

**OMAHA STREETCAR AUTHORITY (OSA)
MONDAY, JANUARY 23, 2023**

**LEGISLATIVE CHAMBERS @ 1:30 P.M.
1819 Farnam Street, Omaha, NE 68183**

**Agenda and materials are available online at:
<https://www.cityofomaha.org/omaha-streetcar>**

To participate via Zoom please contact the City Clerk's Office. You must register by 10:00 A.M. the morning of the meeting.

*Pre-registration is not required for anyone attending the meeting in person.

CALL TO ORDER

1. Roll Call

CERTIFICATION OF PUBLICATION – NOTIFICATION OF OPEN MEETING ACT

2. City Clerk certifies publication in the Daily Record, the Official Newspaper of the City of Omaha on January 18, 2023, notice of the Omaha Streetcar Authority Meeting, January 23, 2023.

A current copy of the Open Meeting Act is posted in a white binder on the east wall of the Legislative Chambers.

NEW BUSINESS

3. Approval of Minutes from the December 12, 2022 meeting – [see attached](#).
4. Interim Director's Report – [see attached](#).
5. Communications (**DISCUSSION**)
6. MOU with Portland Streetcar, Inc for vehicle procurement – [see attached](#). (**ACTION REQUESTED**)
7. Off-Wire Study – [see attached](#). (**DISCUSSION**)
8. April Meeting Date Proposed Change (**VOTE TODAY**)
 - Monday, April 10th @ 1:30 P.M.
 - Monday, April 24th @ 1:30 P.M.

ADJOURNMENT

Next meeting date February 13, 2023 at 1:30 P.M.

This Agenda, which shall be kept continually current, shall be available for public inspection in the Office of the City Clerk, Omaha/Douglas Civic Center, 1819 Farnam Street, Suite LC-1, Omaha, NE, during normal business hours.

All requests for accommodations, including interpreters and signers, will require at least 2 business days advance notice. Please contact the City Clerk's Office at cityclerk@cityofomaha.org to request a copy of the required form if arrangements need to be made.

MINUTES FOR THE OMAHA STREETCAR AUTHORITY (OSA)

MONDAY, DECEMBER 12, 2022 AT 1:30 P.M.

LEGISLATIVE CHAMBERS

1819 Farnam Street, Omaha, NE 68183

Agenda and materials are available online at:

<https://www.cityofomaha.org/omaha-streetcar>

The meeting will be available by Zoom. Information to be provided.

MEMBERS PRESENT:

Lauren Cencic
William Clingman
Steve Curtiss
Dave Fanslau
Jay Noddle, President
Bob Stubbe, Vice President

MEMBERS NOT PRESENT:

Edith Simpson

STAFF PRESENT:

Jennifer Taylor, Senior Attorney
Elizabeth Butler, City Clerk
Kimberly Hoelsing, Deputy City Clerk

1. Roll Call.
2. Introductions and Notification of Open Meetings Act. A current copy of the Open Meeting Act is posted in a white binder on the east wall of the Legislative Chambers.
3. Approval of Minutes from November 14, 2022 meeting

**MOTION by Stubbe, SECOND by Curtiss to approve the minutes from the November 14, 2022 meeting
Approved 6-0**

4. Interim Director's Report.

Interim Director Rick Gustafson presented the monthly report. The contract with Empace & Lovgren has been signed by the Omaha Development Foundation for the Chamber of Commerce. Work has started and a kickoff meeting was held on December 13, 2022. Discussions have also started with property owners that may be affected along the streetcar route.

5. Proposal for joint procurement of vehicles: Discussions are continuing with Portland with regard to conducting a joint procurement of streetcar vehicles in 2023. It is anticipated a recommendation can be developed for action by the Board in January. (DISCUSSION)

Interim Director Rick Gustafson discussed the joint procurement of vehicles. It was noted that it takes approximately 2.5 – 3 years to get cars manufactured. The desire is to proceed with procurement. Omaha has been approaching Portland for joint procurement. The goal is for Portland to have 11 vehicles operational by 2026 and for Omaha to have 6 vehicles operational by 2026. The Omaha Streetcar Authority must follow the City of Omaha procedures for procurement which are to accept the best and lowest bid in most cases. Portland has different purchasing requirements. It was reported that there are two additional cities that may be interested in joining the procurement of vehicles. This would be the largest procurement of streetcar vehicles. The joint RFP would be more complicated. A recommendation will be presented to the board at the January meeting. The RFP should be issued in May. There are already 5-8 companies interested in bidding on the streetcar vehicles.

