

AMES TRANSIT AGENCY BOARD OF TRUSTEES

AMES, IOWA

February 14, 2019

The Ames Transit Agency Board of Trustees met on February 14, 2019 at 4:15 p.m. in CyRide's Conference room. President Bibiloni called the meeting to order at 4:16 p.m. with Trustees Cain, Schrader, Jeffrey, Schainker, and Bibiloni present with Trustee Nelson joining via conference call.

Public in Attendance: Sarah Lawrence, ISU Facilities Planning & Management, Trent Taglauer, ISU student, and Peter Hallock and Mark Steffen, Ames residents.

Approval of January 10 and January 22, 201 Minutes: Trustee Jeffrey made a motion to adopt the January 10 and January 22, 2019 transit board minutes as presented. Trustee Schainker seconded the motion. (Ayes: Six. Nays: None.) Motion carried.

Public Comments: No public comments.

Electric Bus Presentation: Director Kyras introduced consultant's from the Center for Transportation and the Environment (CTE) to present the results of their four-month study on a Zero Emission Roadmap for CyRide – Joel Donham, Steve Clermont and Kylie McCord. She indicated that this firm had been selected to determine the feasibility of operating electric buses within the Ames community and if feasible, how to deploy these buses.

Mr. Clermont provided board members with background information regard the CTE firms and their work, as well as which transit systems nationwide had deployed electric buses and which systems were currently studying how to deploy these vehicles in service. Further, he identified ten systems of similar size and service delivery to CyRide that were operating or studying how to incorporate electric vehicles into their fleets. He indicated that the number of grant awards had increase exponentially over the past several years and that the typical award was for five or fewer vehicles. Mr. Donham then began by stating that CTE's role was to provide unbiased information regarding the impacts of zero emission buses, so that transit system policy-makers could make an informed decision. He shared some of the challenges with the current electric bus technology: state of charging stations, higher electric costs in some areas of the county and the impact of battery degradation on the range of vehicles. He also indicated that "preconditioning" the buses, prior to their operation in service, could help extend this range. He also stated that the bus batteries would need to be replaced at a bus' mid-life at current costs of \$200,000.

Trustee Cain asked if the consultants had factored in winter temperatures when gathering their data and Mr. Donham responded that their analysis was based on a difficult winter day when temperatures were below zero.

Mr. Donham then shared the benefits of the electric bus technology: Zero emission - less greenhouse gases, lower fuel costs to operate service and lower maintenance costs as there are fewer moving parts (2,000 versus 7,000 with a diesel bus).

Mr. Donham then briefed those present on the roadmap for CyRide to deploy electric bus technology in Ames, addressing operations, facility/equipment, maintenance and financial/economic information. He indicated that they would also address best practices within the industry and funding opportunities.

Trustee Schainker asked about whether, in the long term, it would be better to be focusing on fuel-cell bus technology, as opposed to electric bus technology due to the limitations previously presented. Mr. Donham said that there were pro's and con's to both technologies and that there was a place in transit fleets for both types of buses to provide the greatest benefit.

Mr. Donham then provided detailed information regarding the methodology used to determine which routes could support electric bus technology and the results of this analysis. In summary, he indicated that at least 17 scheduled buses could be operated with electric power on CyRide routes on the coldest or hottest days of the year during the school year, and 7 buses during the summer using current electric bus technology. Additionally, he indicated that there was a possibility of 16 additional buses on more favorable weather days, with 7 CyRide buses that could not be electric buses. He also indicated that some of CyRide's "extra" buses could also be operated with electric buses. He indicated that 37,000 miles per year per bus could be operated with electric buses, which exceeds current per bus mileage per year.

Mr. McCord then provided information regarding the costs and savings that could be achieved by CyRide. First, he provided a comparison of the per bus cost to purchase an electric versus diesel bus (\$750,000 versus \$450,000). He then explained the modifications and locations of changes that would be needed to the facility to accommodate electric buses – new transformer, electric switchgear, chargers, dispenser, etc. He estimated the local cost (20%) to modify the building for a two bus pilot program to be \$38,300.

