



**Metro**

Los Angeles County  
Metropolitan Transportation Authority

One Gateway Plaza  
Los Angeles, CA 90012-2952

213.922.2000 Te  
metro.net

**1**

**SPECIAL BOARD MEETING  
APRIL 30, 2012**

**SUBJECT: LIGHT RAIL VEHICLE PROCUREMENT**

**ACTION: AWARD CONTRACT FOR PROCUREMENT OF LIGHT RAIL VEHICLES**

**RECOMMENDATION**

- A. Authorize the Chief Executive Officer to award a 53 month, firm fixed price contract under Request for Proposal No. P3010, to Kinkisharyo International, LLC for the manufacturing and delivery of 78 light rail vehicles (LRV), in the amount of \$299,061,827 for the base contract buy, exclusive of four contract options totaling 157 LRVs.
- B. Authorize the Chief Executive Officer to negotiate and execute up to four contract options to Contract P3010, for a total delivery of up to 157 LRVs, in an aggregate amount of \$591,080,448, for a total contract not-to-exceed amount of \$890,142,275, not including allowable contract escalation.
- C. Approve an increase of \$6,940,000 in the life-of-project budget for CP#206035 – Light Rail Vehicle Procurement (P3010) from \$335,410,000 to \$342,350,000.
- D. The Board finds that the award to Kinkisharyo International is made to the Proposer that provides the agency with the best value and is most advantageous to Metro. The recommended price addresses all contract requirements and represents the best overall value when all RFP evaluation factors are considered, including clear advantages in technical compliance, schedule risk and project management. The offer also commits to the sizable creation of new U.S. jobs to produce the P3010 LRV.

**ISSUE**

The Board authorized staff to issue a federally funded solicitation for a “Best Value” LRV procurement for additional vehicles as required for Measure R light rail projects including Exposition Phase 2, Foothill Phase 2B Extension, and Crenshaw lines, and for the eventual replacement of the Metro Blue Line fleet consisting of 69 LRVs that will have reached the end of their revenue service life by end of 2018.

Staff’s recommendation presents the firm that is most advantageous to Metro in spite of the fact that Kinkisharyo International is not the lowest price offerer. Kinkisharyo

International's offer represents the Best Value to Metro when all technical and price factors presented to the Board on October 28, 2010 and further defined in RFP P3010 are carefully considered. The Procurement Summary of this report (Attachment A) further describes the evaluation results and detailed rankings for all Proposers, including the weighted scores associated with each evaluation criteria.

## **DISCUSSION**

The P3010 LRV procurement is essential to the success of Measure R initiatives, including providing the rolling stock for the on-time opening of the Expo Phase II, Foothill Extension, and Crenshaw rail lines. This procurement is also consistent with the Draft August 2011 Rail Fleet Management Plan submitted to the Federal Transit Administration (FTA) Project Management Oversight Team.

The LRV Contractor selection has progressed over a 16-month period from the date of Board approval of the solicitation and has followed a Best Value solicitation process. The primary objective of the source selection is to obtain safe, reliable, high quality LRVs delivered on time and within budget, and to create new manufacturing and assembly jobs in the United States that can be tied directly to the P3010 Contract.

To prevent a repeat of the problems experienced with the P2550 LRV procurement, which followed the low-bid procurement methodology and resulted in schedule delays, meager contractor project management and varying quality; the Metro Board approved a Best Value solicitation process to use other relevant factors, in addition to price, to identify the Best Value rail car manufacturer.

An integral part of the Best Value solicitation is the assembly of the Source Selection Committee (SSC) consisting of key Metro Operations staff to conduct a comprehensive evaluation of the proposals received. The committee reviewed the proposals and evaluated four key factors, weighted in descending levels of relative importance: 1) Experience and Past Performance, 2) Price, 3) Technical Compliance and 4) Project Management Experience. Metro also used its U.S. Employment Program as a Best Value trade-off analysis factor against the Price criterion. All three proposals were in compliance with RFP requirements and determined to be within the Competitive Range.

Upon Board approval and the completion of a Pre-Award Buy America compliance audit, a Notice-to-Proceed (NTP) is expected immediately after Board approval. Delivery of the 78 base contract LRVs is scheduled to be completed 53 months following NTP, approximately by August 2016. The Contract contains four options, which, if exercised, will extend the contract three years beyond the base order. The options will be awarded subject to adequate funding and Board approval. The delivery rate is an aggressive four LRVs per month. The required delivery dates have liquidated damage assessments that can be imposed for late deliveries.