Steve Curtiss mentioned the timeline of scheduling a down payment. Interim Director Gustafson mentioned that it would typically be 10% up front. In addition, bidders will be asked to submit a payment schedule. No payment would be due before the first part of 2024.

Jay Noddle mentioned that there is an ongoing conversation with UNMC regarding how they would like the streetcar to interact with their campus. A question was also raised about how easy or difficult it would be to add to the vehicle order of more vehicles need to be added. In addition, the question was raised if more vehicles are ordered, will the price per vehicle go down?

Bob Stubbe raised a question about whether efforts had been made to reach out to other streetcar vehicle manufacturers. Any industry outreach must be done before the RFP is issued. Interim Director Gustafson mentioned that there will be an industry outreach day where vendors will get up one at a time to present. The event will be hosted by HDR and attended by some OSA members as well as Interim Director Gustafson.

Jay Noddle mentioned the timeline and delivery schedule for the streetcar vehicles and whether it is typical that completed vehicles are delivered as they are done or whether delivery is after all vehicles are 100% complete. Interim Director Gustafson mentioned that currently vehicles are taking longer than usual to build and that 30 months was about average.

BOARD MEMBER CENCIC LEFT THE LEGISLATIVE CHAMBERS AT 1:58 P.M.

BOARD MEMBER CENCIC RETURNED TO THE LEGISLATIVE CHAMBERS AT 1:59 P.M.

6. Status of CM/GC Procurement: OSA received 2 proposals. The Selection Committee is reviewing the proposals. The RFP is expected to be issued December 9 with a due date of January 6. The procurement is progressing. (DISCUSSION)

Two high quality proposals are expected from Kiewit (with Mass Electric and Stacy & Witbeck) and Omaha Streetcar Constructors (Herzerg & Ames). The RFP is due January 6, 2023. The RFP includes an outline of project management, key personnel including track personnel and value added personnel, as well as a safety manager. The breakdown is 60% proposal and 40%

qualifications. The Selection Committee should complete their reviews and interviews by January 25, 2023. A recommendation could be made to the board at the February meeting.

7. 100% Design Proposals: OSA has received one proposal on December 1 from HDR.
(DISCUSSION)

One proposal was received from HDR for the 100% design contract. The procurement process for the City of Omaha was followed. Negotiations have started with HDR. Interim Director Gustafson and Public Works will put the contract together.

8. Additional Discussion

Jay Noddle mentioned the steps involved to expand the streetcar service in all directions. Interim Director Gustafson met with the City of Council Bluffs to understand their proposal. Other uses are currently being looked at. Getting more people engaged and involved greatly enhances the project. A question was raised about whether a timeline is being worked on to expand the streetcar route with federal dollars. Interim Director Gustafson explained that Derek Miller in the Planning Department is currently taking the lead on this. Jay Noddle mentioned that we want to make sure we are responsive to requests from the community and that it is important to start looking at ideas for the future.

9. Next meeting date December 12, 1:30 PM.

10. Motion to Adjourn.

MOTION by Cencic, SECOND by Fanslau to adjourn

Approved 6-0

Meeting adjourned at 2:17 P.M.

A person is allowed to speak during the public hearing of any agenda item or if the person is invited to speak by a Board member regarding an item on the agenda. A person shall not be allowed to address the Board at any other time during a meeting. The presiding officer shall determine the amount of time for speakers.

Omaha Streetcar Authority (OSA)
Monthly Report
Interim Director Rick Gustafson
October 2022

