voice annunciators, which will allow all passengers to navigate the system better. This equipment will also enable periodic advertising on equipped buses. This technology project is currently programmed in the FY 2023 Capital Improvement Plan (CIP).

Section 5339 or Public Transit Management System (PTMS)/ICAAP Funding: Section 5339 funding for eight forty-foot heavy-duty buses is only partially included in the CIP, as funding received from the State of Iowa for bus replacements is competitively awarded. CyRide will not be informed if its buses are selected until the end of FY 2023. Buses can be federally funded at 80% (ICAAP) or 85% (Section 5339), depending on the type of funds available. Requesting replacement of CyRide's oldest and most utilized buses is anticipated to provide two or three buses for replacement through this process.

With significant apportionment increases in the Infrastructure Investment and Jobs Act (IIJA), there is a possibility that the Iowa DOT will fund more buses than in previous years. Requesting more buses than what is included in the CIP will not obligate CyRide to accept more vehicles than planned. Prior to any buses being purchased, an item would be brought to the Transit Board for consideration detailing the number of vehicles to buy and the local funding to be used in the acquisition.

Public Transit Infrastructure Grants (PTIG) Funding: Public Transit Infrastructure Grant (PTIG) projects are competitively selected at the state level. CyRide will be notified of selection decisions during FY 2023, with any work beginning in summer 2023. Typically, public transit receives approximately $1.5 million for PTIG projects statewide, and each transit agency may receive up to 40% of the overall allocation. The PTIG funding is supported by the Rebuild Iowa Infrastructure Fund (RIIF), which comes primarily from gaming revenues. CyRide is requesting funding for the Shop Rehabilitation project. This building area was originally constructed in 1983 when CyRide began its operations at the current site. This project includes the following improvements:

- Remove existing half walls within the maintenance fabrication area and repair the floor as necessary.
- Install new precast concrete floor panels to connect the east and west maintenance mezzanines, creating additional storage space.
- Construct a new wall on ground level and add two doors to isolate the repair bays from office and parts areas which will help control sound pollution and vapors between the two spaces.
- Move mop sink, wash fountain and supplies closer to the shop repair bays to improve the mechanic's work flow.
- Move the eye wash closer to work areas to improve safety.
- Switch the welding and fabrication area with the parts room to isolate airborne particulates, noise pollution and visual welding hazards to improve safety.
- Rework the maintenance office area to create a more practical layout and create a space for the Maintenance Coordinator to have private conversations.
- Rework the fire alarm and suppression system to bring the reworked spaces up to code.

PTIG funding is currently included in CyRide's FY 2024 CIP at $750,000 total ($600,000 federal; $150,000 local).

A public hearing will be held on April 25, 2022, at 10:00 a.m. to discuss this application with the community. Any written or oral comments received during the public meeting will be shared with the Transit Board at a subsequent meeting and communicated in the final submission to the Iowa DOT.

ALTERNATIVES:

1. Approve the FY 2023 State Grant and Public Transit Infrastructure Grant (PTIG) applications as presented.

2. Modify the FY 2023 State Grant Application based upon Transit Board priorities.

3. Reject the grant application and do not submit a state funding request for FY 2023.

RECOMMENDATION:

The Transit Director recommends approval of Alternative #1, to submit operating and capital grant applications to the Iowa DOT. These applications support transit services in the Ames community and lower the overall local commitment to identified projects.

CyRide Capital - FY21 to FY27

2/21/22 5:47 PM

		FY21	FY22	FY23	FY24	FY25	FY26	FY27
Capital		Actual						
Beginning Balance		**$ 2,111,446**	**$ 2,680,238**	**$ 227,632**	**$ 514,605**	**$ 529,861**	**$ 311,532**	**$ 161,556**
State/Federal Building	80%							
PTIG Building	80%	$ 410,015	$ 353,537	$ 331,548	$ 600,000	$ 600,000	$ 600,000	$ 600,000
State/Federal Bus (60' Bus)	80%	$ -	$ 874,148		$ 436,077	$ 439,450		
State/Federal Bus (40' Bus)	80%	$ 1,221,960	$ 5,061,027	$ 879,946	$ 853,686	$ 1,741,517	$ 1,332,260	$ 1,358,906
STBG Money		$ -	$ 450,000		$ 225,000	$ 225,000	$ 225,000	$ 225,000
State/Federal Bus	85%	$ -						
VW Award Money		$ 170,640	$ 890,000					
State/Federal BEB		$ -	$ 1,660,180	$ 2,502,489			$ 439,450	$ 439,450
State/Federal Minibuses	83%	$ -	$ 809,387	$ 135,372				
State/Federal Bus Stops	80%	$ -	$ -	$ -	$ 48,000	$ 48,000	$ 48,000	$ 48,000
State/Federal Annunciators - LED	80%	$ -	$ 101,360	$ -	$ -			
State/Federal Annunciators - APC			$ 469,037					
LED - Signage Infotainment			$ 35,707	$ 72,249				
Interior Improvement Project		$ 94,768						
ISU Parking		$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000	$ 17,000
Interest		$ 20,164	$ 7,000	$ 7,000	$ 7,000	$ 7,000	$ 7,000	$ 7,000
GSB								
Capital Transfer		$ 1,057,193	$ 5,300,000	$ 1,400,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000
Capital Revenues		**$ 2,991,740**	**$ 16,028,383**	**$ 5,345,604**	**$ 2,986,763**	**$ 3,877,967**	**$ 3,468,710**	**$ 3,495,356**
Total Available		$ 5,103,186	$ 18,708,621	$ 5,573,236	$ 3,501,368	$ 4,407,828	$ 3,780,242	$ 3,656,912
	Grants							
Interior Improvement Project		$ 124,560	$ 5,207					
HVAC Replacement (Phase 1)	PTIG	$ 517,990	$ 76,805					
HVAC Replacement (Phase 2)	PTIG		$ 468,920					
HVAC Replacement (Phase 3)	PTIG			$ 414,435				
Shop Expansion	PTIG				$ 750,000			
Spill Free Fueling	PTIG					$ 262,500		
Gasoline Fueling	PTIG					$ 487,500		
Facility Expansion	PTIG						$ 750,000	$ 750,000
Articulated Bus (Grants)		$ -	$ 1,710,903		$ 850,000	$ 850,000		
Bus (Grants) BEB		$ -	$ 2,293,800	$ 2,964,986			$ 908,960	$ 908,960
Bus (Grants) 40' Buses		$ 1,437,164	$ 6,050,200	$ 1,035,230	$ 1,067,107	$ 2,176,896	$ 1,665,326	$ 1,698,632
Bus (Grants) Minibuses		$ -	$ 970,596					
		3 Large Buses Tot: *3-40' HD BUSES (711, 712, 716)	16 Large Buses Tot. * 2 BEB's (778, 779) * 2 ARTIC (7130, 1141) *12-40' HD BUSES (7132, 7123, 7125, 958, 956, 955, 957,1140, 7117, 7133, 7124 & 762/785 Lilac EXP) *8 Minibus (333-338; 390-391)	5 Large Buses Tot: *3-40' BEB BUSES (501, 503, 504) *2 - 40' HD BUSES (953, 954)	3 Large Buses Tot. * 1 ARTIC *2-40' HD BUSES	5 Large Buses Tot. * 1 ARTIC * 4-40' HD BUSES	4 Large Buses Tot. * 1 BEB *3-40' HD BUSES	4 Large Buses Tot. * 1 BEB * 3-40' HD BUSES
HIRTA Bus	5310	$ -		$ 96,000				
HIRTA Van	5310		$ -	$ 63,261				
Bus Stop Shelters	5310		$ -		$ 60,000	$ 60,000	$ 60,000	$ 60,000
Annunciators / AVL - LED Signage	5310		$ 126,700					
LED Signage - Infotainment	5310		$ 44,634	$ 90,319				
APC Project	5312		$ 525,383					
Needs Analysis	5309							
AVL								
Facility Improvements - Exterior			$ 75,000					
Facility Improvements - Interior		$ -		$ 50,000				
AVL (Local)		$ -	$ 100,000					
Bus Technology		$ -	$ 150,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Support Vehicle		$ 55,819	$ 30,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000
		Terrain (White 2014)	Terrain (Red 2015)	Fusion (2016)	Escape (2017)			
Shop Trucks		$ 27,158						
Shop Equipment		$ 16,042	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Computers/Office Equip.		$ 14,808	$ 40,125	$ 14,400	$ 14,400	$ 14,400	$ 14,400	$ 14,400
Concrete		$ 142,340	$ 40,000	$ 40,000	$ 40,000	$ 30,000	$ 30,000	$ 30,000
Concrete (Shelters)		$ -	$ 25,000	$ -		$ 25,000		
A&E Services		$ 46,531	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Security System (Building)		$ -	$ 200,000					
Forklift		$ 33,086						
Maint. Software		$ -	$ 50,000	$ 50,000				
Safety Software			$ 20,000					
Demand Response Mgmt Software				$ 50,000				
Protection Rails (Articulated Buses)			$ 75,000					
Facility Technology		$ 7,450	$ 62,550					
Air Compressor (Shop)		$ -	$ 25,000					
Capital Expenses		**$ 2,422,948**	**$ 13,265,823**	**$ 5,058,631**	**$ 2,971,507**	**$ 4,096,296**	**$ 3,618,686**	**$ 3,651,992**
Ending Balance		$ 2,680,238	$ 5,442,798	$ 514,605	$ 529,861	$ 311,532	$ 161,556	$ 4,920
Facility Expansion Local Match			$ 1,715,166					
BEB Local Match (10 Vechicles)			$ 1,000,000					
40' Bus Local Match			$ 2,500,000					
Balance without Bus Replacement and Building Fund		$ 2,680,238	$ 227,632	$ 514,605	$ 529,861	$ 311,532	$ 161,556	$ 4,920

March 23, 2022
Systemwide Fare Free Analysis
CyRide Resource: Barbara Neal

BACKGROUND: At the Transit Board meeting held on November 10, 2021, CyRide staff was directed to provide an analysis of fareless operations across all of CyRide's services. The elimination of fares is a complex issue that needs to be carefully considered in the context of CyRide's overall goals. Following this guidance, staff have prepared an analysis that overviews the historical context of fare free initiatives at CyRide, looks at similar initiatives from other transit agencies, and estimates the costs of offering additional fareless options.

CyRide has implemented two fareless initiatives in its history. The first is a universal pass agreement with Student Government which allows all Iowa State undergraduate students showing a valid ISU card to ride the bus without paying a fare. The second initiative was a fareless pilot project, paid for by Ames City Council, that created a fareless system for the summer of 2009.

During the design phase of CyRide 2.0 the consultant, Nelson\Nygaard, prepared a fareless analysis as part of their scope of work. Both initiatives and results of the consultant work are discussed below. Additionally, this analysis assumes all fare categories would be made free and that the agreement with Student Government would remain constant.

ISU Fare Free System

In 2001 Iowa State students voted in a referendum to pay their portion of CyRide services through their student fees, referred to as "ISU fare free". Since that time all revenues for the student portion of CyRide's capital and operating expenses has been generated from these fees. ISU fare free was phased in over two years due to the magnitude of this change on CyRide operations.

For the first year, three routes that were free to everyone were created: #4 Orange route, #6 Brown route, and #9 Gold route. At the time, these routes served the Vet Med College, high density student housing at the Towers, and the Greek area. These routes allowed greater access from off campus to on campus areas. Internally, it allowed CyRide to hire additional employees and purchase 6 new 40' buses and 5 used 40' buses. Ridership from ISU students increased by 12.3% during the first year.

In the second year, CyRide added two additional circulator routes: #21 Cardinal route and #24 Silver route. All four campus circulator routes were changed to start with the number 20 to help students, facility, staff, and visitors understand that these routes were free to everyone. During the second year, all stops on central campus were also made free to board, regardless of the route number serving the stops. This was done to speed up boarding on campus and to shorten trip times. Finally, ISU students were allowed to ride fare free citywide by showing their ISU card. Ridership increased by 36.9% during the second year.

Prior to going fare free, CyRide ridership was 3,044,456 passengers, which is approximately 60 rides per capita. Overall ridership has increased by about 30%[1] since the Student Government agreement began in FY2003, in large part due to students being able to board any bus without paying a fare. For context, ISU students account for over 93% of CyRide's ridership. CyRide experienced the largest ridership level in FY2016 with 6,785,479 passengers, which correlates to ISU's peak enrollment of 36,660 during the 2016-2017 academic school year. Both ridership and enrollment have declined since that time.

ISU fare free was a transformative change for CyRide that impacted all areas of the organization. As a result, it is difficult to determine how much the fare free component of the system ultimately impacted system costs. However, an analysis of the amount of additional funding supplied by Student Government since that time is informative. The SG percentage increase for the first year of fare free was 20.1% compared to 7.5% for the City of Ames and ISU Administration. During the second year the student percentage increase was 54.7% compared to 7.5% for the City of Ames and 4.1% for ISU Administration. The Student Government also purchased services for routes to better serve the student population, which shifted the funding ratio between the three funding partners. If annual percentage increases by the local funding partners is compared from 2002 to 2022, the Student Government has averaged an 8% annual increase, compared to the City of Ames at 5.2% and ISU Administration at 5%.

This arrangement has increased CyRide's state and federal funding by improving eligibility for certain funds tied to high levels of ridership. CyRide receives State Transit Assistance (STA) funding that is allocated based on a formula reflecting each transit system's performance during the previous year in terms of rides, miles, and local funding support. Currently, CyRide receives approximately $800,000 in STA funding. CyRide also receives grant funding from the Federal Transit Administration (FTA's) Small Transit Intensive Cities (STIC) program. STIC grant funding is directly tied to high ridership and operational efficiencies. Currently, CyRide receives approximately $1,300,000 in STIC funding.

Summer Fare Free Pilot Program

In March 2009, the Ames City Council approved funding a pilot project to operate CyRide services from May 15 to August 15, 2009, without a fare required. The purpose of this summer program was to determine the interest, need, and impact of free fares within the whole community.

CyRide provided 113,258 additional rides during the 2009 summer fare promotion, averaging a 26.7% increase over the same period one year earlier (May 15, 2008 – August 15, 2008). Based on passenger feedback, a significant proportion of this increase came from the elimination of fares. Average national gasoline prices exceeded $4.00 per gallon in June and July of 2008, and thus the year-over-year percentage change would likely have been higher if fuel prices in 2008 were more typical.

This ridership increase resulted in the existing service carrying more passengers per bus, but due to overall low usage during the summer, no additional buses were added for the increased ridership. However, some trips that were scheduled to operate with a minibus were replaced with a larger 40' bus. This modification was easily accommodated due to the fewer number of large buses used in daily service over the summer.

[1] Enrollment from FY 2003 through FY 2019

The Ames City Council budgeted $93,000 for this pilot project. Actual expenses incurred were $91,632 as indicated in the table below. Dial-A-Ride expenses did not increase as much as anticipated, resulting in slightly lower total costs.

Expense	Actual Cost
Fixed-Route Revenue Loss	$71,664
Dial-A-Ride Revenue Loss	$2,119
Dial-A-Ride Operating Cost	$809
Marketing	$17,040
TOTAL	**$91,632**

At the conclusion of the Summer Fare Free pilot program, riders were surveyed to determine public opinion. A summary of the results is listed below:

- **New Riders** – 20.1% of all respondents indicated they were new riders due to the Summer Fare Free program.
- **Existing Rider Patterns** – 34.2% of existing riders indicated they rode more this summer due to the Summer Fare Free program.
- **Continued Support of Fare Free Program** – 61.7% of all respondents indicated that if the Fare Free program was continued as a permanent program, they would support increases in their property taxes to pay for this program.

The summer fare free pilot program resulted in new riders and increases in usage by existing riders. Based on survey results there is support from the community for a fareless system. However, determining the ongoing cost associated with a fareless system based on this pilot program is challenging. While ridership did increase, the overall low level of summer ridership and the high fuel prices for 2009 makes it difficult to determine how much of this ridership would translate to a new fareless model. Additionally, since the summer fare free pilot did not increase the overall amount of service, there may be a demand for more frequent service or expansion of service to currently underserved areas if a fareless system were implemented on a permanent basis.

Fareless Experiences at Other Transit Agencies

In the lead-up to the summer 2009 fare free pilot project, staff looked to other communities with large university populations that had fareless transit experience. These systems help highlight potential benefits and drawbacks to Ames. For background, the demographics of each community are listed in the following table.

System/City	Population	University	Enrollment	Ridership Before Fare Free	Ridership After Fare Free
Chapel Hill, NC	Chapel Hill – 49,919 Carrboro – 16,557	University of North Carolina	27,717	3,120,000	6,000,000
Logan, Utah	47,660	Utah State University	23,000	800,000	>1,000,000
Austin, Texas	709,893	University of Texas	50,201	N/A	35,151,897

Chapel Hill, North Carolina

The fareless citywide program began in the towns of Chapel Hill, Carrboro, and for the students at the University of North Carolina in 2002. This program has been determined to be very successful for all parties involved. Chapel Hill operates the system under a three-party agreement. The goal of the fareless program was to address on-campus parking shortages and provide free access to all citizens. Prior to 2002, the Chapel Hill transit system provided just over 3 million rides. The first year, ridership rose by nearly 50%. Twenty buses were added on the routes to keep up with demand. The transit system also added several new routes at the same time as they went fareless. Changes the transit staff would suggest for other transit systems considering a fareless program are:

- Add mechanics, as they did not. The fleet deteriorated and is just now beginning to be reliable after hiring three more mechanics five years after going fareless.
- Develop a marketing plan that addresses who the transit system is targeting. Chapel Hill used only the local radio station and marketing could have been more effective with a broader medium.
- Find a way to control Dial-A-Ride trips. This has been a major cost and customers are using it like a taxi.

The benefits that Chapel Hill transit staff attributes to the fareless system are:

- Improved ease of travel.
- Increased mobility within the community.
- Increased satisfaction with the service overall by residents.

Logan, Utah

The purpose of Logan, Utah's fareless system was intended to increase mobility of university students, public school children, and seniors. It was initiated in 1992 with an 85% increase in ridership the first year from 2,000 to 3,700 trips per day. The community requested the fareless system. There have been very few problem riders; however, the community has implemented an outreach program at the middle school level which is cited as a positive example of how to address the issues related to younger riders. The transit system's success has resulted in additional service requests to outlying areas.

Austin, Texas

Austin, Texas is a medium-sized city and has a transit system with substantially larger ridership and population than Ames. However, their experiences can help guide this community in identifying areas where additional attention/cost may occur. Austin began their fareless system in October 1989 and ended in December 1990. It was adopted by the Board of Directors as a promotional program to increase ridership with some members believing it should be a permanent program and others a short-term program. It also had little staff commitment to achieving a successful outcome. Ridership increased 75%; however, the program ended because it had met its goal to increase ridership and an increase of security incidents related to problem riders. The transit system was forced to hire security staff to ride on the buses to address these issues. Overcrowding also occurred as the unanticipated, overwhelming ridership increases were not planned for which incurred substantial cost increases.

Nelson\Nygaard Analysis

As part of the scope of work for the CyRide 2.0 system redesign, the consultants, Nelson\Nygaard, provided a Fare Free Analysis. They reviewed existing conditions, best practices, on-going costs associated with fare collection, and evaluated the ridership and revenue implication of three different fare scenarios:

- Scenario 1 – Fare Pricing Rollback, which evaluated rolling back fares to 2011 prices.
- Scenario 2 – Systemwide Fare Free, which evaluated a fareless system where all fare categories are free and the agreement with ISU Student Government remained constant.
- Scenario 3 – Tiered ISU Fare Zones, which evaluated a two-tiered system of on and off campus zones for ISU students.

For these three scenarios the analysis only evaluated the ridership and revenue implications of each option, which was used as a baseline for the Transit Board to understand the magnitude of the changes to fare revenues as a result of price changes. The Fare Analysis from Nelson\Nygaard is attached at the end of the board packet.

During the system redesign an online survey was conducted to collect information from CyRide riders and non-riders in Ames. There were 1,725 responses and information collected was analyzed with the following results:[2]

[2] A full list of responses is available in the Nelson\Nygaard final system redesign report, available at https://www.cyride.com/about-us/planning-documents/current-planning-projects/system-redesign-study

- All respondents were interested in bus stop amenity improvements. This was the top priority for ISU students (48%) and the second highest priority for ISU faculty and staff (51%), those with no ISU affiliation (45%), and non-riders and infrequent riders (48%).
- ISU students prioritized improved service on weekday evenings in terms of both service span (45%) and frequency (44%).
- Non-ISU students prioritized adding more service to new areas. Those with no ISU affiliation chose adding more service to new areas as the top priority by a 20% margin (65%), and 59% of ISU faculty and staff chose this as the highest priority for CyRide.
- Non-riders and infrequent riders selected adding more service to new areas as their top priority by a generous margin (61%), followed by bus stop improvements (48%) and faster, more direct service (42%).

CyRide 2.0 was intentionally designed to not increase the cost of the transit system. However, additional services desired by the public were identified that could enhance CyRide in the future if funding was secured. A list of these possible service changes and a chart with the preliminary cost estimates was included in the report and is attached.

CONCLUSION:

Based on the information above, staff has created a high-level preliminary estimate of ridership and costs associated with moving to a fareless system. The farebox accounts for only 1% of CyRide's revenue sources, and it is likely the elimination of fares would increase ridership. It would also help to advance equity within the community by reducing the cost of transportation for those least able to afford the cost of transit fare. However, a fareless system would probably increase the community's expectation for additional frequency during the day and/or the expansion of services to areas of the community not currently served by fixed route transit.

Due to a combination of expected ridership increases and an expectation that fareless transit should benefit the community equally, CyRide staff believe some type of expansion of service will be required for any fareless system. This could potentially include increased frequency and service area expansions.

The cost for CyRide's services can be analyzed for both the fixed route and Dial-A-Ride services. Each mode is reviewed below.

Fixed Route

Determining the impact of a fareless system on fixed route ridership is challenging due to low system usage from the pandemic. Assuming ridership will rebound to pre-pandemic levels and using the information on ridership increases from the consultant's study, non-student ridership is anticipated to increase by approximately 2.3%, or a change in annual ridership of about 140,000 passengers.[3]

CyRide's service coverage is extensive, but if a fareless system was approved, services would likely need to be improved to meet transit needs for a greater proportion of the community. Additionally, increased vehicles may be necessary in existing service areas due to crowding on already-overloaded buses.

[3] Based on FY2019 ridership data.

When estimating fixed route demand costs, staff used the consultant's recommendation for highest priority long-term recommendations and the cost estimates from the final report for more service to new areas. As mentioned above, these CyRide services were identified as desired by the public. The themes for fixed route improvements focused on increased frequency, extended hours of service on weekdays, new services to meet future demand and planned development, and improved weekend service. A list of the service changes including anticipated revenue hours, costs, and vehicle needs associated with long term recommendations are attached. Approximately $1 million in CyRide's annual budget would be required to implement the highest priority recommendations. The estimated total annual operating cost for all long-term recommendations is anticipated to be $3.8 million.

