

Transmittal

CS Transmittal No. 2124

To: Jeff Davis
FTA
201 Mission Street, Suite 1650
San Francisco, CA 94105

From:
Project No.
Subject:

John Funghi
M544.1
LRV Procurement Scope and Budget for use of
Central Subway 5309 Funds by Transit Division
to progress LRV Procurement for FTA Review

Date: November 30, 2012

Sent via:	<input type="checkbox"/> mail	<input type="checkbox"/> overnight	<input type="checkbox"/> messenger	<input type="checkbox"/> hand-delivered
	<input type="checkbox"/> fax – No:		<input checked="" type="checkbox"/> email – Address:	jeffrey.s.davis@dot.gov
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<input type="checkbox"/> specifications	<input type="checkbox"/> review comments	<input type="checkbox"/> incorporation of comments		
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<input type="checkbox"/> reference material	<input type="checkbox"/> acceptance/approval	<input type="checkbox"/> other		
<input checked="" type="checkbox"/> other	Refer to Items List below			

Item No.	Copies	Description	Rev.	Date
1	1	SFMTA Transit Division Nov. 2012 proposed LRV Procurement Project Work Plan (Scope) - Concept Definition through Contract Award Phases		11/6/12
2	1	SFMTA Transit Division Nov. 2012 proposed LRV Procurement Budget for a) Conceptual Engineering, b) Design Engineering (PS&E), and c) Contract Activities	1	11/6/12

If enclosures are not as noted, kindly notify us at once.

Remarks: Submittal for review and FTA approval that the Scope and budget are appropriate for use of the Central Subway Section 5309 funds.

The 24 tasks in the scope outline steps to achieve an RFP and a contract document by April of 2013.

The \$2,000,000 proposed budget is divided into Conceptual, Final Design and Contract Activities.


John Funghi
Program Director

JF:LA:smk

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CS File No. M544.1.5.4020.a

SFMTA | CAPITAL FINANCIAL PLANNING & ANALYSIS

SCOPE/SCHEDULE/BUDGET

Project Title New LRV Procurement - Phase 1

Initial Entry Date: November 16th, 2012 Project ID: _____
 Initiating Agency SFMTA Additional Agencies: _____
 Prepared By: _____ Date Modified: _____

Scope: Phase 1 of the procurement of 24 new light rail vehicles to serve the Central Subway Third Street Extension as well and provide expansion cars for the rest of the system. Detailed scope includes Concept Definition, Conceptual Design, Technical Specification/RFP Preparation, Selection Process and Contract Award.

Schedule

Phases	Start (Month / Year)	End (Month/Year)	Duration (months)
Planning/Conceptual Engineering	11 / 2012	1 / 2013	2
Environmental Studies (PA&ED)	/	/	0
Design Engineering (PS&E)	1 / 2013	5 / 2013	4
R/W Activities/Acquisition	/	/	0
Advertise Construction	5 / 2013	4 / 2014	11
Construction(e.g. Award Contract)	/	/	0
Procurement (e.g. Rolling Stock	/	/	0
Project Completion (i.e. Open for Use)	/	/	0
Total:			17

Budget

Phases	Cost	%
Conceptual Engineering	\$ 200,000.00	10.00
Planning		0.00
Environmental Studies (PA&ED)		0.00
Design Engineering (PS&E)	\$ 500,000.00	25.00
R/W Activities/Acquisition		0.00
Contract Activities	\$ 1,200,000.00	60.00
Construction/Procurement		0.00
Warranty Work		0.00
Contingency	\$ 100,000.00	5.00
Total	\$ 2,000,000.00	100.00

FOR CAPITAL FINANCE STAFF TO FILL OUT		
Program Funding Source	Amount	%
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
		#DIV/0!
Total	\$ -	#DIV/0!
Surplus/Shortfall	(2,000,000)	

Construction/Procurement Detail

Item Description	Unit Cost	# Of Units	Total	Notes
SFMTA Internal Support	\$ -	1.00	\$ -	
Consultant Support	\$ -	1.00	\$ -	
Carbuilder - engineering	\$ -	1.00	\$ -	
Carbuilder - vehicles	\$ -	1.00	\$ -	
Carbuilder - spare parts	\$ -	1.00	\$ -	
Carbuilder - training/manuals	\$ -	1.00	\$ -	
			\$ -	
Total			\$ -	
Construction difference:			\$ -	

SFMTA | CAPITAL FINANCIAL PLANNING & ANALYSIS

DETAILED FUNDING PLAN BY FISCAL YEAR (FOR CAPITAL IMPROVEMENT PROGRAM)										
	Description	PHASE	SOURCE	PRIOR	FY12	FY13	FY14	FY15	FY 16	Totals
1	Conceptual and RFP	1			300,000	1,700,000				2,000,000
2										0
3										0
4										0
5										0
6										0
Total Secured Funding:										#####

