



SFMTA
Municipal
Transportation
Agency



Muni Forward: Get On Board!



Siemens S200 SF Light Rail Vehicle

09 | 03 | 2014
SAN FRANCISCO, CALIFORNIA

The Right Vehicle to Meet Increasing Demand *for Rail Transit in the City*

- Competitively bid
- Emphasis on technical qualifications and improving vehicle reliability
 - Directly addresses the doors/steps issue – our current #1 failure component
- Meets Central Subway timeline
- Exceeds reliability requirements
- Proven manufacturer
- Competitive price
- Manufactured in Sacramento, CA
- Prototype due in December 2016



Exceed All Our Procurement Objectives

- **ON TIME:** Car builder has solid history of delivering **Quality** cars on time
- **LOCAL :** The project to be delivered (including support) within 90 miles of San Francisco
- **EXTENDED LIFE:** Offering 30 year design life vs. 25 years required
- **EXCEED RELIABILITY REQUIREMENTS :** Offering safe, attractive vehicles with reliability more than twice specified values in the RFP
- **FASTER DELIVERY:** Committed to deliver vehicles earlier than required, and also offering expedited delivery rate
- **COMPETITIVE PRICE:** High value low cost cars provide the Agency the opportunity to get 215 cars with the original budget for 175 cars
- **FINANCIAL SOLUTION:** Offering financing solutions to address SFMTA cash flow challenge

Light Rail Procurement – The Right Vehicle to Meet Our Demands

- SFMTA Board conditionally approved award of contract on July 15, 2014 to Siemens for up to 260 cars





New LRV4 train on the lift at MUNI Metro East Facility



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State of The Art Features in the New LRV To Improve Safety and Performance

- Lightweight car body features a crashworthy design – meeting CPUC requirements
- Meets stringent weight requirements
- Designed to allow easy access for inspections, maintenance and repairs to minimize time out of service



- Improved passenger amenities, fully ADA compliant
- Modern information system with crystal clear audio announcement and camera surveillance system

Directly Address Component That Most Negatively Impacts Rail Service

- Improved passenger door system - higher reliability – fewer moving parts
- Dramatic reduction in maintenance
- Improved passenger door obstruction detection system
- Electrically operated steps for higher reliability and smoother operation



Longitudinal Seating: Wide, Open Interior



Final layout will be determined via public process/vetting with stakeholders such as CAC and MAAC

Operator's Cab



Left View

Right View



Center View



Ergonomic, High Visibility Design

Three trains at MUNI Metro East Facility



Meeting Transportation Goals of Current and Emerging San Francisco

Need	No. of Cars	Delivery
Central Subway Extension and near term service expansion	24	2017 – 2018
Fleet Replacement	151	2021 – 2027
Expansion Needs (Travel Demand Study)	85	
Short Term	40	2018 – 2021
Long Term	45	2027 – 2030

- **Funding for the base order for CS and fleet replacement is programmed**
- **Funding for the needed short term expansion is being determined**

Vehicle costs

NEEDS	NO. OF CARS	DELIVERY SCHEDULE	COST PER CAR
CURRENT NEEDS	Base Order = 175 cars		
Central Subway and near term service expansion	24	2016 – 2018	\$3.3M
Fleet Replacement (including escalation)	151	2021 – 2027	\$4.2M
EXPANSION NEEDS	Option Order = 85 cars		
Alternative #1	Short Term (40) (Price break due to escalations)	2018-2019	\$3.3M – \$3.6M
	Long Term (45)	2027 - 2030	\$5.1M
Alternative #2	85 (order later)	2027 - 2030	\$5.1M

Selecting Alternative #1 and to exercise the option of 40 cars now would allow us to purchase cars at the best price and provide early delivery to meet service demand.

Requesting approval from the Budget and Finance Committee today for the following:

- Execute the Contract to procure up to 260 vehicles
- Recommend that the Full Board of Supervisors approve the contract
- Action is required today to meet the project schedule

SFMTA Board Approved	- July 15, 2014
Recommended Board of Supervisors Approval	- September 2014
Notice to Proceed	- October 2014
First prototype car delivered	- December 2016

New LRV4 at 3rd and King