Dial-A-Ride

Paratransit services should be carefully considered when deciding on a fareless system. By law, if CyRide's fixed routes are fareless, Dial-A-Ride services would also need to be fareless. Currently, Dial-A-Ride services are operated by HIRTA and the impact on this service would likely be significant. Based on information provided in the system redesign final report when Chapel Hill Transit implemented a systemwide fare free structure, demand response ridership increased by 20%. CyRide staff believes a similar increase would be likely in Ames. Currently, CyRide funds an average of 33 trips per day. It is expected that this could increase to 50 trips per day requiring an additional two buses and two drivers to handle this door-to-door service.

Ultimately, charging a fare, or not charging a fare, involves a wide range of costs and benefits. Some of the key benefits associated with collecting a fare include generating revenue, reducing reliance on federal and state funding, and supporting the perception that the public helps pay for public transportation services. Concurrently, there are costs associated with charging a fare. Operating as a fareless system simplifies accounting systems, reduces the need for secured cash storage, and eliminates the requirement for management and distribution of fare media (i.e., tickets, passes). A fareless system also includes the potential for increased ridership and enhanced operating efficiency. In order to determine a potential cost estimate CyRide staff used the System Redesign Final Report to estimate fixed routed demand, Dial-A-Ride demand, and savings associated with fare collection.

Estimated Costs for a Fareless System

Description	Estimated Cost
Increased Fixed Route demand costs (12,400 new revenue hours)	$1,011,557
Increased Dial-A-Ride demand costs	$42,000
Farebox Reduction	$189,400
Increase in staffing needs	
1 Mechanic	$72,500
2 Full-Time Drivers	$152,000
1 Part-Time Dispatcher	$31,800
Savings from collecting fares	($28,000)
Total Estimated Cost for a Fareless system	$1,471,257

If the Transit Board would like to pursue a systemwide fareless analysis, a thorough understanding of the financial implications of a fareless system would be necessary, including potential ridership gains, losses in passenger fare revenue, and estimated operating and capital costs or savings. It is also important for the Transit Board to consider the difficulty of re-imposing fares if the system moves to a fareless model. Working with a consultant would assist staff in preparing a deeper quantitative financial analysis of a fareless system today and into the future. If directed, CyRide staff would begin to prepare a scope of work and determine an estimated budget to develop an RFP for a consultant.

ALTERNATIVES:

1. Direct staff to develop a budget and scope of work for hiring a consultant to investigate the feasibility of a future fareless system for CyRide.

2. Direct staff to proceed according to Transit Board priorities.

RECOMENDATION:

The Transit Director recommends adoption of Alterative #1. Fareless transit systems offer significant benefits to transit, with high potential operating costs. Hiring a consultant would allow the Transit Board to evaluate a fareless model, alongside a comprehensive analysis of the potential positive and negative impacts to CyRide and the local funding partners.

CyRide Three-Party Revenue History

	Percentage of Yearly Revenues			Annual Percentage Increase		
Year	City	ISU	SG	City	ISU	SG
1999-2000	32.4%	14.7%	52.9%	6.0%	6.0%	6.0%
2000-2001	32.4%	14.7%	52.9%	7.5%	7.5%	7.5%
2001-2002	30.5%	13.8%	55.6%	7.5%	7.5%	20.1%
2002-2003	24.6%	10.8%	64.5%	7.5%	4.0%	54.7%
2003-2004	24.1%	10.6%	65.3%	10.6%	10.6%	14.2%
2004-2005	24.3%	10.7%	65.0%	3.1%	3.1%	1.8%
2005-2006	26.2%	11.5%	62.3%	10.0%	10.0%	-1.9%
2006-2007	26.2%	11.5%	62.3%	6.1%	6.1%	6.1%
2007-2008	26.9%	11.8%	61.3%	5.9%	5.9%	1.4%
2008-2009	26.9%	11.8%	61.3%	5.8%	5.8%	5.8%
2009-2010	26.9%	11.8%	61.3%	5.0%	5.0%	5.0%
2010-2011	26.8%	11.8%	61.4%	3.5%	3.5%	3.8%
2011-2012	26.4%	11.6%	62.0%	4.0%	4.0%	6.5%
2012-2013	26.1%	11.5%	62.4%	7.0%	7.0%	9.2%
2013-2014	25.5%	11.2%	63.3%	2.6%	2.6%	6.5%
2014-2015	24.4%	10.7%	64.9%	4.4%	4.4%	11.9%
2015-2016	23.2%	10.2%	66.7%	5.2%	5.2%	13.8%
2016-2017	23.2%	10.2%	66.7%	5.3%	5.3%	5.3%
2017-2018	23.2%	10.2%	66.7%	4.9%	4.9%	4.9%
2018-2019	23.2%	10.2%	66.7%	4.7%	4.7%	4.7%
2019-2020	23.2%	10.2%	66.7%	4.6%	4.6%	4.6%
2020-2021	23.5%	10.3%	66.2%	2.2%	2.2%	0.0%
2021-2022	23.5%	10.3%	66.2%	0.0%	0.0%	0.0%
2022-2023	23.8%	10.4%	65.8%	2.0%	2.0%	0.0%

Excerpt from 9 Long Term Recommendations Nelson\Nygaard Final Report
Figure 9.1: Summary of Highest Priority Long-Term Service Recommendations

Route	Long-Term Service Recommendations
5 Yellow	Extension to ISU campus
6 Brown	Later weekday evening service (extend to 10:30 p.m.)
7 Purple	Due to new residential development along Lincoln Way, improve frequency from 15 to 10 minute service in the morning period and to 15 minutes in afternoon period
12 Lilac	Due to new residential development along Mortensen, improve frequency from 20 to 15 minute service in morning period and to 15 minutes in afternoon period
26 Gold	Later weekday evening and additional weekend service (weekdays extend to 12:30 a.m., Saturday 8 a.m. to 9 p.m., Sunday 8:30 a.m. to 8:30 p.m.)
New Service: Applied Sciences	New service to Applied Sciences (one new vehicle, 60 minute frequency, operating from 7 a.m. to 7 p.m.)
New Service: Research Park North Loop	New service to Research Park North Loop (60 minute frequency, operating from 7 a.m. to 7 p.m.)

Excerpt from 9 Long Term Recommendations Nelson\Nygaard Final Report
Figure 9.2: Summary of All Long-Term Service Recommendations

Route	Long-Term Service Recommendations
1 Red	• Provide more frequent weekday evening service (20 minutes) • Expand weekend hours of service and frequency (20 minutes, service until 12:30 a.m. on Saturday)
2 Green	• Provide later weekday evening service (12:30 a.m.) • Provide more frequent weekday evening service (20 minutes) • Expand weekend hours of service and frequency (20 minutes, service until 12:30 a.m. on Saturday)
3 Blue	• Provide more frequent weekday evening service (20 minutes) • Expand weekend hours of service and frequency (20 minutes, service until 12:30 a.m. on Saturday)
5 Yellow	• Extend alignment from downtown Ames to ISU • Improve frequency to respond to additional residential growth on South Duff Avenue (20 minutes, one additional vehicle) • Provide later weekday evening service (11 p.m.) • Expand weekend hours of service and frequency (Saturday 8 a.m.-11 p.m., Sunday 8:30 a.m.- 11:00 p.m.)
6 Brown	• Provide later weekday evening service (11 p.m.) • Provide more frequent weekday service (20 minutes all day) • Expand weekend hours of service and frequency (20 minutes, service until 11 p.m.)
7 Purple	• Due to new development along Lincoln Way, improve frequency from 15 to 10 minute service in morning and to 15 minutes in afternoon • Operate all day on weekdays (7 a.m.-6:30 p.m.)

Route	Long-Term Service Recommendations
9 Plum	• Provide more frequent weekday evening service (20 minutes) • Add weekend service (20 minutes, Saturday 8 a.m. – 10:30 p.m., Sunday 8:30 a.m. – 10:30 p.m.)
12 Lilac	• Due to new development along Mortenson Road, improve frequency from 20 to 15 minute service in morning and to 15 minutes in afternoon • Operate all day on weekdays (7 a.m.-6:30 p.m.)
25 Peach	• Increase weekday frequency (30 minutes, one additional vehicle) • Add weekend service (60 minutes, Saturday and Sunday 7 a.m.-7 p.m.)
26 Gold	• Expand weekday hours of service (until 12:30 a.m.) • Provide more frequent weekday evening service (20 minutes) • Add weekend service (20 minutes, Saturday 8 a.m. – 12:30 a.m., Sunday 8:30 a.m. – 11:30 p.m.)
EASE	Potential for re-introducing fixed-route service based on demand at a future date
New Service: Applied Sciences	Applied Sciences service (60 minutes, 7 a.m.-7 p.m.)
New Service: Research Park North Loop	Research Park North Loop service (60 minutes, 7 a.m.-7 p.m.)
New Service: Campustown-Downtown/North Grand Mall	Campustown-Downtown-North Grand Mall service (60 minutes, 7 a.m.-7 p.m.)
New Service: Campustown-Downtown/North Grand Mall	New Innovative Transit Service Zone for Somerset/North Ames

Excerpt from 9 Long Term Recommendations Nelson\Nygaard Final Report
Figure 9.4: Long-Term Recommendations Revenue Hours, Costs, and Vehicle Needs

	High Priority Recommendations			All Long-Term Recommendations		
Route	**New Revenue Hours**	**Cost**	**New Vehicles Required**	**New Revenue Hours**	**Cost**	**New Vehicles Required**
1 Red				2,400	$ 195,785	
2 Green				4,300	$ 350,782	
3 Blue				1,100	$ 89,735	
5 Yellow	3,700	$ 301,836	1	9,200	$ 750,510	2
6 Brown	400	$ 32,631		6,800	$ 554,725	
7 Purple	1,200	$ 97,893	1	1,900	$ 157,997	1
9 Plum				2,400	$ 195,782	
11 Cherry						
12 Lilac	1,200	$ 97,893	1	2,800	$ 228,416	1
21 Cardinal						
23 Orange						
25 Peach				2,600	$ 212,101	1
26 Gold	2,100	$ 171,312		4,400	$ 358,940	
EASE: Innovative Transit Service						
New Service: North Ames/Somerset Innovative Service				3,100	$ 252,889	1
New Service: Applied Sciences	1,900	$ 154,997	1	1,900	$ 154,997	1
New Service: North Loop	1,900	$ 154,997	1	1,900	$ 154,997	1
New Service: Campustown-Downtown-North Grand Mall				1,900	$ 154,997	1
Total	**12,400**	**$ 1,011,557**	**5**	**46,700**	**$ 3,809,654**	**9**

March 23, 2022
Monthly Report
CyRide Resource: Barbara Neal

1. State Legislative Conference

On March 7, Shari Atwood, Chris Crippen, and I attended the Iowa Public Transit Association (IPTA) legislative conference. The conference focused on upcoming legislative initiatives and goals for the association. On March 8, Chris Crippen and I attended IPTA's Legislative Lobby Day along with several other public transit providers in Iowa. This was an opportunity to discuss our 2022 State legislative priorities, including fully funding Iowa's Rebuild Iowa Infrastructure Fund (RIIF) at $1.5 million annually and fully allocating tax revenues for State Transit Assistance funding. RIIF is distributed through the Iowa DOT's Public Transit Infrastructure Grant (PTIG) program and has most recently funded CyRide's roof replacement, bus wash replacement, and three HVAC (heating, ventilation, air conditioning) projects.

These events allowed me to have a productive conversation with Representative Bush, the House floor manager for legislation allowing third-party CDL testers with motor carriers, Iowa nonprofits, and public transit agencies. This bill would benefit multiple groups, including CyRide, who are experiencing difficulties scheduling CDL knowledge and driving skills tests. I'm pleased to report that the legislation passed the Iowa Senate 48-0 on February 23 and the Iowa House 91-0 on March 10. If approved by the Governor, the Iowa DOT would still need to modify the Administrative Rules to detail procedures necessary to comply with the law before third-party CDL testing could be formally implemented. CyRide is grateful for this legislation and the support being shown to resolve delays in the CDL testing process.

2. Bus and Bus Facilities Grant Award

The Federal Transit Administration (FTA) provides discretionary funding each year through the Grants for Bus and Bus Facilities Competitive Program. In FY 2021, approximately $409 million was made available through this process. On April 16, 2021, the Transit Board authorized CyRide to submit two grant requests through the program:

- $3,185,374 in funding to help support the purchase of three battery electric buses and two articulated buses, replacing five 40' heavy-duty diesel buses beyond their useful operating life.
- $3,384,408 as part of the consolidated Iowa DOT submission to help replace eight additional 40' diesel buses beyond their useful operating life.

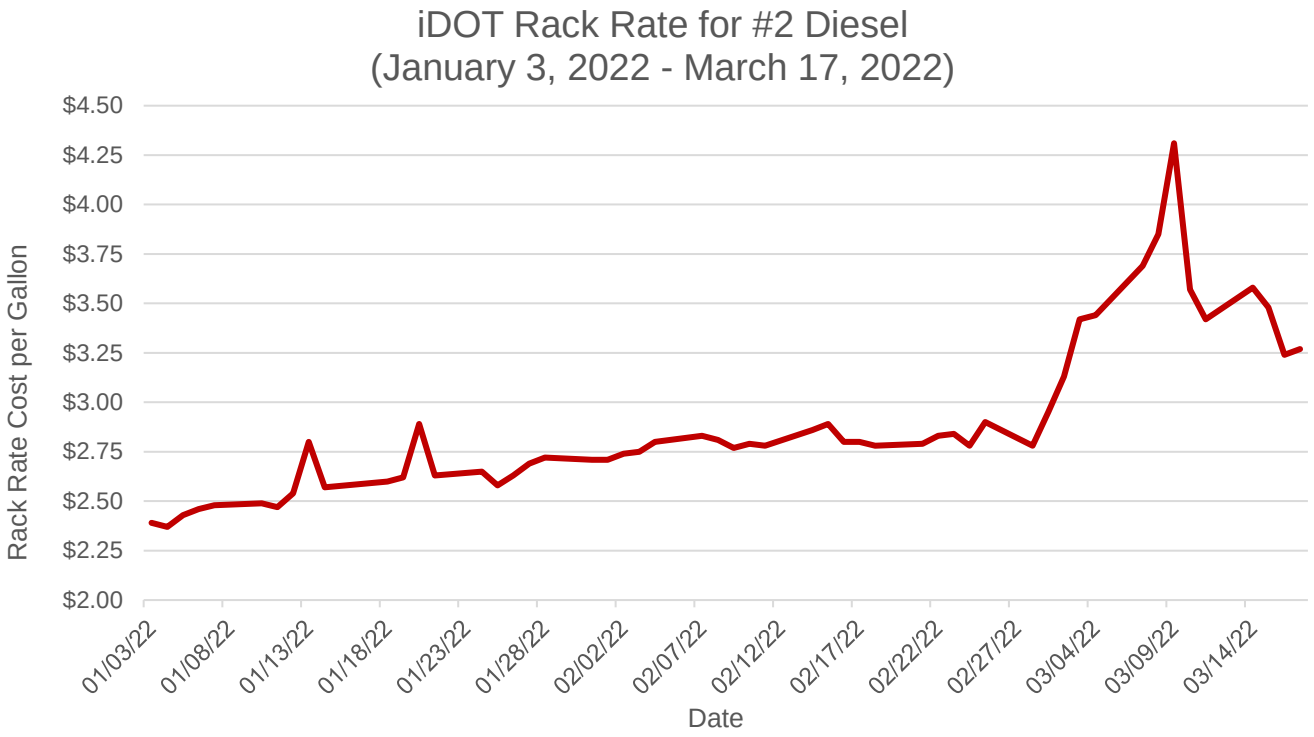
On Monday, March 14, the FTA released the list of 70 awarded projects for the Bus & Bus Facilities Program. Overall, FTA received 303 applications from 50 states/territories requesting $2.6 billion, and of those applications, 166 (55%) were rated as highly recommended. Of those, only 70 applications (23%) were awarded, which included full funding for CyRide's direct request of $3,185,374. With this funding award, CyRide will be able to expand the number of purchased battery electric buses and achieve the Transit Board goal of acquiring 10 articulated buses for use on the #23 Orange route. This is an exciting development for CyRide, and we are very grateful for the federal support from the FTA.

Unfortunately, the awarded projects did not include the Iowa DOT submission, so CyRide's request for eight additional 40' diesel buses will not be funded. This will delay the replacement of the relevant buses until a future year of the Capital Improvements Plan.

Staff will begin evaluating the specifics of the awarded funding and will bring items requesting authorization for bus purchases to the Transit Board in a future meeting.

3. Fuel Update

The market for diesel fuel has experienced exceptional volatility over the past month. The following table shows the Iowa DOT price of #2 diesel fuel since the beginning of the calendar year. With the current fuel contract, CyRide receives a small discount from this price when making purchases.



The budget for FY 2022 has fuel budgeted at a per-gallon price of $2.75. Staff has analyzed historical fuel data compared to current usage and determined that CyRide will end the year below the budgeted threshold for gallons of fuel consumed, primarily through a reduction in the number of extra buses operated. Combined with the earlier portion of the year spent below the $2.75/gallon rate, staff believes the fuel budget can absorb current fuel prices without risk to the organization's overall budget.

If unusual volatility continues, or if the cost of fuel rises further, additional information on this subject will be brought to the Transit Board.

4. Mask Mandate

On Thursday, March 10, 2022, the Transportation Security Administration (TSA) announced an extension to the mask mandate, moving the end date from March 18 to April 18, 2022. CyRide will continue to offer masks for passengers should they not have one.

Fiscal Year 2021 Buses and Bus Facilities Projects

State	Project Sponsor	Project Description	Funding Amount	Funding By State
AK	City and Borough of Juneau, Capital Transit	The City of Juneau (Capital Transit) will receive funding to purchase charging equipment for the Juneau Valley Transit Center as it moves from diesel to electric buses. This project will improve air quality as well as safety and reliability for the 32,000 residents who live in Alaska's capital city.	$1,446,827	**$1,446,827**
AL	City of Mobile	The City of Mobile (Wave Transit System) will receive funding to purchase new buses that will replace aging buses that have exceeded their useful life. The new vehicles will improve the safety and reliability of transit service for residents in the Mobile area.	$4,850,535	**$4,850,535**
AR	City of Jonesboro, AR	The City of Jonesboro will receive funding to enhance bus stops with infrastructure enhancements that improve safety, security and comply with the Americans with Disabilities Act. The upgrades will improve the passenger experience throughout Jonesboro's public transportation system.	$752,000	**$752,000**
AZ	Northern Arizona Intergovernmental Transportation Authority	The Northern Arizona Intergovernmental Transportation Authority (Mountain Line) will receive funding to build a bus storage facility and purchase low- or no- emission buses and charging equipment to support future electric bus service. This project will improve air quality and the safety and reliability of transit service for residents in and around Flagstaff.	$1,292,118	**$1,292,118**
CA	Eastern Contra Costa Transit Authority	The Eastern Contra Costa Transit Authority will receive funding to purchase infrastructure and equipment to support hydrogen fuel cell electric buses. This project will improve air quality and the safety and reliability of ECCTA transit, which serves residents of Antioch, Brentwood, Oakley, Pittsburg and the County of Contra Costa.	$3,998,543	
CA	Sacramento Regional Transit District	The Sacramento Regional Transit District will receive funding to purchase CNG buses to replace older buses that are reaching the end of their useful life. This project will allow SacRT to improve service reliability and maintain a state of good repair.	$5,250,000	
CA	City of Torrance Transit Department	The City of Torrance Transit Department (Torrance Transit System) will receive funding to purchase zero-emission battery-electric buses to replace older buses and procure a new electric vehicle charging station. The new buses will improve air quality, safety, reliability and state of good repair for residents in the South Bay Region of Los Angeles County.	$6,280,000	
CA	Napa Valley Transportation Authority	The Napa Valley Transportation Authority, which operates the regional Vine Transit Bus system, will receive funding to purchase electric buses to replace older buses that have reached their useful life along with support charging infrastructure to be installed at its future maintenance facility. The project will improve air quality, safety and the reliability of transit service for residents throughout Napa County.	$8,455,856	
CA	Riverside Transit Agency	The Riverside Transit Agency will receive funding to build hydrogen fueling stations at its Riverside and Hemet Divisions and provide training for its maintenance staff. This project will support the RTA's efforts in transitioning towards a hydrogen fuel cell electric bus fleet, improving air quality and furthering the agency's climate goals.	$8,787,846	
CA	San Luis Obispo Regional Transit Authority	The San Luis Obispo Regional Transit Authority will receive funding to buy zero-emission battery-electric buses to replace older diesel buses that have reached the end of their useful life. This project will improve air quality and support RTA's efforts to keep its fleet in a state of good repair, improving safety and reliability for riders throughout San Luis Obispo County, El Paso de Robles-Atascadero and Arroyo Grande-Grover Beach.	$8,799,979	
CA	SunLine Transit Agency	The SunLine Transit Agency will receive funding to buy zero-emission hydrogen fuel cell electric transit buses and rehabilitate CNG buses. This project will allow SunLine to improve air quality, safety, and service reliability.	$8,409,070	
CA	City of Norwalk: Norwalk Transit System	The City of Norwalk (Norwalk Transit System) will receive funding to buy zero-emission, battery electric buses to replace older buses that have reached the end of their useful life and charging infrastructure. This project will improve air quality as well as service reliability while maintaining a state of good repair.	$3,530,822	
CA	City of Santa Rosa	The City of Santa Rosa (CityBus) will receive funding to buy battery-electric buses to replace older buses that have reached the end of their useful life along with charging infrastructure. This project will allow CityBus to improve air quality, safety and service reliability and maintain a state of good repair.	$4,288,300	
CA	North County Transit District (NCTD)	The North County Transit District will receive funding to buy hydrogen fuel cell electric buses to replace older buses that have reached the end of their useful life. The buses will improve air quality as well as transit service in greater Northern San Diego County.	$4,800,000	
CA	City of Cerritos	The City of Cerritos will receive funding to buy electric buses to replace older buses that have reached the end of their useful life. This project will allow the city to improve air quality as it operates its fixed-route transit program, Cerritos on Wheels, a nine-mile network that connects residential neighborhoods and regional destinations such as jobs, school and healthcare.	$4,378,140	
CA	Foothill Transit	Foothill Transit will receive funding to buy zero-emission buses to replace older buses that have reached the end of their useful life. This project will maintain service reliability and a state of good repair while improving air quality for residents in the San Gabriel and Pomona valleys of Los Angeles County.	$7,942,200	
CA	California DOT on behalf of the City of Arvin	The City of Arvin, located in the San Joaquin Valley Air District, will receive funding to buy battery-electric, zero- emission buses to replace older buses that have reached the end of their useful life and build a microgrid to power the buses. This project will improve the safety and reliability of transit service and improve air quality for residents living in the five-square mile agricultural community in Kern County.	$2,922,550	