SFMTA New LRV Procurement Project

**Project Work Plan - Concept
Definition through Contract
Award Phases**

Rev 1, 6th November 2012

TRINH NGUYEN

Purpose

This document describes the key activities to be performed by the team for the SFMTA New LRV procurement. It will be revised with more detail added as work progresses. This revision contains more detail in the first major phase, concept definition. A high level schedule is contained at the end, with the lead for each of the initial phase tasks identified. The approach assumes a performance specification, with only essential interfaces and functionality defined, and procurement using a pre-qualification stage, followed by best value negotiations with qualified carbuilders. Note, it may be feasible to bring the qualification earlier in the process (in parallel with completion of the RFP package) to allow more time for the negotiated procurement stage.

Revision History

Revision	Date	Changes
0	11/5/12	First issue
1	11/6/12	Reformatted. Added detail to each work element.

1. CONCEPT DEFINITION

1.1 45ft Curve White Paper

Task Overview

Document the situation with existing curves on the SFMTA system, providing a rationale why this key requirement, and its associated impact on the ability to use “standard” LRV designs, cannot reasonably be relaxed.

Specific Activities

- a) Interview SFMTA staff to identify infrastructure locations with tightest curve radii, and feasibility of relaxing them to a “standard” 82ft
- b) Review infrastructure documents for same purpose
- c) Identify locations of most restrictive curves and total quantity of tighter than “standard” curves
- d) Identify impact on LRV design
- e) Develop high level cost estimate for curve radius relaxation to “standard”
- f) Develop recommendations
- g) Summarize findings and recommendations in White Paper

Task output

White paper documenting reasons for retaining 45ft as the minimum horizontal curve radius for the LRV to negotiate.

1.2 Cost Estimate

Task Overview

Develop the cost estimate for the LRV fleet replacement, including capital cost, “soft” costs and schedule. Base order and all known options will be included. This firm estimate will need to be held somewhat closely as we do not want to make the information too public.

Specific Activities

- a) Develop unit market cost estimate for LRVs of varying order quantities
- b) Identify unique SFMTA factors which impact cost, and quantify these
- c) Identify soft costs to support LRV procurement program

- d) Identify schedule for program, including timing of deliveries of LRVs, option orders etc.
- e) Align costs and schedule into cash flow format

Task output

Cost estimate with budget amounts over the duration of the entire project.

1.3 Integration White Paper

Task Overview

Develop a white paper to review industry practice for agencies using mixed fleets of LRVs. The purpose of this is to inform the decision on compatibility of the new cars with the LRV2 fleet.

Specific Activities

- a) Identify North American agencies operating LRV fleets of mixed builders/ ages/ technologies
- b) Through industry knowledge, or outreach to the agencies, identify the level of integration of the LRV fleets
- c) Compare and contrast industry best practice with the situation which will prevail for this procurement during introduction of the new LRVs
- d) Reach conclusion on best approach
- e) Summarize finding and recommendations into White Paper

Task output

White Paper on best practice for integration of LRV fleets with differing characteristics.

1.4 Collate Interface Information

Task Overview

Work with SFMTA staff to identify and document the key interfaces (structural, mechanical, electrical and electronic) that the new LRVs will have with the existing and planned rail system.

Specific Activities

- a) Identify SFMTA staff/ departments which are custodians of relevant information in each category
- b) Meet with SFMTA staff to collect interface definitions
- c) Collate interface information
- d) Where possible, independently validate interface information
- e) Compile interface information into Master Interface Matrix for the New LRV program

Task output

Interface matrix documenting the key interfaces between LRV and existing system.

1.5 LRV Concept

Task Overview

Define the concept for the LRV in terms of basic parameters, approach to specification (i.e. performance with functionality and interface definitions), format of specification etc.

Specific Activities

- a) Review existing documentation (LRV2 specification, APTA standard specification) to identify the LRV system elements to be specified
- b) For each system element, identify the specification approach to be employed – which interfaces need to be defined, which performance requirements are mandatory and which functions are mandatory
- c) Identify federal, state and local regulatory requirements that apply (e.g. CPUC GO 143)
- d) Define basic LRV parameters using the information collected above
- e) Define format of specification (i.e. every requirement has unique number, language practices etc)
- f) Summarize into report and matrix.

Task output

Informal report and matrix documenting the decisions.

1.6 Specification Outline

Task Overview

Draft outline of specification following APTA standard LRV specification, with cuts and areas for addition clearly identified.

Specific Activities

- a) Using Word version of APTA standard as a basis, establish a baseline specification outline, cutting sections that are not required and flagging where information is to be added in the final document
- b) Provide feedback to APTA/ FTA on the usability of the standard specification for LRV procurement purposes for this procurement
- c) Publish document as LRV specification outline.

