



City of Phoenix

SAMPLE

**CITY OF PHOENIX
PUBLIC TRANSIT DEPARTMENT
INVITATION FOR BID
IFB NO. _____**

BID TITLE

**PREBID/CLARIFICATION MEETING
DATE OF MEETING
TIME OF MEETING. LOCAL TIME**

**BID OPENING
DATE OF MEETING
TIME OF MEETING. LOCAL TIME**

THIS PUBLICATION IS AVAILABLE IN THE FOLLOWING ALTERNATIVE FORMATS: LARGE PRINT, BRAILLE, AUDIOTAPE OR COMPUTER DISKETTE. PLEASE CALL THE PURCHASING RECEPTIONIST AT (602) 262-7181 OR FAX NUMBER (602) 534-1933 FOR ASSISTANCE.

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ESTIMATED SCHEDULE OF EVENTS

- A. DATE IFB issued.
- B. DATE Pre-proposal conference. The conference will be held at TIME Local Time, in the conference room on the 7th floor of the Valley Metro headquarters building at 302 North First Avenue, Phoenix, AZ 85003. Bidders are encouraged to submit written questions at least one week prior to the meeting for review by City.
- C. DATE Last day for submission of questions, if any.
- D. DATE Issuance of Addendum, if any.
- E. DATE Due date for submission of bids. Bids will be received by the Purchasing Division, Eighth Floor, 251 W. Washington, Phoenix, Arizona 85003, until DATE, TIME., PHOENIX TIME. Late Bids will not be considered.
- F. DATE Estimated completion date of the evaluation process.
- G. DATE Award Recommendation.
- H. DATE Issuance of Award.
- I. DATE Post award meeting.
- J. DATE Contract period starts.

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DOCUMENT

- Part I Solicitation, Offer, and Award/Contractual Provision
- Part II Technical Specification / Scope of Work
- Part III Offer Documents and Attachments

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PART I
SOLICITATION, OFFER AND AWARD/CONTRACTUAL PROVISIONS

CITY OF PHOENIX

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PART I

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PART I - SOLICITATION AND CONTRACTUAL PROVISIONS

SECTION 1
SOLICITATION

1.1 SCOPE

The City of Phoenix (CITY) invites bids from responsive and responsible vendors for BID SCOPE. This project is titled the BID TITLE, which includes BID HIGHLIGHTS as described within the Technical Specification. The BID TITLE **shall** be supplied in accordance with the provisions, Specification, and instructions set forth in this Invitation For Bid (IFB). Bids will be received by the Purchasing Division, Eighth Floor, 251 W. Washington, Phoenix, Arizona 85003, until OPENING DATE, TIME., PHOENIX TIME. Late Bids will not be considered.

A pre-bid conference will be held at Time Phoenix Time on Date, in the conference room on the 7th floor of the Valley Metro headquarters building at 302 North First Avenue, Phoenix, AZ. The purpose of the conference is to address questions pertaining to the IFB document.

In order for your bid to be considered, your firm must comply with Phoenix City Code, 1969, Chapter 18, Article V, as amended, Affirmative Action Program. Failure to comply with the reporting requirements of this ordinance will result in your bid being rejected. Firms are also responsible for maintaining their eligibility during the life of any Contract and failure to do so may result in termination of the Contract. A form has been included within this IFB package to assist you in complying with the ordinance. Any questions in regard to this Affirmative Action Program should be directed to the Affirmative Action Contractor Compliance Section of the Equal Opportunity Department, (602) 262-6790. The City extends to each individual, firm, vendor, supplier, Contractor and subcontractor an equal economic opportunity to compete for City business. Successful majority firms are expected to use disadvantaged, minority-owned and women-owned businesses in the subcontracting and purchasing of services and commodities that reflect the business community ethnic composition.

Any questions in regard to this IFB should be directed to Alton Jones, Procurement Supervisor, Seventh Floor, 301 North First Street., Phoenix, Arizona, 85003, Phone Number (602) 261-8918, FAX (602) 495-2002

1.2 CONTRACT LENGTH:

This Invitation for Bid is for awarding a contract to cover a FIVE (5) year period. The expected start date for the contract is CONTRACT START DATE.

1.3 OPTION TO EXTEND:

The CITY may, at it's option and with the approval of the Vendor, extend the period of this agreement up to a maximum of ____(), ____() year options. The Vendor shall be notified in writing by CITY of it's intention to extend the contract period at least thirty (30) calendar days prior to the expiration of the original contract period.

1.4 CONTRACT DOCUMENTS

Any Contract resulting from this IFB **shall** include the following, which are incorporated herein:

- Part I – Solicitation, Offer and Award/Contractual Provisions
- Part II – Technical Specification and Table of Conformance
- Part III – Bid Documents and Attachments
- The Contractor's bid.
- Federal excise tax exemption certificate and certificates for all other tax exemptions.
- Resolution from the City of Phoenix approving the Contract and certifying availability of funds.
- Addenda - As issued.

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1.5 DEFINITIONS

The following are definitions of special terms used in this document.

- 1.5.1 AGREEMENT - The Contract to be negotiated and entered into by City and the successful bidder for the Work described in this IFB (see Attachment F).
- 1.5.2 AUTHORIZED SIGNEE -The person who is executing this Contract for the Bidder/Contractor and is authorized to bind the Bidder/Contractor.
- 1.5.3 BIDDER/VENDOR/CONTRACTOR - Any manufacturer, company or agency providing program management, software engineering, hardware engineering, service, devices, components, and subassemblies participating in this IFB.
- 1.5.4 CITY - The City of Phoenix, a municipal corporation
- 1.5.5 CONSULTANT - An independent firm used to monitor EFCS development activities
- 1.5.6 CONTRACTING OFFICER -The Deputy Finance Director.
- 1.5.7 DAYS - Normal business days of City staff offices, unless otherwise specifically noted. (see Part I, Section 1.1.32)
- 1.5.8 DEFECT - Patent or latent malfunction or failure in manufacture or design of any component or subsystem that causes a product to cease operating or causes it to operate in a degraded mode.
- 1.5.9 DEPUTY FINANCE DIRECTOR - The person who is executing this Contract for the City and has complete and final authority except as limited herein.
- 1.5.10 PERFORMANCE - The ability of a system or product to comply with the required Technical Specification and to function during its expected economic life in a reliable and other satisfactory manner under actual operating conditions. Also, the ability of a manufacturer to comply, during the expected economic life of the system or product, with all contractual terms and conditions specified in this RFP.
- 1.5.11 PROCURING AGENCY - The City of Phoenix.
- 1.5.12 BIDDER RESPONSE - A written document submitted by a bidder in response to this IFB.
- 1.5.13 PUBLIC TRANSIT - City of Phoenix Public Transit Department.
- 1.5.14 IFB – Invitation For Bid
- 1.5.15 RELATED DEFECT - Damage inflicted on any component or subsystem as a direct result of a defect.
- 1.5.16 WORK - Any and all of the labor, material, services, supervision, tools, machinery, equipment, supplies, facilities, and support used by the Contractor in accordance with achieving the Technical Specification requirements for which City has contracted with the Contractor as called for by the Agreement and necessary to the completion thereof.

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1.6 BID REQUIREMENTS

Competitive sealed bids **shall** be submitted consisting of one (1) original and _____ (__) copies, both in hard copy form (paper) and _____ (__) compact discs (CDs). The submitted CDs **shall** be identical to one another and **shall** contain electronic file copies of all proposal text, spreadsheets, and diagrams included in the hard copy technical and price proposal packages. The electronic file copies **shall** be presented in Microsoft Word and Microsoft Excel, or word processing, Adobe PDF format, and spreadsheet applications. Acceptable formats of the electronic files **shall** be up to the latest release of these programs. Proposals **shall** be received at the address shown in Part I, Section 1.1 and by the date specified in Part I, Section 1.1. The Instructions to Bidders is contained in Part I, Section 9 of this IFB. Bid bond requirements are specified in Part I, Section 1.14.

1.7 PRICING SCHEDULE

The bidder **shall** complete and execute the pricing schedule shown in Part III. For this procurement, the City will be responsible for all Use, State, and local taxes. The City **shall** be liable for any taxes applicable to the complete product as delivered that are promulgated and become effective between the date of proposal opening and the delivery date.

1.8 DELIVERY PROCEDURE

Delivery **shall** be determined by signed receipt by the City's designated agent(s) at the point of delivery and will be preceded by an acceptance test as defined in IFB Part II, the Technical Specification. The point of delivery **shall** be City of Phoenix, Public Transit Department, 302 N. First Avenue, Phoenix, Arizona, 85003 or as designated by the Director of Public Transit, or designee, for this project.

1.9 DELIVERY SCHEDULE

Hours of delivery **shall** be 8:00 a.m. through 3:00 p.m. during normal City working hours (defined in the Standard Work Schedule clause, Part I, Section 1.32) or as arranged with the City for this project.

1.10 SERVICE AND PRODUCTS

As stated in the Technical Specifications

1.11 PAYMENT SCHEDULE

The City **shall** compensate the Contractor for satisfactory and complete performance of the Work under this Agreement the total fixed purchase price as set forth in the Agreement. Payment **shall** be based on the payment milestones listed below.

The City **shall** make payment within 30 days after acceptance of each payment milestone activity in the payment milestone schedule, as approved by the City, unless other payment terms are given (Section III, Payment Terms). The Contractor **shall** submit invoices in the amounts indicated in the milestone for a minimum thirty-day period. The invoices **shall** include as a minimum:

- Purchase Order/Contract/RFP number
- Line item number and description on Purchase Order
- Supporting documentation indicating milestone completion
- Unit and total prices by line item number
- Invoice amount.

In the event the Contractor submits invoices containing erroneous billing information, Contractor **shall** be held liable for City costs incurred to review and correct these erroneous invoices.

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Payment milestones have been selected that clearly identify the actual status of the portion of the Work completed rather than anticipated project progress schedules. Payments will be based on actual completion of each milestone event, as approved by City, not on the scheduled completion date. However, City will make no payments before the milestone in question is completed. Milestones **shall** not be invoiced more frequently than once a month. City will not approve a milestone payment until all preceding milestones have been approved.

When a change is made to the Agreement, the Purchase Price will be changed as needed and the milestone payments will be adjusted by mutual agreement of the Contractor and City.

The payment milestones are:

- 1.11.1 _____ percent (__) of the Contract Purchase Price upon City approval of the detailed project schedule meeting the requirements of Specification Section II and a complete list of training, hardware, software, and other documentation deliverables.
- 1.11.2 _____ percent (__) of the Contract Purchase Price upon:
 - 1.11.2.1 Approval of Preliminary Design Review (PDR) documents and completion of the PDR described in Technical Specification Section II.
 - 1.11.2.2 Approval of all Final Design Review (FDR) documents and completion of the FDR described in Technical Specification Section II.
- 1.11.3 _____ percent (__) of the Contract Purchase Price upon:
 - 1.11.3.1 Successful installation and performance testing of _____ .
 - 1.11.3.2 Completion of the _____ test.
- 1.11.4 _____ percent (__) on successful installation and checkout of _____ equipment on all of the fixed-route buses.
- 1.11.5 _____ percent (__) of the Contract Purchase Price upon successful installation and checkout of the _____.
- 1.11.6 _____ percent (__) of the Contract Purchase Price upon successful completion of the complete _____, receipt of all final documentation reflecting all changes and corrections, and acceptance, in writing, of the system by City.
- 1.11.7 _____ percent (__) of the Contract Purchase Price upon successful completion of the warranty period.