Fiscal Year 2021 Buses and Bus Facilities Projects

CA	California DOT on behalf of Yosemite Area Regional Transportation System (YARTS)	The Yosemite Area Regional Transportation System, which provides transit service into Yosemite National Park from Merced, Mariposa, Mammoth Lakes, Sonora, Groveland, Fresno and Oakhurst, will receive funding to purchase new buses. This project will ensure service reliability and reduce the agency's overall operating expenses.	$4,600,625	**$82,443,931**
CO	State of Colorado, Department of Transportation (CDOT)	The Colorado Department of Transportation will receive funding on behalf of the Town of Snowmass Village to construct a multi-modal transit station that will improve efficiency of operations for regional and local bus systems. The project will feature bike and pedestrian improvements, accessibility features and safety measures addressing future pedestrian and vehicle touch points.	$13,500,000	
CO	State of Colorado, Department of Transportation (CDOT)	The Colorado Department of Transportation will receive funding on behalf of the Roaring Fork Transportation Authority to build a bus maintenance and storage facility and support charging infrastructure. This project will allow RFTA to enhance its maintenance capabilities in support of a larger, modern zero-emission fleet.	$9,350,000	**$22,850,000**
CT	Connecticut Department of Transportation	The Connecticut Department of Transportation will receive funding to buy battery electric buses to replace diesel-powered buses that have exceeded their useful life. This project will improve air quality and service reliability as well as maintain a state of good repair as the state moves forward in the next phase of its zero emission bus deployment program.	$11,446,538	**$11,446,538**
DE	Delaware Transit Corporation	The Delaware Transit Corporation will receive funding to modernize the Rehoboth Park & Ride into a new transit center featuring new bus boarding stations, a self-sustaining microgrid fed by on-site solar generation, a new administrative and bus maintenance facility and enhanced pedestrian and bike connectivity to adjacent routes.	$5,400,000	**$5,400,000**
FL	City of Gainesville Dept of Transportation & Mobility, Regional Transit System	Gainesville's Department of Transportation & Mobility, (Regional Transit System) will receive funding to buy buses to replace older buses that have exceeded their useful life and build a new bus transfer station. This project will improve service reliability and efficiency for residents in Gainesville and Alachua County.	$10,660,817	
FL	Pinellas Suncoast Transit Authority	The Pinellas Suncoast Transit Authority will receive funding to buy electric buses to replace older buses that have exceeded their useful life and support charging infrastructure. The new vehicles will improve air quality as well as the safety and reliability of transit service for residents in Pinellas County.	$18,399,000	**$29,059,817**
GA	Metropolitan Atlanta Rapid Transit Authority (MARTA)	The Metropolitan Atlanta Rapid Transit Authority (MARTA) will receive funding to build a new bus and operations maintenance facility in Clayton County. This project will allow MARTA to improve service reliability and maintain a state of good repair.	$15,000,000	**$15,000,000**
HI	Honolulu, City & County of	The City and County of Honolulu will receive funding to buy electric buses to replace older buses that have exceeded their useful life. This project will improve air quality and the safety and reliability of transit service for residents in Honolulu.	$4,711,900	**$4,711,900**
IA	Ames Transit Agency dba CyRide	The Ames Transit Agency (CyRide) will receive funding to replace aging transit vehicles that have exceeded their useful life with new buses. The buses will improve transit safety and reliability for residents in Ames.	$3,185,374	**$3,185,374**
ID	Valley Regional Transit	Valley Regional Transit will receive funding to buy battery electric buses to replace older buses that have exceeded their useful life. This project will improve air quality and the safety and reliability of transit service for residents of Boise and communities throughout Ada and Canyon counties in southern Idaho.	$1,920,000	**$1,920,000**
IL	Madison County Mass Transit District	The Madison County Mass Transit District will receive funding to buy buses to replace older buses that have exceeded their useful life. This project will improve the safety and reliability of transit service for Madison County residents.	$2,700,000	**$2,700,000**
IN	South Bend Public Transportation Corporation	The South Bend Public Transportation Corporation (Transpo) will receive funding to buy CNG buses to replace older diesel buses that have exceeded their useful life. This project will improve the safety and reliability of transit service for residents of South Bend and Mishawaka in Northern Indiana.	$4,327,304	
IN	Indianapolis Public Transportation Corporation	The Indianapolis Public Transportation Corporation (IndyGo) will receive funding to build new passenger shelters and bus boarding areas for bus rapid transit and local bus services. The project will include developing a bus stop location plan considering ridership, connectivity, transfer points, accessibility, safety, streetscapes and rider amenities, creating more efficient, better connections to jobs, schools and community services.	$2,346,658	**$6,673,962**
KS	Prairie Band Potawatomi Nation	The Prairie Band Potawatomi Nation will receive funding to purchase a new ADA accessible vehicle to replace an older vehicle that has exceeded its useful life. The project will address state of good repair needs and ensure safe and reliable travel for tribal residents located in rural Jackson County.	$52,972	**$52,972**
KY	Transit Authority of the Lexington-Fayette Urban County Government	The Transit Authority of the Lexington-Fayette Urban County Government (Lextran) will receive funding to replace buses that have exceeded their useful life. The replacement vehicles will reduce maintenance costs and improve service reliability for residents in St. Martins Village, Galberith, and surrounding neighborhoods, including services to Lexington.	$4,107,642	**$4,107,642**
LA	City of Shreveport	The City of Shreveport will receive funding to improve bus stops by adding shelters and infrastructure that improve accessibility. The upgrades will enhance safety for riders, better accommodate passenger transfers between buses, and attract new riders in the Shreveport-Bossier service area.	$1,948,000	**$1,948,000**

Fiscal Year 2021 Buses and Bus Facilities Projects

MA	Massachusetts Bay Transportation Authority	The Massachusetts Bay Transportation Authority will receive funding to replace the Quincy Bus Maintenance Facility, the oldest in MBTA's system, with a modern facility that will allow the agency to convert the current fleet housed at the facility from diesel buses to clean, battery electric buses. This project will improve safety and state of good repair for facilities that were originally built in the 1900s and further the agency's climate goals.	$5,000,000	**$5,000,000**
MD	MDOT - MTA on Behalf of Harford County Maryland	The Maryland Department of Transportation will receive funding on behalf of Harford County to replace older buses that have exceeded their useful life. This project will improve service reliability and state of good repair.	$1,498,000	**$1,498,000**
ME	Greater Portland Transit District	The Greater Portland Transit District in Maine will receive funding to replace aging buses that have exceeded their useful life. The bus replacements will be ADA-compliant and improve safety and efficiency for the fleet, which serves a growing ridership in and around Portland.	$1,887,000	**$1,887,000**
MI	Michigan Department of Transportation	The Michigan Department of Transportation will receive funding to purchase transit vehicles for rural transit agencies across the state. The new vehicles will allow the agencies to replace aging vehicles and expand their fleets, resulting in enhanced safety and service reliability for riders.	$6,199,631	
MI	Michigan Department of Transportation	The Michigan Department of Transportation will receive funding for bus facility rehabilitation and expansion projects for four rural transit providers. The project will allow the city of Alma, the Benzie Transportation Authority, the Eastern Upper Peninsula Transportation Authority and the Thunder Bay Transportation Authority to enhance transit safety and access and improve service reliability.	$7,391,200	**$13,590,831**
MN	Minnesota Valley Transit Authority	The Minnesota Valley Transit Authority will receive funding to improve and modernize the Burnsville Bus Garage. The project will allow MVTA, which provides transit service to Twin Cities suburbs in Dakota and Scott counties, to improve safety and efficiency and accommodate future fleet and service expansions.	$4,960,000	
MN	City of Rochester	The City of Rochester (Rochester Public Transit) will receive funding to improve bus stops by adding shelters and benches and build a new park and ride featuring a new bus passenger platform. The upgrades will enhance safety for riders, better accommodate transfers between buses and attract new riders.	$4,339,344	**$9,299,344**
MO	Bi-State Development Agency of the Missouri-Illinois Metropolitan District	The Bi-State Development Agency of the Missouri-Illinois Metropolitan District will receive funding to buy electric buses to replace older buses that have exceeded their useful life and charging equipment. This project will improve air quality as well as the safety and reliability of transit service for residents in and around St. Louis.	$4,098,410	**$4,098,410**
MT	City of Billings, MET Transit Division	The City of Billings Metropolitan Transit System will receive funding to buy buses to replace older buses that have exceeded their useful life and refurbish its administrative and maintenance facility. This project will improve transit service and reliability in Billings.	$3,028,000	**$3,028,000**
NC	City of Greensboro	The City of Greensboro will receive funding to buy electric buses to replace older buses that have exceeded their useful life. This project will improve air quality and support the city's state of good repair needs while reducing operating costs.	$3,008,800	
NC	City of Concord	The City of Concord will receive funding to buy hybrid electric diesel buses to replace older buses that have exceeded their useful life. This project will improve air quality and service reliability while reducing maintenance costs.	$3,966,318	
NC	City of Durham	The City of Durham will receive funding to renovate and upgrade its Durham Station to improve safety and add passenger amenities. The upgrades include additional bus bays, expanded canopies, more seating and a customer service kiosk.	$10,800,000	**$17,775,118**
NM	City of Albuquerque	The City of Albuquerque (ABQ Ride) will receive funding to rehabilitate its bus washing system at the Daytona Maintenance Facility. This project will improve safety and state of good repair for the bus fleet as well as the facility.	$1,161,100	**$1,161,100**
NV	Regional Transportation Commission of Southern Nevada	The Regional Transportation Commission of Southern Nevada will receive funding to buy hydrogen fuel cell buses to replace older diesel buses and install renewable energy lighting at bus stops throughout its system. This project will improve air quality as well as safety and service reliability for residents in the greater Las Vegas area.	$4,870,000	**$4,870,000**
NY	Niagara Frontier Transportation Authority	The Niagara Frontier Transportation Authority will receive funding to buy battery electric buses to replace older buses that have exceeded their useful life and support charging equipment. The new buses will improve air quality, safety, reliability and state of good repair for the system.	$4,844,000	
NY	Metropolitan Transportation Authority	The New York Metropolitan Transportation Authority will receive funding to rehabilitate the Michael J. Quill Bus Depot. The project will improve the efficiency of transit operations for riders in and around Manhattan.	$12,337,280	**$17,181,280**
OH	Laketran	Laketran will receive funding to modernize its main headquarters building, including expanding a bus garage and adding operations and maintenance facilities. This project will help improve overall service reliability for Laketran and its passengers.	$14,681,981	
OH	Portage Area Regional Transportation Authority	The Portage Area Regional Transportation Authority will receive funding to buy buses to replace older buses that have exceeded their useful life. The new buses will improve safety and service reliability for passengers in Portage County and lower maintenance costs.	$1,514,888	
OH	Toledo Area Regional Transit Authority	The Toledo Area Regional Transit Authority will receive funding to rehabilitate its maintenance facility and buy paratransit vehicles to replace older vehicles that have exceeded their useful life. This project will help improve overall service reliability for TARTA riders.	$2,307,200	

Fiscal Year 2021 Buses and Bus Facilities Projects

OH	Southwest Ohio Regional Transit Authority (SORTA)	The Southwest Ohio Regional Transit Authority will receive funding to buy buses to replace older buses that have exceeded their useful life. The new buses will allow SORTA, which serves the greater Cincinnati region, to improve service for riders, reduce maintenance costs and keep its fleet in a state of good repair.	$10,134,960	
OH	Greater Cleveland Regional Transit Authority (GCRTA)	The Greater Cleveland Regional Transit Authority will receive funding to rehabilitate its Hayden Bus Maintenance Facility. This project will allow GCRTA to more efficiently maintain its buses and improve service reliability.	$4,000,000	**$32,639,029**
OK	Oklahoma Department of Transportation	The Oklahoma Department of Transportation will receive funding on behalf of the Ki Bois Area Transit System to construct a new, ADA compliant administrative facility and the Muskogee County Transit System to rehabilitate their maintenance facility. These projects will help improve overall service reliability for riders and maintain a state of good repair.	$914,725	**$914,725**
OR	Rogue Valley Transportation District	The Rogue Valley Transportation District will receive funding to build a new bus maintenance facility. This project will allow RVTD to more efficiently maintain its buses and improve service reliability.	$12,552,523	
OR	Lane Transit District	The Lane Transit District will receive funding to buy zero-emission buses and support charging equipment to replace older buses that have exceeded their useful life. This project will improve safety, air quality and reliability for residents in the Eugene-Springfield metropolitan area.	$4,891,676	
OR	Oregon Department of Transportation, Public Transportation Division	The Oregon Department of Transportation will receive funding on behalf of the city of Cottage Grove to purchase new buses to replace older buses for South Lane Wheels, the city's transit service provider. The new buses will improve safety and service reliability for riders.	$244,800	**$17,688,999**
PA	Southeastern Pennsylvania Transportation Authority	The Southeastern Pennsylvania Transportation Authority will receive funding to construct two new bus transportation centers in South Philadelphia. This project will create dedicated end-of-line bus facilities for up to 9 routes, featuring ADA accessible bus stops with critical infrastructure and safety enhancements.	$9,800,000	**$9,800,000**
SC	City of Rock Hill	The City of Rock Hill will receive funding to buy electric buses and support charging infrastructure. The new, technologically advanced buses will improve air quality, reduce operating and maintenance costs, and support continued transit expansion in Rock Hill.	$2,832,848	**$2,832,848**
TX	Galveston, City of	The City of Galveston (Island Transit) will receive funding to buy buses to replace older buses that have exceeded their useful life. This project will improve safety and support the Galveston's state of good repair needs.	$1,060,000	
TX	Fort Worth Transportation Authority	The Fort Worth Transportation Authority (Trinity Metro) will receive funding to rehabilitate its Hershel R. Payne Transportation Complex, Texas and Pacific Station, and Fort Worth Central Station facilities. These projects will help the agency maintain a state of good repair, reduce energy and repair costs, and ensure reliable, high-frequency transit service for riders.	$6,484,320	
TX	Texas Department of Transportation	The Texas Department of Transportation will receive funding to buy replacement buses, build new transit maintenance facilities and support charging infrastructure for rural transit fleets. These projects will improve transit service and reliability for residents in rural Texas communities.	$22,850,000	**$30,394,320**
UT	Utah Department of Transportation	The Utah Department of Transportation will receive funding on behalf of Park City to buy electric buses. This project will improve air quality as well as service reliability and improve transit service for residents.	$2,389,699	**$2,389,699**
VA	Central Shenandoah Planning District Commission	The Central Shenandoah Planning District Commission (BRITE Transit) will receive funding to construct a bus transit hub in downtown Staunton. This project will improve service reliability and safety for BRITE riders.	$916,500	**$916,500**
WA	Clark County Public Transportation Benefit Area	The Clark County Public Transportation Benefit Area (C-TRAN) will receive funding to replace older buses with newer buses. The new vehicles will improve access and mobility for residents in the urban areas of Clark County in Southwest Washington.	$2,742,600	
WA	Kitsap Transit	Kitsap Transit will receive funding to buy battery electric buses to replace older diesel buses along with charging infrastructure. The project will improve air quality as well as the safety and reliability of transit service for residents throughout Kitsap County.	$10,400,000	
WA	Central Puget Sound Regional Transit Authority	The Central Puget Sound Regional Transit Authority (Sound Transit) will receive funding to purchase new, high capacity transit buses and to construct a new transit center to support future Bus Rapid Transit (BRT) service along the I-405 corridor in south King County, WA. This project will deliver new, expanded service and to help relieve congestion in a rapidly growing region.	$12,924,801	**$26,067,401**
WI	City of Madison	The City of Madison (Metro Transit) will receive funding to rehabilitate its maintenance and administrative facility. The project will ensure a state of good repair so the transit system can continue to provide safe and reliable transit service for residents throughout Madison.	$6,400,000	**$6,400,000**
			$409,274,220	**$409,274,220**

APPENDIX D:
Fare Analysis

1 FARE ANALYSIS INTRODUCTION

More than 90% of CyRide's transit trips are paid through a universal pass agreement with Iowa State University's (ISU) Student Government. ISU students also comprise the majority of CyRide's systemwide ridership. Given this ratio, CyRide is interested in evaluating the current fare structure and fare policies, including potentially transitioning to fare free operations across all aspects of the transit service.

Charging a fare—or not charging a fare—encompasses a wide range of costs and benefits. Some of the key benefits associated with collecting a fare include generating revenue, reducing reliance on federal and state funding, and supporting the perception that the public helps pay for public transportation services. Concurrently, there are costs associated with charging a fare. Operating fare free is less complex because it simplifies accounting systems and reduces the need for secure storage of cash; additionally, management and distribution of fare media are not required. Additional benefits of operating fare free include the potential for increased ridership and enhanced operating efficiency.

This fare analysis seeks to:

- Review existing conditions and best practices
- Evaluate the existing agreement with ISU students
- Document ongoing administrative, operating, and capital costs related to fares
- Evaluate the ridership and revenue implications of different fare scenarios, and
- Develop a cost-benefit analysis for systemwide fare free operations

2 EXISTING FARE STRUCURE

This section discusses the existing structure of CyRide's fare options, including fare categories and structure.

FARE CATEGORIES

There are five main categories for CyRide fixed-route transit fare products: regular fare, children, reduced fare, student, and faculty/staff. Each is described briefly below:

Adult

Adult fares are a full-fare category and do not require any additional identification beyond valid fare payment.

Children

Children five years and younger (maximum of three children per passenger) ride free.

Reduced

Reduced fares are available for K-12 students, Medicaid/Medicare cardholders, seniors (ages 65 and above), and people with a disability. The reduced fare is $0.60 for fixed-route services.

Student

Iowa State University (ISU) students with a current ISUCard ride free.

ISU Subsidized

ISU faculty and staff are eligible for subsidized rates on unlimited ride passes. The subsidized passes are available at the University Bookstore, at the CyRide office, or by mail. Riders must show a Staff/Faculty ID card or a current ISU pay stub to be eligible for the subsidized pass.

FARE STRUCTURE

CyRide offers several fare and pass options for riders. These options are single ride fares, ticket books, and unlimited ride passes. The current CyRide fare structure is detailed in Figure 2-1.

Figure 2-1 CyRide Fare Structure

Fare Type		Price
Regular Fare		$1.25
Reduced Fare		$0.60
Transfers		Free
Passes		
10-Ticket Book	Regular Fare	$12.00
	Reduced Fare	$6.00
Monthly Pass Valid for a calendar month	Regular Fare	$40
	Reduced Fare *Not available for K-12 students*	$20
Summer Pass May to August	Regular Fare	$100
	Reduced Fare	$50
	ISU Subsidized Fare	$70
Fall Semester Pass August to December *Prices drop in September*	Regular Fare	$160/$120
	Reduced Fare	$80/$50
	ISU Subsidized Fare	$115/$85
Winter Pass November to March *Prices drop in December*	Regular Fare	$150/$100
	Reduced Fare	$75/$50
	ISU Subsidized Fare	$105/$70
School Year Pass August to June *Prices drop in September, December, and February*	Regular Fare	$320/$280/$160/$120
	Reduced Fare	$160/$140/$80/$60
	ISU Subsidized Fare	$230/$200/$115/$85

Single Ride Fares

One-way single fare is $1.25 for fixed-route service.

The fare structure offers a reduced fare for eligible customers, which include senior citizens, individuals with disabilities, Medicare card holders, and K-12 students. Reduced fare is $0.60 for one-way fixed-route service.

Transfers

Paper transfer slips are available onboard CyRide fixed-route services and are issued by the driver when a cash or ticket fare is paid. There is no additional charge for a transfer slip.

Pass Products

CyRide offers numerous transit pass options including multiple-ride and unlimited-ride products, described in the following section. Pass prices are discounted over regular cash fares for regular and express services, though the amount of the discount varies by pass product. Figure 2-2 shows the "multiplier" for each of CyRide's pass products—in other words, the number of one-way rides that a customer would have to take to break even using the pass product—as well as the number of times per weekday a customer would have to ride transit to break even and the discount from the base fare, if applicable.

Figure 2-2 Pass Products

Pass Product		Price	Multiplier/Discount	Uses per Weekday to "Break Even"
10-Ticket Book	Regular Fare	$12.00	4% discount	1.9
	Reduced Fare	$6.00	No discount	2.0
Monthly Pass	Regular Fare	$40	32	1.6
	Reduced Fare	$20	33	1.7
Summer Pass	Regular Fare	$100	80	0.9
	Reduced Fare	$50	83	1.0
	ISU Subsidized Fare	$70	56	0.7
Fall Semester Pass	Regular Fare	$160/$120	128/96	1.3
	Reduced Fare	$80/$50	133/83	1.3
	ISU Subsidized Fare	$115/$85	92/68	0.9
Winter Pass	Regular Fare	$150/$100	120/80	1.3
	Reduced Fare	$75/$50	125/83	1.4
	ISU Subsidized Fare	$105/$70	84/56	0.9
School Year Pass	Regular Fare	$320/$280/$160/$120	256/224/128/96	1.2
	Reduced Fare	$160/$140/$80/$60	267/233/133/100	1.3
	ISU Subsidized Fare	$230/$200/$115/$85	184/160/92/68	0.9

10-Ticket Book

Regular and reduced fare tickets are available in a 10-ticket booklet for fixed-route services only. In addition to providing a convenient method of payment, the 10-ticket booklets provide a $0.50 discount to regular fare paying riders compared to the cost of purchasing 10 individual fares.

Monthly Pass and Reduced Monthly Pass

Similar to many transit agencies, CyRide offers frequent riders a monthly pass and a reduced rate monthly pass. The pass is based on the calendar month, and can be purchased on the 20th of the previous month.

The multiplier for the Monthly Pass is 32 trips, and for the Reduced Monthly Pass is 33 trips. This means that an employee using transit to travel to work must take, on average, 1.6 rides per day for a pass to "break even." Essentially, if a person were to take four days off per month, the cost of the monthly pass would still be worthwhile.

Summer, Fall, Winter, and School Year Passes

CyRide offers a variety of unlimited ride passes based around the ISU academic calendar. These include:

- **Summer Pass:** May 1 to August 31
- **Fall Semester Pass:** Early August to December 31
- **Winter Pass:** Early November to Mid-March
- **School Year Pass:** Early August to June 1

The prices for Fall and Winter Passes drop part-way through the semester. The prices for the School Year Pass drops in September, December, and February. This may be to encourage customers to purchase a pass later in the semester if needed.

For Regular Fare and Reduced Fare paying customers, the weekday "break-even" rate for these pass products averages 1.3 rides per day (and just one ride per day in the summer). This means that an employee using these pass products only needs to take transit 65% of the time to make the purchase of a pass worthwhile.

For ISU faculty and staff members, the incentive is even greater. ISU faculty and staff are eligible for subsidized rates on unlimited ride passes, a perk provided by ISU Parking Systems. An ISU faculty or staff member using transit to travel to work must only take, on average, 0.9 rides per day for a pass to "break even" (and just 0.7 rides per day in the summer). Essentially, the cost of the seasonal pass is worthwhile for ISU faculty and staff if they take transit for less than half (45%) of their trips to work.