Task output

Outline version of technical specification.

1.7 Procurement Strategy/ Approach

Task Overview

Develop the strategy and approach to the procurement, and start to detail how this will be accomplished.

Specific Activities

- a) Evaluate procurement strategies for the LRV procurement and document basic approach in each case
- b) Identify pros and cons for each approach in the SFMTA context
- c) Identify Federal, City and State requirements which must be complied with, and their impact on the process
- d) Develop recommended approach to the procurement, with justifications
- e) Summarize findings and recommendations into a White Paper.

Task output

White paper documenting the procurement strategy and outline of the approach.

1.8 Confirm with SFMTA Stakeholders

Task Overview

Review white papers and documented efforts to date with key SFMTA stakeholders to confirm buy-in to the technical and procurement approach.

Specific Activities

- a) Collate documents and work done to date, and set up a series of focused meetings with SFMTA stakeholders to obtain concurrence
- b) Make revisions to approach if needed and review final documents with stakeholders
- c) Document concurrence.

Task output

Agreed technical and procurement strategy and approach.

1.9 Industry Outreach

Task Overview

During development of the technical and procurement approaches, a second round of industry meetings will be held. The purpose will be to retain industry engagement and interest, and get feedback into concepts as they are developed.

Specific Activities

- a) Schedule meetings with interested carbuilders
- b) Prepare an information package covering technical and procurement approach for review
- c) Meet with carbuilders (6 are likely)
- d) Document meetings in summary terms.

Task output

Informal report on Industry outreach.

1.10 LRV Concept Report

Task Overview

Using the work streams discussed above, prepare a report which defines the approach to the procurement, in terms of technical decisions, procurement decisions and the various white papers.

Specific Activities

- a) Collate information developed to date
- b) Make revisions as needed to reflect input from stakeholders, industry and other refinements
- c) Prepare final LRV concept report, including technical specification in concept form, procurement approach, schedule and other key issues
- d) Publish LRV concept report.

Task output

LRV concept report with attachments.

2. Prepare Solicitation Package

2.1 LRV Specification Development

Task Overview

Develop the LRV specification outline to completeness. Write the specification in clear language, focusing on performance and must-have interfaces and functionality.

Specific Activities

- a) Collect final data on interfaces
- b) Collect final requirements for functionality
- c) Collect final performance requirements
- d) Update and maintain interface matrix
- e) Ensure full integration with contract and RFP documents
- f) Develop specification outline into fully populated specification to 90% complete stage or better for release for internal and external review.

Task output

LRV Specification, ready for review.

2.2 Industry and Internal Review

Task Overview

Solicit industry (and internal) review of specification and procurement documents as they reach the 90% complete stage. Comments will be collated, considered, responded to (where necessary) and where appropriate incorporated into the final package.

Specific Activities

- a) Release draft specification, contract and RFP documents to industry for review – formally advertise or send directly to participants, depending on advice from counsel
- b) Release draft documents for final round of focused internal review by SFMTA stakeholders
- c) Maintain dialog with reviewers during the review period
- d) Reconcile comments and develop summary list of changes needed to draft documents.

Task output

Feedback into final LRV solicitation package.

2.3 Contract and Solicitation Document Development

Task Overview

Develop the Contract documents to completeness. The basis will be the APTA standard Terms and Conditions, modified where unavoidable to conform to City laws. Develop RFP package, to clearly define the submittal requirements, pre-qualification process and evaluation criteria that will be used.

Specific Activities

- a) Collect final data on contract terms and conditions, including city requirements etc
- b) Develop final RFP and pre-qualification packages
- c) Develop and document evaluation criteria for pre-qualification and proposal review and negotiations, including definition of the basis of award
- d) Ensure full integration with technical specification
- e) Issue RFQ package to solicit qualification packages for pre-qualification phase
- f) Develop contract and RFP documents to 90% complete stage or better for release for internal and external review.

Task output

Contract documents and RFP package, ready for review.

2.4 Prepare RFP Package

Task Overview

Combine the LRV specification, contract documents and instructions to bidders into a single, integrated, RFP package, ready for release to industry for procurement.

Specific Activities

- a) Collate, reconcile and integrate comments from industry and internal review on specification, contract terms and conditions and RFP package
- b) Develop final specification, contract terms and conditions and RFP documents
- c) Perform final review for errors, omissions and lack of integration
- d) Release integrated package to procurement for advertisement
- e) Assist with advertisement process, including identification of publications and websites for advertisement.

Task output

LRV Specification, contract documents and RFP package, ready for advertisement.

3. Procurement Phase

3.1 Requests for Clarifications (RFCs)

Task Overview

Respond to RFCs from potential proposers. Responses should be managed and coordinated, and resolved quickly and treated equitably. Documents shall be modified and reissued via addendum as needed.