1.12 EVALUATION AND AWARD

Award **shall** be based on the procedures and criteria set forth in Part I, Section 10 of this RFP.

1.13 PRE-PROPOSAL CONFERENCE

Proposers may attend a pre-proposal conference held to clarify the requirements of this RFP. This meeting will be held on the date indicated in Part I, Section 1.1. Proposers are encouraged to submit their written questions at least one week prior to the meeting, for review by City.

1.14 PROPOSAL PREPARATION

Proposers **shall** submit sealed technical and price proposal packages. Price proposals **shall** be submitted separate from technical proposals. The contents of each sealed package **shall** be clearly marked with the proposer's name, the RFP number and title, and the words "**PROPOSAL SUBMITTAL**" on the outside of the envelope.

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Each proposer's submittal package **shall** contain:

- 1.14.1 Properly completed pages of the Part III, Offer Documents and Attachments
- 1.14.2 Technical Proposal
- 1.14.3 Price Proposal (separate package)
- 1.14.4 All requirements of Part 1 Section 9
- 1.14.5 All applicable bonds (see Part I, Section 1.14).

No responsibility will attach to City, or any official or employee thereof, for the early opening of, late opening of, or the failure to open a proposal that is not properly addressed and identified.

1.15 BID BOND

Each proposal must be accompanied by an acceptable Bid Bond, cashier's or certified check or postal money order (hereinafter collectively referred to as "bid bond") equal to _____ % of the proposed price made payable to the City of Phoenix, as a guarantee that if the Work is awarded to the proposer, the proposer will within two weeks from the date of Notice to Award, enter into proper contract and bond condition for the faithful performance of the Work, otherwise, said amount may be forfeited to the City of Phoenix as liquidated damages.

1.16 PERFORMANCE SURETY REQUIREMENTS

Proposals **shall** be accompanied by a notarized letter from a surety company, holding a Certificate of Authority to transact surety business in Arizona, certifying that the successful proposer can obtain the required bonds in the amount and within the time period specified in the Contract.

The Contractor **shall** provide a performance bond within two weeks after notice of award. The City will not issue a written purchase order or give notice to proceed in any form until the Purchasing Division receives the bond. The performance bond must be in the form of a bond, cashier's check, certified check or money order. Personal or company checks are not acceptable unless certified. If surety is in the form of a bond, the company issuing the surety must be authorized by the Insurance Department of Arizona to transact business in the State of Arizona or be named on the approved listing of non-admitted companies. A Certificate of Deposit issued by a local Phoenix bank may also be used as a form of surety provided that the Certificate of Deposit is issued jointly in the name of the City and the Contractor, and that the Contractor endorses the Certificate of Deposit over to the City at the beginning of the Contract period. The Contractor can retain interest earnings from the Certificate of Deposit.

Within 30 days of the award of the Contract, the Contractor **shall** furnish the City with the following bonds:

- 1.16.1 A Performance Bond in an amount equal to \$_____ conditioned upon the faithful performance of the Contract in accordance with terms, Technical Specification, and conditions thereof. Such bond **shall** be solely for the protection of the City.
- 1.16.2 A Payment Bond in an amount equal to \$_____ solely for the protection of claimants supplying labor or materials to the Contractor or the Subcontractors in the prosecution of the work provided for in such Contract.

Each such bond **shall** include a provision allowing the prevailing party in a suit on such bond to recover as a part of their judgment such reasonable attorney's fees as may be fixed by a judge of the court.

A surety company or companies holding a certificate of authority to transact surety business in the State of Arizona issued by the Director of the Department of Insurance **shall** execute each such bond. An individual surety or sureties **shall** not execute the bonds. The bonds **shall** be made payable and acceptable to the City.

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The bonds **shall** be written or countersigned by an authorized representative of the surety who is either a resident of the State of Arizona or whose principal office is maintained in this state, as by law required, and the bonds **shall** have attached thereto a certified copy of the Power of Attorney of the signing official. In addition, said company or companies **shall** be rated "Best A-" or better as required by the Contracting Agency, as currently listed in the most recent Best Key Rating Guide, published by the A.M. Best Company.

Bonds are to be identified with proposal serial number, title, and return address.

1.17 PROPOSAL POSTPONEMENT AND AMENDMENT

The City reserves the right to revise or amend the Technical Specification requirements or any RFP requirements up to the time set for submission of the proposals. Such revisions and amendments, if any, **shall** be issued in writing by amendments to this RFP. Copies of such amendments **shall** be furnished to all prospective proposers. If the amendments significantly change the RFP, the date set for proposal submission may be postponed by such number of days as in the opinion of the City **shall** enable proposers to revise their proposals. In any case, the proposal due date **shall** be at least five working days after the last amendment and the amendments **shall** include an announcement of the new date, if applicable, for proposal submission.

1.18 ACCEPTANCE OF PROPOSALS

City reserves the right to reject any and all proposals or any portion of a specific proposal and to waive any informalities or irregularities in any proposals received.

Issuance of the RFP and receipt of proposals does not commit City to award an Agreement. City reserves the right to postpone opening for its own convenience, to accept or reject any or all proposals received in response to this RFP, to negotiate with other than the selected proposer should negotiations with the first selected proposer be terminated, to negotiate with more than one proposer simultaneously, or to cancel all or part of this RFP. City may require selected proposers to participate in negotiations and submit such cost or technical data or other revisions of its proposals as may result from the negotiations.

City will accept the proposal based on the evaluation criteria stated in this RFP.

Upon acceptance in writing by City of the final offer to furnish any and all of the services described herein, the parties **shall** promptly execute the final Agreement documents. The written Agreement **shall** bind the proposer to furnish and deliver at the price proposed and in accordance with conditions of the accepted proposal and this RFP, as negotiated.

1.19 SINGLE PROPOSAL RESPONSE

If only one proposal is received in response to the RFP, a detailed cost/price bid may be requested of the single proposer. A cost or price analysis and evaluation and/or audit of the cost may be performed in order to determine if the price is fair and reasonable. If the City determines a cost analysis is required, proposer must be prepared to provide, upon request, cost summaries of estimated costs (i.e., labor, equipment, supplies, and overhead costs, etc.) and documentation supporting all cost elements.

1.20 PROPOSAL WITHDRAWAL

After the proposals are opened, proposals may not be withdrawn for 180 calendar days. Prior to the date/time set for proposal opening, however, proposals may be modified or withdrawn by the proposer's authorized representative in person, or by written or telegraphic notice. If proposals are modified or withdrawn in person, the authorized representative **shall** make their identity known and **shall** sign a receipt for the proposal. Written or telegraphic notices **shall** be received in the office designated in Section 1.1 no later than the exact date and time for proposal opening. A telegraphic modification or withdrawal received in the designated office by telephone from the receiving telegraph office no later than the date and time set for proposal opening **shall** be considered if such message is confirmed by a copy of the telegram.

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1.21 AWARD PROCEDURE

Public Transit Department will simultaneously send a copy of the recommendation to the City's Deputy Finance Director and each proposer. Within thirty (30) days of receiving the recommendation the City's Deputy Finance Director **shall** submit a request for council action to City Council for award. CITY will notify successful proposer of award within seven days of Council approval.

1.22 OPTIONS AND EVALUATION OF OPTIONS

By signing and submitting this proposal, proposer agrees that the City may at any time prior to _____ () years after award of Contract, purchase any of the options for the proposed prices stated in the proposal as submitted.

Proposers shall note that options will be evaluated by CITY before the exercise thereof. CITY will, before the exercise of the option, determine that the option price is better than the price available in the market or that the option is the more advantageous offer at the time.

FTA requirements for the exercise of options is shown below:

Options. Grantees may include options in contracts. An option is a unilateral right in a contract by which, for a specified time, a grantee may elect to purchase additional equipment, supplies, or services called for by the contract, or may elect to extend the term of the contract. If a grantee chooses to use options, the requirements below apply:

(1) Evaluation of Options. The option quantities or periods contained in the proposer's bid or offer must be evaluated in order to determine contract award. When options have not been evaluated as part of the award, the exercise of such options will be considered a sole source procurement.

(2) Exercise of Options.

(a) A grantee must ensure that the exercise of an option is in accordance with the terms and conditions of the option stated in the initial contract awarded.

(b) An option may not be exercised unless the grantee has determined that the option price is better than prices available in the market or that the option is the more advantageous offer at the time the option is exercised.

1.23 PROTEST PROCEDURES

Any interested party who has an objection to the pre-award procurement document, process or award of a materials, commodities or services contract to any Proposer by the City of Phoenix, pursuant to competitive proposal procedures, **shall** lodge that protest, in writing, with the Deputy Finance Director prior to award by the City Council. Any interested party who has an objection after the award may submit a post-award protest, in writing, within ten calendar days after award of the materials, commodities or services contract. All protests **shall** clearly state the grounds for the protest and the relief sought. The City will respond, in detail, to each substantive issue raised in the protest. The City will not make award prior to resolution of protest or open proposals prior to resolution of protest filed before proposal opening.

This is a Federal Transit Administration (FTA) funded procurement and is subject to FTA rules and regulations. FTA only accepts protests alleging that a grantee fails to have written protest procedures or has violated such procedures. Written protest procedures are available from the point of contact named in Part I, Section 1.1. upon request.

1.24 PROTOTYPE PRODUCT REVIEW

Not used in this RFP

1.25 ASSIGNABILITY AND PIGGYBACKING

Contractor thereof, may assign neither the resulting Agreement, nor any portion without the written consent of the City first having been obtained. Any attempt by the Contractor to assign any performance of this Contract without the written consent of the City **shall** be null and void and **shall** constitute a breach of this Contract.

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The Proposer agrees that the resulting contract can be assigned to other Valley Metro members for the purchase of additional hardware or options. In case of Piggyback usage of the contract by other Valley Metro members, the maximum quantities cannot exceed _____ % of the solicited quantities.

Note:

The term "piggybacking" is defined as the post-award use of a contractual document/process that allows someone who was not contemplated in the original procurement to purchase the same supplies or equipment through the original document/process.

Piggybacking is permissible when: (a) the solicitation document and the resultant contract contain an assignability clause that provides for the assignment of all or part of the specified deliverables as originally advertised, competed, evaluated, and awarded. This includes the base and option quantities. In addition, the original solicitation and resultant contract must contain both a minimum and a maximum quantity, which represent the reasonably foreseeable needs of the parties to the solicitation.

"Tag-ons" are not permitted. This term is defined as the adding on to the contracted quantities (base and option) as originally advertised, competed, and awarded, whether for the use of the buyer or for others and then treating the add-on portion as though it met the requirement of competition.