Options 1 through 4 for 28, 39, 21 and up to 69 LRVs, respectively, may be exercised in any order as long as the Option expiration ordering dates are followed. The order for the first option may be placed not later than 34 months following NTP, the order for the second option may be placed not later than 42 months following NTP, the order for the third option may be placed not later than 48 months following NTP and the order for the fourth option may be placed not later than 59 months following NTP.

The options are priced in 2012 dollars and are subject to escalation based upon the Producer Price Index for Railroad Rolling Stock Manufacturing published by the United States Department of Labor.

Lessons-learned from experience with the P2550 LRV procurement has resulted in staffing this LRV project utilizing experienced Metro Project Management personnel to oversee and manage the commercial and technical program elements, augmented by experienced Technical and Project Management consulting staff. Staff has also adequately budgeted necessary travel expenses to ensure performance of the Contractor and their most important subcontractors remain on schedule and within specification requirements.

Lessons-learned also requires an increase of the LOP budget by \$6.94M to \$342.3M to enhance consultant services to focus primarily on program management oversight.

A program partnering approach will be implemented to further ensure program success:

1. Program leadership provided by Metro Project Management with experienced consultant staff to assist with the decision making.
2. Manage stakeholders to think, work, and act towards timely delivery of the LRVs to meet schedule, weight, safety, reliability, with high quality standards.
3. Ensure Operations and Maintenance ownership by including in decision-making.

## **U.S. EMPLOYMENT PROGRAM**

In May 2011 the FTA approved the use of Metro's unique U.S. Employment Program. Staff employed the U.S. Employment Program to incentivize Proposers to create new jobs in the United States by incorporating new job creation as a function of the Best Value evaluation process. Staff's goal of creating meaningful new U.S. jobs was achieved, as evidenced by the fact that the recommended Awardee, Kinkisharyo, commits to creating new jobs in the U.S. totaling \$97.9 million in wages and benefits, with a full economic impact of \$138.8 million on the U.S. economy. The value for new jobs committed by Kinkisharyo equates to 554 Job Years for the base Contract, and 1,614 Job Years for the base and contract options.

The employment program allows Metro to perform a price trade-off analysis for the value of all new jobs created directly by LRV production, including the use of an economic multiplier to assess the full impact on the U.S. economy of all new jobs

proposed. The trade-off process consists of deriving the aggregate dollar value of the proposed new jobs' salaries and benefits, after applying an economic multiplier. That total jobs value was then traded off (subtracted), dollar for dollar, against each Proposer's price. This yielded a reduced proposal price for only evaluation purposes. That subsequent evaluation price was then scored using the evaluation scoring weight for the Price criterion.

### **DETERMINATION OF SAFETY IMPACT**

- The P3010 LRVs will be designed to current design criteria meeting all local, State, and Federal safety standards.
- Exercising the options will allow Metro to replace light rail vehicles that have reached the end of their revenue service life.

### **FINANCIAL IMPACT**

The funding of \$36,531,006 for this project is included in the FY12 budget in cost center 3940, Rail Fleet Services, under project 206035, Expo/Blue Line Light Rail Vehicle Procurement. Since this is a multi-year project, the Executive Officer, Rail Vehicle Maintenance, will be accountable for budgeting the cost in future years, including any options exercised.

### **ALTERNATIVES CONSIDERED**

As the Measure R projects require a definite need for more LRVs, the primary alternative considered was in the method of procurement. On October 28, 2010, the Board approved a competitively negotiated Best Value procurement for new LRVs to evaluate the overall combination of past performance, technical capability, quality, price and other elements of a proposal, including a trade-off of U.S. job creation. This approach will provide the greatest overall procurement value and probability of vehicle delivery success.

As an alternative, the Board may choose not to move forward with the procurement. This alternative is not recommended as the Measure R light rail transit projects must have LRVs for testing and revenue operations.

### **NEXT STEPS**

Within a month following contract award, Metro will meet with Kinkisharyo, LLC for the Contract required Specification Review Meeting. During same meeting, Metro will establish communication and reporting protocols. Key milestones and deliverables, through the shipment of the first two pilot cars and delivery of the first two production cars, will be discussed to ensure understanding and agreement of requirements to ensure expedient reviews and approvals.