Iowa State University Student 'Fare Free'

Students at Iowa State University (ISU) ride free on CyRide fixed-route transit routes. The "fare free" universal pass agreement between ISU's Student Government and CyRide has been in place since 2002.

ISU students effectively pay about $0.70 per trip (or a 44% discount off the full cash fare). Trends in student ridership and revenues received from the ISU Student Government are discussed in the following section.

3 REVENUES AND RIDERSHIP TRENDS

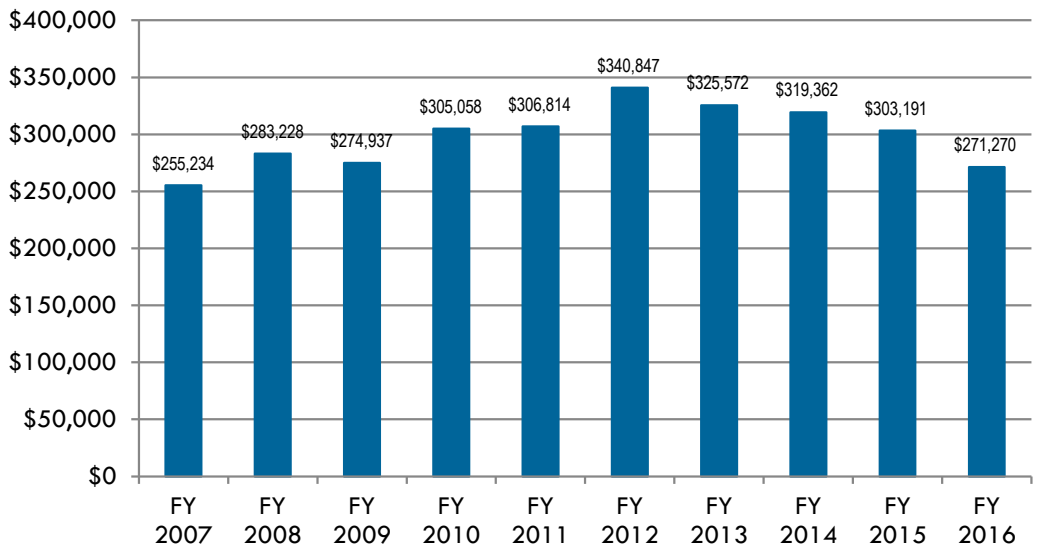
FAREBOX REVENUES

This section provides an overview of fare revenue and ridership trends.

Annual Farebox Revenue

Annual farebox revenues rose from 2007 to 2013 and declined from 2013 to 2016. Growth in farebox revenue from 2007 to 2016 is just 6.2%. At the beginning of 2012, CyRide increased cash fares from $1 to $1.25. Revenues have declined since the fare increase.

Figure 3-1 Annual Farebox Revenue

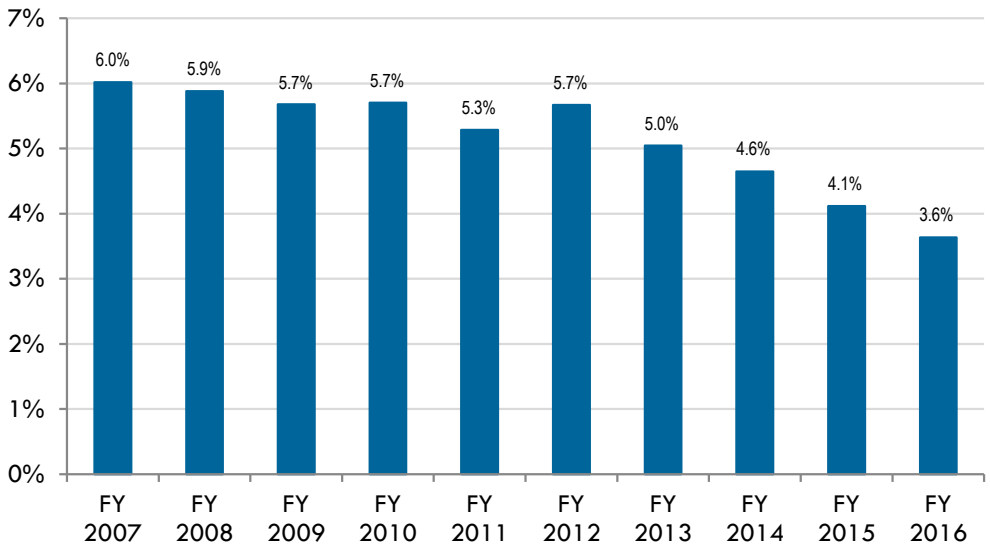


Note: These figures exclude farebox revenue generated by the funding agreement with ISU.

Farebox Recovery Ratio

Farebox recovery ratio is a measure of the percentage of agency funds that come from fare-paying customers. From 2007 to 2016, CyRide's farebox recovery ratio fell by 40%, from 6% in FY07 to 3.6% in FY16.

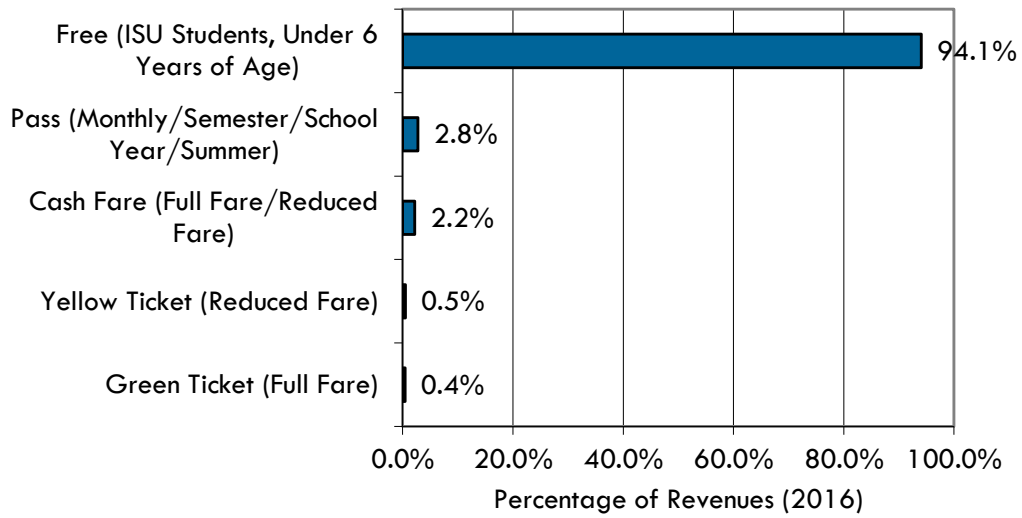
Figure 3-2 Farebox Recovery Ratio



Farebox Revenues by Type

Figure 3-3 shows a breakdown of farebox revenues by fare type. This is based on FY 2015/2016 data collected from CyRide. The highest share of CyRide farebox revenue is from student fares from the agreement with ISU (94%). The next highest shares of farebox revenues (2.8%) is from passes, followed by cash fares (2.2%).

Figure 3-3 Farebox Revenues by Fare Type (FY 15/16)



Ridership by Fare Type

A similar breakdown of CyRide ridership by fare type can be seen in the following figures. Figure 3-4 shows ridership by fare type, including transfers and ISU students. In terms of overall boardings, the bulk of all riders (93.8%) ride free because they are ISU Students or children under six years of age. People paying with passes, cash fare, Moonlight Express, transfers, and Green and Yellow tickets combined account for just 6.2% of overall ridership.

Figure 3-4 Ridership by Fare Type Including Transfers

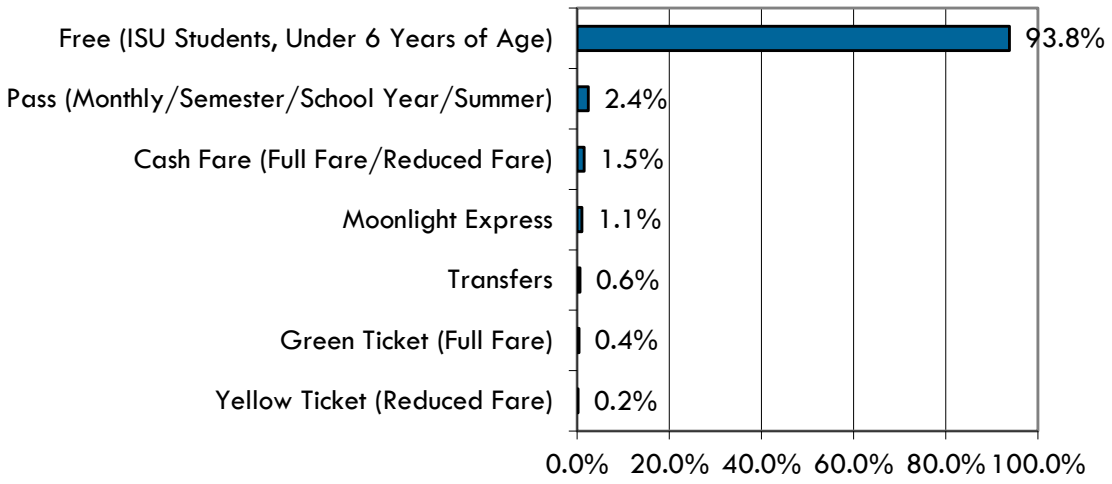
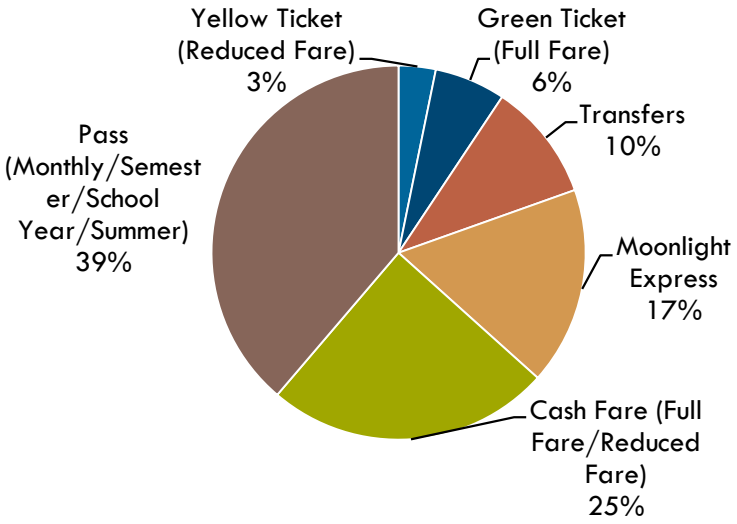


Figure 3-5 shows a breakdown of ridership by fare type excluding those riding free (ISU students and children under 6). Of those that pay a fare, 39% pay with a monthly, semester, school year, or summer pass product. Another 25% pay either a full or reduced cash fare.

Figure 3-5 Paid Fare Ridership

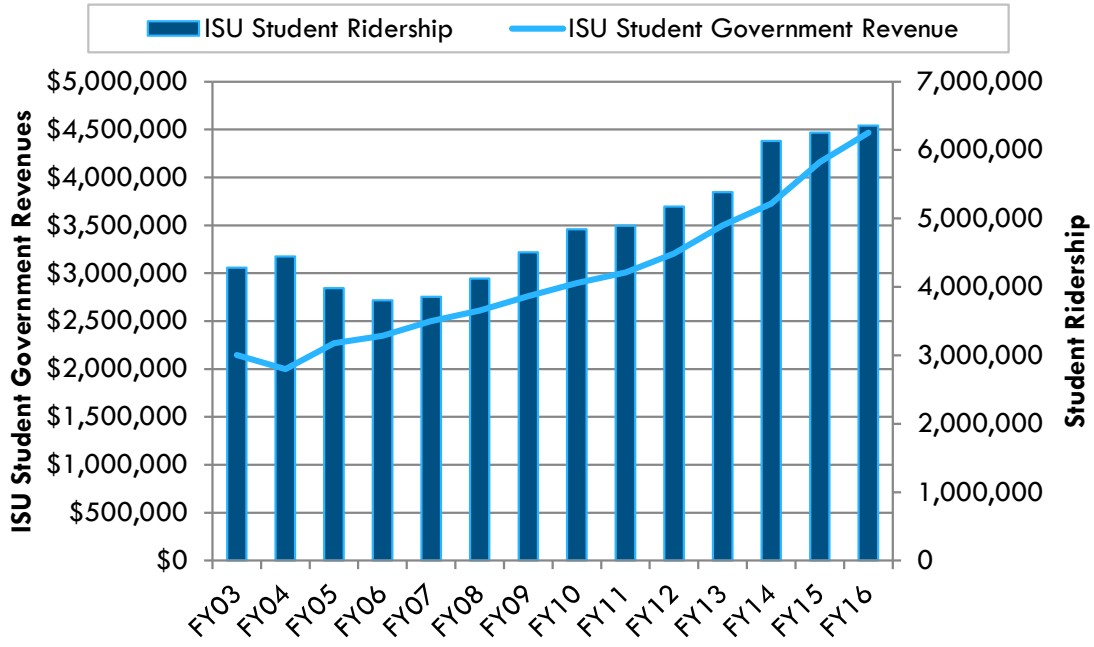


ISU REVENUE AND RIDERSHIP TRENDS

ISU Revenue and Ridership Trends

ISU student revenue and ridership trends are compared in Figure 3-6. Revenues from the agreement with ISU Student Government have risen steadily since FY 2003 when the agreement began. Student ridership has been rising since FY 2006. It is important to note that student ridership figures are considered "free" in CyRide's revenue tracking database, therefore this number includes other passengers who ride free such as children under the age of six.

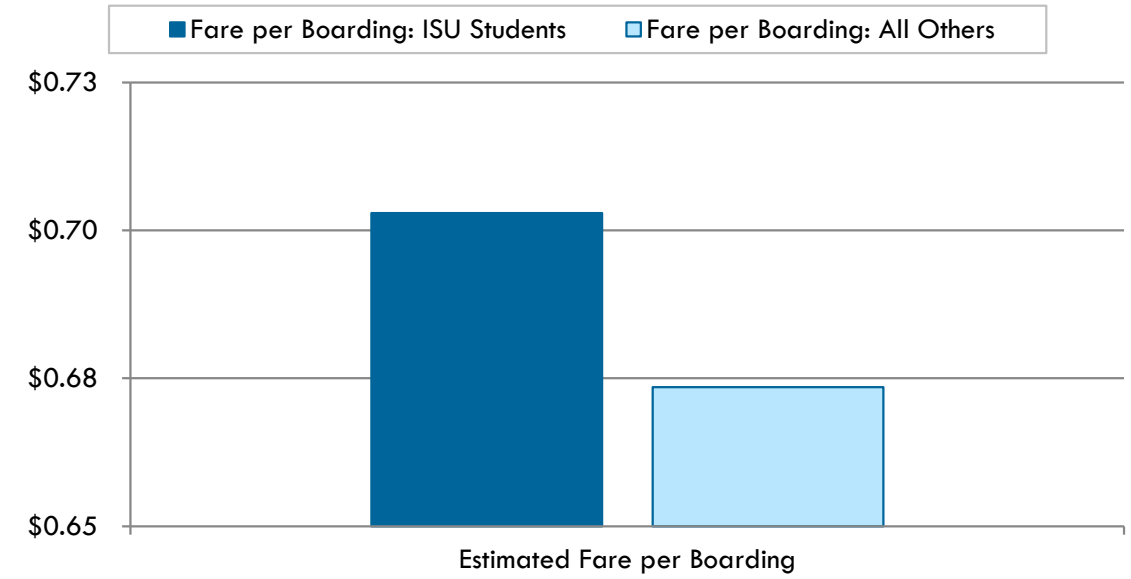
Figure 3-6 Student Revenue and Ridership Trends (FY03 to FY16)



ISU Student Fare per Boarding

The average fare that ISU students pay per boarding is comparable to non-campus riders. This figure is derived by dividing the farebox/fee revenue received from the agreement with ISU by student ridership. Non-campus riders pay slightly less on average per trip than ISU students—$0.67 per boarding compared with $0.70 for ISU students.

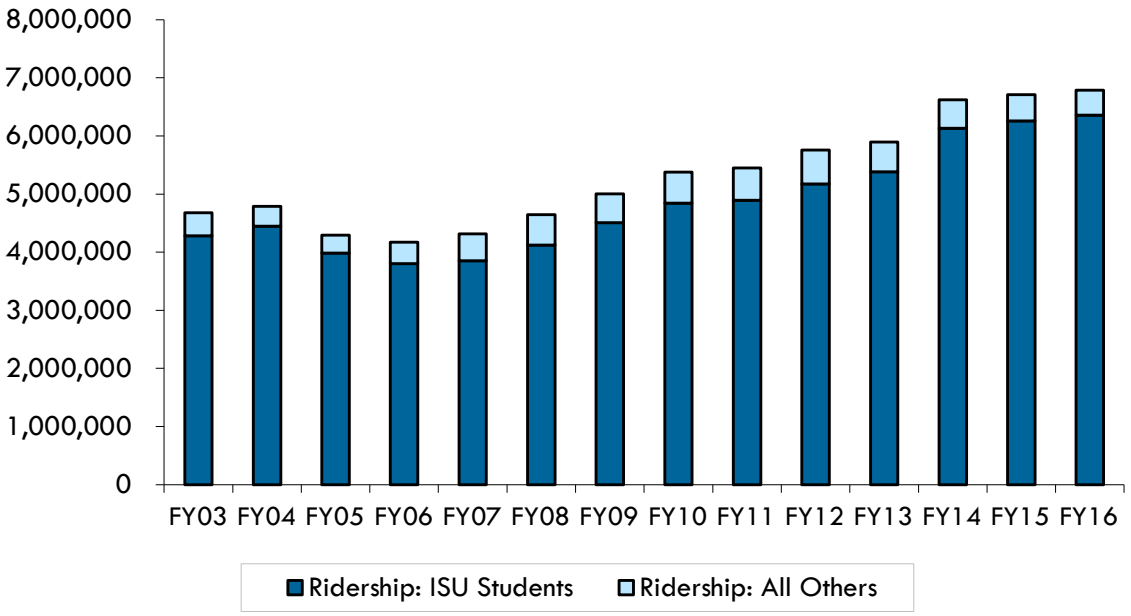
Figure 3-7 ISU Student Estimated Fare per Boarding



Ridership before/after ISU Student Government Agreement

Overall ridership has increased 45% since the ISU student government agreement began in FY 2003. ISU Students now comprise the majority of CyRide ridership, as shown in Figure 3-8.

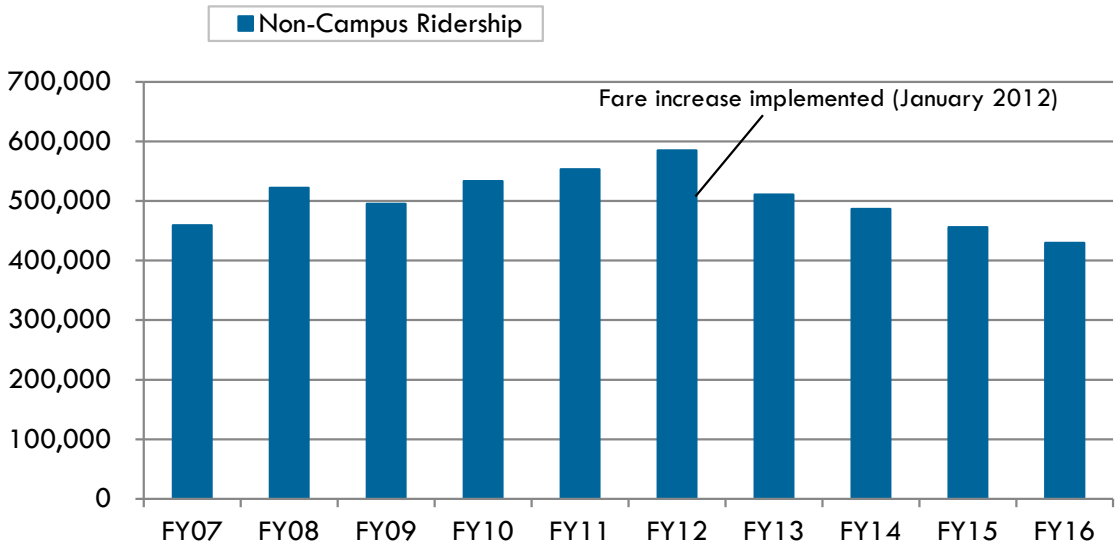
Figure 3-8 ISU Student Ridership



Non-Campus Ridership

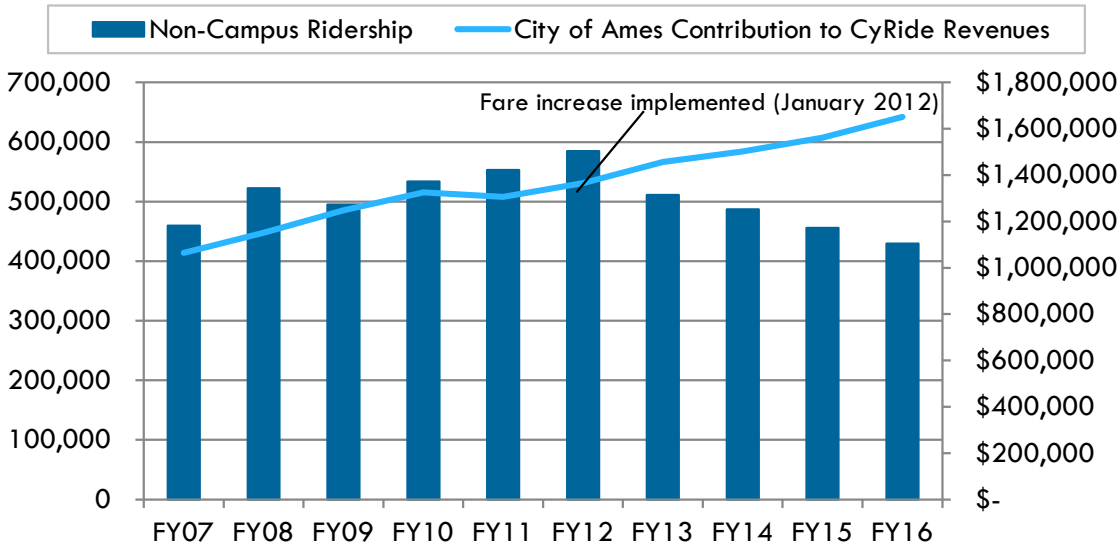
Non-campus ridership has been declining since 2012. This decline has coincided with a fare increase that was implemented in January 2012. The 10-year trend shows a 6.5% decline in non-campus ridership since 2007.

Figure 3-9 Non-Campus Ridership



Additionally, a decline in non-campus ridership means that the City of Ames is effectively paying more per trip. The following figure compares non-campus ridership trends with the City of Ames contribution to CyRide revenues over the previous 10 years.