1.26 INSURANCE

INSURANCE (WORKERS COMP/GENERAL LIABILITY)

Contractor and subcontractors **shall** procure and maintain until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

The insurance requirements herein are minimum requirements for this contact and in no way limit the indemnity covenants contained in this Contract. The City in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Contract by the Contractor, his agents, representatives, employees or subcontractors and Contractor is free to purchase such additional insurance as may be determined necessary.

MINIMUM SCOPE AND LIMITS OF INSURANCE

Contractor **shall** provide coverage at least as broad and with limits of liability not less than those stated below.
Commercial General Liability - Occurrence Form
(Form CG 0001, ed. 10/93 or any replacements thereof)

General Aggregate	\$500,000
Products-Completed Operations Aggregate	\$500,000
Personal & Advertising Injury	\$500,000
Each Occurrence	\$500,000
Fire Damage (Any one fire)	\$ 50,000
Medical Expense (Any one person)	Optional
Workers' Compensation and Employer's Liability	
Workers' Compensation	Statutory
Employer's Liability:	
Each Accident	\$100,000
Disease-Each Employee	\$100,000
Disease-Policy Limit	\$500,000

SELF-INSURED RETENTIONS/DEDUCTIBLES

Any self-insured retentions and deductibles must be declared to and approved by the City. If not approved, the City may require that the insurer reduce or eliminate such self-insured retentions with respect to the City, its officers, agents, employees and volunteers.

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OTHER INSURANCE REQUIREMENTS

The policies are to contain, or be endorsed to contain, the following provisions:

Commercial General Liability

The City of Phoenix, its officers, officials, agents, employees are additional insureds for all goods and services furnished to the City of Phoenix with respect to liability arising out of activities performed by, or on behalf of, the Contractor including the City's general supervision of the Contractor.

The Contractor's insurance **shall** contain broad form contractual liability coverage.

The City, its, officers, officials, agents, employees and volunteers **shall** be additional insureds to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Contract. The Contractor's insurance coverage **shall** be primary insurance with respect to the City, its, officers, officials, agents, employees and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, agents, employees or volunteers **shall** be in excess to the coverage of the Contractor's insurance and **shall** not contribute to it.

The Contractor's insurance **shall** apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

Coverage provided by the Contractor **shall** not be limited to the liability assumed under the indemnification provisions of this Contract.

The policies **shall** contain a waiver of subrogation against the City, its officers, officials, agents, employees and volunteers for losses arising from work performed by the Contractor for the City.

Workers' Compensation and Employer's Liability Coverage

The insurer **shall** agree to waive all rights of subrogation against the City, its officers, officials, agents, employees and volunteers for losses arising from work performed by the Contractor for the City.

NOTICE OF CANCELLATION

Each insurance policy required by the insurance provisions of this Contract **shall** not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to the City. Such notice **shall** be sent directly to: Insurance Secretary, 251 West Washington, 8th Floor, Phoenix, AZ 85003 and **shall** be sent by certified mail, return receipt requested.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers duly licensed or approved unlicensed companies in the State of Arizona and with a "Best's" rating of not less than A-: VII. The City in no way warrants that the above required minimum insurer rating is sufficient to protect the Contractor from potential insurer insolvency.

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VERIFICATION OF COVERAGE

Contractor **shall** furnish the City with Certificates of Insurance (ACORD form or equivalent approved by the City) required by this Contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. Any policy endorsements that restrict or limit coverage **shall** be clearly noted on the certificate of insurance.

All certificates must include a reference to the RFP number and are to be received and approved by the City before work commences. Each insurance policy required by this Contract must be in effect at or prior to commencement of work under this Contract and remain in effect for the duration of the project. Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of contract.

All certificates required by this agreement **shall** be sent directly to: Insurance Secretary, 251 West Washington, 8th Floor, Phoenix, AZ 85003. The project number and project description are to be noted on the Certificate of Insurance. The City reserves the right to require complete, certified copies of all insurance policies and endorsements required by this Contract, at any time.

APPROVAL

Any modification or variation from the insurance requirements in this Contract must have prior approval from the City of Phoenix Law Department, whose decision **shall** be final. Such action will not require a formal Contract amendment, but may be made by administrative action.

1.27 BASE CONTRACT PRICE ADJUSTMENT

1.27.1 Price Adjustment

The City may, at its sole discretion, exercise any of the Options listed in the Contract within _____ () years of Notice to Proceed, subject to Price Adjustment as presented below.

Prices for Options on the Price Proposal Form **shall** be offered in calendar year _____ dollars and will be adjusted at the time the option is exercised based on the indices and weightings described below.

The Price Adjustment **shall** be determined as follows:

- 1.27.1.1 Base Economic Index: At the time of Notice to Proceed, the base economic index will be established from which future price adjustments are calculated. The base economic index will be determined at Notice to Proceed by selecting the latest available, published rate from the indices indicated below.
- 1.27.1.2 Revised Economic Index: At the time the option is exercised, a revised economic index will be determined by selecting the latest available, published rate from the indices indicated below. The Economic Price Adjustment will be determined by calculating the ratio of the Base Economic Indices and the Revised Economic Indices and applying those ratios to the appropriate price. The method of calculation is shown below.

1.27.2 Price Composition

The assumed price composition for any item **shall** be:

Labor	= 50%	of the unit price
Material	= 40%	of the unit price
Firm	= 10%	of the unit price

Material price adjustment will be based on the Bureau of Labor Statistics publication "Producer Price Indexes" code number 3699, commodity group 3699-P ("Electrical Equipment and Supplies Not Elsewhere Classified, Primary Products"), code number 3571, commodity group 3571#1 (General Purpose Digital Computers), and code number 4812, commodity group 4812 # (Wireless Communications).

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The adjustment formula **shall** be:

$$PA = (L \times EP) \times (L2 - L1)/L1 + (M \times EP) \times (M2 - M1)/M1$$

where:

PA = Price Adjusted Amount

EP = Price Eligible for adjustment

L = Labor % of Eligible Price

M = Material % of Eligible Price

(L1) Base Labor Index = Most current published index at Notice to Proceed.

(L2) Price Adjustment Index = Latest available, published index at time the option is exercised.

(M1) Base Material Index = Latest available, published index at Notice to Proceed.

(M2) Price Adjustment Material Index = Latest available, published index at time the option is exercised.

All ratios will be rounded to the nearest 1/10 of 1 percent.

All price adjustments will be rounded to the nearest cent.

1.27.3 Indices and Adjustment

Labor price adjustment will be based on the Bureau of Labor Statistics publication "Employment and Earnings," Major Industry Group Services1, Business Services.

1.28 GOVERNING LAW

The validity, construction, effect, and enforcement of the Agreement and the obligations, rights, and remedies of the parties thereunder **shall** be governed by the laws of the State of Arizona.

1.29 SEVERABILITY

Should one or more of the provisions contained in the Agreement be determined to be invalid, illegal, or unenforceable in any respect, the validity, legality, and enforceability of the remainder of the Agreement **shall** be unaffected. The affected provision **shall** be amended or interpreted, if possible, so as to correct the deficiency and give effect to the intent of the parties.

1.30 AUTHORIZED REPRESENTATIVES AND NOTICES

The Contractor **shall** designate a representative to represent its organization and act on its behalf. This agent **shall** have the authority to make binding and enforceable decisions in the name of the Contractor and to accept all notices that the City desires to serve, or that are required by the Agreement to be served, on the Contractor. At the start of the Work, the Contractor **shall** advise the City, in writing, of the name, address, and telephone number (both day and night) of such designated agent. The Contractor **shall** notify the City promptly of any changes in this designation.

The City **shall** likewise designate its representative and **shall** notify the Contractor in writing of the name of such representative and of any subsequent change in such designation.

Any notices provided for hereunder may be served in person on the representative of either party or may be sent by registered mail to the address of either party.

1.31 SUBCONTRACTORS

Prior to entering into a formal agreement with the City, the Contractor **shall** submit for the City's approval a complete list of the names and addresses of all major subcontractors proposed for the work, together with a description of the extent and character of the portion of the work to be done by each. Any subcontract with a value equal to or exceeding \$ _____ **shall** be considered a major subcontract. Major subcontractors engaged

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subsequent to the signing of the Agreement **shall** likewise be submitted for the City's approval. No such approval **shall** relieve the Contractor of any of the obligations of the Agreement, and the Contractor **shall** remain responsible to the City as though no such subcontract had been made.

The Contractor **shall** be responsible for the acts and omissions of all subcontractors and of all persons employed by the subcontractors. If for sufficient reason at any time during the progress of the work the City determines that any subcontractor is incompetent or undesirable, the City will notify the Contractor accordingly, and immediate steps **shall** be taken for cancellation of such subcontract. Any work sublet by any subcontractor or supplier **shall** also be subject to cancellation upon written notification by the City.

The Contractor **shall** incorporate the relevant Sections of this RFP into all of its subcontracts so that every subcontractor **shall** be bound by the terms of the Agreement as far as it is applicable to the subcontractor's performance of the work. Nothing herein **shall** create any contract between any subcontractor and the City or any obligation on the part of the City to pay, or see to the payment of, any sums to any subcontractor of the Contractor.

1.32 NONWAIVER

Except for scheduled payment milestones, the City's failure to notify the Contractor, in writing, of the rejection of any hardware or software or failure to specify particular defect(s) in the hardware or software after rejection or acceptance thereof, will not bar the City from any remedies which it may otherwise have. For scheduled payment milestones, the City will not be barred from any remedies, which it may otherwise have, provided the City acts in good faith to notify the Contractor of the reason for rejection, even though the reason for rejection may subsequently be determined to be inaccurate or incomplete.

Inspections and payments made under the Agreement **shall** not constitute conclusive evidence of satisfactory performance hereunder, either wholly or in part. No payment **shall** be construed to be an acceptance of either defective work or nonconforming hardware or software.

1.33 STANDARD WORK SCHEDULE

Work scheduled and performed by the Contractor on the City's premises or items delivered to the City **shall** conform to published City working hours and **shall** account for the City's observed holidays.

1.34 INTERFERENCE WITH OPERATIONS

The Contractor **shall** not interfere with normal operation of the City's facilities or equipment, or the work of any contractors or subcontractors on the City's premises. When the Contractor anticipates unavoidable interference, it **shall** so notify the City at least 14 days in advance. The City's representative will determine, in advance, whether such interference is unavoidable and will, if required, establish the necessary procedures under which the interference will be allowed. The City **shall** have final determination of priorities in case of conflicts with the operations of others. The Contractor **shall** not operate any of the City's equipment or control devices or those of any other contractor or subcontractor on the City's premises, except at the direction and under the immediate supervision of the City's representative.

1.35 RELEASE OF INFORMATION

The Contractor **shall** not release any information, including the award of Contract or the Contract price, concerning this project or any part thereof in any form, including advertising, news releases, or professional articles, without written permission from the proper authorities of the City.

1.36 FINAL ACCEPTANCE

Final acceptance of the system will occur only after successful completion by the Contractor of payment milestones one (1) through seven (7), including all final testing, and after the City's receipt of all final

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documentation reflecting all changes and corrections, including those resulting from field performance testing and availability testing.