**ATTACHMENTS**

- A. Procurement Summary
- B. Funding/Expenditure Plan
- C. Metro Board Report, dated October 21, 2010
- D. Metro Board Report, dated January 21, 2010

Prepared by: Jesus Montes, Director, Rail Vehicle Acquisition and Maintenance  
Victor Ramirez, Director, Contract Administration

*Michelle Lopes Caldwell*

---

Michelle Lopes Caldwell  
Chief Administrative Services Officer

*[Signature]*

---

Frank Alejandro  
Chief Operations Officer

*[Signature]*

*Arthur T. Leahy*

---

Arthur T. Leahy  
Chief Executive Officer

## PROCUREMENT SUMMARY

## P3010 LIGHT RAIL VEHICLE PROCUREMENT

1.	Contract Number: P3010, New Light Rail Vehicles	
2.	Recommended Vendor: Kinkisharyo International, LLC	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: November 1, 2010	
	B. Advertised/Publicized: October 31, 2010 and December 1, 2010	
	C. Pre-proposal/Pre-Bid Conference: November 19, 2010	
	D. Proposals/Bids Due: April 11, 2011	
	E. Pre-Qualification Completed: March 9, 2012	
	F. Conflict of Interest Form Submitted to Ethics: January 27, 2012	
	G. Protest Period End Date: March 27, 2012	
5.	Solicitations Picked up/Downloaded: 267	Bids/Proposals Received: 3
6.	Contract Administrator: Victor Ramirez	Telephone Number: 213-922-1059
7.	Project Manager: Jesus Montes	Telephone Number: 213-922-3293

**A. Procurement Background**

On January 28, 2010 the Board authorized the use of a "Best Value" procurement to solicit this rail car requirement in accordance with Public Utility Code 130238. The Board then approved the specific relative weighting of the evaluation criteria to be used for P3010 on October 28, 2010. This Board Action is for a "Best Value" Request for Proposals (RFP) solicitation issued to procure up to 235 New Light Rail Vehicles (LRV), including a base purchase of 78 LRVs.

The RFP was issued in accordance with Metro's Acquisition Policy and the contract type is Firm Fixed Price.

Twenty-three amendments were issued during the solicitation phase of this RFP; amendment Nos. 1, 6, 8 and 21 were issued to modify proposal due dates; amendment No. 2 was issued to provide information concerning the RFP Pre-

Proposal Conference; amendment Nos. 3, 4, 5, 7 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 22 and 23 were issued to provide answers to questions posed by interested parties, and to modify RFP technical specification requirements and commercial terms; amendment 16 modified the Instructions to Proposers section of the RFP; and, amendment No. 20 invited Proposers in the Competitive Range to submit Best and Final Offers.

A total of three proposals were received on April 11, 2011, after staff responded to 349 technical and commercial questions from interested parties.

## **B. Evaluation of Proposals/Bids**

A Source Selection Committee (SSC) consisting of staff from Rail Vehicle Acquisition and Maintenance, Rail Fleet Services, Wayside Systems, and Service Operations was convened and conducted a comprehensive evaluation of the proposals received. The SSC also held direct interviews with each Proposer and performed manufacturing and engineering site surveys to fully assess the Proposers' capabilities, capacities, strengths and weaknesses.

The proposals were evaluated based on the following evaluation criteria and weights:

- |                                   |            |
|-----------------------------------|------------|
| • Experience and Past Performance | 40 percent |
| • Price                           | 30 percent |
| • Technical Compliance            | 20 percent |
| • Project Management Experience   | 10 percent |

The evaluation criteria described above was presented to the Board in October 2010 and approved prior to the RFP issuance. The most important factors considered in developing the relative weighting of the evaluation criteria were based on lessons learned from Metro's previous LRV procurement. It was determined that the best approach to assess probability of on-time performance for delivery of the rail cars was to measure all Proposers' historical performance as a leading indicator of future success. This approach was applied not only to schedule adherence, but also to reliability, weight compliance, quality and change orders.

In May 2011, the FTA provided Metro with approval to use a U.S. Employment Program as a Best Value trade-off analysis factor against the Price criterion. This trade-off consisted of taking the dollar value of all new jobs proposed and applying an Economic Multiplier to assess the full impact of those jobs on the U.S. economy. This assessed U.S. jobs value was then used to reduce each Proposer's price on a dollar for dollar basis to establish an evaluation Price for scoring purposes.



