



Jeffrey Polenske

City Engineer

Frank P. Zeidler Municipal Building
841 North Broadway, Room 701
Milwaukee, WI 53202-3681

Voice (414) 286-2400

Fax (414) 286-5994

TDD (414) 286-2025

www.city.milwaukee.gov

www.milwaukee.gov/mpw

City of Milwaukee

Request for Information (RFI) to identify Vendors interested in providing Modern
Streetcar rail vehicles for the Milwaukee Connector Streetcar Project

Issued: August 24, 2010

Responses Due: September 24, 2010, 4:00 PM CDT

1 Executive Summary

The City of Milwaukee is formally issuing a Request for Information (RFI) from Vendors with the ability to supply the City with a fleet of modern Streetcars for operation on its Milwaukee Connector Streetcar Project.

The Milwaukee Connector Streetcar will connect the heart of the downtown central business district with the Milwaukee Intermodal Station and high-density residential areas just north of downtown. The proposed operation is anticipated to require a fleet of five to six Streetcars.

Project Development (Preliminary Engineering & Environmental Assessment) for this project is currently ongoing and the primary objectives of this RFI are to:

- initiate interest for the supply of modern Streetcars
- aid the City of Milwaukee in the development of a solicitation
- facilitate ongoing preliminary system design (ensure that system design details will not exclude potential vehicle suppliers)
- capture industry comments and recommendations

Vendors interested in supplying modern Streetcar vehicles to the City of Milwaukee should respond to this RFI.

The City of Milwaukee is formally issuing a Request for Information (RFI) from Vendors with the ability to supply the City with a small fleet of modern streetcars.

Contents	Page
1 Executive Summary	1
2 Introduction	3
3 Purpose of the Request for Information	4
4 Scope of Procurement	5
4.1 Project Schedule	5
4.2 Joint Procurements	5
4.3 Order Quantity	5
4.4 Option Contracts	5
4.5 Funding	5
4.6 Finance	6
4.7 Operations and Maintenance	6
4.8 System Supply	6
5 Submitting a Response	6
5.1 Clarifications	7
5.2 Confidentiality	7
6 Vendor Response	7
6.1 Response to Section 4 Scope of Procurement	8
6.2 Company Information	8
6.3 Technical Information	8
6.4 Further Information	8
7 Declaration of Issue	9
8 Appendices	10

2 Introduction

The City of Milwaukee (City) is currently undertaking preliminary engineering on its Milwaukee Connector Streetcar Project. The Milwaukee Connector Streetcar is a two (2) mile starter Streetcar system that will connect important destinations in the heart of the downtown central business district with the Milwaukee Intermodal Station and high-density residential areas just north of downtown. It is expected that the Milwaukee Connector Streetcar will provide many benefits, including increased mobility, enhanced multimodal connections and economic development. Figure 1 below shows the current proposed alignment for the starter system.



Figure 1 – Map of Proposed Route

The alignment can be seen in greater detail by typing the following link into a web browser:

<http://www.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msid=100385486299036740845.00048a42630d4415346ea&ll=43.040163,-87.928047&spn=0.088577,0.150375&z=13>

The initial system will utilize five (5) modern low-floor Streetcars powered by an overhead electric contact system. The vehicles will operate in mixed traffic with 10-minute headways throughout most of the day and 15-minute headways during early morning and late evening hours. The initial route will have 12 stop (station) pairs strategically located within walking distance to numerous parking structures to facilitate Milwaukee's "Park Once" concept.

Two route extensions that will add 1.55 miles and a further 8 stops (stations) to the initial route are included in the preliminary engineering that is currently underway.

- 1) The 4th Street extension would connect the Intermodal Station and several large entertainment venues within the Park East and Brewery redevelopment areas.
- 2) The Prospect/Farwell extension would provide Lower East Side residents and the Brady Street commercial district with a direct connection to downtown.

Service characteristics for the extensions will be identical to the initial system, however the additional route length will require one (1) additional Streetcar to maintain the planned headways.

The development of a successful Streetcar starter system is seen as the foundation for future route additions and expansions. The proposed initial alignment is such that it will allow easy expansion to nearby neighborhoods and destinations.

Further information on the Milwaukee Connector Streetcar Project can be found on the project website at:

www.milwaukeeconnector.com

3 Purpose of the Request for Information

The purpose of this RFI is to gather information about firms, consortiums or joint ventures with the ability to supply Streetcars (Vendors) and their product/service offerings. The primary objectives of this RFI are:

- To publicly and formally initiate interest for the supply of modern Streetcars for the Milwaukee Connector Streetcar Project
- To aid the City of Milwaukee in the development of a specification and associated Request for Proposal (RFP) that is equitable to all Vendors and will ultimately lead to a Vendor selection.
- To collate technical vehicle data and facilitate ongoing preliminary system design (ensure that system design details will not exclude potential vehicle suppliers)
- To capture industry comments and recommendations

4 Scope of Procurement

The City is looking to implement a modern Streetcar system that will be in keeping with Milwaukee's urban environment and is suited to the performance requirements and anticipated future expansions. The City is seeking to initiate a vehicle procurement that both maximizes the likelihood of meeting an aggressive schedule and, at the same time, keeps costs to a minimum. The City is cognizant that in line with these goals, to minimize design costs and realize the schedule, it will be necessary to adopt a "standard" vehicle platform.