Mr. McCord then provided information on the diesel versus electric costs, indicating diesel costs averaged \$.52 per mile compared to \$.16 per mile for electricity from Ames Municipal Electric, based on conversations with city staff. The average cost per bus per year for diesel range from \$7,518- \$25,061 versus a consistent cost of approximately \$9,500 per bus per year for an electric bus.

Mr. McCord then provided information on maintenance costs of diesel versus electric buses – indicating that electric buses cost, on average, 37% less due to the smaller number of parts.

Trustee Cain asked whether the methodology of maintenance costs was based on comparable mileage and reflected a true comparison. Mr. McCord indicated the same statistics were used to calculate these costs for both types of buses.

He then provided information on the total local cost of ownership for a two bus pilot project versus the same cost for diesel buses (\$1,150,000 for electric and \$1,420,000 for a diesel bus). He indicated that for a fleet of 17 buses, the cost was roughly the same for diesel compared to electric buses, as there was a savings for electric buses on fuel and maintenance, but a higher cost for new batteries and initial bus cost.

Mr. McCord then shared the emission results for two and 17 electric buses, indicating a net emission reduction of 122,561 lbs. CO₂ to 1,041,770 lbs. CO₂. The savings for 17 buses equates to 81 acres of trees to remove this same level of carbon from the air.

He then shared some of the industry's best practices, such as having the bus manufacturer responsible for the charger procurement and identification of emergency operations and backup energy supply.

Mr. McCord ended the presentation with a discussion on the three potential funding sources for electric buses –Low/No grants, Bus & Bus Facilities grants and Volkswagen (VW) Settlement grants.

Director Kyras then provided board members with possible next steps if there was a desire to move toward an electric bus project. She indicated the first option would be a demonstration project to rent/borrow an electric bus from a nearby transit system for a 1-2 week period to operate on CyRide routes, at an estimated local cost of \$2,000 (borrow) and \$13,000 (rent).

The second option for an electric bus project would be to apply for a grant for a two bus pilot project (two buses, facility retrofit, and equipment) at an estimated local cost of between \$87,000 and \$100,000. She compared this cost with the local match required for two diesel buses at between \$147,000 – \$197,000. Further, she indicated that from the time of application to the delivery of the buses, it would be a minimum of three years. She also indicated that due to the timing to apply for a Low/No and VW grant, the board would need to commit up to \$400,000 up front to match the Low/No grant until a VW grant could be received. Director Kyras shared the grant process needed to secure the buses – Low/No grant in summer 2019, VW grant in early 2020.

President Bibiloni asked for clarification on the first option as to whether the electric bus would be operating on one or more of CyRide's routes. Director Kyras indicated it would.

Director Kyras explained the three actions that were provided to the board – approve applying for the next federal Low/No grant, proceed with a demonstration project or to not take action on electric buses at this time.

President Bibiloni asked for additional information about a possible demonstration project. Director Kyras shared that Rock Island, Illinois currently had three electric buses operating and that Des Moines DART would be receiving their buses later this year. She indicated that CyRide could ask to borrow one of these systems buses for a one-week period and operate the bus on CyRide routes to gather actual operating data. Further she indicated that bus manufacturers had electric bus rental programs and that CyRide could rent a bus for 1 – 2 weeks and operate the buses in service as well.

Trustee Cain asked if CyRide could coordinate the time period for a demonstration project in the winter or summer to determine how the vehicles operated in more challenging environments and Director Kyras indicated that could be possible.

Trustee Cain asked if the demonstration project and applying for a grant application could be done simultaneously. Director Kyras indicated that it could, but that CyRide would need additional local funds to do both projects.

Trustee Jeffrey shared her thoughts and support for electric vehicle technology, as well as her experience in long-distance travel with an electric car.

Trustee Schainker shared his concern about financing and timing of local funding needed to support the grant application option in identifying \$400,000 in local funding in case the VW grant is not approved. Director Kyras indicated that, if CyRide did not receive a grant in the second round of VW funding, it could wait until the last round in 2021. Trustee Schainker expressed his desire to identify funding in case the VW grant was not a possibility, so the project could proceed forward. Director Kyras indicated that when staff provides the board with the final budget, prior to submitting the grant, that it could also provide a funding plan for the \$400,000 local match.