Figure 3-10 Non-Campus Ridership and City of Ames Contribution

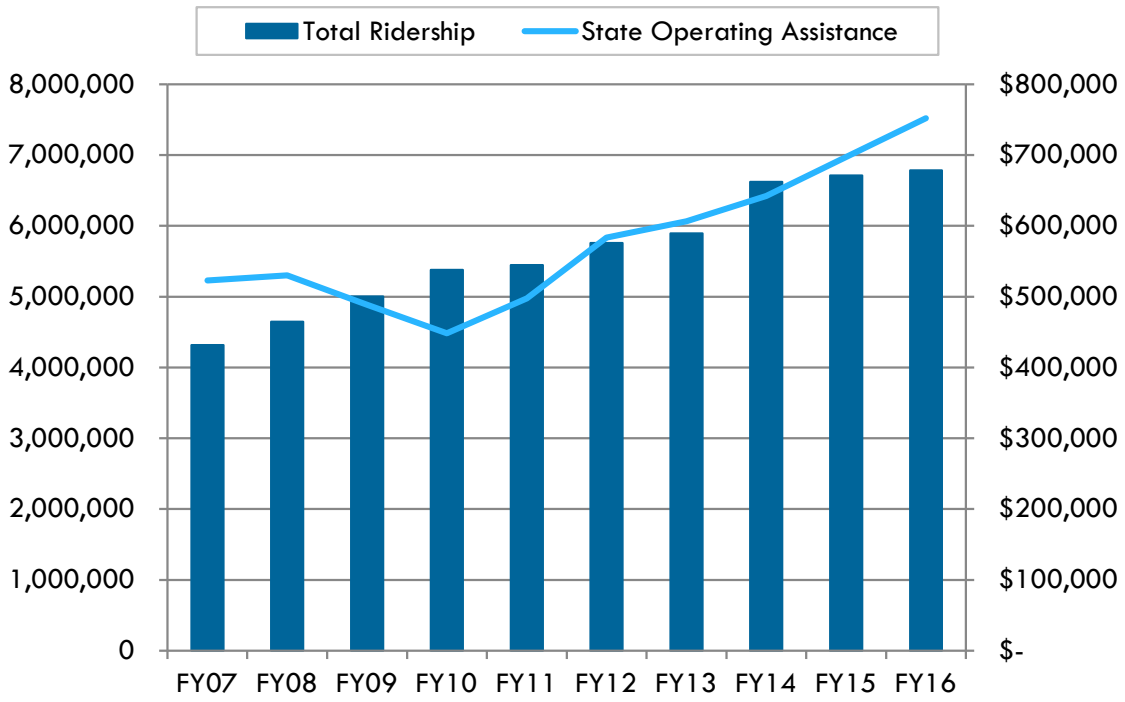


STATE, FEDERAL, AND LOCAL REVENUE TRENDS

State Revenue Trends

Ridership has an influence on state funding levels. Figure 3-11 shows CyRide's 10-year trends in revenues from state operating grants. Overall, state revenues have been increasing. State operating funds declined from FY 2006 to FY 2010, then rose from FY 2010 to FY 2016.

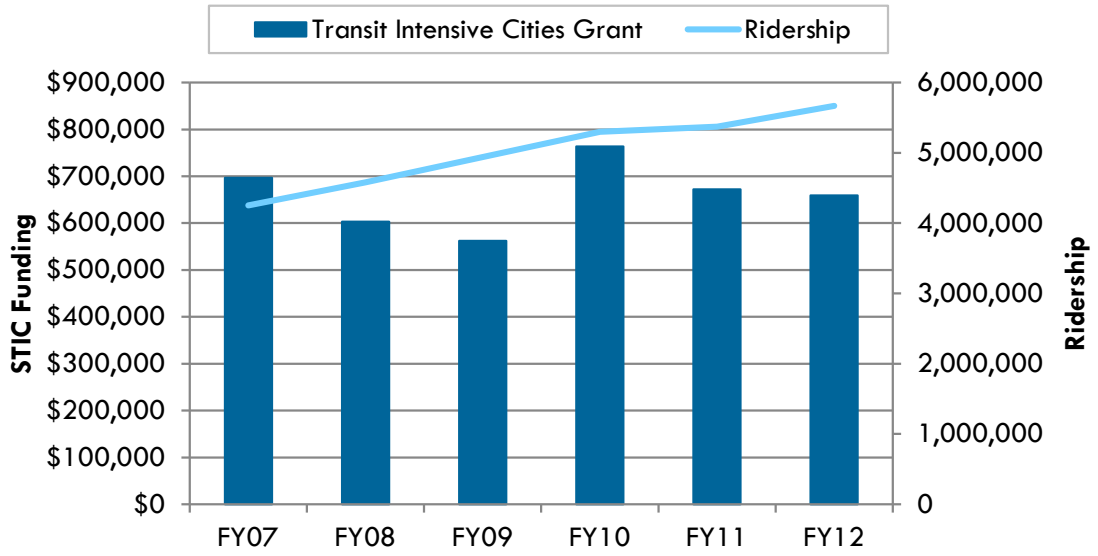
Figure 3-11 State Revenue Trends and Total Ridership (FY06 to FY16)



Federal Revenue Trends

CyRide receives grant funding from the Federal Transit Administration (FTA)'s Small Transit Intensive Cities (STIC) program. Since 2007, CyRide has received between $550,000 and $763,000 annually, in addition to FTA formula funding through Sections 5307 and 5310. Figure 3-12 shows trends in STIC grant funding and total ridership from FY 2007 through FY 2012. Figure 3-12 shows trends in STIC grant funding and total ridership from FY 2007 through FY 2012. Ridership influences federal funding levels for Small Transit Intensive Cities grants.

Figure 3-12 FTA Small Transit Intensive Cities Grant Funding and Ridership Trends



Federal funds account for roughly $1.9 million (about 18%) of CyRide's revenues annually. Figure 3-13 and Figure 3-14 illustrate the 20- and 10-year trends in CyRide's Federal Transit Administration (FTA) Section 5307/5310 funding. Federal revenues declined in FY 1998 and again in FY 2005. Overall, federal formula funding has been increasing steadily since FY 2006.

Figure 3-13 CyRide 20-Year Federal Revenue Trend

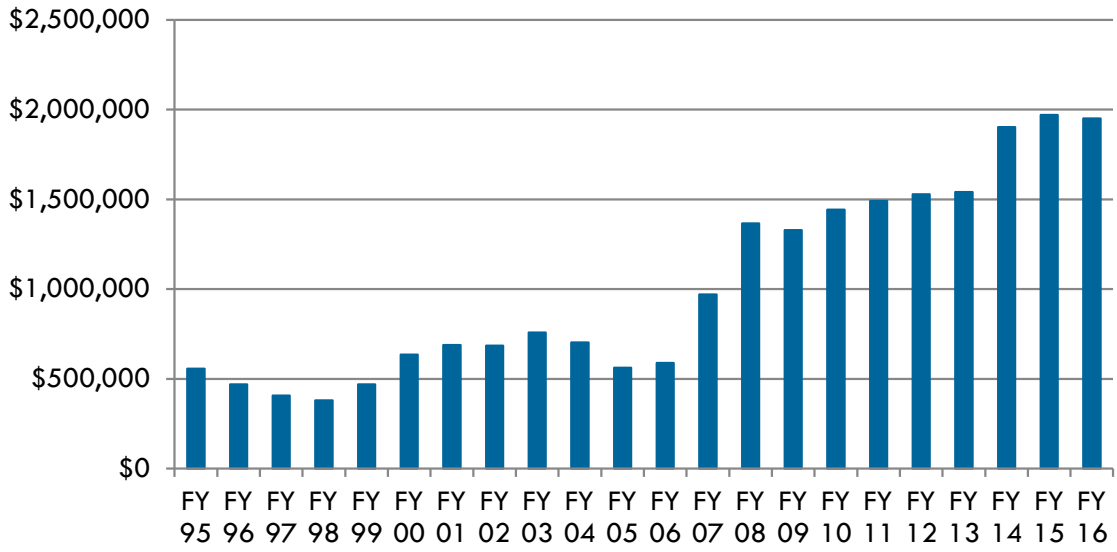
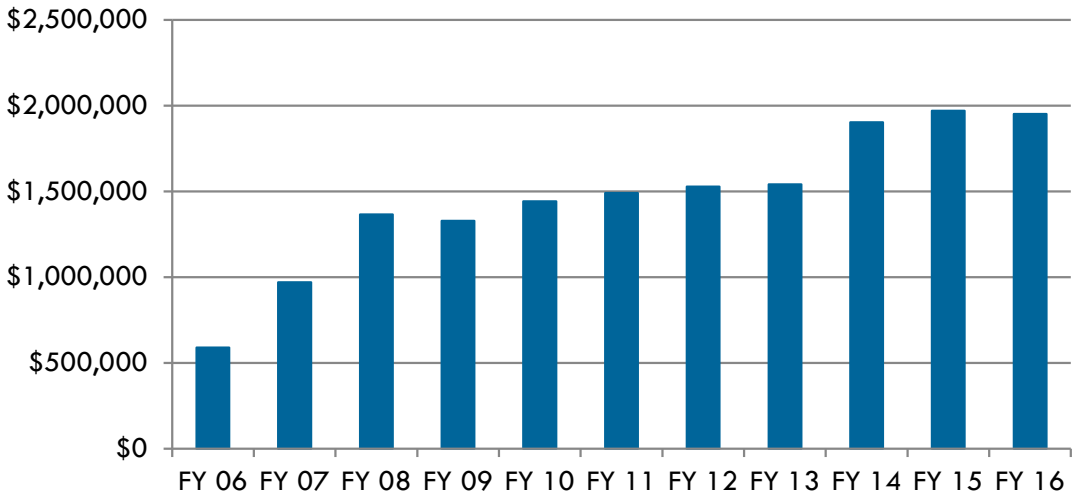
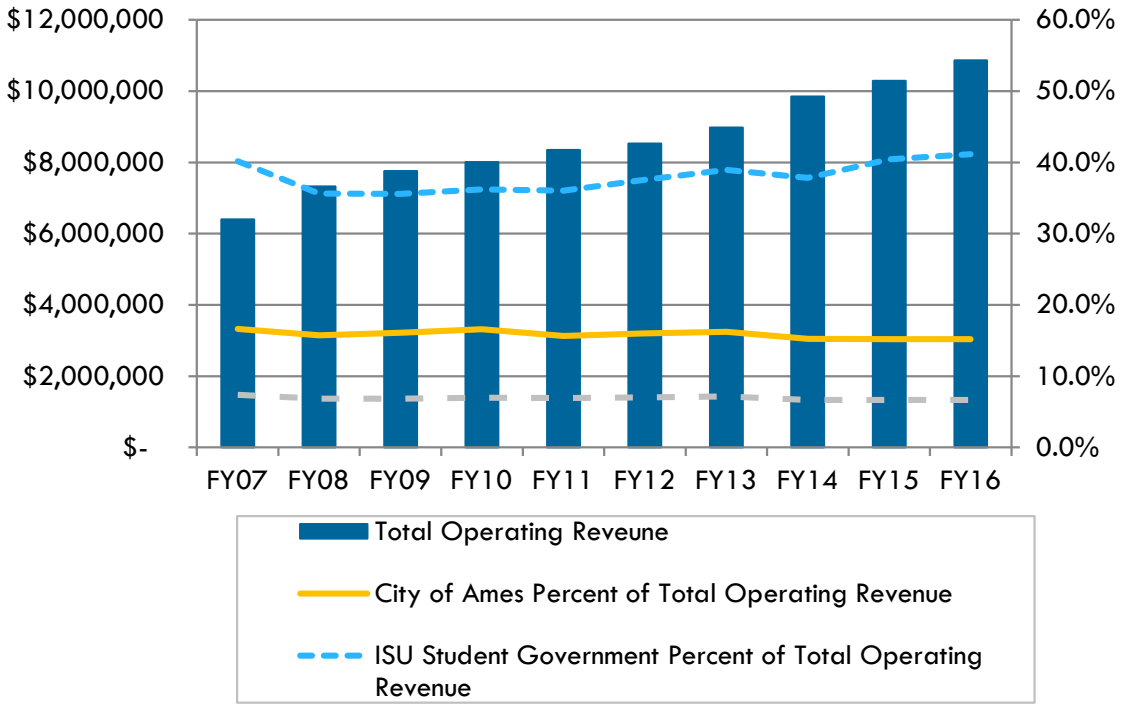


Figure 3-14 CyRide 10-Year Federal Revenue Trend



Local Revenue Trends

Although CyRide's total operating revenues have been increasing, the proportional contribution of total operating revenues from ISU and the City of Ames have remained relatively constant. On average, the City of Ames contributes just under 20% of total operating revenues to CyRide, the ISU Student Government contributes roughly 40%, and general ISU contributions are less than 10%.



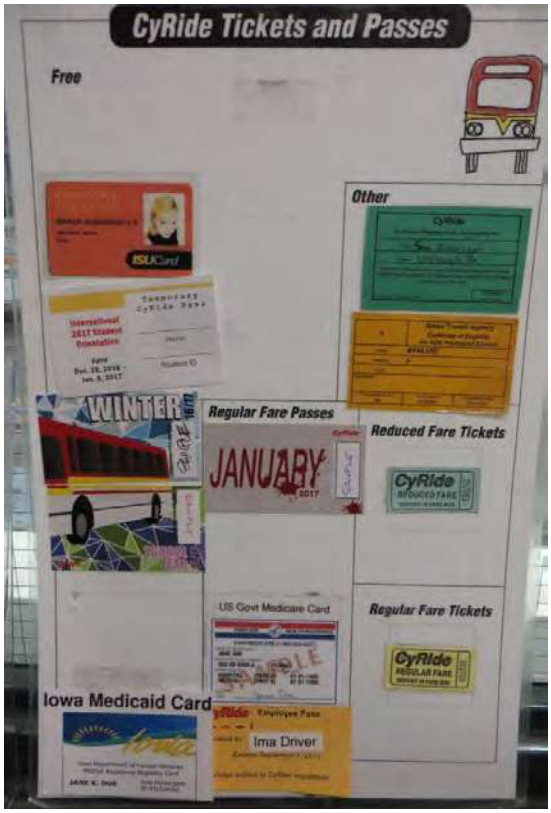
4 ADMINSTRATIVE, OPERATING, AND CAPITAL COST CONSIDERATIONS

ADMINISTRATION AND ACCOUNTING

Fare collection results in ongoing operating costs associated with administering the fare system. These costs include developing and distributing fare media (tickets and passes), managing reduced fare programs, and customer service.

Additionally, all cash farebox revenue must be securely counted and reconciled. Reconciling fare collections serves as both a preventive and detective control and can deter and identify a potential misappropriation of farebox receipts. Revenue controls, processing, and handling can be particularly difficult for small to mid-sized agencies because they often do not have large administrative staff to manage these systems. At present, CyRide uses dropboxes where passengers insert any combination of cash, coins, tokens, green and yellow tickets, and other fare media (see Figure 4-1).

Figure 4-1 CyRide Fare Media



Every other week, CyRide staff count and reconcile collected fare by hand. This labor-intensive process requires five mechanic and seven operations staff members for a total 12 hours of staff labor, in addition to lane workers who remove the boxes from the bus for an additional 4.6 hours of labor (see images below). The total cost per year to CyRide for dropbox counting and reconciliation is $14,992. The current fare reconciliation process is cumbersome, and leaves potential for fraud and human error.

Figure 4-2 Estimated Annual Fare Collection Costs

Estimated Annual Fare Collection Costs	
Administrative	$15,000
Fare Media	$2,500
Farebox Maintenance	$14,000
Total	**$31,500**

CyRide's current fare collection system results in a labor-intensive process of CyRide staff manually sorting dropbox collections.
Images from CyRide

OPERATIONS AND CAPITAL

Fare payments on buses inevitably create boarding delays. These delays are related to passengers paying their fares as well as asking questions and talking to the driver. For a single stop, these small delays may seem insignificant. However, over the course of a full route, they can aggregate and create noticeable issues with on-time performance and schedule adherence. Operating fare free also avoids disputes between operators and passengers regarding properly-paid fares.

Additionally, fare collection requires capital equipment such as fareboxes, spare parts, and specialized hardware. Eliminating fares would result in future cost savings since fare-related capital purchases would no longer be required.

As illustrated in the images above, CyRide's current fare collection boxes (dropboxes) result in a pile of fares that must be sorted and reconciled by hand. Upgrading the current dropboxes with fareboxes with more functionality would cost more than $1 million. The following table summarizes the low, high, and average costs of installing and maintaining a magnetic farecard system, a low-end farebox technology upgrade that CyRide could consider.

Figure 4-3 Costs to Upgrade to Magnetic Farecard System

Magnetic Farecard System	Low	High	Average
One-Time Costs			
Electronic farebox with card processing unit	$ 752,000	$ 940,000	$ 846,000
Revenue equipment (vaults, bins, etc.)	$ 40,000	$ 65,000	$ 52,500
Garage hardware/software	$ 30,000	$ 70,000	$ 50,000
Attended farecard issuing device	$ 25,000	$ 50,000	$ 37,500
Spare parts	$ 75,200	$ 141,000	$ 108,100
Support services	$ 75,200	$ 141,000	$ 108,100
Installation/nonrecurring engineering	$ 22,560	$ 94,000	$ 58,280
Fare media costs (magnetic cards)	$ 3,984	$ 7,969	$ 5,976
Contingency costs	$ 6,984	$ 18,600	$ 12,792
Total One-Time Costs	***$ 1,030,928***	***$ 1,527,569***	***$ 1,279,248***
Ongoing Costs			
Equipment maintenance costs	$ 45,120	$ 65,800	$ 55,460
Software licenses/system support	$ 2,250	$ 7,000	$ 4,625
Revenue handling costs (cash)	$ 6,260	$ 10,433	$ 8,346
Revenue handling costs (farecards)	$ 5,309	$ 10,618	$ 7,964
Contingency costs	$ 1,430	$ 4,313	$ 2,871
Total Ongoing Costs	***$ 60,369***	***$ 98,164***	***$ 79,266***
TOTAL FIRST-YEAR COST	**$ 1,091,297**	**$ 1,625,732**	**$ 1,358,515**

5 BEST PRACTICES

This chapter provides an evaluation of fare policies and best practices across the transit industry. CyRide receives revenues from both federal and state formula funding programs and federal grants. The first section of this chapter explains the correlation between ridership and formula funding, to determine what, if any, impact an increase or decrease in CyRide ridership would have on agency revenues. Next, this chapter presents lessons learned from fare free agencies, including Cache Valley, UT, Missoula, MT, and Chapel Hill, NC. Finally, programs that provide transit passes to residential areas or buildings in cities with similar sized universities are discussed.

FEDERAL AND STATE FORMULA FUNDS

Federal Formula Funds

The Federal Transit Administration (FTA) administers approximately eight programs, roughly half of which are formula programs that provide basic financial support for transit services. Federal funds account for roughly $1.9 million (about 18%) of CyRide's revenues annually.

The majority of these funds are administered through the Federal Transit Administration (FTA) Section 5307/5310 program, which distributes resources based on formula set by law. For areas with populations of 200,000 and under, the formula is based on population and population density. For areas with populations of 200,000 and more, the formula is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guideway revenue vehicle miles, and fixed guideway route miles, as well as population and population density.

FTA 5307 grant funds are made available to designated recipients with the legal authority to receive and dispense federal funds, such as governors, local officials, and publically owned transit operators. For urbanized areas with 200,000 people or fewer, funds are apportioned to the governor of each state for distribution. For urbanized areas with 200,000 people or more, funds are allocated directly to the recipient.

Section 5307 grant funds can be used for planning, engineering, studies, and capital investments in vehicles or facilities. They can also be used for operating assistance in urbanized areas of 200,000 or less. Funds used in this manner must be matched by nonfederal funds (other than passenger revenues) on a dollar-for-dollar basis.

In urban areas with populations over 200,000 people, Section 5307 funds are allocated in part based on system-wide ridership. A change in ridership can sometimes result in a change in federal formula funds received. Ames, Iowa has an estimated population of 62,815 as of 2015; therefore, CyRide is not at risk of losing federal formula funds based on ridership changes.

State Funds

The State of Iowa provides funding for public transportation services. The State Transit Assistance (STA) program, the largest of these programs, provides funds for operating, capital, or planning expenses for transit systems in Iowa. Allocations are based on a formula that reflects each transit system's performance during the previous year in terms of rides, miles, and local funding support. In FY 2015/2016, CyRide received $751,915 (about 7% of total revenues) from the STA.

Key Lessons for CyRide

A change in ridership can sometimes result in a change in federal formula funds received. However, because Ames, Iowa has an estimated population below 200,000 (62,815 as of 2015), CyRide is not at risk of losing federal formula funds based on ridership changes.

FARE FREE AGENCIES

Charging a fare—or not charging a fare—encompasses a wide range of costs and benefits. Some of the key benefits associated with collecting a fare include generating revenue, reducing reliance on federal and state funding, and supporting the perception that the public helps pay for public transportation services.

At the same time, there are costs associated with charging a fare. Operating fare free is less complex because it simplifies accounting systems and reduces the need for secure storage of cash; additionally, management and distribution of fare media are not required. Additional benefits include the potential for increased ridership and enhanced operating efficiency. This section provides key lessons learned from agencies that are operating fare free.

Cache Valley Transit District (Logan, UT)

The Cache Valley Transit District (CVTD) has operated a fare-free system for more than two decades in Logan, Utah, and the surrounding region. In 2012, CVTD conducted a study to determine whether or not they should remain fare free. The study identified the following benefits and challenges of collecting a fare:

Benefits of Implementing a Fare

- Increasing revenue to help close a funding gap or backfill loss of funding
- Reducing reliance on federal funding
- Helping reduce or prevent service reductions through increased revenues
- Potentially increasing service, if increased revenues are substantial
- Supporting the perception that the public helps pay for public services (addressing the question: why should transit riders get a “free ride”?)
- Addressing potential problems with individuals who may ride the bus seeking shelter or for other non-transportation reasons

Challenges Associated with Collecting a Fare

- Investment in hardware and physical space necessary to collect fares, including;

  - Fareboxes on buses
  - Secure space for accounting, auditing, and fare reconciliation
  - Vault for secure money storage
  - Ticket vending machines (TVMs)
- Increase in staff resources
  - Accounting, auditing, fare reconciliation
  - Additional marketing and customer service responsibilities to convey and educate passengers and drivers alike about the fare structure and policies
  - Point of sale administration/staffing (selling passes at CVTD and distributing passes to retail locations and TVMs)
  - New and increased responsibilities for drivers in operating the farebox and conducting fare enforcement
  - Resources needed to conduct public outreach around introductions of fares and future increases in fares
  - Additional responsibility for maintenance/administrative staff to "empty" fareboxes and count fares
  - Maintain fareboxes and ticket vending machines
- Operational challenges
  - Increased dwell times (additional boarding time at bus stops), operational delays associated with collecting a fare, and the resulting interactions between operators and passengers.
- Increased responsibility for operators to oversee fare validation and enforce policies.