4.1 Project Schedule

The City is working towards a revenue service opening date prior to November 2013. To meet this aggressive schedule a successful Vendor would need to delivery the base order of vehicles no later than July 2013. The entire fleet would have to be commissioned and turned over to the City no later than September 1, 2013.

The City is seeking indication from potential Vendors as to the perceived practicality of the proposed schedule as well as any constraints imposed by the schedule (based on a projected contract award date of April 2011).

4.2 Joint Procurements

Subject to agreement by all stakeholders the City may consider adapting its procurement to be combined with another procurement of suitable vehicles. Vendors are requested to indicate the feasibility of such an approach.

4.3 Order Quantity

The City is anticipating a base order of six (6) vehicles.

4.4 Option Contracts

The City's planned procurement may include options for additional vehicles as priced options.

4.5 Funding

The Milwaukee Connector Streetcar project is utilizing an existing \$54.9 million in Federal funds appropriated to the project and will therefore need to meet the requirements for Buy America. The City is seeking information from Vendors as to their ability to meet Buy America requirements and how they intend to do so.

4.6 Finance

The City may be interested in different finance options as alternatives to the milestone payments made in a traditional procurement (such as potentially leasing vehicles, etc.). The City is seeking indications from potential Vendors as to:

- 1) whether financing is of interest; and if so
- 2) the potential framework or format structure of such a financing agreement.

4.7 Operations and Maintenance

The City may elect to request Vendors to provide Operation and/or Maintenance services for a fixed concessionary period. The City is seeking indications from potential Vendors as to their interest and ability to provide such services.

4.8 System Supply

The City may be interested in offering options for extending the scope of work beyond vehicle supply to include additional systems such as overhead catenary, signaling systems, etc. The City is seeking indications from potential Vendors as to their interest and ability to provide integrated systems.

5 Submitting a Response

Interested Vendors should submit a response answering the questions in section 6 Vendor Response. Responses may be submitted either in hardcopy or electronically (preferred) in either Microsoft Office or Adobe Acrobat formats. The responses to the requested information and any supplemental materials should be returned to the following address no later than September 24, 2010, 4:00 PM CDT.

Hard copy

Please provide five (5) copies to:

Mr. Jeffrey S. Polenske, City Engineer

841 North Broadway, Room 701

Milwaukee, WI 53202

Electronic copy

Email to Jeffrey Polenske, City Engineer at:

jeffrey.polenske@milwaukee.gov

Note: If the size of the electronic response is too large to email please provide three (3) CDs to the address for hard copy submissions above.

Failure to respond to this RFI will not preclude a Vendor from responding to the RFP that will proceed, however, a response is strongly encouraged. This RFI is not intended to result in a contractual relationship. The City shall not be liable for any costs incurred by Vendors in responding to this RFI.

5.1 Clarifications

Questions concerning this RFI should be directed to:	
Name:	Jeffrey S. Polenske
Position:	City Engineer
Telephone:	+1 (414) 286-2400
E-mail:	jeffrey.polenske@milwaukee.gov
Address:	841 North Broadway, Room 701 Milwaukee, WI 53202-3681

The City shall make every effort to respond to all clarification requests. Any responses shall be made available to all prospective Vendors through the City of Milwaukee website. However, requests for clarification shall not be cause to extend submittal deadline.

5.2 Confidentiality

The City recognizes that in answering some of the questions in this RFI Vendors may request that the City enter into a confidentiality agreement such that intellectual property is not disseminated to third parties. In such cases, Vendors should provide any confidentiality agreement/forms to the City prior to response submission.

6 Vendor Response

Vendors submitting a response to this RFI should address the following information requests. Additional information regarding your products, systems or services is welcome. To facilitate the review and collation of responses the City requests that responses are organized into the sections outlined below.

6.1 Response to Section 4 Scope of Procurement

Vendors are requested to address the discussion and issues outlined in Section 4. Please utilize the heading numbering in the structuring of your responses.