The Contractor **shall** request final acceptance in writing stipulating the following:

- 1.36.1 All Work is completed.
- 1.36.2 Final acceptance and payment does not constitute a waiver by the City of any rights with respect to the Contractor's continuing obligations under the Agreement.
- 1.36.3 A waiver of all claims beyond final payment by the Contractor against the City other than those previously made in writing and still unsettled.

Final acceptance of the Work will be confirmed by the City in writing and by making the final payment to the Contractor.

1.37 RIGHT TO USE HARDWARE OR SOFTWARE REQUIRING CORRECTION

After the hardware and software has been installed and if it, or any part thereof, or the process performed thereby should require correction, the City **shall** have the right to use such hardware or software until such time as it is convenient to the City for the hardware or software, or any part thereof, to be removed from service for correction. Such use **shall** not constitute acceptance, nor **shall** it constitute a waiver of any of the City's rights with respect to said hardware or software.

1.38 WARRANTY

The Contractor warrants that the hardware and software, and all parts thereof, to be delivered to the respective job sites as set forth in this RFP **shall** be of the kind and quality described in this RFP, **shall** perform in the manner specified, and **shall** be fit for the purpose for which they are supplied. The Contractor **shall** correct, without delay and at its own expense, any failure to comply with the warranty hereunder that is discovered within one year after final acceptance of the Work by correcting the defective hardware or software, including any required correction in defective design or by providing a non-defective replacement thereof on the City's premises.

The Contractor **shall** submit a draft Warranty Plan for Valley Metro's review at the FDR and a final Warranty Plan for Valley Metro Acceptance a minimum of 60 days prior to the start of the first warranty period for any System Components. The Warranty Plan **shall** detail all processes and procedures to be used for any and all anticipated warranty redesign, repairs, or replacements during the warranty period and **shall** conform to all requirements set forth in the Contract. The Warranty Plan **shall** include any procedures provided by Valley Metro.

Warranty plan Acceptance does not waive any Valley Metro rights. Warranties described in this article are in addition to any statutory implied warranties or remedies imposed on the Contractor.

Contractor proposal **shall** address in detail response times to help Valley Metro to achieve maximum availability of the fareboxes with minimum loss of revenue (during warranty period).

Valley Metro currently operates buses for twenty (20) hours on weekdays and sixteen (16) hours on weekends and holidays.

The Contractor may use spare parts that are purchased by the City to replace a failed or defective part. Any City-owned spare part used to meet the Warranty requirements **shall** be replaced in the City's spare parts inventory within 14 calendar days of its use.

The costs of replacement of the defective hardware or software **shall** be at the Contractor's expense and **shall** include all shipping costs for failed or replacement parts, both to and from the Contractor's facility; any costs associated with replacement of a City's spare part; any technical advice and direction from the Contractor's

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factory for troubleshooting, removal of the defect, and installation of the corrected hardware or software; and any on-site related costs for travel, troubleshooting, and repair.

The Contractor **shall** correct all design defects identified by the City prior to the expiration of the warranty. The warranty **shall** be extended, if required, so that it remains in force for a period of not less than ninety days after all such design defects have been corrected.

If the Contractor **shall** fail to correct any defect hereunder, the City **shall** have the right to employ others to do so. The Contractor **shall** be liable for all costs and expenses thereby incurred by the City.

1.39 SPARE AND EXPANSION PARTS

Contractor will supply at reasonable cost all required spare and expansion parts and maintenance services that may be required for the system for a period of not less than ten years from date of final acceptance.

The Contractor will further agree that if a supplier can no longer fulfill its maintenance and spare part obligations, the Contractor will provide or secure for the City the necessary maintenance services and, on a form, fit, and function basis, the required spare parts. If the furnishing of a spare part requires design or redesign by the Contractor or others, the definition of "reasonable cost" will include a verifiable, reasonable, one-time engineering charge. The Contractor will also agree that, if after final acceptance the Contractor should cease operations or otherwise be unable to fulfill its maintenance and spare-part obligation, the Contractor will transfer all necessary maintenance and manufacturing documentation, including agreements with suppliers, to the City so that the City can provide for itself or secure from a third party the necessary maintenance services and spare parts.

If due to merger, sale, receivership, or any other reasons the composition or ownership of the Contractor changes, the resulting organization will be bound to the obligations of this Section for the remaining duration of this 10-year period.

1.40 RESTRICTIONS

There **shall** be no restrictions on the City's use, ownership, or transfer of the system hardware and software without restriction, in whatever manner is necessary for the operation of the Valley Metro transit system.

1.41 DOCUMENT REPRODUCTION

The City reserves the right to reproduce any and all documentation produced by the Contractor, whether such documentation is the Contractor's standard documentation or such documentation is prepared specifically for the EFCS project, for distribution within the City, other Valley Metro agencies, and the City's consultant for the use in connection with the system to be supplied by the Contractor under the Agreement, despite any notice to the contrary appearing on the documentation.

1.42 RISK OF LOSS

The risk of any and all types of loss or damage from whatever cause, including actions or omissions by the City, **shall** be and remain with the Contractor until the hardware and software have been delivered to the City and the equipment set in place, uncrated, interconnected with power and signal cables, and energized. After any such loss or damage, the Contractor **shall**, at its own expense, with due diligence and dispatch, replace the hardware or software lost or damaged.

1.43 CONSULTANT'S AUTHORITY

The City may employ a Consultant in any manner it sees fit in connection with the Agreement, including but not limited to having the Consultant participate in any or all meetings with the Contractor or its subcontractors, review and comment on any or all documents from the Contractor or subcontractors, and witness and assist in the conduct of any or all inspections or tests of the Work, wherever conducted. The Consultant **shall** act as advisor in all aspects to the City.

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The City may give the Consultant the authority to act on behalf of the City or other Valley Metro agencies. In the absence of a written statement setting forth the Consultant's authority, the Contractor **shall** not accept any instructions, written or oral, directly from the Consultant.

1.44 TESTS AND INSPECTIONS

The Contractor **shall** conduct at its responsibility and expense, all tests and inspections called for by the Agreement. The Contractor **shall** repair and replace, at its sole expense and without delay, anything found defective by tests and inspections and also conduct at its own responsibility and expense re-inspection and retest to demonstrate to the City's satisfaction that the defects have been corrected and no additional defects have been introduced. Any inspection required by statutory authority, the Contractor at its authority and expense must carry out governmental regulation, or other similar authority.

The City **shall** have the right to inspect or observe the production, inspection, or testing of the Work at any time and place, including the Contractor's facilities and those of its subcontractors, where the Work is being produced. The Contractor **shall** provide at least ten (10) business days notification of tests and inspections. The witnessing of the Contractor's tests and inspections by the City **shall** not relieve the Contractor of any of its responsibilities or liabilities under the Agreement, nor be interpreted in any way as implying acceptance of the Work.

1.45 APPROVALS

As called for in the Agreement, the Contractor will provide documents for approval by City. Any approval or conditional approval with comment signifies permission to the Contractor to proceed with the Work and indicates, but does not warrant, that the City has seen nothing in the document at variance with the Agreement. The Contractor's proceeding with the Work prior to this approval is at the Contractor's own risk. Neither approval nor conditional approval with comment **shall** relieve the Contractor of any of his responsibilities under the Agreement.

1.46 RIGHT TO USE AND ADAPT

There **shall** be no restrictions on the City's rights to use, modify, expand, add to, or in any way adapt the Work or any portion thereof to best suit Valley Metro's needs as determined by the City at any time following the end of the warranty period. If the City elects to make changes to the Work during the warranty period, the effect on the warranty will be by mutual agreement.

The City's rights include, but are not limited to, adding hardware or software from suppliers whether or not they were previously involved in the Work, providing those suppliers with documentation of the Work as needed for proper interfacing of the additions to the Work, modifying the Work to permit the additions, and continuing to use the Work and all portions of it, whether modified or not, with the additions. The City has the further right to use the Work, with or without additions, for purposes not envisioned at the execution of the Agreement and not described therein. These rights **shall** survive the Agreement.

1.47 CONTRACT ADMINISTRATION

To ensure contract compliance, a contract administration process will be an integral part of this contract. CITY employees will be assigned as contract monitors. The contract administration process is an audit and feedback system and will be in addition to any of the other policies and procedures contained in the RFP. The Contract Administration Process is a total quality management tool that empowers the CITY to monitor and assure contract compliance. The Proposers should know in the proposal process that the successful Proposer will be closely monitored for contract compliance. No additional cost is anticipated to be incurred by the successful Proposer by the presence of the contract administration process as long as contract compliance is maintained. Except for the more formalized feedback of findings, the normal Proposer/user relationship will exist within compliance, and the contract administration process should be transparent.

1.48 POST AWARD MEETING:

The successful Contractor may be required to attend a Post-Award Meeting with Public Transit for discussion of

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the terms and conditions of this Contract. The Public Transit Contract Specialist will coordinate this meeting.

1.49 EXCEPTIONS TO THE SOLICITATION

The Contractor will identify and list all exceptions taken to all sections of this RFP and list these exceptions referencing the section (paragraph) where the exception exists and then identify the exceptions and the proposed wording for the contractors exception. The Contractor will list these exceptions in the Best and Final Proposal under the heading "Exception to the PROPOSAL Solicitation". Exceptions that surface elsewhere and that do not also appear under the heading "Exception to the PROPOSAL Solicitation", shall be considered invalid and void and of no contractual significance.

The CITY reserves the right to reject, render the proposal non-responsive, enter into negotiation on any of the contractor exceptions, or accept them outright

1.50 BREACHES AND DISPUTE RESOLUTION

Applicability to Contracts

This paragraph contains provisions or conditions which will allow for administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate. This may include provisions for bonding, penalties for late or inadequate performance, retained earnings, liquidated damages or other appropriate measures.

Flow Down

The Breaches and Dispute Resolutions requirements flow down to all tiers.

Disputes:

Disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of CITY's Public Transit Director. This decision shall be final and conclusive unless within ten (10) days from the date of receipt of its copy, the Contractor mails or otherwise furnishes a written appeal to the CITY's Public Transit Director. In connection with any such appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the CITY's Public Transit Director shall be binding upon the Contractor and the Contractor shall abide by the decision.

Performance During Dispute:

Unless otherwise directed by CITY's Public Transit Director, Contractor shall continue performance under this Contract while matters in dispute are being resolved.

Claims for Damages :

Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of his employees, agents or others for whose acts he is legally liable, a claim for damages therefor shall be made in writing to such other party within a reasonable time after the first observance of such injury of damage.

Remedies:

Unless this contract provides otherwise, all claims, counterclaims, disputes and other matters in question between the CITY and the Contractor arising out of or relating to this agreement or its breach will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State of Arizona.

Rights and Remedies :

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by CITY or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

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1.51 APPLICABILITY OF BROOKS ACT:

Brooks Act does not apply to this RFP.

1.52 ADDITION/DELETION OF SERVICES AND PRODUCTS:

The CITY reserves the right to add and/or delete services or products to this contract. Should a service/product requirement be deleted, payments to the Contractor will be reduced proportionately, to the amount of service/product reduced in accordance with the proposal price. Should additional services/products be required from this Contract, prices for such additions will be negotiated between the Contractor and City.

All such changes, which are mutually agreed upon by and between all parties, shall be incorporated in written amendments to this Contract. All such amendments shall state any increase or decrease in the amount of the compensation due to the Contractor for the change in the scope.