All three Proposers who submitted proposals were determined to be within the Competitive Range. The three firms within the competitive range are listed below in alphabetical order:

1. CAF USA, Inc.
2. Kinkisharyo International, LLC
3. Siemens Industry, Inc.

The SSC interviewed all Proposers in Los Angeles from June 21 -29, 2011, and performed manufacturing site visits from July 18, 2011 through August 4, 2011. The firms' project managers and key team members had an opportunity to present each team's qualifications and respond to the evaluation committee's questions. In general each team's presentation addressed the requirements of the RFP, experience with all aspects of the required tasks, and stressed each firm's commitment to the success of the project. Also highlighted were staffing plans, manufacturing plans, schedules and perceived project issues. Each team was asked questions relative to each firm's proposed staff, capability, manufacturing capacity, facility development, new job training, job creation and previous experience implementing their proposed manufacturing plan.

#### **Qualifications Summary of Firms Within the Competitive Range:**

##### **CAF USA Inc.**

CAF has over 100 years of operational experience in the rolling stock industry supplying multiple types of rail transit vehicles world-wide. CAF USA's most recent clients include the Port Authority of Allegheny County (Pittsburgh PA), Sacramento Regional Transit, Bilbao, Spain, and Vitoria, Spain, where they provided LRVs.

CAF's proposal strengths include lowest price offer and a worldwide range of vehicle platforms that attest to deep engineering resources and capability. However, CAF's past performance in the U.S. market, their technical compliance and project management team proposed for P3010 were not as strong as the recommended Awardee.

##### **Kinkisharyo International, LLC.**

Kinkisharyo has provided urban transit vehicles world-wide since 1984. Kinkisharyo International's most recent clients include Dallas Area Rapid Transit, Washington Sound Transit (Seattle), and Valley Metro Rail (Phoenix). Kinkisharyo International has the unique distinction of having delivered every U.S. transit vehicle on time.

The SSC found Kinkisharyo's strengths to be in their past performance and experience, technical capability and project management. As the recommended Awardee, Kinkisharyo ranked highest in all evaluation categories except price. They also propose a U.S. Employment commitment that is within 2% of the highest offer

for new U.S. job creation. Kinkisharyo International's Project Manager has extensive rail car experience in the U.S., having led projects in Seattle, Dallas and Boston. He has over twenty years of experience in the project management of light and heavy rail transit vehicles.

**Siemens Industry, Inc.**

Siemens Industry has manufactured the highest quantity of LRVs in North America; having delivered more than 1100 LRVs. Their list of clients includes San Diego, St. Louis, Denver, Salt Lake City, and the P2000 car in Los Angeles. The P2000 car has been in operation at Metro since 2001.

Siemens's greatest strength is in their U.S. Employment plan. Siemens offered the highest new U.S. job commitment. Although Siemens was three years late in delivering the P2000 vehicle to Metro, Siemens has since improved their schedule performance record. However, the overall past performance, technical compliance and project management elements of their offer were deemed by the SSC to be not as strong as the recommended Awardee.

1	FIRM	Average Score	Factor Weight	Weighted Average Score	Rank
2	<b>CAF USA Inc.</b>				
3	Experience and Past Performance	73.00	40.00%	29.20	
4	Price (as evaluated with U.S. Jobs trade-off)	100.00	30.00%	30.00	
5	Technical Compliance	71.00	20.00%	14.20	
6	Project Management Experience	62.00	10.00%	6.20	
7	<b>Total</b>		<b>100.00%</b>	<b>79.60</b>	<b>2</b>
8	<b>Kinkisharyo International, LLC</b>				
9	Experience and Past Performance	82.50	40.00%	33.00	
10	Price (as evaluated with U.S. Jobs trade-off)	92.66	30.00%	27.80	
11	Technical Compliance	75.50	20.00%	15.10	
12	Project Management Experience	74.00	10.00%	7.40	
13	<b>Total</b>		<b>100.00%</b>	<b>83.30</b>	<b>1</b>
14	<b>Siemens Industry Inc.</b>				
15	Experience and Past Performance	77.25	40.00%	30.9	

<b>16</b>	Price (as evaluated with U.S. Jobs Trade-off)	87.00	30.00%	26.1	
<b>17</b>	Technical Compliance	72.50	20.00%	14.5	
<b>18</b>	Project Management Experience	68.00	10.00%	6.8	
<b>19</b>	<b>Total</b>		<b>100.00%</b>	<b>78.30</b>	<b>3</b>