1. **OSA Meeting:** The December 12 meeting of the OSA Board was held.
2. **Communications:** Emspace and Lovgren are preparing a draft communications strategy. The draft will be reviewed in January and results for the Board in February.
3. **CM/GC Process:** The RFP was issued in December with responses due January 6. Kiewitt (with Mass Electric and Stacy & Witbeck) and Omaha Streetcar Constructors (Herzerg and Ames) are expected to submit proposals. The Selection Committee is expected to complete their rating of the proposals by January 25. They should make a recommendation for the OSA Board in February.
4. **100% Design Procurement:** Negotiations have started with HDR for 100% design contract.
5. **Design Progress:** The 15% design documents have been submitted for review.
6. **Vehicle Procurement:** A draft document for parallel procurement with Portland Streetcar, Inc has been submitted for legal review. The recommended agreement is expected to be on the January agenda for the Board. The schedule calls for January approval of the MOU with Portland, February private meetings with potential vendors, March adoption of the vehicle specifications and issuance of the RFP in May. The vehicle manufacturers are being invited to participate February 15-17. A draft off-wire report developed by HDR is expected to be on the agenda for the January meeting along with a recommendation on whether or not to include battery power on the vehicles.
7. **Vehicle Maintenance Facility:** Site A has been designated as the site for the Maintenance Facility. The intent is to begin design and closely include MECA in the exterior process and parking planning so that an agreement with MECA and the City of Omaha can developed incorporating the changes in responsibility. MECA will be included in the design process with the goal to agree upon the design.
8. **Finance:** The City Council approved the issuance of bonds for the streetcar. OSA has received Notice to Proceed pursuant to Section 5 of the Redevelopment Act.
9. **OSA December Agenda:** Items planned for the agenda for January 23 meeting of the Board: Off Wire Study, MOU with Portland Streetcar, Inc. for Parallel Procurement.

D R A F T

**Non-Binding Memorandum of Understanding
Parallel Streetcar Vehicle Procurement**

**Omaha Streetcar Authority
Portland Streetcar, Inc.**

This is a non-binding Memorandum of Understanding between the Omaha Streetcar Authority, an entity formed through an Interlocal Agreement between the City of Omaha and the Transit Authority of the City of Omaha, d/b/a Metro, and Portland Streetcar, Inc. (PSI), a non-profit corporation contracted by the City of Portland to design, build, operate and maintain Portland Streetcar, hereinafter collectively referred to “the parties.”

RECITALS

WHEREAS, the parties desire to purchase vehicles for their respective streetcar projects in a cooperative manner to assure the maximum effectiveness of both parties in evaluating manufacturers of streetcars; and,

WHEREAS, the Omaha Streetcar Authority plans to purchase six streetcar vehicles in 2023 and expects to commence operation of the Omaha Streetcar Project in 2026; and,

WHEREAS, the Portland Streetcar, Inc. plans to purchase eleven (11) streetcar vehicles to replace their current fleet of older vehicles with a goal of securing a contract to purchase the vehicles in 2023 and receiving vehicles in 2026; and,

WHEREAS, other cities have expressed interest in participating in a cooperative process for procurement; and,

WHEREAS, the parties have decided to enter into this Memorandum of Understanding to formalize the understanding between the parties.

NOW THEREFORE, the parties hereto desire to express their mutual intentions and understandings with respect to Parallel Streetcar Vehicle Procurement:

Both parties agree that a cooperative process for procurement would benefit the evaluation of the proposed vehicles, in overseeing the manufacture, certifying the compliance of vehicles and in maintaining the vehicles. The following are proposed processes to be followed by both parties in conducting this parallel procurement process:

1. **Vehicle Specifications:** Both parties agree to develop vehicle specifications to be used in the procurement. The intent is to develop as many common specifications with only a few

which are unique to one party. It is anticipated that vehicle width, length and floor height may be different. The specifications are proposed to be completed by March, 2023.

2. **Bid Specifications/RFP:** Each party would develop its own Bid Specifications/Request for Proposals (RFP) for procurement and share this information with the other party. It is anticipated that each party will issue its respective bid specification/RFP in May 2023.
3. **Industry Outreach:** Both parties agree to include the other party in pre-bid industry outreach.
4. **Proposal Evaluation:** Both parties agree to share the bids received from the manufacturers and, to the extent possible, include the other party in the technical evaluation and scoring for the proposals. The final decision for acquisition of a vehicle is left entirely to the contracting entity.
5. **Selection Criteria:** Each party shall establish selection criteria that is consistent with the requirements for procurement in their jurisdiction and shall have the sole authority to select the manufacturer.
6. **Contracts:** Each party is expected to enter into a contract with their respective selected contractor and share all information about the contract provisions with the other party.
7. **Manufacturing Oversight:** The parties agree to explore the potential of combining manufacturing oversight in a joint contract.
8. **Proposed Timeline:** The goal of the parties is to enter a procurement contract in 2023 for acquisition and final delivery of all streetcar vehicles by 2026. In order to meet the joint goal of the parties, the parties have established the following proposed time benchmarks with an understanding that each party is not required to meet the benchmarks:

January 2023	Adopt MOU for Parallel Procurement
March 2023	Adopt vehicle specifications
May 2023	Complete RFP, issue
July 2023	Proposals submitted by manufacturers
December 2023	Notice to Proceed
July 2025	Delivery of first vehicle

This Agreement between Omaha Streetcar Authority and Portland Streetcar, Inc. is non-binding and is an agreement to cooperate in conducting the process of procurement of streetcar vehicles.