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SECTION 2
CONTRACTUAL PROVISIONS REQUIRED CLAUSES (FTA)

The Contractor **shall** comply with the following required Federal Transit Administration clauses.

2.1 CONTRACTOR CHANGES

Any proposed change in this Contract **shall** be submitted in writing to the City for its prior approval.

2.2 INTEREST OF MEMBERS OF, OR DELEGATES TO, CONGRESS

No member of, or delegate to, the Congress of the United States **shall** be admitted to any share or part of this Contract or to any benefit arising therefrom.

2.3 PROHIBITED INTEREST

No member, officer or employee of the City or of a local public body during his tenure or one year thereafter **shall** have any interest, direct or indirect, in this Contract or the proceeds thereof.

2.4 EQUAL EMPLOYMENT OPPORTUNITY

In connection with the execution of this Contract, the Contractor **shall** not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. The Contractor **shall** take affirmative action to insure that applicants are employed and that employees are treated, during their employment, without regard to their race, religion, color, sex or national origin. Such actions **shall** include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. All proposers **shall** be certified and Equal Opportunity Employer, by City of Phoenix, Equal Opportunity Department prior to proposal opening. If you have submitted the forms, the manufacturer can call (602) 262-6790 to verify status.

2.5 CLEAN AIR

2.5.1 The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. " 7401 et seq. The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

2.5.2 The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or part with Federal assistance provided by FTA.

2.6 MOTOR VEHICLE SAFETY STANDARDS

Not required for this proposal.

2.7 MOTOR VEHICLE POLLUTION REQUIREMENTS

Not required for this proposal.

2.8 DISADVANTAGED BUSINESS ENTERPRISE

For this RFP the City of Phoenix has established that there is no goal, for the utilization of Disadvantaged Business Enterprises owned, operated, and controlled by socially and economically disadvantaged individuals. Although there was not a DBE goal established for this contract, it is strongly encourage that the CONTRACTOR use, wherever

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possible, Disadvantaged Business Enterprises owned, operated, and controlled by socially and economically disadvantaged individuals.

The City of Phoenix extends to each individual, firm, vendor, supplier, contractor, and subcontractor an equal economic opportunity to compete for City business and strongly encourages voluntary use of disadvantaged and/or minority-or women-owned businesses to reflect both the industry and community ethnic composition.

The use of such businesses is encouraged whenever practicable. The City of Phoenix publishes a directory of minority-owned and women-owned businesses through the Equal Opportunity Department. Individuals, firms, vendors, suppliers, contractors, and subcontractors are encouraged to contact the Equal Opportunity Department at (602) 262-6790 for assistance in identifying minority-and women owned businesses.

2.9 CARGO PREFERENCE

The Contractor agrees:

To utilize privately owned United States flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners and tankers) involved, whenever shipping any equipment, material or commodities pursuant to this Contract, to the extent such vessels are available at fair and reasonable rates for United States flag commercial vessels.

To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, onboard commercial ocean bill-of-lading in English for each shipment of cargo described in the paragraph above to the FTA Administrator and the City (through the prime Contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, D.C. 20230.

To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this Contract.

2.10 BUY AMERICA

The Buy America requirement provides that federal funds may not be obligated for mass transportation projects unless steel, cement, and manufactured products used in such projects are produced in the United States. The requirement will not apply in the following four cases:

- 2.10.1 When its application is against the public interest (as decided by the FTA Administration on a case by case basis).
- 2.10.2 When the required materials and products are not produced in the U.S. in sufficient quantities and of satisfactory quality.
- 2.10.3 When, in the procurement of buses and other rolling stock, the cost of the components which are produced in the U.S. is more than 60 percent of the cost of all components of the vehicle or equipment, and if the final assembly takes place in the U.S.
- 2.10.4 When the inclusion of domestic material will increase the overall cost of the project Contract by more than 25 percent in the case of projects for the acquisition of buses and rolling stock, and 25 percent in the case of all other projects.

The CONTRACTOR as a condition of responsiveness, **shall** submit with the proposal a completed Buy America Certification, ATTACHMENT A.

The proposer, who seeks to establish grounds for an exception, must seek the exception, in writing, to Purchasing Division at least thirty (30) days prior to proposal opening. When a petition for investigation has been filed with FTA before award, the Purchaser reserves the right to not make an award prior to the resolution of the investigation by FTA and when a request for investigation has been filed with FTA before the opening of proposals, the Purchaser reserves the right to not open proposals prior to the resolution of the investigation by FTA.

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2.11 ENERGY EFFICIENCY

Supplier agrees to abide by the mandatory standards and policies relating to energy efficiency that are contained in the State of Arizona Energy Conservation plan as issued to be in compliance with the Energy Policy and Conservation Act (P.L. 94-163).

2.12 PRE-AWARD AND POST-DELIVERY PRODUCT PROCUREMENT AUDITS

The contractor agrees to comply with 49 U.S.C. #5323(I) and FTA's implementing regulation at 49 C.F.R. Part 663 and to submit the required certifications.

2.13 DEBARRED PROPOSER

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Lower Tier-covered Transactions (Third Party Contracts over \$100,000).

The CONTRACTOR **shall** be required to submit a certified copy of ATTACHMENT B with this proposal.

- 2.13.1 By signing and submitting this proposal, the prospective lower tier participant is providing the signed certification set out below.
- 2.13.2 The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, (Recipient) may pursue available remedies, including suspension and/or debarment.
- 2.13.3 The prospective lower tier participant **shall** provide immediate written notice to (Recipient) if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 2.13.4 The terms covered "transaction", "debarred", "suspended", "ineligible", "lower tier-covered transaction", "participant", "persons", "principal", "proposal", and "voluntarily excluded", as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549 [49 CFR Part 29]. You may contact (Recipient) for assistance in obtaining a copy of those regulations.
- 2.13.5 The prospective lower tier participant agrees by submitting this proposal that, should the proposed tier-covered transaction be entered into, it **shall** not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized in writing by (Recipient).
- 2.13.6 The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 2.13.7 A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Non-procurement List issued by U.S. General Service Administration.
- 2.13.8 Nothing contained in the foregoing **shall** be construed to require establishment of system of records in order to render in good faith the certification required by this clause. The

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knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

- 2.13.9 Except for transactions authorized under Paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to all remedies available to the Federal Government, (Recipient) may pursue available remedies including suspension and/or debarment. Neither CONTRACTOR nor any officer or controlling interest holder of the CONTRACTOR, is currently, or has been previously, on a debarred proposer list maintained by the United States Government. The CONTRACTOR **shall** be required to submit a certified copy of ATTACHMENT B with this agreement.

2.14 PRODUCT TESTING CERTIFICATION

As stated in the Technical Specifications

2.15 CERTIFICATION OF RESTRICTIONS ON LOBBYING

For all purchases exceeding \$100,000 the Proposer is required to complete ATTACHMENT C certifying compliance with P.L. 101-121, Section 319, that no Federal Funds have been used to support lobbying activities to exert influence regarding the award of a Federal contract and that such requirements have been imposed upon contractors and subcontractors.

If non-Federal Funds have been used to support lobbying activities, a disclosure form, Standard Form-LLL "Disclosure Form to Report Lobbying" must be submitted in accordance with P.L. 101-121, Section 319.

2.16 COMPETITIVE PROPOSING

In connection with the performance of this Contract, the Proposer **shall** submit a completed Free Competitive Proposing Affidavit, ATTACHMENT D, and return with the proposal.

2.17 FEDERAL CHANGES

Contractor **shall** at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Agreement (Form FTA MA (2) dated October, 1995) between Purchaser and FTA, as they may be amended or promulgated from time to time during the term of this Contract. Contractor failure to so comply **shall** constitute a material breach of this Contract.

2.18 CLEAN WATER

- 2.18.1 The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.
- 2.18.2 The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

2.19 CONTRACT WORK HOURS

- 2.19.1 **Overtime requirements.** No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics **shall** require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

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- 2.19.2 **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any subcontractor responsible therefore **shall** be liable for the unpaid wages. In addition, such Contractor and subcontractor **shall** be liable to the United States for liquidated damages. Such liquidated damages **shall** be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
- 2.19.3 **Withholding for unpaid wages and liquidated damages.** The (write in the name of the grantee or recipient) **shall** upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- 2.19.4 **Subcontracts.** The Contractor or subcontractor **shall** insert in any subcontracts the clauses set forth in this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor **shall** be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this section.
- 2.19.5 **Payrolls and basic records.** (I) Payrolls and basic records relating thereto **shall** be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records **shall** contain the name, address, and social security number of each worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor **shall** maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs **shall** maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

2.20 PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. "3801 et seq. and U.S. DOT regulations, Program Fraud Civil Remedies, @ 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying Contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made,

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pertaining to the underlying Contract or the FTA assisted project for which this Contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. '5307, the Government reserves the right to impose the penalties of 18 U.S.C. '1001 and 49 U.S.C. '5307 (n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses **shall** not be modified, except to identify the subcontractor who will be subject to the provisions.

2.21 PRIVACY ACT

The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. ' 552a. Among other things, the Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its employees operate a system of records on behalf of the Federal Government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.

The Contractor also agrees to include these requirements in each subcontract to administer any system records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

2.22 INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS

The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1C, dated May 1, 1995, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms **shall** be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor **shall** not perform any act, fail to perform any act, or refuse to comply with any (name of grantee) requests which would cause (name of grantee) to be in violation of the FTA terms and conditions.

2.23 RECYCLED PRODUCTS

The Contractor agrees to comply with all the requirements of Section 6002 of the resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

2.24 NO OBLIGATION BY THE FEDERAL GOVERNMENT

The City and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and **shall** not be subject to any obligations or liabilities to the City, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying Contract.

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The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause **shall** not be modified, except to identify the subcontractor who will be subject to its provisions.

2.25 NOTIFICATION OF FEDERAL PARTICIPATION

This project is expected to have the following funding, federal 20% and local 80%.

2.26 CONTRACTOR LICENSE REQUIREMENT

The Contractor **shall** procure all permits and licenses, and pay all charges and fees necessary and incidental to the lawful conduct of their business. The Contractor **shall** keep themselves fully informed of existing and future Federal, State, and Local laws, ordinances and regulations which in any manner affect the fulfillment of this contract and **shall** comply with the same.

The Contractor furnishing finished products, materials or articles of merchandise that will require installation or attachment as a part of the Contract, **shall** possess any licenses required by the Arizona Registrar of Contractors. The Contractor is not relieved of its obligation to possess the required licenses by subcontracting out the labor portion of the Contract. Proposers are advised to contact the Arizona Registrar of Contractors, Chief of Licensing, at (602) 542-1502 to ascertain licensing requirements for a particular contract. Proposers **shall** identify which license(s), if any, the Registrar of Contractors requires for performance of the Contract.

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SECTION 3
REQUIRED CLAUSES (CITY)

3.1 LIABILITIES AGAINST PROCURING AGENCY

The Contractor **shall** indemnify, keep and save harmless the City, other agencies using this proposal, all agents, officials and employees against all injuries, deaths, losses, damages, claims, suits, liabilities, judgments, costs and expenses, which may accrue against the City arising out of or resulting from the Contractor's acts of omissions, or those of its employees, servants and agents.