Specific Activities

- a) Receive RFCs from suppliers and sub-suppliers
- b) Review and provide responses where appropriate
- c) Maintain accurate integrated record of RFCs received and responses provided
- d) Where responses require revisions to documents issued, collate these into groupings and prepare and release addenda. Pay particular attention to the impact of a change in one area of the package on other areas/documents.

Task output

RFC responses, RFC record, Addenda.

3.2 Qualification Review

Task Overview

Review submitted qualifications packages against pass/fail or scoring criteria developed earlier in the project. Short list of qualified proposers will be produced – pass/fail or scoring above a certain threshold value.

Specific Activities

- a) Receive qualification packages from carbuilders
- b) Maintaining strict confidentiality, review packages against pass/fail or scoring criteria previously developed. Reviews are to be strictly objective and defensible
- c) Collate results of review of each qualification package element into a final score sheet for each carbuilder
- d) Integrate results into pre-qualification shortlist, identifying which carbuilders met and did not meet the baseline requirements, and the relative ranking of each based on scoring. Clearly identify the shortlist of pre-qualified carbuilders.

Task output

Shortlist of qualified proposed, with scoring details.

3.3 Proposal Review and Negotiations

Task Overview

Review submitted proposals against scoring criteria developed earlier in the project. Develop list(s) of negotiation points. Identify best value proposal.

Specific Activities

- a) Receive proposal packages from carbuilders
- b) Maintaining strict confidentiality, review packages against pass/fail or scoring criteria previously developed. Reviews are to be strictly objective and defensible
- c) Collate results of review of each proposal package element into a final score sheet for each carbuilder, identifying strengths and weaknesses and opportunities for negotiation
- d) Participate in negotiation meetings, maintaining records as needed
- e) Revise documentation as needed, including requests for Best And Final Offer (BAFO) if applicable
- f) Review "BAFO" submittals
- g) Develop analysis of final submittals, post negotiations, and identify preferred carbuilder
- h) Develop recommendation of award documents as needed for Board approval

Task output

Results of evaluation, in summary format.

4. Project Support Activities

4.1 Develop PMP/ WBS/ Schedule

Task Overview

Develop detailed Project Management Plan (PMP), together with appropriate levels of detail with WBS and schedule, for the procurement.

Specific Activities

- a) Develop existing PMP, WBS and project schedule into a detailed document meeting FTA criteria
- b) Finalize document and review with internal stakeholders
- c) Release document to FTA, receive and review PMOC comments and make changes if applicable.

Task output

Project Management Plan.

4.2 Monitor CS Simulation Efforts

Task Overview

Monitor efforts by CS project to simulate the CS service, and the resulting impact on LRVs required to operate the service.

Specific Activities

- a) Engage with CS project team to monitor requirements definition, simulation performance and results
- b) Provide comments as necessary
- c) Ensure results which impact LRV quantities are fed back into other project work.

Task output

None.

4.3 Monitor Ridership Modeling Efforts

Task Overview

Monitor efforts by SFMTA Planning to update ridership predications, and the resulting impact on LRVs required to operate the service.

Specific Activities

- a) Engage with SFMTA service planning team to monitor requirements definition, modeling efforts and results
- b) Provide comments as necessary
- c) Ensure results which impact LRV quantities and schedule are fed back into other project work.

Task output

None.

4.4 Define Project Risks

Task Overview

Define the risks facing the project and develop mitigation plans.

Specific Activities

- a) Review overall project and identify technical, schedule and commercial risks
- b) Develop recommended mitigation plans to manage the risks
- c) Collate results into risk matrix, which is to be updated throughout the project.

Task output

Risk Matrix.

4.5 Define Funding Plan

Task Overview

Define the plans to obtain funding for the base buy of LRVs and the various options.

Specific Activities

- a) Identify capital, and operating funding needs associated with the LRV project, and define cash flow over the duration
- b) Work with Finance Department to identify sources of funding
- c) Develop formal funding plan

Task output

Funding Plan.

4.6 PMOC Briefings

Task Overview

Prepare regular activity/ progress summaries to brief FTA/ PMOC of progress in the LRV procurement.

Specific Activities

- a) Prepare specific summaries or input to FTA quarterly report as needed
- b) Review and respond to FTA PMOC comments as needed

Task output

FTA briefings.

5. Schedule

5.1 Outline Schedule

An outline schedule is provided below:

- Start Concept Definition : November , 2012
- Start Detailed design/.RFP Prep. February, 2013
- RFP Completion April, 2013
- Issue RFP May 2013
- Proposals Due August 2013
- Complete Proposal Review/Negotiation September, 2013
- Receive BAFOs December 2013
- NTP to Vendor April 2014