CVTD leadership considered the results of the study and voted to remain fare free, but continues to face pressure from members of the public to charge a fare. Many of CVTD's riders are students at Utah State University and there is a perception by some community members that the public dollars used to fund transit are benefitting only a portion of the population. In 2014, CVTD considering proposing a tax increase to fund transit operations but ultimately decided not to put it on the ballot. Though not necessarily the determining factor in whether to put the tax levy on the ballot, the fare-free system was brought up by members of the public in opposition to the levy, arguing that CVTD should charge a fare before asking the community to contribute more tax dollars.

Though public opposition to the fare free system has had some impact on CVTD's ability to be supported by the community, CVTD is overall an efficient and effective system, which may be related to the benefits of a fare free system.

Missoula Urban Transportation District (MUTD) (Missoula, MT)

From 1976 (when the agency was created) through 2015, Missoula Urban Transportation District (MUTD) charged fares for the majority of its fixed-route transit (Mountain Line). In January of 2015, all fares on Mountain Line were eliminated for a three year zero-fare demonstration project. Prior to the zero-fare demonstration project, fixed-route regular fare was $1.

Since September 1990, the University of Montana Office of Campus Safety has contracted with MUTD to provide subsidized (fare free with ID) transportation on all services to students, faculty, and staff. In addition to using Mountain Line services, the University of Montana provides its own

shuttle service to park-and-ride lots, dorms, and an evening shuttle to downtown Missoula. In November 2013, MUTD voters passed a $1.7 million levy to expand Mountain Line services to fund service increases, which included an additional 15-minute frequency Bolt! Route, and late evening service until 10 p.m. In addition, Route 2 service was upgraded to Bolt! Service, and service on Routes 1, 2, 6, and 7 were extended until 10 p.m. in 2015.

Before the zero-fare demonstration project, MUTD considered its overall goals, and the complex issues that would arise in transitioning from a paid-fare to a fare-free system. Ridership gains were estimated to be about 25% based on an elasticity factor supported by research on other fare-free demonstration projects. Additionally, travel time impacts were estimated based on a reduction in boarding time if passengers did not have to pay a fare. Estimated travel time for the system was calculated at a savings of 280 annual service hours, or just under one percent of the total system. The busiest routes were expected to benefit from decreasing dwell time. Routes that had heavy loads on peak trips, such as those associated with the University of Montana or school "bell times" were expected to experience time savings and improve schedule reliability.

Other potential benefits MUTD expects from the zero-fare demonstration project are achievements in livability and public health objectives, reduction in administrative expenses for the transit agency, more repeat riders and mode share shifts, increase in community recognition and pride, increased productivity of public investment, and increased support from bus operators.

Community investment from numerous partners, along with the City of Missoula, replaced the majority of fare revenue. The growing list of community partners include:

- The University of Montana
- Associated Students of the University of Montana
- City of Missoula
- County of Missoula
- Missoula Metropolitan Planning Organization
- St. Patrick Hospital
- Community Medical Center
- Missoula County Public Schools
- Missoula Aging Services
- Missoula Downtown Association
- Missoula Parking Commission
- Missoulian
- Southgate Mall
- Destination Missoula
- Homeword, Inc

After community investment replaced fare revenue, and fares were eliminated, ridership has increased about 30-40%. MUTD continues to gather data and study the benefits and challenges of the zero-fare demonstration project.

Chapel Hill Transit (Chapel Hill, NC)

Chapel Hill Transit (CHT) transitioned from charging fares to operating fare free in 2002. Shortly after this change, annual ridership began to increase and ultimately grew from approximately 3.5 million to nearly seven million between 2002 and 2012. CHT credits this growth—in part—to its decision to operate fare free.

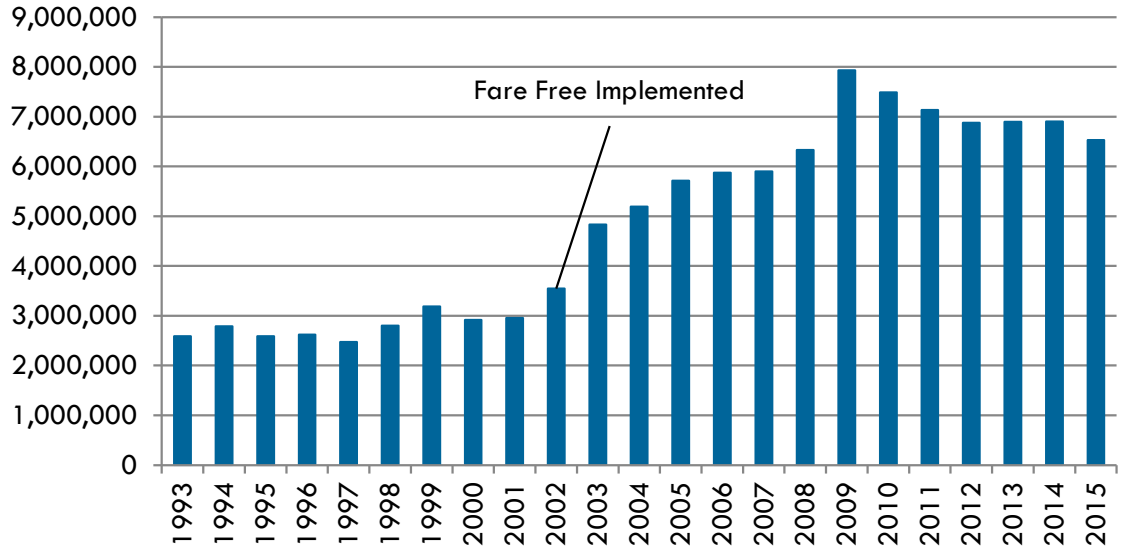
In 2015, financial constraints led CHT and the CHT Partners[1] to re-evaluate the potential benefits and costs associated with re-instituting fares, including:

- Policy and administrative implications associated with charging a fare
- Estimated capital and operating costs and benefits
- Expected ridership and revenue impacts raised by different fare scenarios
- Estimated return on investment associated with charging a fare

Ridership Before and After Fare Free

Chapel Hill's ridership increased dramatically between 2002 and 2003, and continued to increase steadily in the years following the switch to fare-free. Chapel Hill Transit ridership trends before and after the switch to fare-free are shown in Figure 5-1.

Figure 5-1 Chapel Hill Transit Ridership Trends (1995-2015)



Source: NTD 1993-2015

Paratransit and Fare Free Systems

Agencies studying fare-free operations are often concerned that paratransit costs could increase due to increased demand for free service. Further, if the neighboring service area has a different fare system, there can be complications, especially with transfers.

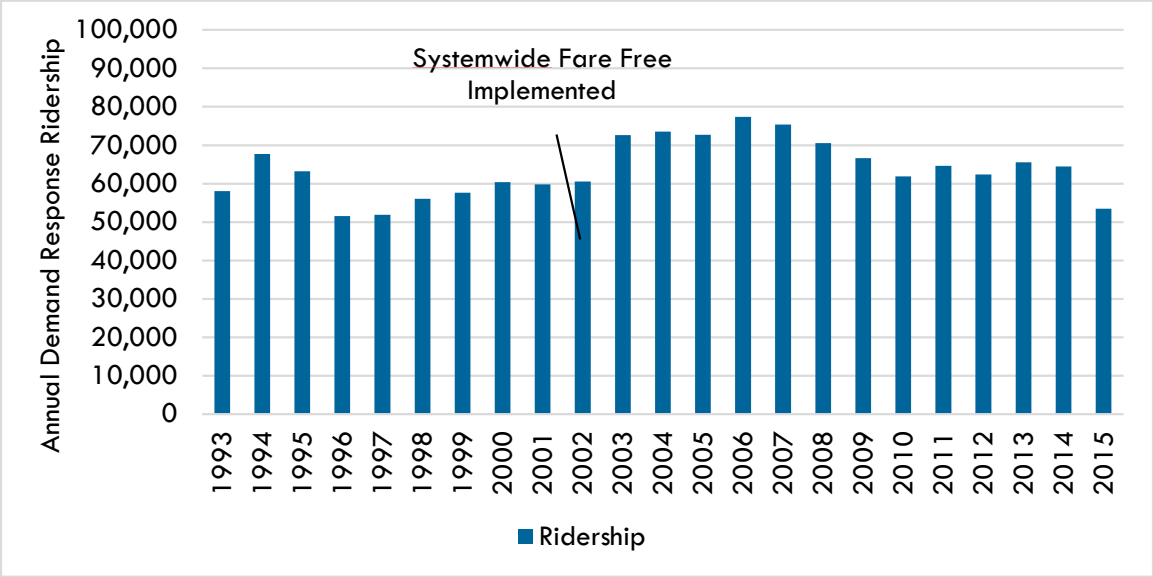
By law, 100% of demand for paratransit service must be met, regardless of cost. In a fare-free system, this can result in high costs to the transit provider. Fare-free paratransit is attractive and can become costly to provide.

Chapel Hill Transit implemented a systemwide fare free structure in 2002. Neighboring service areas, including GoTriangle Transit and Chatham Transit, continue to charge a fare. Figure 5-2 shows demand response ridership trends before and after fare free implementation. CHT

[1] Includes representatives from the Town of Chapel Hill, the Town of Carrboro, and the University of North Carolina-Chapel Hill.

experienced a 20% increase in demand response ridership from 2002 to 2003. However, demand response ridership is currently declining—the trend shows a 0.6% average annual decline in demand response ridership from 2003 to 2015.

Figure 5-2 Chapel Hill Transit Demand Response Ridership Trends Before/After Fare-Free Implementation



Federal Funds and Fare Free Systems

Figure 5-3 compares federal funds earned, ridership, and service hours for three fare-free agencies—Cache Valley Transit District (Cache Valley), Chapel Hill Transit, Missoula Urban Transportation District (Mountain Line)—as well as CyRide.

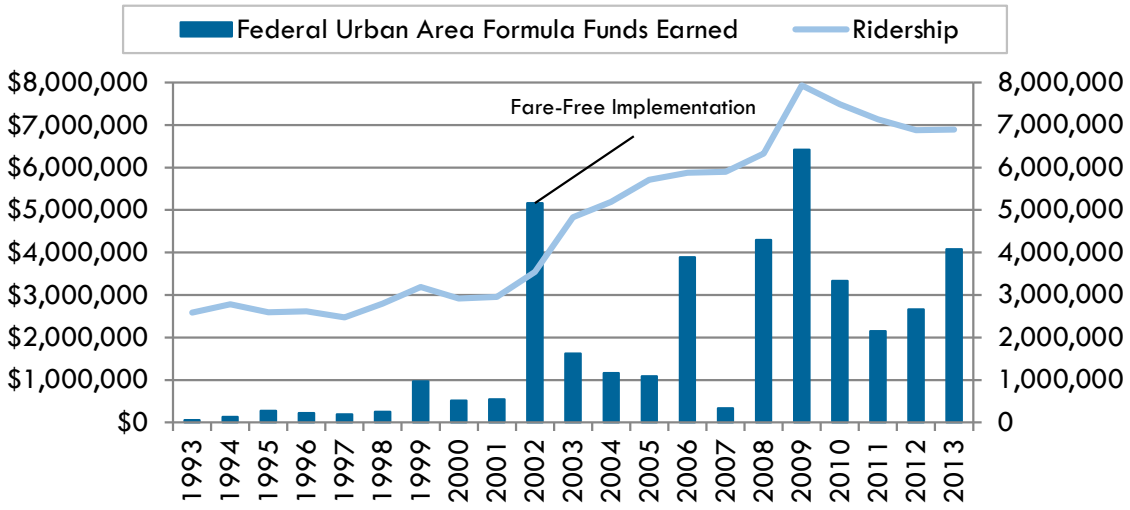
Figure 5-3 Ridership and Federal Funds at Fare-Free Systems (2013)

	Ridership	Passenger Miles	Federal Formula Funds
CyRide	5,876,422	9,925,533	$1,540,702
Cache Valley	1,978,002	7,241,515	$1,656,082
Chapel Hill Transit	6,893,972	15,017,145	$4,080,564
Mountain Line	886,049	2,055,084	$1,993,333

Source: NTD 2013 (Note that 2013 was most recently reported Federal funding number)

Figure 5-4 shows 20-year trends in ridership and federal formula funds earned at Chapel Hill Transit. Chapel Hill went fare-free in 2002, resulting in a steep increase in both ridership and federal formula funds earned. However, federal formula funds reported to NTD have been uneven.

Figure 5-4 Chapel Hill Transit Federal Formula Funds and Ridership Trends (1993 to 2013)



Key Lessons for CyRide

- 100% fare free benefits include simplified administration and ridership increases
- Additional local partnerships and demand response eligibility are important considerations for managing demand
- Chapel Hill Transit's fixed route ridership doubled from 2002-2012
- While the success of these fare free systems in terms of ridership make a strong case in favor of eliminating fares, there are political implications that may have long-term impacts on a transit system due to a belief among members of the community that transit riders should pay a share of the cost of transit through the farebox.
- MUTD has preempted criticism by using local partners, such as the University of Montana, to replace fare revenue, rather than relying on tax dollars to fund the fare free transition.
- CVTD does not have local partnerships to point to as a source of revenue and gets criticized for serving its largest ridership market, Utah State University.
- As CyRide considers going fare free, local partnerships could play a key role in facilitating a smooth transition.
- Federal formula funds are not threatened by a switch to a fare free system, in fact, as evidenced with Chapel Hill Transit, a move to fare free can result in increased ridership and a subsequent increase in federal formula funding.

RESIDENTIAL PASS PROGRAMS

King County Metro Transit, RTD, and the Centre Area Transportation Authority (CATA) are implementing or piloting residential, non-employer pass programs. Residential pass programs are intended to be geared towards bulk pass or fare product sales to help encourage ridership and provide developers or other organizations options for expanding resident or member transportation benefits.

King County Metro Transit (Seattle, WA)

King County Metro Transit is currently developing the ORCA Multifamily Development Passport as an annual transportation pass that property owners can offer to residents. This pass provides residents with access to bus, light rail, streetcar, commuter rail, and some ferry services, much in the same way a U-Pass or Employer Pass works. Participating property managers purchase pre-loaded ORCA smart cards to offer to their residents. The pass must be offered to every residential unit, and the cost to the property manager for the first year is calculated by the existing transit use in the surrounding neighborhood. The cost in subsequent years will likely be based on actual transit use for the Passport in the building. Property managers are able to market this amenity in a competitive real estate market to prospective residents, who may want to be a car-lite or car-free household.[2] The program is still in development and will be conducting pilots soon.

RTD (Denver, CO)

Denver RTD currently offers a new pass called the Neighborhood EcoPass, which is a discounted pass, purchased by neighborhoods inside the RTD district for all its residents. The Neighborhood EcoPass program can be started by any contiguous group of residences (houses, condominiums, apartments, etc.); residents are issued an EcoPass smart card valid for up to one year of unlimited rides on all Local, Express, and Regional bus and rail service. To be eligible for the neighborhood EcoPass program, the neighborhood must be represented by either a county or city government entity or a registered homeowner association and must meet the following criteria: neighborhood must be located within the Regional Transportation District area, all homes must be included in the contract, and residents holding the pass must reside in the specified neighborhood.[3] There is no minimum or maximum size for a neighborhood, and all full-time members of a household are eligible to receive the EcoPass.

Pricing for the Neighborhood EcoPass program is determined by a direct mail RTD survey that reviews the neighborhood's current level of RTD ridership. Based upon the survey results, a per-household rate is determined and ranges from $80-$250 per household. The per-household rate is then multiplied by the total number of households to determine a final contract price. Smaller neighborhoods are subject to a contract minimum of $8,494.

RTD recommends starting the program with 30 to 70 households in the first year and expanding in subsequent years. As with their Business EcoPass program, new Neighborhood EcoPass contracts in their first year are eligible for a 60% subsidy through Boulder County and a 30% subsidy in the second year of the program.

CATA (State College, PA)

Centre Area Transportation Authority (CATA) serves six Centre Region municipalities and Pennsylvania State University (Penn State). Starting in the late 1980s, CATA created a system of apartment passes for off-campus multifamily complexes beyond walking distance to campus, where many students live. The multifamily complexes offer residents a pass that allows them to take CATA service to campus on one or two nearby routes for free. The pass works only for those

[2] For more details on King County Metro Transit's ORCA Multifamily Development Passport, visit the program website: http://metro.kingcounty.gov/programs-projects/orca-multifamily-passport/

[3] For more information on Denver RTD's Neighborhood EcoPass program, visit the website: http://www.rtd-denver.com/Neco.shtml

routes that are in proximity to the multifamily complex that travel to campus. Property managers use different ways to pay for this benefit; some complexes include it as an optional activity fee, and some bundle it with rent.

Residents can sign up for the pass online, and CATA verifies requests with lists that participating complexes provide. Using GFI fareboxes, CATA provides each qualifying resident with a magnetic strip pass that includes their photo. Trips are recorded by each pass that is linked to a multifamily complex account, and each complex is billed at the end of the month at a rate of 90% of cost per passenger per route. Twenty-three complexes are participating in this program, and all complexes are on the same handful of routes. Though cost per passenger varies slightly depending on the route, CATA charges all complexes the same rate.

In discussion with the Information Services Department at CATA, planners estimate on a typical weekday their system sees 40,000 trips, which includes about 15,000 on the free campus circulator. Of the remaining 25,000 community trips, about half are generated by the apartment pass program.[4]

Key Lessons for CyRide

- Bulk passes can be offered to multifamily apartment buildings or entire neighborhoods as a new way to coordinate transit usage beyond the traditional model of employers and universities.
- Neighborhood bulk pass rates can be determined by assessing an area's current level of demand through ridership surveys or market analysis.
- Local planning is key to running service efficiently in State College to be able to charge a rate that attracts off-campus multifamily complexes to their pass program. CATA notes that it would be challenging to provide the same service if the multifamily complexes were developed outside of the growth boundary, away from existing transportation infrastructure.

[4] For more information on the CATA apartment pass see, http://www.catabus.com/test/FareTypeRidership.html.

6 PEER REVIEW

Peer reviews are a useful technique to understand the "state of the practice" with regard to fare levels, structures, and policies. A peer review was conducted for this fare analysis and includes a comprehensive evaluation of other transit agencies comparable in size and scope to CyRide. This peer review identifies and describes emerging trends and best practices in setting fares and fare policies for mid-sized transit agencies, including a review of university ridership and revenues at peer agencies.

Nine peer agencies were chosen as part of this analysis and are consistent with the Peer Review conducted for the State of the System report. Peers were chosen based on the size, organizational structure, and demographic similarity to CyRide. With the exception of one peer (Centre Area Transportation Authority), all agencies in the peer group are either divisions of a city government or are operated by a large university. All of the cities in the peer group are home to a major university. The nine agencies in this peer review are:

- Ames Transit Agency, Ames, Iowa (CyRide)
- Athens Transit System and University of Georgia Transit System, Athens, Georgia (ATS)
- Champaign-Urbana Mass Transit District, Champaign-Urbana, Illinois (MTD)
- Chapel Hill Transit, Chapel Hill, North Carolina (CHT)
- Gainesville Regional Transit System, Gainesville, Florida (RTS)
- Iowa City Transit and University of Iowa, Iowa City, Iowa (ICT)
- Greater Lafayette Public Transportation Corporation, Lafayette, Indiana (CityBus)
- City Transit Management Company, Inc., Lubbock, Texas (Citibus)
- Centre Area Transportation Authority, State College, Pennsylvania (CATA)

Figure 6-1 Peer Review Agencies

Agency Name	Abbreviation	Location	Organization Type	Major University	Student Population	Urban Area Population	System Type	People per Square Mile	Service Area Size (sq. mi)	Annual Passenger Trips
Ames Transit Agency	CyRide	Ames, IA	City	Iowa State University (ISU)	34,732	94,073	Small Urban	3,873	15	6.7 million
Athens Transit System	ATS	Athens, GA	City	University of Georgia (UGA)	36,130	136,979	Small Urban	2,653	44	1.6 million
University of Georgia Transit System	UGA		University					1,264	89	10.6 million
Champaign-Urbana Mass Transit District	MTD	Champaign-Urbana, IL	City	University of Illinois (U of I)	44,087	141,471	Small Urban	4,716	30	13.1 million
Chapel Hill Transit	CHT	Chapel Hill, NC	City	University of North Carolina-Chapel Hill (UNC)	29,135	375,715	Large Urban	1,294	62	6.9 million
Gainesville Regional Transit System	RTS	Gainesville, FL	City	University of Florida (UF)	52,519	197,268	Small Urban	3,165	75	10.8 million
Iowa City Transit	ICT	Iowa City, IA	City	University of Iowa (UI)	31,387	118,980	Small Urban	2,105	76	1.8 million
University of Iowa	CAMBUS		University					1,815	74	4.7 million
Greater Lafayette Public Transportation Corporation	CityBus	Lafayette, IN	City	Purdue University (Purdue)	38,770	154,822	Small Urban	2,758	25	5.2 million
City Transit Management Company, Inc.	Citibus	Lubbock, TX	City	Texas Tech University (TTU)	35,893	251,335	Large Urban	3,143	14	3.9 million
Centre Area Transportation Authority	CATA	State College, PA	Authority	Pennsylvania State University (PSU)	46,000	89,403	Small Urban	2,379	30	7.3 million

Source: NTD 2014 Transit Agency Profile

NOTE: UGA/ATS and CAMBUS/ICT are presented as two composite peer agencies in following metrics because they operate in the same geographic location.

PERFORMANCE INDICATORS

The CyRide State of the System Report compared performance indicators at CyRide with performance of peer agencies. Figure 6-3 summarizes performance indicators for all agencies. The peer analysis revealed the following key findings relevant to this fare analysis:

- CyRide's farebox recovery is 51% of operational costs[5], almost 14% higher than the peer group average. Accordingly, the average subsidy per passenger is 46% below average.
- Operating expense per passenger trip, operating expense per revenue hour, and average fare per passenger are all below the peer group, but operating expense per revenue mile is above the peer group average. This indicates that CyRide operates short routes that have relatively high ridership in comparison to the peer group.
- CyRide generated the second-highest number of passenger trips per revenue mile and per revenue hour, right after the composite score for ATS and the UGA. This is important because CyRide operates the lowest number of revenue miles and the second lowest number of revenue hours of any agency included in this peer review.
- CyRide has strong financial performance with a farebox recovery ratio of 51%, compared with the peer group average of 45%. This figure includes revenue generated by the agreement with Iowa State University, which provides funding through student fees.

[5] This figure includes revenue generated by the agreement with Iowa State University, which provides funding through student fees.