The City **shall** give the Contractor prompt notice in writing of the institution of any suit or proceeding or of any incident which could give rise to such suit or proceeding, and furnish Contractor with all information, assistance and authority to enable Contractor to defend same.

3.2 PATENT INFRINGEMENT

The City will advise the Contractor of any impending patent suit and provide all information available. The Contractor **shall** defend any suit or proceeding brought against the City based on a claim that any equipment or any part thereof furnished under this Contract constitutes an infringement of any patent and the Contractor **shall** pay all damages and costs awarded therein, including incidental and consequential damages against the City. In case said equipment or any part thereof is in such suit held to constitute infringement and use of said equipment or parts is enjoined, the Contractor **shall**, at its own expense and at its option, either procure for the City the right to continue using said equipment or part or replace same with non-infringing equipment or modify it so it becomes non-infringing.

3.3 OMISSION

Notwithstanding the provision of drawings, technical specifications or other data by the City, the Contractor **shall** have the responsibility of supplying all parts and details required to make the EFCS complete and ready for service even though such details may not be specifically mentioned in the drawings and Specifications.

3.4 ORDER OF PRECEDENCE

In the event of a conflict, the following Order of Precedence **shall** be applied:

- 3.4.1 The Agreement
- 3.4.2 Federal Conditions
- 3.4.3 City Conditions
- 3.4.4 The Specification, as amended, and as resolved by the final Table of Conformance, which establishes
- 3.4.5 the minimum requirements for the Work
- 3.4.6 Clarification of and amendments to the Contractor's proposal as agreed and listed in order of precedence here:
 - 3.4.6.1 ** Subject, Title of document, document #, date, etc.
 - 3.4.6.2
 - 3.4.6.3

The CONTRACTOR's proposal which, when not in conflict with the above Purchase Documents, establishes a superior set of requirements for the Work.

3.5 WRITTEN CHANGE ORDERS

Oral change orders are not permitted. No change in this Contract **shall** be made unless the Deputy Finance Director gives prior written approval. The Contractor **shall** be liable for all costs resulting from and/or for

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satisfactorily correcting any specification change not properly ordered by written modification to the Contract and signed by the Contracting Officer.

3.6 CHANGE ORDER PROCEDURE

Within 14 calendar days after receipt of the written change order to modify the Contract, the Contractor **shall** submit to the Deputy Finance Director a detailed price schedule proposal for the work to be performed. This proposal **shall** be accepted or modified by negotiation between the Contractor and the Deputy Finance Director. At that time a detailed modification **shall** be executed in writing by both parties. Disagreements that cannot be resolved within negotiations **shall** be resolved in accordance with the Contract disputes clause. Regardless of any disputes, the Contractor **shall** proceed with the work ordered, provided the City has obtained the prior concurrence of FTA.

3.7 PRICE ADJUSTMENT FOR REGULATORY CHANGES

If price adjustment is indicated, either upward or downward, it **shall** be negotiated between the City and the Contractor for changes that are mandatory as a result of legislation or regulations that are promulgated and become effective between the date of proposal opening and the date of manufacture. Such price adjustment may be audited, where required.

3.8 INTERCHANGEABILITY

All units and components procured under this Contract, whether provided by suppliers or manufactured by the Contractor, **shall** be duplicates in design, manufacture and installation to assure interchangeability among products in this procurement. This interchangeability **shall** extend to the individual components as well as to their locations in the products.

3.9 MATERIALS/ACCESSORIES RESPONSIBILITY

The Contractor **shall** be responsible for all materials and workmanship in the construction of the product and all accessories used, whether the same are manufactured by the Contractor or purchased from supplier.

3.10 INSPECTION OF JOB SITE

Each proposer **shall** make an estimate of the local difficulties that may be encountered in carrying out the requirements of this RFP. The proposer may arrange to inspect the job sites where the EFCS will be installed by contacting the representative indicated in Part I, Section 1.1.

3.11 CODE OF ETHICS & WRITTEN STANDARDS OF CONDUCT

CODE OF ETHICS Proposer understands that CITY is governed by a Code of Ethics. Copies of Code of Ethics can be obtained from Contract Specialist, Public Transit, 302 North first Ave., Suite 700, Phoenix, AZ 85003; Phone:602-261-8283, Fax: 602-495-2002; E-mail: kdayal@ci.phoenix.az.us.

Written Standards of Conduct. CITY maintains a written code of standards of conduct governing the performance of their employees engaged in the award and administration of contracts. No employee, officer, agent, immediate family member, or Board member of CITY shall participate in the selection, award, or administration of a contract supported by FTA funds if a conflict of interest, real or apparent, would be involved.

Such a conflict would arise when any of the following has a financial or other interest in the firm selected for award:

(1) The employee, officer, agent, or Board member, (2) Any member of his/her immediate family, (3) His or her partner, or (4) An organization that employs, or is about to employ, any of the above. CITY's officers, employees, agents, or Board members will neither solicit nor accept gifts, gratuities, favors, or anything of monetary value from contractors, potential contractors, or parties to subagreements. CITY Administrative Regulations 2.93 Revised sets minimum rules where the financial interest is not substantial or the gift is an unsolicited item of

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nominal intrinsic value. To the extent permitted by state or local law or regulations, such standards of conduct provide for penalties, sanctions, or other disciplinary action for violation of such standards by the CITY's officers, employees, or agents, or by contractors or their agents.

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SECTION 4
SERVICE AND PARTS

4.1 INSTRUCTORS

As required by Part II, Technical Specification.

4.2 ENGINEERS

As required by Part II, Technical Specification.

4.3 DOCUMENTS

As required by Part II, Technical Specification.

4.4 LICENSING

Where licenses for software, firmware, or other elements of the Work are required, they **shall** be furnished to City by the Contractor on a paid-up and perpetual basis. They **shall** be in accord with the requirements of the Specification and **shall** allow for operation of software on primary and back-up processors. These licenses **shall** survive adaptation of the Work. These licenses **shall** also apply to upgrade and replacement of processor and network hardware purchased by the City during the life of the _____ and **shall** permit the City to use the software without restriction in whatever manner necessary for the operation of the Valley Metro transit system.

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SECTION 5
DELIVERIES

5.1 UNAVOIDABLE DELAYS

If the delivery of completed product under this Contract should be unavoidably delayed, the Deputy Finance Director **shall** extend the time for completion of the Contract for the determined number of days of excusable delay. A delay is unavoidable only if the delay was not reasonably expected to occur in connection with or during the Contractor's performance and was not caused directly or substantially by acts, omissions, negligence or mistakes of the Contractor, the Contractor's suppliers or their agents and was substantial and, in fact, caused the Contractor to miss delivery dates and could not adequately have been guarded against by contractual or legal means.

5.2 NOTIFICATION OF DELAY

The Contractor **shall** notify the Deputy Finance Director as soon as the Contractor has, or should have, knowledge that an event has occurred which will delay deliveries. Within five days, the Contractor **shall** confirm such notice in writing, furnishing as much detail as is available.

5.3 REQUEST FOR EXTENSION

The Contractor agrees to supply, as soon as such information are available, any reasonable proofs that are required by the Deputy Finance Director to make a decision on any request for extension. The Deputy Finance Director **shall** examine the request and any documents supplied by the Contractor and **shall** determine if the Contractor is entitled to an extension and the duration of such extension. The Deputy Finance Director **shall** notify the Contractor of his decision in writing.

It is expressly understood and agreed that the Contractor **shall** not be entitled to damages or compensation and **shall** not be reimbursed for losses on account of delays resulting from any cause under this provision.

5.4 PREDELIVERY TESTS AND INSPECTION

The pre-delivery tests and inspections **shall** be performed at the Contractor's or subcontractor's plant. They **shall** be performed in accordance with the procedures defined in Part II Technical Specifications.

5.5 ASSUMPTION OF RISK OF LOSS

See Part I, Section 1.37.

5.6 ACCEPTANCE OF PRODUCT

The product **shall** undergo tests defined in Part II Technical Specifications after installation of each segment of Contract.

5.7 REPAIRS AFTER NONACCEPTANCE

The City will require the Contractor, or its designated representative, to perform the repairs after non-acceptance. Contractor **shall** provide a time schedule for repair and re-testing for the City approval.

5.8 REPAIRS BY CONTRACTOR

If the City requires the Contractor to perform repairs after non-acceptance of the system, the Contractor's representative must begin work within five working days after receiving notification from the City of failure of acceptance tests.

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5.9 REPAIRS BY CITY

If repairs are required to be done by the City that are outside of the terms of this Contract they **shall** be done in accordance with the following guidelines:

- 5.9.1 Parts Used - If the City is required to perform the repairs of the system, it **shall** correct or repair the defect and any related defects using Contractor-specified parts available from its own stock or supplied by the Contractor specifically for this repair. Monthly, or at a period to be mutually agreed upon, reports of all repairs covered by this procedure **shall** be submitted by the City to the Contractor for reimbursement. The Contractor **shall** provide forms for these reports.
- 5.9.2 Contractor Supplied Parts - If the Contractor supplies parts for repairs being performed by the City, these parts **shall** be shipped prepaid to the City from any source selected by the Contractor within 2 working days after receipt of the request for said parts.
- 5.9.3 Return of Defective Components - The Contractor may request that parts covered by this provision be returned to the manufacturing plant. The total cost for this action **shall** be paid by the Contractor.
- 5.9.4 Reimbursement for Labor - The City **shall** be reimbursed by the Contractor for labor. The amount **shall** be determined by multiplying the number of man-hours actually required to correct the defect by a per hour, first class technician, straight wage rate, plus 75 percent fringe benefits plus the cost of towing in the bus, if such action were necessary.
- 5.9.5 Reimbursement for Parts - The City **shall** be reimbursed by the Contractor for defective parts that must be replaced to correct the defect. The reimbursement **shall** include taxes where applicable, 25 percent handling costs and a 20% service charge for reimbursements 60 or more days late.

5.10 TITLE

The Contractor **shall** retain title and be responsible for movement of the equipment from the delivery carrier onto the premises and for the subsequent unpacking of the equipment. Title of the hardware **shall** pass to the City upon placement of the equipment with the City's premises prior to commencement of its installation, subject to the City's inspection thereof.

If for any reason the Work is terminated prior to its completion, the title to all hardware and documentation portions of the work performed to that time and the possession of, together with the right to use and all applicable licenses for all software portions of the work performed at that time, whether at the Contractor's facility, in transit, or on the City's premises, **shall** immediately pass to the City unless the City's notice of termination specifically declines title or possession to all or some of the Work.

5.11 LIQUIDATED DAMAGES

If the Contractor fails to complete the mini-fleet test described in the Technical Specification within sixty (60) days of the completion date specified for this test in the approved project schedule, the Contractor or its sureties **shall** pay to the City as fixed, agreed, and liquidated damages for each calendar day of delay in completing the mini-fleet test an amount equivalent to one-tenth of one-percent (0.1%) of the total purchase price of the Contract. The counting of delay days **shall** begin on the ninety-first day following or agreed upon date for completion of the mini-fleet test. These payments **shall** continue until the mini-fleet test is successfully completed or until a maximum value of ten percent (10%) of the Contract purchase price has been reached. Payments for liquidated damages will be deducted by the City from subsequent milestone payments.