Trustee Schainker made a motion to approve alternative #1 directing staff to begin development of a Low/No grant application for two electric buses, facility modifications and supporting equipment when the federal funding opportunity is released. Further, that staff will present a final budget and information on how a \$400,000 local funding match could be addressed in CyRide's Capital Improvement Plan before approving the grant for submission. Trustee Jeffrey seconded the motion. (Ayes: Six, Nays: None.) Motion carried.

Facility Site Study: Director Kyras indicated that staff had prepared information for board members on the top five sites chosen as possible expansion sites. Specifically, she indicated that staff had prepared information on the “buildability” of the sites, including utilities, and conceptual designs to ensure that the site was large enough to

accommodate all CyRide's future needs. She indicated that Site #15 had been eliminated through this analysis based on a fatal flaw, leaving four sites for consideration. She also shared that through the analysis; staff was finding it difficult to locate the expansion in a rural setting due to the limitation of utilities.

Brent Schipper from ASK Studio provided the results of an analysis regarding the utilities, terrain for excavation and other factors, such as owner preference/proximity to neighbors. He also shared a preliminary conceptual design of an initial building (20 buses, HIRTA, some office and maintenance areas) on each site and a building illustrating consolidating of all CyRide functions at the new site. Based on this analysis, he indicated that their architectural/engineering recommendation was for site #5 as the preferred location, followed by Site #17, #8 and #13. Concerns with site #5 were related to nearby neighbors, with sites #8, #13 and #17 concerning the availability of utilities.

Mr. Schipper concluded his presentation indicating that the next step would be to estimate a construction cost for each of the options and shared that narrowing of the sites down to two would be preferable. Director Kyras shared that the results of the cost analysis would be prepared for the March board meeting. She indicated that once a preferred site was chosen by the Transit Board, staff would work with FTA on the necessary documentation. She indicated that there would be two grant opportunities in the near future to seek federal funding to construct a portion of the expansion – Bus and Bus Facilities and BUILD programs.

Trustee Schainker shared his concerns that he would prefer to be making decisions on a facility expansion after the City's Comprehensive Plan process. Further, he indicated that he was apprehensive to consider Site #5 due to the residential homes nearby. He indicated that he would like to see operating costs along with the construction costs from each of the sites. He reiterated his desire to have the expansion farther from residential areas and conflicting land use. Director Kyras indicated that staff could review sites ranked #6 - #10 to determine their evaluation of "buildability" and site size compared to building needs. Trustee Schainker indicated that he believed it was best to continue to the next step of the analysis with the five top sites.

Consensus of the transit board was to narrow the locations to sites #17 and #13 and proceed to the next step in the analysis.

Farebox Revenue Analysis: Director Kyras provided board members with a preliminary analysis of farebox revenue after the May 2018 fare reduction. She indicated that the fare reduction had had a positive impact on CyRide's non-student ridership, which was a goal of the Transit Board. She indicated that ridership had increased for customer's paying with cash/tickets and passes. However, she stated that this had not translated into higher revenue, as revenue in all fare categories is lower. She stated that reasons for this variance in ridership/revenues could be attributed to increased rides on unlimited passes, more discounted rides for seniors, K-12 and disabled individuals and more rides,

but not enough to increase revenues. She indicated staff would continue to monitor this impact.

Rate Setting Resolution – Fares: Director Kyras stated that the Transit Board is required by City Ordinance to formally set fares each year and that the Transit Board had approved a budget in January that reflected no change in fare structure.

Trustee Schainker made a motion to approve the 2019-2020 rates, which reflect no change from the 2018-2019 rate structure. Trustee Jeffrey seconded the motion. (Ayes: Six. Nays: None.) Motion carried.

Rate Setting Resolution – Passes: Director Kyras stated that the same action would be needed for pass rates as the previous agenda item for cahs/tickets.

Trustee Schainker made a motion to approve the 2017-2018 rates reflecting no change from the 2018-2019 rate structure. Trustee Jeffrey seconded the motion. (Ayes: Six. Nays: None.) Motion carried.