Figure 6-2 Performance Indicators

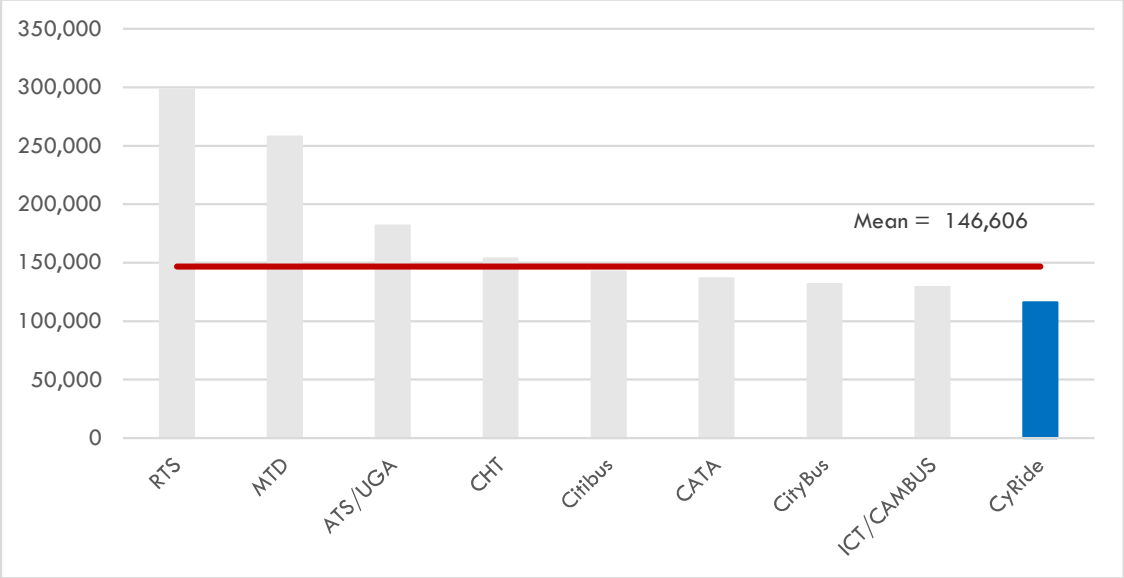
	CyRide Ames, IA ISU	**MTD** Champaign-Urbana, IL U of I	**CHT** Chapel Hill, NC UNC	**RTS** Gainesville, FL UF	**CityBus** Lafayette, IN Purdue	**Citibus** Lubbock, TX TTU	**CATA** State College, PA PSU	**ATS/UGA** Athens, GA UGA	**ICT/ CAMBUS** Iowa City, IA UI
Passenger Trips	6,711,635	13,137,209	6,904,007	10,814,433	5,247,151	3,968,653	7,352,640	12,282,247	6,585,728
Revenue Miles	1,234,878	3,113,261	2,091,747	3,428,040	1,769,607	2,422,351	2,904,662	1,717,109	1,521,734
Revenue Hours	116,077	257,734	153,501	298,200	131,756	142,202	136,638	181,758	129,118
Total Operating Expense	$8,679,250	$29,999,661	$14,827,216	$22,633,015	$10,438,052	$8,008,361	$12,721,033	$10,904,744	$8,503,031
Passenger Fare Revenues	$4,519,823	$7,060,858	$8,601,522	$14,732,556	$2,782,806	$4,488,810	$6,899,107	$8,775,588	$2,946,698
Farebox Recovery Ratio	51.0%	23.5%	58.0%	65.1%	26.6%	56.1%	54.2%	79.2%	37.0%
Cost/Revenue Hour	$74.77	$116.40	$96.59	$75.90	$79.22	$56.32	$93.10	$60.00	$65.85
Cost/Passenger	$1.29	$2.28	$2.15	$2.09	$1.99	$2.02	$1.73	$0.89	$1.29
Passengers/Revenue Hour	58	51	45	36	40	28	54	68	51
Subsidy/Passenger	$0.62	$1.75	$0.90	$0.73	$1.46	$0.89	$0.79	$0.17	$0.84
Average Fare/Passenger	$0.67	$0.54	$1.25	$1.36	$0.53	$1.13	$0.94	$0.71	$0.45

Source: NTD 2014 Transit Agency Profiles

Annual Revenue Hours Operated

CyRide operates the fewest annual revenue hours among peer agencies.

Figure 6-3 Annual Revenue Hours Operated

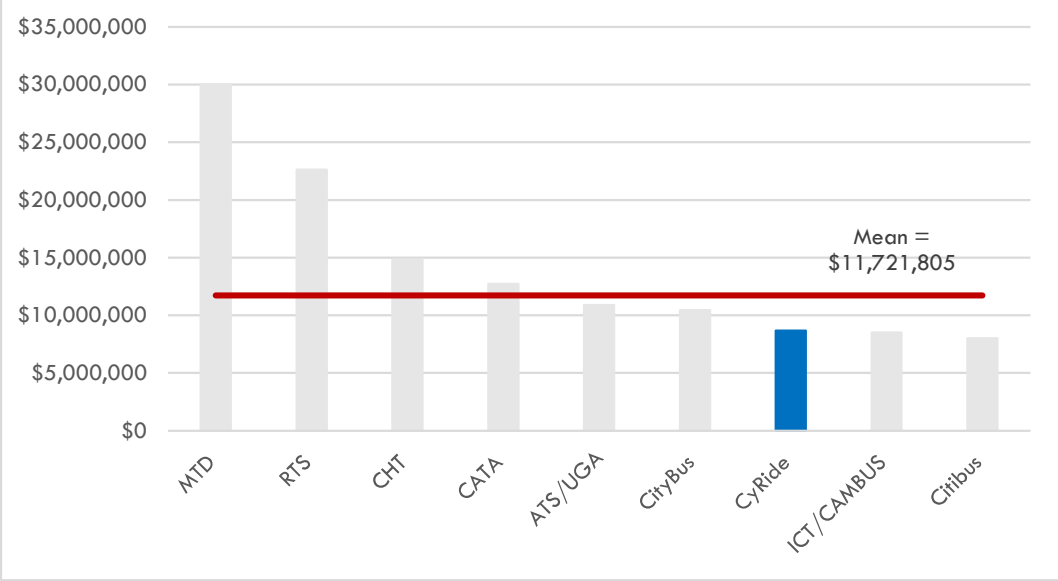


Source: NTD 2014 Transit Agency Profiles

Annual Operating Expense

CyRide's operating expenses are less than the average among peer agencies.

Figure 6-4 Total Annual Operating Expense

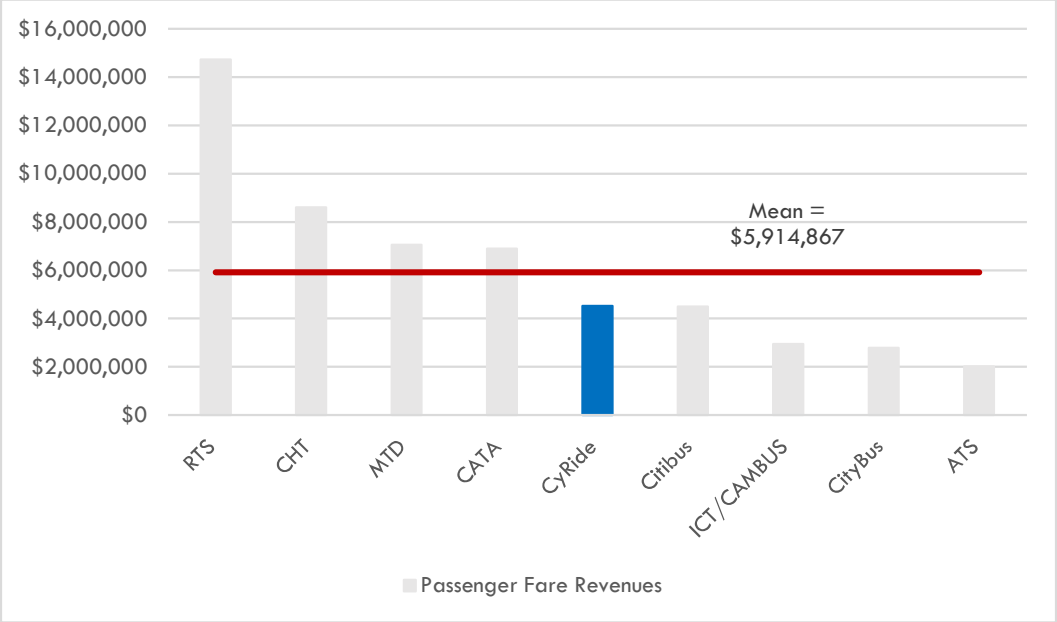


Source: NTD 2014 Transit Agency Profiles

Annual Fare Revenue

CyRide's annual fare revenues are less than the peer average. However, RTS collects nearly double the annual fare revenues compared with other peer agencies. When RTS' annual fare revenues are ignored, CyRide fare revenues (which include revenue from the agreement with ISU in addition to passenger fare revenue) are in the middle among peer agencies.

Figure 6-5 Annual Fare Revenue[6]



Source: NTD 2014 Transit Agency Profiles

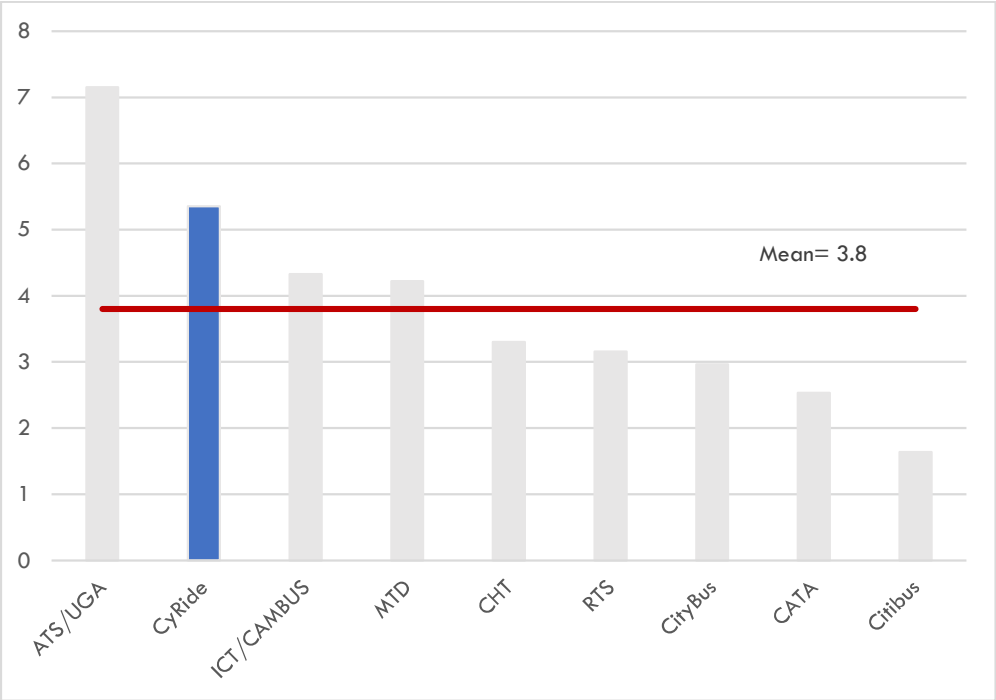
Note: CyRide fare revenue data reported to NTD includes revenue from the agreement with ISU in addition to passenger fare revenue collected on vehicles.

[6] UGA is excluded from this metric because they are funded entirely through student fees and are not a good peer for CyRide in this regard.

Passenger Trips per Revenue Mile and Revenue Hour

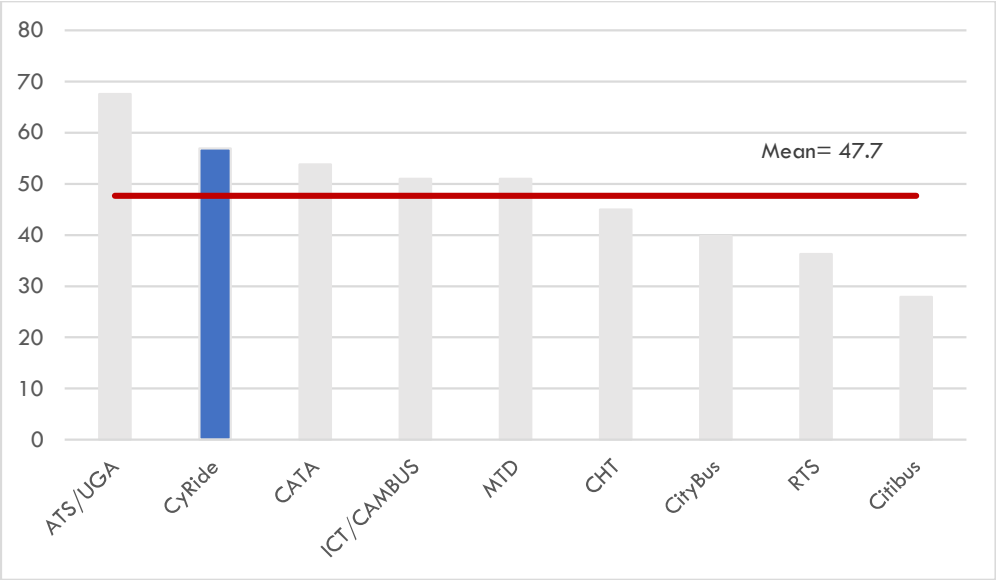
Passenger trips per revenue mile and revenue hour are measures of performance efficiency. CyRide performs well compared with peer agencies in terms of passenger trips per revenue mile and revenue hour, with the second-highest average on both metrics among peers.

Figure 6-6 Passenger Trips per Revenue Mile



Source: NTD 2014 Transit Agency Profile

Figure 6-7 Passenger Trips per Revenue Hour

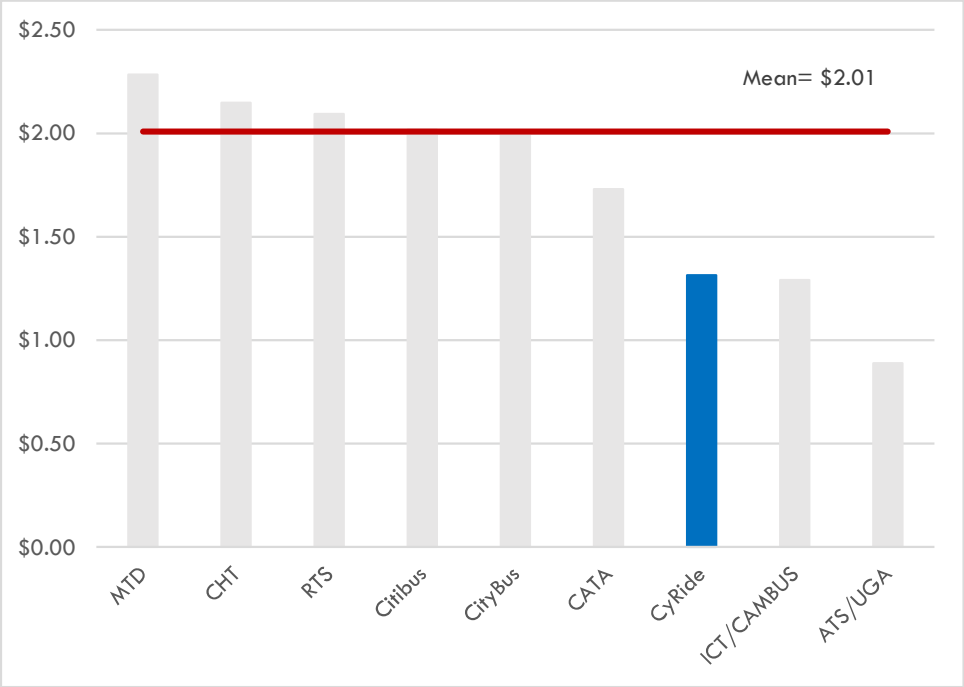


Source: NTD 2014 Transit Agency Profiles

Operating Expense per Passenger Trip

Operating expense per passenger trip compares the cost of providing transit service to the level of ridership. In 2014, it cost CyRide $1.31 in operating expenses for each passenger trip taken. CyRide's operating expenses per passenger trip are lower than the average among peer agencies, which is good.

Figure 6-8 Operating Expense per Passenger Trip



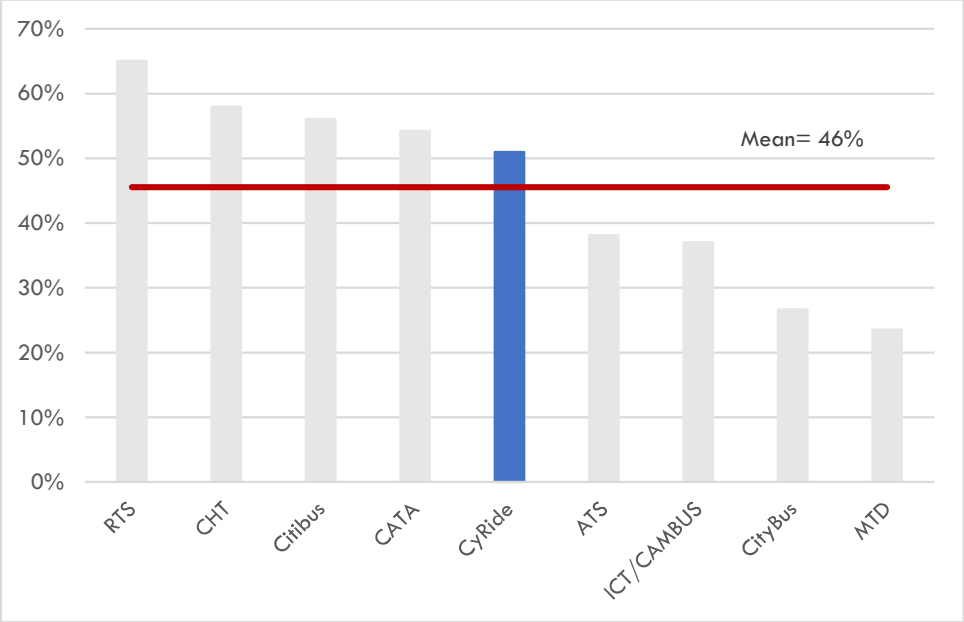
Source: NTD 2014 Transit Agency Profiles

Note: UGA is omitted because it receives its funding from student fees and is not a good peer for CyRide for this metric.

Farebox Recovery Ratio

This is a measure of the share of operating expenses that are recovered by farebox revenues. CyRide recovers just over half (51%) of its operating expenses through farebox revenues, which includes revenue from the agreement with Iowa State University's Student Government in addition to passenger fare revenue collected on vehicles. This is higher than the peer average.

Figure 6-9 Farebox Recovery Ratio



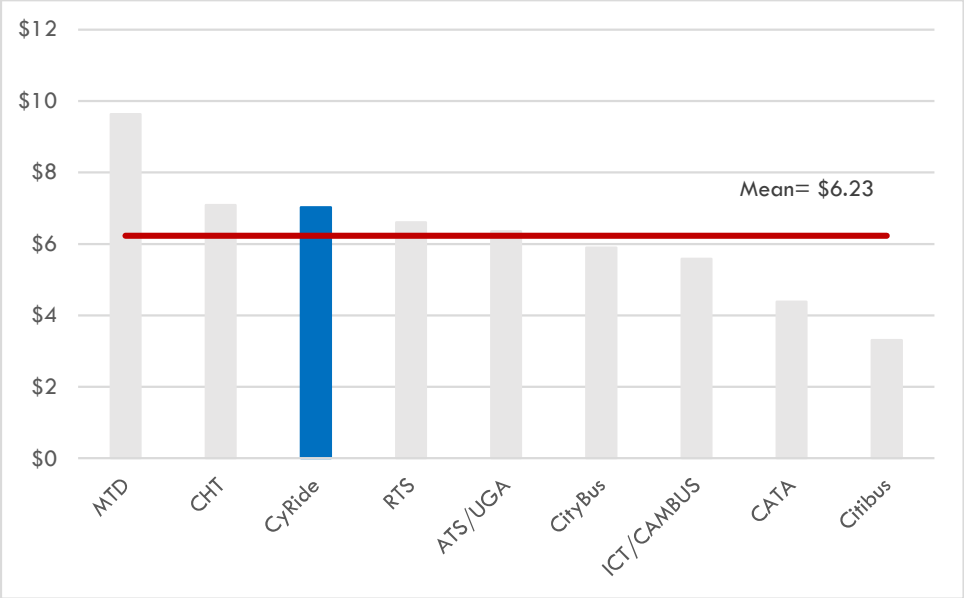
Source: NTD 2014 Transit Agency Profiles

Note: UGA is omitted because it receives its funding from student fees and is not a good peer for CyRide for this metric. CyRide fare revenue data reported to NTD includes revenue from the agreement with Iowa State University's Student Government in addition to passenger fare revenue collected on vehicles.

Operating Expense per Revenue Mile and Revenue Hour

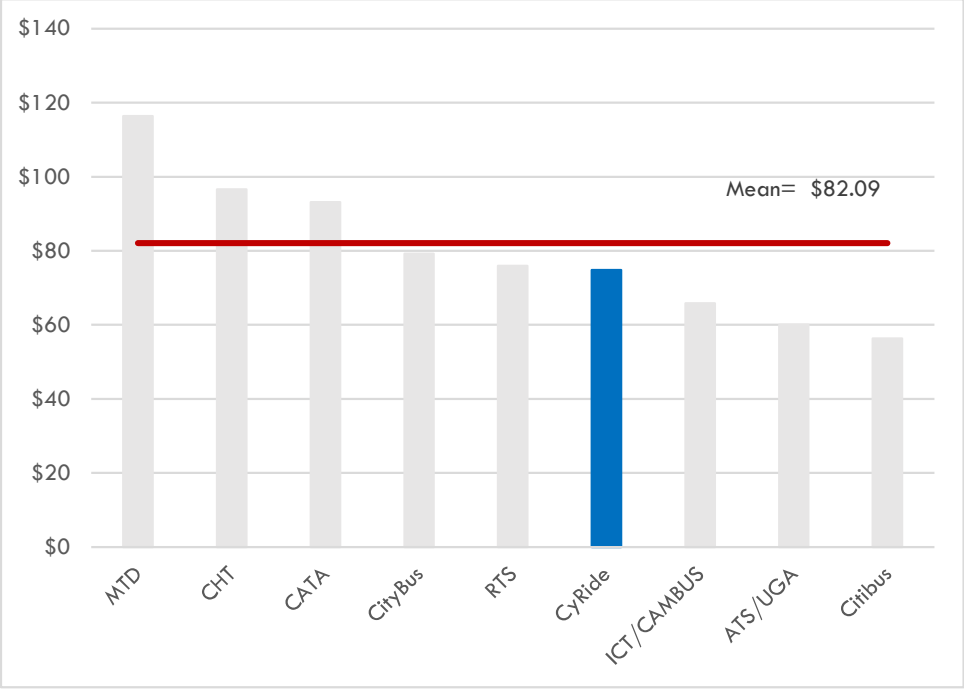
Operating expense per revenue hour is below the peer group, but operating expense per revenue mile is higher than the peer group average.