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5.12 AUDIT AND INSPECTION OF RECORDS

The Contractor **shall** permit the authorized representative of the United States Department of Transportation and of the Comptroller General of the United States to inspect and audit all data and records of the Contractor relating to its performance and its subcontracts under this Contract with which Federal funds are used from the date of the Contract through and until the expiration of three years after completion of the Contract. This section excludes the inspection data and records required in Part III Quality Assurance Provisions. The inspection and audit provided in this section does not include an audit of the manufacturer's cost and/or profit, with the exception of single proposal or sole source situations.

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SECTION 6
TERMINATION OF CONTRACT

6.1 TERMINATION FOR CONVENIENCE

The City may, by written notice of default to the Contractor, terminate the whole or any part of this Contract, if the Contractor fails to make delivery of the supplies or to perform the services within the time specified herein or any extension thereof; or if the Contractor fails to perform any of the other material provisions of the Contract or so fails to make progress as to materially endanger performance of this Contract in accordance with its terms and in either of these two circumstances does not cure such failure within a period of 10 days (or such longer period as the Deputy Finance Director may authorize in writing) after receipt of notice from the Deputy Finance Director specifying such failure.

If the Contract is terminated in whole or in part for default, the City may procure, upon such terms and in such manner as the Deputy Finance Director may deem appropriate, supplies or services similar to those so terminated. The Contractor **shall** be liable to the City for any excess costs for such similar supplies or services and **shall** continue the performance of this Contract to the extent not terminated under the provisions of this clause.

Except with respect to defaults of subcontractors, the Contractor **shall** not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor and if such default arises out of causes beyond the control of both the Contractor and subcontractor and without the fault or negligence of either of them, the Contractor **shall** not be liable for any excess costs for failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.

Payment for completed supplies delivered to and accepted by the City **shall** be at the Contract price. The City may withhold from amounts otherwise due the Contractor for such completed supplies such sum as the Deputy Finance Director determines to be necessary to protect the City against loss because of outstanding liens or claims of former lien holders.

If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause or that the default was excusable under the provisions of this clause, the rights and obligations of the parties **shall** be the same as if the notice of termination had been issued pursuant to termination for the convenience of the City.

The rights and remedies of the City provided in this clause **shall** not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

6.2 TERMINATION FOR DEFAULT

The City may, by written notice of default to the Contractor, terminate the whole or any part of this Contract, if the Contractor fails to make delivery of the supplies or to perform the services within the time specified herein or any extension thereof; or if the Contractor fails to perform any of the other material provisions of the Contract or so fails to make progress as to materially endanger performance of this Contract in accordance with its terms and in either of these two circumstances does not cure such failure within a period of 10 days (or such longer period as the Deputy Finance Director may authorize in writing) after receipt of notice from the Deputy Finance Director specifying such failure.

If the Contract is terminated in whole or in part for default, the City may procure, upon such terms and in such manner as the Deputy Finance Director may deem appropriate, supplies or services similar to those so terminated. The Contractor **shall** be liable to the City for any excess costs for such similar supplies or services and **shall** continue the performance of this Contract to the extent not terminated under the provisions of this clause.

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Except with respect to defaults of subcontractors, the Contractor **shall** not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor and if such default arises out of causes beyond the control of both the Contractor and subcontractor and without the fault or negligence of either of them, the Contractor **shall** not be liable for any excess costs for failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.

Payment for completed supplies delivered to and accepted by the City **shall** be at the Contract price. The City may withhold from amounts otherwise due the Contractor for such completed supplies such sum as the Deputy Finance Director determines to be necessary to protect the City against loss because of outstanding liens or claims of former lien holders.

If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause or that the default was excusable under the provisions of this clause, the rights and obligations of the parties **shall** be the same as if the notice of termination had been issued pursuant to termination for the convenience of the City.

The rights and remedies of the City provided in this clause **shall** not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

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SECTION 7
COMMUNICATIONS

7.1 CONFIRMATIONS

Official communications in connection with this Contract **shall** be in writing and **shall** be delivered personally or by electronic mail, FAX, telex, telegram, TWX or by regular, registered mail, or certified mail addressed to the officer(s) or employee(s) of the City and of the Contractor designated to receive such communications. Any correspondence using electronic mail **shall** also be submitted in hardcopy format using any of the other delivery types noted. Telephone calls may be used to expedite communications but **shall** not be official communication unless confirmed in writing.

7.2 OFFICIAL RECEIPT

Communications **shall** be considered received at the time actually received by the addressee or designated agent.

7.3 COMMUNICATIONS WITH CITY OFFICIALS DURING THE BID PROCESS

With respect to the RFP, Vendors/Bidders/Proposers **shall** not communicate with City officials, other than the Procurement Officer and/or Public Transit Contract Specialist after the bid issuance through the time of final award, unless specific permissions have been obtained from the Procurement Officer and/or Public Transit Contract Specialist.

Failure to conform to this requirement, may result in the Vendors/Bidders/Proposers being disqualified for reasons of having obtained non-competitive advantages.

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SECTION 8
CONDITIONAL ACCEPTANCE

8.1 CONDITIONAL ACCEPTANCE

Not required for this RFP.

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SECTION 9
INSTRUCTIONS TO PROPOSERS

9.1 PROPOSALS

By submitting a proposal, the proposer represents that it has thoroughly examined and become familiar with the Work required under this RFP and that it is capable of performing quality work to achieve the objectives of the City.

City is not responsible for any costs incurred by the proposers prior to award and execution of an agreement. Proposers **shall** not include any such expenses as a part of their proposals.

Proposals **shall** be submitted in accordance with the following instructions. Failure to comply with the instructions included in this Section may disqualify the proposer from further consideration.

9.2 PROPOSAL SUBMISSION DATES

The proposal submission date and time deadline is specified in Part I, Section 1.1. Only proposals received on or before the submission deadline will be considered. City will consider extending the submission deadline only if this extension is requested at least two weeks before the initial submission date or for reasons beyond the control of the proposer.

City reserves the right to change its requirements prior to the proposal submission date for proposers. Any such change will be provided as an addendum to the RFP. City will consider extension of the submission date if the addendum causes the proposers to require more preparation time.

Any extension of the proposal submission date will be granted equally to all proposers.

9.3 PROPOSAL CONTENTS

Each proposal **shall** contain all of the information listed below. Proposals **shall** be organized with tabbed dividers, as indicated below.

9.3.1 TAB 1 – Summary

- 9.3.1.1 A letter of transmittal signed in ink by a duly authorized officer of the proposer's company, containing, as a minimum, the following information:
- 9.3.1.2 Identification of the proposer and subcontractors, including name, address, and telephone number of each
- 9.3.1.3 Acknowledgment of receipt of the RFP addenda, if any (list all addenda received) (see Part III)
- 9.3.1.4 Name, title, address, and telephone number of the proposer's contact person during the evaluation
- 9.3.1.5 A statement indicating the number of days from the date of submittal for which the proposal is valid
- 9.3.1.6 Signature of a representative authorized to bind the proposer to the terms of the proposal.
- 9.3.1.7 A detailed Table of Contents of the proposal.
- 9.3.1.8 A management summary providing an overview of the proposal.

9.3.2 TAB 2 – Qualifications

- 9.3.2.1 Description of the proposer's company and major subcontractors, including type of products and services offered, the year founded, and forms of organization (corporation,

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partnership, and sole proprietorship). The percent of the work to be performed by each party should be indicated.

9.3.2.2 Qualifications of the proposer and the proposed subcontractors and suppliers of major system items, such as the processors. The qualifications **shall** include experience with similar projects, contracts awarded for similar equipment and software as proposed and similar equipment and software that is installed and operational. Also describe the proposer's experience working with the subcontractor/s on other similar projects.

9.3.2.3 A description of each such project currently being implemented by your company. Each description **shall** include size of the fleet, the major system functions, the Contract start date, Contract delivery date, planned delivery date and an explanation of reasons for any delays, a description of the hardware and software, a description of any notable unique features, and a contact name and phone number.

9.3.2.4 A copy of the audited financial statements (including balance sheet and income statements) of the proposer for the last five years, together with the financial statements of any parent or affiliated company of the proposer for the same period.

9.3.3 TAB 3 - Project Organization and Staffing

9.3.3.1 A description of your company organization, including:

§ A current company organization chart with reporting lines; names and titles of manager, supervisors, and key staff personnel; and number of technical employees in each work group.

§ A description of the organization of the group that will be responsible for project implementation and where it fits into the company organization. Identify the city in which this group is located.

§ A description of the groups within your company that provide software, hardware, or services to the group responsible for the project. Show where these groups fit on the company organization and identify the reporting lines.

§ A project organization chart that clearly delineates communication and reporting relationships among the project staff and among the various subcontractors involved, if any.

9.3.3.2 Information about the project manager and the principal project participants for both the proposer and major subcontractors:

§ Describe the responsibilities of the project manager. What control will the project manager have over scheduling, reporting of progress, and management of resources to meet the schedule? Indicate the percent of time the project manager will be assigned to the project. Identify the city in which the project manager is located. Identify the other project the proposed Project Manager is involved in.

§ Describe the responsibilities of principal project participants (i.e., software leader, lead systems analyst, lead computer hardware engineer, and lead officer) and the percent of their time assigned to the project during each major project activity. Identify the other project the proposed project personnel are involved in.

§ Identify the individual proposed for each position in (1) and (2) above, provide references from other similar projects (names and phone numbers), and identify the city in which the individual is located.

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- 9.3.3.3 A resume for each of the key proposer and subcontractor personnel who will be involved in the project. The resumes should describe education, experience (including the year for completion of each project), and professional credentials.
- 9.3.3.4 A description of the proposer's and subcontractor's ability to accomplish current projects and the project with the planned workforce, and their ability to complete the project within the required schedule. Include a statement acknowledging that no key person will be removed or replaced without written concurrence of City.

9.3.4 TAB 4 - Work Plan

- 9.3.4.1 A detailed, well-conceived work plan and methodology to be used to accomplish the project.
- 9.3.4.2 A detailed schedule of project activities, per Section 3.0 of the Technical Specification. All project payment milestones defined in the RFP **shall** be shown on the schedule. This schedule **shall** form the basis for the project implementation if the proposer is the successful proposer.
- 9.3.4.3 A description of any major development activities required for the project. The status of each development activity and its planned completion date **shall** be included.

9.3.5 TAB 5 - System Description

- 9.3.5.1 System configuration drawings that match the equipment list of deliverables (TAB 8)
- 9.3.5.2 A complete, detailed, and clear description of the proposed System to meet all functional requirements of the Specification. This description **shall** use the same numbering format and section naming as the Technical Specification.
- 9.3.5.3 A description of how the proposer proposes to meet the contractual and special requirements, including _____.
- 9.3.5.4 Anticipated weights, shipping dimensions, power, and environmental conditioning requirements for all major pieces of equipment proposed.
- 9.3.5.5 Dimensioned drawings of the proposed equipment.