Omaha Streetcar Authority

Portland Streetcar, Inc.

Jay Noddle, Chair

Off Wire Memo- Executive Summary

As part of the Preliminary Engineering phase, the design team looked at the possibility of having sections of revenue alignment that did not have overhead contact system (OCS) wire. The vehicle would need to be fitted with an adequate On-Board Energy Storage System (OESS), typically a large battery and support systems. As the vehicle is not yet chosen, the design team reached out to the leading car builders in the North American market for help on building the traction power model and validating the results.

The design team identified significant portions of the proposed Omaha Streetcar line where off-wire operations were feasible. These sections are mainly on level or downhill sections of the alignment. The wire-free sections need to start and end at platforms to allow the pantograph to raise and lower while the vehicle is static. To account for the many short off-wire sections in the model, the design team added 20 seconds of dwell time per raise or lower. In places where the car needs extra charging while there is not overhead wire, a charging bar was included in the study at a platform. The design team determined that the Eastern terminus was a favorable location for having a charging station with an overhead conductor rail (OCR) instead of an overhead wire.

The current 15% design horizontal and vertical alignment engineering CAD data from the design team was input into OpenTrack/ OpenPowerNet (OT/OPN) modeling software. The OT/OPN model was run and analyzed to recommend the power needs for off-wire operation. This is a complete system approach, with the power from the overhead wire and the power available from the vehicle modeled. Different failure modes of both the vehicle charging and charging availability are modeled to give a more realistic output for a conservative real-world solution. The variability of the streetcar moving in mixed traffic with some transit signal priority was also modeled.

Based on the topography of the alignment, operation in mixed traffic with other vehicles, and the climactic conditions of Omaha, the systems team recommended certain areas of the alignment that were best suited for off-wire operation. The total route with the off-wire sections identified in blue, and the on-wire sections in green is presented on the map in figure 1 on the page following this narrative.

The total off-wire percentage of track determined to be feasible at this preliminary stage of engineering is approximately 45% of the total route. Removing the visible wire, poles, and foundations from this section of line does allow for some cost savings. The systems team was able to remove one of the Traction Power Substations (TPSS) and replace it with a smaller charging unit. That saves both cost and right-of-way required. There are some additions needed for contingency operation that are added when the overhead wire is removed. Approximately 2,300 feet of buried parallel feeder cable is needed to ensure redundant feeds to the sections of the alignment with overhead wire if a TPSS feeding an isolated section is out of service. These underground parallel feeder additions make the savings of capital dollars not equal to the amount of overhead wire removed. The removal of 45% of the overhead wire may reduce systems capital expenditures between \$4.2M and \$4.6M when the parallel feeder additions to provide reliable service are included. However, the removal of equipment from the wayside does require added weight and complexity to the vehicle. The On-Board Energy System (OESS) complete with batteries, chargers, battery heating and cooling units, and other associated equipment on each vehicle does increase the cost of the vehicle purchase by approximately \$3.9M to \$4.3M for the vehicle contract based on recent car builder outreach.

In summary, the removal of the overhead wire, poles and associated systems elements over 45% of the mainline trackage results in a net project capital savings between approximately \$680,000 on the high end and \$60,000 on the low end (using budgetary average traction power infrastructure costs from recent (2021) construction contracts) for the costs for building the streetcar line when adding back in the vehicle equipment cost upcharge. This is only a capital savings and does not reflect any increase in maintenance over the life cycle of the vehicle due to the increase in on-board systems. In addition to the capital cost reduction, removal of the overhead wire on portions of the alignment will result in reduced potential for utility conflicts, stray current mitigation and ADA/sidewalk clearance.

DRAFT

Figure 1: The graphic below shows the approximate areas (in blue) where off-wire operation was considered feasible.