Quarterly Operations Report (October – December 2018): Director Kyras shared several highlights from the operation's report provided in the board's material. She indicated that Moonlight Express ridership is significantly lower, and that staff had adjusted the service level of this service as of February 1, 2019 to reflect the almost 1/3 lower ridership this year compared to last year.

She also highlighted the higher maintenance expenses for the quarter. She indicated that these expenses were trending higher due to the need to replace engines in older buses, repair emission equipment and purchase new tires. She indicated that these three line items had been increased in the 2019-2020 budget, so this should be a current year issue only.

Trustee Schainker asked about the closing balance and Director Kyras stated that CyRide is on target to have a budget savings of approximately \$250,000, which will increase the closing balance. This increase is attributed to lower fuel prices and an estimated \$225,000 more in federal funding that was not included in the current budget.

Transit Director's Report:

- 1) Radio System Funding Shortfall:** Director Kyras shared with board members that the new city/county radio system, which CyRide is and would continue to be a part of, would be costing significantly more than budgeted in the 2019-2020 year of the Capital Improvement Plan approved by the board in January 2019. She indicated that staff was developing options to address the funding shortfall and would provide board members with alternatives at the March board meeting.

2) Summer Construction Projects Update: This item was not discussed at the meeting.

Trustee Item - Interim Plan: Trustee Schainker shared with board members that the search for the new director is moving slower than planned, optimistically estimating it would be another 14 weeks until the City was able to extend an offer to a candidate. As a result, he indicated that he had been talking with Director Kyras about the gap in leadership from her retirement on March 29, 2019 until a new Director was hired and a possible solution was developed to address the transition period between Directors. He indicated it could be June or July before a new Director could on-board.

Director Kyras then explained a possible transition solution, indicating that postponing her retirement date was not financially feasible for her due to IPERS policies. She indicated that the Transit Board could hire an Interim Director, with one of CyRide's Assistant Director's serving in this role. However, she indicated that it would be difficult for the Interim Director to successfully complete their "regular" job and the Director's duties for multiple months. She indicated that a management consultant could be hired to assist the Interim Director in completing the Director's duties until a New Director is at CyRide.

Further, she indicated that if the board desired for the current Director to assist, that she had been told by IPERS that after 30 days she could work for a consultant who, in turn, could have a contract with the City of Ames for services. She indicated that the consultant would be staff to the Interim Director during this time.

Trustee Schainker indicated that it would benefit CyRide to have the current Director provide the consultant services, as an employee of the consulting firm, and indicated that the City of Ames purchasing policies allow for a "waiver" for just cause. He indicated that he believed this was a good reason for applying the waiver and having the firm the Director was an employee of, provide the service during the transition.

Trustee Schainker stated that he did not believe going through a typical Request for Proposal process was fair to other consultant's when it was his desire to have the retiring Director fill in during the transition. He indicated that he desired to have an open and transparent process.

Director Kyras shared her thoughts on possible areas a consultant could assist, writing material for the Interim Director to approve for the board materials, grant work, further the facilities and electric bus studies, prepare FTA documentation, etc.

There was a consensus of board members to proceed with the proposed transition plan.

Next Meeting Dates/Times: There was a discussion regarding a special board meeting in March, in addition to the March 12, 2019 meeting so that the two summer construction project could be approved after the March 14, 2019 bids were received. It

was decided that a March 15, 2019 special meeting would be held to consider approval of the construction bids.

- March 12, 2019 – 4:15 pm
- March 15 SPECIAL CONFERENCE CALL Meeting at noon
- April 11, 2019 – 4:15 pm
- May 9, 2019 – 4:15 pm
- June 13, 2019 – 4:15 pm
- July 11, 2019 – 4:15 pm

Adjourn: Trustee Schrader made a motion to adjourn the meeting and Trustee Cain seconded the motion. The meeting was adjourned at 6:30 P.M. (Ayes: Six. Nays: None.) Motion carried.

Juan Bibiloni, President

Joanne Van Dyke, Recording Secretary