6.2 Company Information

1. Introduce your organization (e.g., parent, age, size, number of customers, offices, facilities, number of employees, etc.). Please include ownership structure.
2. Identify contact name(s) and information for any questions the City might have concerning this information and the products and services you offer.
3. List any relevant web sites for your company.
4. Describe your products and services including markets served. Include information regarding any strategic partnerships or alliances with other technology or service organizations.
5. Identify major customers that utilize your Streetcar or related products and services and are willing to serve as a reference. Please provide the appropriate contact information and include all systems whether:
 - a. In operation
 - b. Under Construction
 - c. Awaiting Notice to Proceed - Contracts awarded
 - d. Awaiting contract award

6.3 Technical Information

1. Provide technical specifications for any potentially suitable vehicle platforms. Vendors are encouraged to provide the most information possible to allow the City to ensure that preliminary engineering activities (system interfaces) will not exclude your vehicle platform. As a minimum please complete the form attached as Appendix 1.
2. Provide a description of any options/variations from the base model the City could include as costed options in the technical specification portion of its procurement.

6.4 Further Information

The City may subsequently request further information from responding Vendors for the purpose of developing RFP criteria.

7 Declaration of Issue

This RFI is signed for and issued on behalf of the City of Milwaukee	
Signed:	
Name:	Jeffrey S. Polenske
Position:	City Engineer
Telephone:	(414) 286-2400
E-mail:	jeffrey.polenske@milwaukee.gov
Date:	

8 Appendices

Appendix 1 – Vehicle Technical Information

Milwaukee Connector

Vehicle Characteristics

1. Dimensions	mm	ft and inches	Comments
Length over couplers			
Length over anti-climbers/body ends			
Width of car at widest point (excluding mirrors)			
Height from top of rail at widest point (excluding mirrors)			
Width of car at widest point (including mirrors)			
Height from top of rail at widest point (including mirrors)			
Width of car at door threshold			
Height (new wheels AW0)			
1. Top of rail to top of roof, maximum			
2. Top of rail to top of roof mounted equipment (excluding pantograph)			
3. Top of rail to top of pantograph (locked down)			
4. Top of rail to top of pantograph (minimum operating height)			
5. Top of rail to low floor			
6. Top of rail to car floor boarding height			
7. Top of rail to high floor (if applicable)			
8. Top of rail to top of anti-climber			
9. Top of rail to centerline of coupler			
Height (worn wheels AW3)			
1. Top of rail to bottom (lowest point) of truck-mounted equipment under Normal vehicle operating condition			
2. Top of rail to bottom (lowest point) of truck-mounted equipment under worst case condition (including failure modes).			
3. Top of rail to top of pantograph (maximum operating height)			
Truck Wheelbase			
Power Truck			
Trailer Truck (if applicable)			
Distance, center to center of trucks			
Distance, center to center of trucks (second distance if applicable)			
Wheel gauge (please provide drawing if possible)			
Between gauge points			
Between backs of flanges			
Height floor to headlining at center line of car, minimum			
Width of double leaf side door openings (if applicable)			
Width of single leaf side door openings (if applicable)			
Height of side door openings			
Minimum aisle width			

2. Performance	Value	Units	Comments
Maximum Speed (level, tangent track)			
Average acceleration at AW2 at the following speed ranges (level, tangent track)			
0 mph - 15mph			
15 mph - 25mph			
25 mph - maximum speed			
Operating voltage			
Maximum hotel power requirements (Full HVAC load)			
Peak power requirement (Traction and Hotel power)			
Sound pressure level - dBA Lmax at 50 ft			
At 10 mph			
At 25 mph			
At Maximum Speed			

3. Alignment	Value	Units	Comments
Minimum turning radius in the yard			
Minimum turning radius in passenger operation (mainline)			
Maximum grade the vehicle can negotiate at AW3			
Minimum vertical curve radius, crest			
Minimum vertical curve radius, sag			

4. Systems	Value	Units	Comments
Passenger capacity			
AW1 - Seated only			
AW2 - Seated and standing @ 4 people per sq meter			
AW3 - Seated and standing @ 6 people per sq meter			
AW4 - Seated and standing @ 8 people per sq meter			
Number of wheel chair spaces per streetcar			
Weight (assume a passenger weight of 165 lbs per person)			
Vehicle Tare Weight AW0			
Maximum Axle Load AW0			
Maximum Weight AW4			
Maximum Axle Load AW4			
Maximum lateral wheel imbalance (weight differential across axle)			
Maximum truck load imbalance (weight differential between trucks)			
Wheels			
Diameter new			
Diameter at condemning limit			
Resilient (Yes/No and if yes type and manufacturer)			
Recommended wheel profile			

5. Requested Technical Documents

Comments

General arrangement drawings (B-Size, including all dimensions)	
High level system descriptions of off-the-shelf and technical parameters	
Description of how ADA compliance is/will be achieved	
List of any special maintenance shop requirements	
Dimensioned drawings of Dynamic and Static envelopes with tables and listed assumptions as applicable	
Performance curves (Maximum acceleration and deceleration against speed or Velocity/Time curves) for level tangent track at AW3 loading.	
Power Curves (maximum traction and hotel power against speed) for level tangent track at AW3 loading.	
Pantograph Information (Including: type, size, operating characteristics and if compliant with IEEE preliminary standard P1629)	