Figure 6-10 Operating Expense per Revenue Mile



Source: NTD 2014 Transit Agency Profiles

Figure 6-11 Operating Expense per Revenue Hour

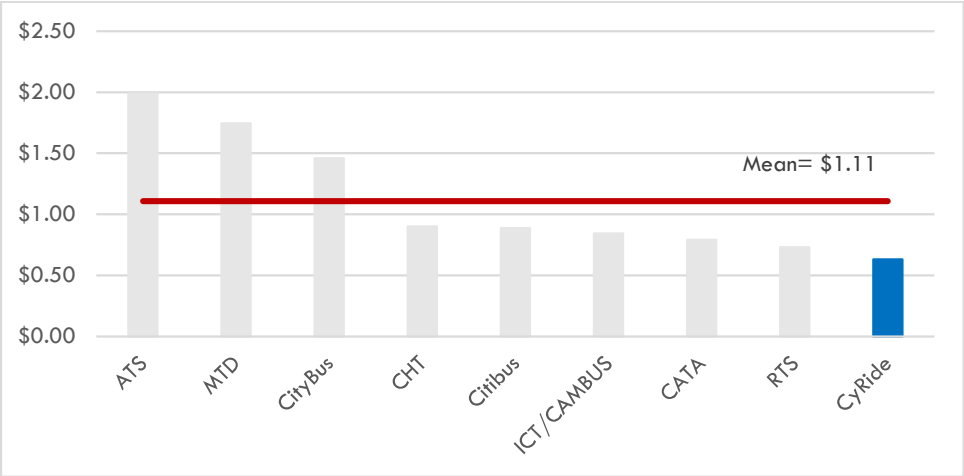


Source: NTD 2014 Transit Agency Profiles

Subsidy per Passenger

The subsidy per passenger is the difference between average fare revenues per passenger and the operating cost per passenger trip. CyRide's subsidy per passenger is the lowest among peer agencies at $0.63.

Figure 6-12 Subsidy per Passenger



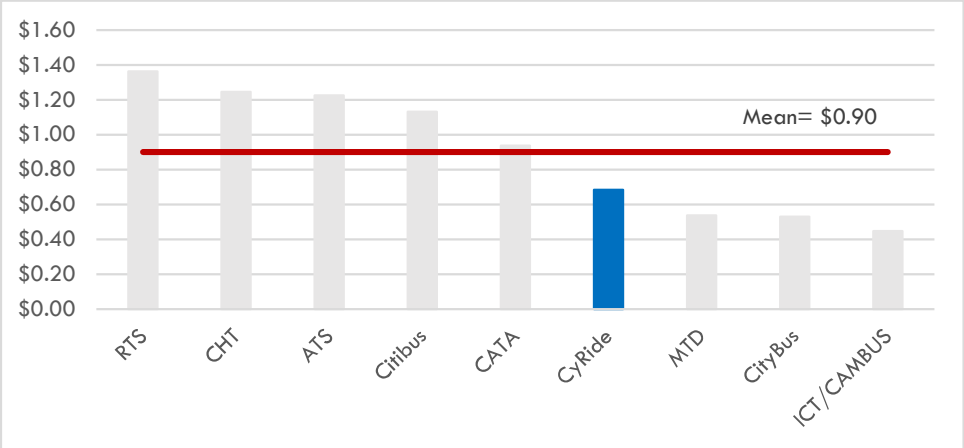
Source: NTD 2014 Transit Agency Profiles

Note: UGA is omitted because it receives its funding from student fees and is not a good peer for CyRide for this metric. CyRide fare revenue data reported to NTD includes revenue from the agreement with Iowa State University's Student Government in addition to passenger fare revenue collected on vehicles.

Average Fare per Passenger

The average fare per passenger for CyRide includes fare revenues from the agreement with Iowa State University's Student Government as well as fares collected on vehicles. CyRide's average fare is lower than the peer group average.

Figure 6-13 Average Fare per Passenger



Source: NTD 2014 Transit Agency Profiles

Note: UGA is omitted because it receives its funding from student fees and is not a good peer for CyRide for this metric. CyRide fare revenue data reported to NTD includes revenue from the agreement with Iowa State University's Student Government in addition to passenger fare revenue collected on vehicles.

PEER AGENCY FARE STRUCTURE

CyRide offers several fare and pass options for riders. These options are single ride fares, ticket books, and unlimited ride passes. Peer agency fare structures are generally similar to CyRide's fare structure. All peers offer a standard fare and a discounted fare for people over 65 or with a disability. Most offer a variety of pass products including a monthly pass. The fare structures of peer agencies are detailed in Figure 6-15. The following section compares the CyRide fare structure and fare products with peer agency structures in more detail.

Cash Fares

ICT, CityBus, and MTD offer the lowest cash fares ($1 for local routes) among peer agencies. The highest cash fares are offered by Citibus, CATA, and ATS, at $1.75 for local routes.

It is common practice to offer higher fare for express services, specialized services, or service to other counties. Chapel Hill Transit, which does not charge fares for local services, charges $4 for Pittsboro Express service.

Peer agencies typically require exact change when paying a cash fare. Several offer tickets or tokens that are valid for one-way fare including CyRide (tickets), CityBus, and CATA.

Transfers

Many peer agencies offer free transfers on local routes for the completion of a one-way trip, including CyRide. Others offer daily passes in lieu of transfers, including MTD (weekends only), RTS, CityBus, Citibus, and ICT.

Pass Products

Day Passes

Day passes are available for half of the peer systems, including MTD (weekends only), RTS, CityBus, Citibus, and ICT. Most agencies offering a day pass also offer a discounted day pass for students/youth, seniors, and people with disabilities. Day passes are priced between two and three times the price of a single ride fare.

Multi-Trip Passes

Most agencies offer discounts for 10 or 11 rides, including CyRide. Uniquely, ATS only offers multi-trip passes and does not offer any unlimited passes.

Monthly Passes

Monthly passes are available for nearly all peer systems, with prices ranging from $20 for MTD to $69 for CATA. CyRide monthly passes cost $40. Most peer agencies offer discounts for seniors and people with disabilities. Additionally, ITS offers a discounted monthly pass for qualified low-income persons.

Quarterly Passes

CyRide, Citibus, CATA, and ICT offer quarterly, semester, or seasonal passes.

Other Fare and Pass Options

Peer agencies also offer several unique fare and pass options for riders:

- Iowa City Transit (ICT) offers a discounted U-Pass to students, faculty, and staff if they do not have a university parking permit. This policy incentivizes the use of transit and other alternative modes to campus.
- ICT offers a family pass for weekend transit rides for up to two adults.
- ICT partners with downtown merchants to offer a free one-way fare to shoppers who spend $15 at participating merchants.
- Citibus in Lubbock, Texas, offers students a discounted Semester Pass for unlimited rides. Other agencies offer students unlimited rides through an agreement with the university or student groups.
- Chapel Hill Transit offers free rides on all fixed-route transit (except for express service). CHT's fare structure may provide lessons for CyRide as they consider going fare-free for all riders.

Figure 6-14 Peer Agency Fare Structures

Agency	One-Way Cash Fare	Discounted Fare for People +65 and with a Disability	Other Fare Categories	Pass Types	Transfers
CyRide	$1.25	$0.60	N/A	10-Ticket Book $12.00 Monthly Pass $40 Summer Pass $100 Fall Semester Pass $160 Winter Pass $150 School Year Pass $320	Free
Champaign-Urbana Mass Transit District (MTD)	$1.00	$0.50	N/A	Day Pass $2 (weekends only) Monthly Pass $20 Annual Pass $84	Free
Chapel Hill Transit (CHT)	Free	Free	N/A	N/A	N/A
Gainesville Regional Transit System (RTS)	$1.50	$0.75 Also applies to City College and K-12 Students	N/A	Day Pass $3 Monthly Pass $35 Discounted Monthly Pass $17.50	No
Lafayette Public Transportation Corporation (CityBus)	$1.00	$0.50	N/A	10 Tokens $7.50 Day Pass $2.00 31-Day Pass $28.00 Discounted 31-Day Pass $14.00 Annual Youth Bus Pass $2.00	Free
Citibus Lubbock (Citibus)	$1.75	$0.85	NiteRide $4.00	Day Pass $3.50 Weekly Pass $14.50 Monthly Pass $50.00 Citibus U Pass (Semester) $52.50 Citikids Pass $52.50	No

Agency	One-Way Cash Fare	Discounted Fare for People +65 and with a Disability	Other Fare Categories	Pass Types	Transfers
				CitiSummer $52.50	
Centre Area Transportation Authority (CATA)	$1.75	$0.85	N/A	20 Tokens $34.00 Monthly Pass $69.00 Four Month Pass $268	Free up to one hour
Athens Transit System (ATS)	$1.75	$1.00 Peak $0.85 Off-Peak	N/A	22 Ride Smart Pass $31.00 Reduced 22 Ride Smart Pass $18.00 Youth 22 Ride Smart Pass $28.00	Free
Iowa City Transit (ICT)	$1.00	$0.50 Free for disabled/low-income elderly	Saturday Family Fare $1 per Family (two adults max) Youth (K-12) $0.75 Field Trip Pass (rate varies) Bus and shopping coupon for one free ride with $15 purchase from participating merchant	Day Pass $2 10-Ride Pass $8.50 31-Day Pass $32 31-Day Youth Pass $27 University of Iowa U-Pass $240/ $168 without University Parking Permit Kirkwood CC Semester Pass $100 Youth (K-12) Semester Pass $100 UI Faculty/Staff Annual Pass $28 per month/$15 without parking permit Low-income Monthly Pass $27	N/A

UNIVERSITY RIDERSHIP AND REVENUES

Student pass programs can be mutually beneficial partnerships for both transit agencies and institutions of higher education. For transit agencies, these partnerships can effectively boost ridership and guarantee a relatively steady stream of funding. Conversely, colleges and universities are able to market the program to students as a convenient and cheaper alternative to driving and parking, and as a way to improve livability by reducing congestion on campus. For many universities, campus transit services are a sustainable and economic alternative to providing parking.[7]

All of CyRide's peer agencies serve a major university. Figure 6-16 summarizes the estimated university-based revenues and ridership at several peer agencies, based on available data. Based on this sample, CyRide has higher than average annual student ridership, and the highest proportion of student riders. The university contribution is slightly less than the average, as is the estimated fare paid per boarding, leading to a higher discount for ISU students compared with peer agencies. University contributions constitute a similarly high percentage of revenues for both CyRide and Chapel Hill Transit (above 90%). CyRide is also similar to peer agencies in terms of the percentage of operating expenses covered by university contributions.

Although the cost per student ride on CyRide is lower than the peer average at $0.70 per ride, the estimated discount of 30% off the base fare is close to the peer average of 25%. This indicates that compared with its peers, CyRide and ISU benefit equally from their existing financial arrangement.

Figure 6-15 Estimated University-Based Annual Revenues and Ridership at Peer Agencies

Agency	Annual Student Ridership	% of Annual Ridership	Estimated Fare per Boarding	Estimated Discount	University Contribution	% of Revenues	% of Operating Expenses
CyRide	6.4 million	94%	$0.70	-30%	$4.5 million	94%	51%
MTD	8.5 million	65%	$0.71	-29%	$6.1 million	86%	20%
CHT	4.1 million	60%	$1.89	189%*	$7.8 million	91%	53%
RTS	8.1 million	75%	$1.52	2%	$12.3 million	84%	55%
CATA	3.2 million	44%	$0.75	-57%	$2.4 million	28% of 2016 operating revenues	19%
ATS	1.1 million	60%	$0.99	-43%	$1.1 million	60%	10%
ICT	4.5 million (CAMBUS)	68%	$0.98	-2%	$4.4 million	N/A	52%
Average	**5.1 million**	**67%**	**$1.10**	**-25%***	**$5.5 million**	**63%**	**37%**

Sources: ATS/UGA Ridership by Fare Category

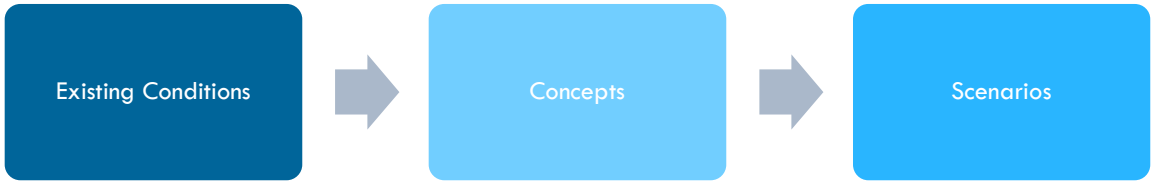
*Notes: Average estimated multiplier/discount excludes Chapel Hill transit, which does not charge a fare.

[7] The national average for structured parking construction is $19,000 per space (Carl Walker, 2016, *Mean Construction Costs*, Carl Walker Consulting)

7 RIDERSHIP AND REVENUE SCENARIO ANALYSIS

The purpose of this section is to introduce a range of fare concepts for further analysis and review. Fare concepts are strategies that may be used to meet the goals and objectives described earlier in this chapter. However, concepts are preliminary. Some concepts may continue to be further refined as part of an alternatives package while others will not.

Fare scenarios are more specific and combine select concepts that can be compared against one another. This chapter describes three specific scenarios. This analysis demonstrates the ridership and revenue impacts of three potential fare structures.



Fare Concepts

Maintaining the fare analysis goals, the following fare concepts were considered as part of the evaluation process in this study:

- Encourage Non-Student Ridership Growth.
- Evaluate Revenue Implications of Rolling Back Fare Pricing.
- Evaluate Ridership and Revenue Implications of Systemwide Fare Free Operation.
- Increase Fare Revenue Generated from ISU.

Fare Model Approach and Assumptions

Specific concepts related to potential fare structure and pricing changes were developed to evaluate potential impacts to CyRide ridership and revenue. The fare model developed for this project is based on existing ridership and revenue data (FY 2016) and assumptions on average fare per passenger for each CyRide fare product. This information is then used as a baseline to understand order of magnitude changes to fare revenues as a result of pricing changes.

Consumption of transit, like other goods and services, reacts to cost. Significant research over time has examined the sensitivity of transit ridership to fare increases. In transit, the standard measurement of sensitivity to fare changes means that for every 10% increase in fares, ridership will decrease by 3% (and vice-versa).

As such, elasticity factors are common in fare modeling, as they define the price sensitivity of riders to fare changes. An elastic factor suggests a larger change in ridership relative to a fare change. An inelastic factor suggests a relatively small change in ridership relative to a fare change. The model accounts for three elasticity factors[8]:

- A relatively inelastic factor (-0.33), which is consistent with industry standards for regular fares
- A "reduced" elasticity factor (-0.21) to account for observations associated with student, elderly, and people with disabilities
- A "fare free" elasticity factor (-0.52) to account for the higher attractiveness of fare free service

Using these elasticity factors, ridership changes (on a fare product basis) are determined from the proposed fare increase or decrease. A new average fare for each fare product is also calculated from the percentage change in the fare product price. Finally, multiplying the new ridership estimate by the new average fare produces a revenue estimate for that fare product.

It should be cautioned that any estimation model is an approximation based on a set of assumptions and is highly dependent on accurate data inputs to ensure quality outputs. The fare model bases ridership and revenue changes strictly on price variation. Qualitative factors such as customer simplicity or other factors are not considered here, but are certainly factors in reality that influence ridership and revenue levels. Based on the perceived simplicity gains, it is likely that ridership benefits in each alternative are understated. As a result, the findings in this memo are simply estimates but offer a valuable means to compare different alternatives against one another.

[8] Source: TCRP Report 95, Chapter 12, *Transit Pricing and Fares*.

Fare Scenarios

Scenario 1: Fare Pricing Rollback

This scenario evaluates the ridership and revenue impacts of rolling the base fare back to $1. The Scenario 1 fare structure is shown in Figure 7-1.

Figure 7-1 Scenario 1 Evaluation Fare Structure

Fare Category	Existing Fare	Proposed Fare
Cash Fare (Full Fare/Reduced Fare)	$1.02	$0.76
Free (ISU Students, Under 6 Years of Age)	$0.70	$0.70
Transfers	$0.00	$0.00
Moonlight Express	$0.00	$0.00
Green Ticket (Full Fare)	$1.20	$1.00
Yellow Ticket (Reduced Fare)	$0.60	$0.50
Pass (Monthly/Semester/School Year/Summer)	$0.82	$0.61

Scenario 2: Systemwide Fare Free

In this scenario, all fare categories are free, and the agreement with ISU Student Government remains constant. The Scenario 2 fare structure is shown in Figure 7-2.

Figure 7-2 Scenario 2 Evaluation Fare Structure

Fare Category	Existing Fare	Proposed Fare
Cash Fare (Full Fare/Reduced Fare)	$1.02	$0.00
Free (ISU Students, Under 6 Years of Age)	$0.70	$0.70
Transfers	$0.00	$0.00
Moonlight Express	$0.00	$0.00
Green Ticket (Full Fare)	$1.20	$0.00
Yellow Ticket (Reduced Fare)	$0.60	$0.00
Pass (Monthly/Semester/School Year/Summer)	$0.82	$0.00

Scenario 3: Tiered ISU Fare Zones

This scenario evaluates the ridership and revenue impacts of implementing two-tiered on-campus and off-campus ISU fare zones for students living on- and off-campus. The Scenario 3 fare structure is provided in Figure 7-3.

Figure 7-3 Scenario 3 Evaluation Fare Structure

Fare Category	Existing Fare	Proposed Fare
Cash Fare (Full Fare/Reduced Fare)	$1.02	$1.02
ISU On-Campus Tier	$0.70	$0.70
ISU Off-Campus Tier		$0.80
Transfers	$0.00	$0.00
Moonlight Express	$0.00	$0.00
Green Ticket (Full Fare)	$1.20	$1.20
Yellow Ticket (Reduced Fare)	$0.60	$0.60
Pass (Monthly/Semester/School Year/Summer)	$0.82	$0.82

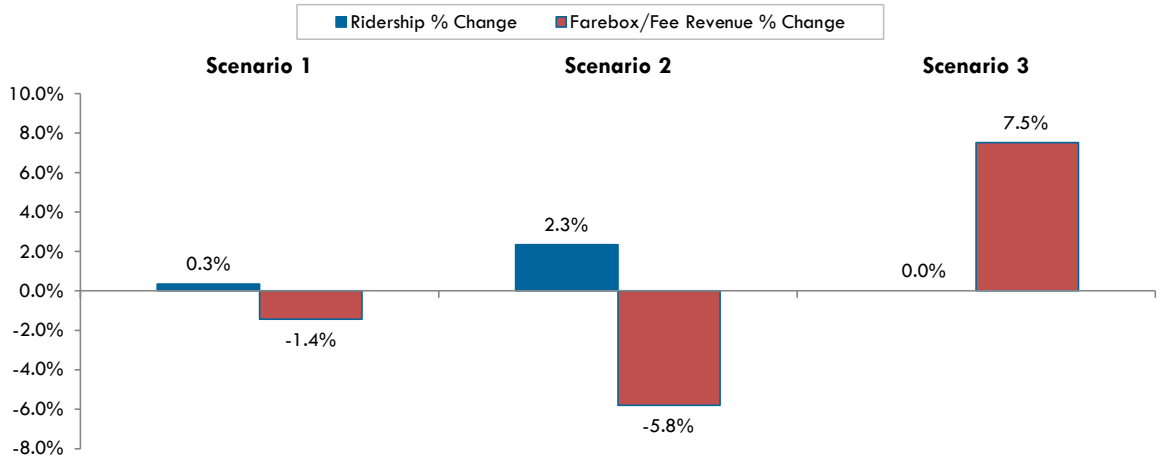
Fare Scenario Summary

A summary of estimated ridership and revenue impacts for each scenario is shown in Figure 7-4 and Figure 7-5. Systemwide Fare Free (Scenario 2) would provide the largest increase in non-campus ridership, and a moderate loss of annual fare/fee revenues (5.8%). Fare Pricing Rollback (Scenario 1) would also result in a slight increase in non-campus ridership, but would reduce total annual fare/fee revenues by just 1.4%. In contrast, Tiered ISU Fare Zones (Scenario 3) results in no anticipated ridership changes, and a slight increase in fare/fee revenues.

Figure 7-4 Estimated Revenue Impacts

Fare Category	Existing	Scenario 1: Fare Pricing Rollback	Scenario 2: Systemwide Fare Free	Scenario 3: Tiered ISU Fare Zones
Cash Fare (Full Fare)	$1.25	$1.00	$0.00	$1.25
Cash Fare (Reduced Fare)	$0.60	$0.50	$0.00	$0.60
Free (ISU Students, Under Six Years of Age)	$0.70	$0.70	$0.70	-
ISU Student On-Campus Tier	-	-	-	$0.70
ISU Student Off-Campus Tier	-	-	-	$0.80
Transfers	$0.00	$0.00	$0.00	$0.00
Green Ticket (Full Fare)	$1.20	$1.00	$0.00	$1.20
Yellow Ticket (Reduced Fare)	$0.60	$0.50	$0.00	$0.60
Pass (Monthly/Semester/School Year/Summer)	$0.82	$0.61	$0.00	$0.82
Total Annual Fare/Fee Revenue	**$4,749,000**	**$4,680,832**	**$4,474,000**	**$5,105,000**
Change in Fare/Fee Revenue	**-**	**($68,095)**	**($275,000)**	**$356,000**
Total Annual Ridership	**6,773,322**	**6,797,027**	**6,931,184**	**6,773,322**
Change in Annual Ridership	**-**	**23,705**	**157,862**	**-**

Figure 7-5 Scenario Ridership and Revenue Impacts



8 FARE RECOMMENDATIONS

This fare analysis reviewed existing conditions and best practices, evaluated the existing agreement with ISU students, documented ongoing costs related to fare collection, and evaluated the ridership and revenue implications of a variety of fare scenarios. Based on the results of this fare analysis, it is recommended that CyRide consider implementation of Scenario 1 – Fare Pricing Rollback. CyRide most recently increased fares in 2012, which included increasing the base fare from $1 to $1.25. This recommendation rolls back the base fare to $1, and is evaluated in the previous chapter as Scenario 1: Fare Pricing Rollback. Figure 8-1 summarizes the recommended fare structure for CyRide.

Figure 8-1 Recommended Fare Structure

Fare Category	Existing Fare	Proposed Fare
Cash Fare (Full Fare)	$1.25	$1.00
Cash Fare (Reduced Fare)	$0.60	$0.50
Free (ISU Students, Under Six Years of Age)	$0.70	$0.70
Transfers	Free	Free
Green Ticket (Full Fare)	$1.20	$1.00
Yellow Ticket (Reduced Fare)	$0.60	$0.50
Pass (Monthly/Semester/School Year/Summer)	$0.82	$0.61

The recommended scenario results in a minimal increase in non-campus ridership (0.3%) and would reduce total annual fare/fee revenues by just 1.4%, as shown in Figure 8-2. In addition to being relatively neutral in terms of ridership and fare/fee revenues, implementation of the recommended scenario would benefit both passengers and CyRide, easing the logistics of fare collection and increasing the attractiveness of service to passengers not affiliated with ISU.

Figure 8-2 Recommended Scenario Ridership and Revenue Impacts

	Existing	Proposed
Total Annual Fare/Fee Revenue	$4,749,000	$4,680,832
Change in Fare/Fee Revenue	-	($68,095)
Percent Change in Fare/Fee Revenue	-	(1.4%)
Total Annual Ridership	6,773,322	6,797,027
Change in Annual Ridership	-	23,705
Percent Change in Annual Ridership	-	0.3%