9.3.6 TAB 6 - Table of Conformance

- 9.3.6.1 A Table of Conformance listing each numbered paragraph, each figure, and table in the solicitation, Specification, required FTA clauses, and required City clauses, stating for each whether the proposed system conforms or not. A numbered paragraph includes all material in both numbered and unnumbered paragraphs up to the next numbered paragraph. The proposer **shall** include in the Table of Conformance, for each numbered paragraph, a cross-reference to pertinent sections of the proposer's proposal. The proposer **shall** provide details of each exception and alternative. If proposer conforms to all the requirements of the RFP, then a certified statement to this effect will suffice and the proposer will not be required to provide detailed information.
- 9.3.6.2 If the proposer fails to supply the Table of Conformance, its proposal will not be considered. In the case of missing, individual conformance statements, City will assume that the proposer's proposed system is in conformance with the RFP, and if the proposer

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is awarded this Agreement, the proposer **shall** be required to meet all such requirements without exception.

The only acceptable statements in the Table of Conformance are:

- 9.3.6.2.1 Conform: The proposer's proposed system meets the requirements in the manner indicated by this RFP.
- 9.3.6.2.2 Alternative: The proposer's proposed system uses an approach at variance with the RFP, which the proposer believes meets the intent of the RFP. The proposer **shall** explain the proposed alternative.
- 9.3.6.2.3 Exception: The proposer's proposed system does not meet the requirements of the RFP and no alternative is proposed. It will be assumed that the proposer agrees to the provisions of this RFP, and in the adequacy of said RFP for bidding purposes unless exceptions are specifically and clearly listed in the bid. The proposer's printed Terms and Conditions are not considered specific exceptions.

9.3.7 TAB 7 - Bid Questionnaire Responses

- 9.3.7.1 A completely filled-out response to the bid questionnaire in Part III, Attachment ___. The response to each question **shall** be cross-referenced to the proposer's proposal.

9.3.8 TAB 8 - Deliverables List

- 9.3.8.1 An itemized list of deliverables that includes hardware that matches the configuration drawings, software that meets all specified functional and system support requirements, documentation for the complete system, licenses, and a recommended spare parts list. This list of deliverables **shall** not relieve the proposer from supplying all deliverables necessary to meet the requirements of the RFP. Deliverables required for options **shall** be identified separately from the Base System list.

9.3.9 TAB 9 - Options

- 9.3.9.1 A description, for each option, of its impact on the following:
 - 9.3.9.2 System project schedule
 - 9.3.9.3 System configuration, including memory requirements
 - 9.3.9.4 Processor loading
 - 9.3.9.5 Recommended spare parts and test equipment
 - 9.3.9.6 Training.
 - 9.3.9.7 A description, including price, of standard hardware and software maintenance agreements and services that are available for the proposed system.

9.3.10 TAB 10 – Certifications

- 9.3.10.1 Proposer's surety, as required by Part I, Section 1.14.
- 9.3.10.2 Completed certification forms as required in Part III of this RFP.

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- 9.3.10.3 A completed Disadvantaged Business Enterprise (DBE) verification form and information as specified in Part III of the RFP.
- 9.3.10.4 A statement indicating that the required insurance coverage is available to the proposer.

9.3.11 TAB 11 - Product Brochures

- 9.3.11.1 A product brochure or specification sheet for each major piece of hardware and each major software module, describing technical specifications, expansion capabilities, and optional features.

9.3.12 TAB 12 - Documentation

- 9.3.12.1 A description of the proposer's hardware quality assurance program.
- 9.3.12.2 A description of the proposer's software quality assurance program.
- 9.3.12.3 A copy of the proposer's software design and documentation standards, procedures used to record changes to software designs as they are modified throughout the project period, and samples of software functional requirement documents, software design documents, and software reference manuals which reflect these standards.
- 9.3.12.4 Samples of hardware documentation, including that used for maintenance purposes, such as standard logic diagrams and wiring lists.
- 9.3.12.5 Operator's manual from previous projects, including sample application program control displays.
- 9.3.12.6 Samples of a test plan and a test procedure similar to those proposed.

9.3.13 TAB 13 - Pricing

- 9.3.13.1 Complete pricing information with the detailed price breakdown per Part III.

9.4 PRICING BREAKDOWN

The proposer's prices **shall** be submitted according to the price breakdown shown in Part III.

The pricing for hardware, including options and unit prices, **shall** include associated equipment (such as cables, connectors, backpanels, terminals, and cabinets) necessary to integrate the equipment into the proposed system configuration. Tables **shall** include the necessary information as indicated in the signature blocks.

9.5 OPTIONS

The proposer **shall** submit prices for the option and alternative items described in the Technical Specification. All prices **shall** remain fixed for _____ years after Contract award and comply with this Section and Sections 1.21, 1.24, and 1.26. Each option and alternative price **shall** include charges for all hardware, software, engineering, testing, training, documentation, recommended spare parts and test equipment, and any other additional costs.

City recognizes that the additional system equipment capacity required by one of the options may also be shared with other options. However, for evaluation purposes, each option **shall** be priced to be purchased independently of one another.

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9.6 UNIT PRICES

The proposer **shall** provide prices for the unit items listed in Part III. Each item's price **shall** include charges needed to install and integrate the item into the system configuration, including associated controllers, engineering, testing, and documentation.

9.7 PRICES OF ENHANCEMENTS

This will include any enhancements that the Contractor believes will be a benefit for the City.

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SECTION 10
EVALUATION AND AWARD

10.1 OVERVIEW

Proposals will be evaluated according to the factors and weights defined in Part I, Section 10.3 by an Evaluation Team composed of personnel selected by the City. The Evaluation Team **shall** have the right to conduct a cost/price analysis; to review and audit all business records and related documents of any and all proposers (and any affiliated or parent company); to determine the adequacy, fairness, and reasonableness of the proposal; and to contact any and all client references. The Evaluation Team will make a recommendation to the Contract Specialist on the selection of the Contractor that is most advantageous to City, considering price, technical merit, and other factors. The award will be subject to approval by the City Council.

10.2 EVALUATION PROCEDURE

City plans to use the following steps in the evaluation of proposals:

Review the proposals and generate requests for additional information and clarifications from the proposers.

10.2.1 After the additional information and clarification responses are received, evaluate and score all proposals on technical criteria.

10.2.2 Evaluate and score all proposals on cost criteria. Cost criteria will be as follows: For proposal evaluation purposes, the proposer offering the lowest price for the project (based on all necessary adjustments) will receive the maximum points allocated for price. All other proposers will be allocated points based on the calculated percentage relationship between their proposal cost offer (including any necessary adjustments) and the proposal offer of the low proposer.

10.2.3 The City selects a "competitive range" for the combined technical/cost scores.

10.2.4 Determine financial responsibility of proposers in the competitive range.

City reserves the right to conduct a pre-award survey and inspection to determine financial responsibility. Any negative determination of responsibility will result in that proposer being disqualified from further evaluation and award.

10.2.5 Responsible proposers in the competitive range will be invited to conduct oral presentations. The proposer's Project Manager, who will coordinate the required work, will lead and direct the oral presentation.

10.2.6 City may request negotiations with the responsible proposers in the competitive range.

10.2.7 Re-evaluate and score proposals based on the negotiations.

10.2.8 Recommend highest-scored proposer for approval by the City.

10.2.9 Negotiate and execute an agreement with the approved proposer.

Notwithstanding this evaluation procedure and Part I, Section 10, City reserves the right to make the award under this RFP based upon the initial proposals submitted, without establishment of a competitive range or discussions and submission of any or all negotiations. Any such award **shall** be based on the criteria in Part I, Section 10.3 of this RFP. Proposers are encouraged to provide their best pricing in the initial proposal.

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10.3 EVALUATION FACTORS

Technical Proposal Element

	<u>Points</u>	<u>Max Points Per Item</u>
10.3.1 Cost Proposal		-----
10.3.2 Experience and Qualifications:		-----
10.3.2.1 Experience and operation of a comparable project by the proposer for the system being proposed. Experience of any subcontractors with comparable project. Experience of the proposer having worked together with the subcontractors on previous projects. Especially important is direct experience with projects of similar nature, and that includes all of the following:		
1) Is either fully accepted or in the installation phase that City can discuss with the purchaser and that can be demonstrated to City.	---	
2) _____	---	
3) _____	---	
4) _____	---	
5) _____	---	
10.3.2.2 Qualifications of the proposer's and subcontractors' staff to be assigned to the project, their experience with bus transit projects of similar content and scope, and their availability for the project.	---	
10.3.2.3 Record of completing work on schedule and within budget.	---	
10.3.2.4 Strength and stability of the proposer and its subcontractors.	---	
10.3.2.5 Results of client contacts	---	
10.3.3 Proposed System, Equipment, and Services:		-----
10.3.3.1 Responsiveness to and compliance with the Technical Specification:		
1) System functionality based on submittal & site visit	----	
2) User interface	---	
3) System design concept	---	
4) Documentation, training, support services, and installation	---	
5) Proposer's proposed project schedule and work plan.	---	
6) Quality assurance and testing	---	

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10.3.3.2 Demonstration of the proposer's understanding of the overall requirements of the project, based on the written proposal submission. —

Total Maximum Points **1000**

PART II
TECHNICAL SPECIFICATION /
SCOPE OF WORK

**The attached constitutes the Part II,
Technical Specification for the RFP.**

SAMPLE
ONLY

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**SECTION I
INTRODUCTION**

1.1 DEFINITIONS

- 1.1.1 CENTRAL SERVER – The computer that can receive, store, transmit data from and to the Electronic Fare Collection System.
- 1.1.2 DISPATCH STATION – The location of the computer aided dispatch software for the vehicle communications system.
- 1.1.3 REVENUE STATION – The location where each revenue station is probed and the transactional and farebox data is downloaded.
- 1.1.4 REVENUE ROOM – Location or locations that the cash box contents are counted.
- 1.1.5 OPERATOR CONSOLE – The operator display unit used by the operator to enter fare types, regular, special, reduced fares, jurisdictional changes, and read the fare transactions.
- 1.1.6 PASSENGER DISPLAY – The display unit that will display all of the passenger fare data from the EFCS, Magnetic Stripe Card Reader, Smart Card Reader & Ticket/Pass Processing Unit.
- 1.1.7 AUXILIARY CASHBOX – A container that bills and coins can be deposited in, if farebox is inoperable.
- 1.1.8 FAILURE – The point where the equipment is unable to function properly or an occurrence, which does not cause the equipment to be inoperable, but requires some form of maintenance attention to restore normal function beyond what can be provided by the driver.
- 1.1.9 NORMAL REPAIR – The diagnosis, removal, and replacement of one or more defective assemblies (such as a coin mechanism, bill transport, electronic board, etc.) in order to restore the EFCS to working condition.
- 1.1.10 MAJOR REPAIR – The repair of the defective assembly.
- 1.1.11 CITY – City of Phoenix personnel will be the inspector and acceptor of the fare collection system. Other agencies in the Valley Metro area will be on the evaluation team.
- 1.1.12 BUS CARD PLUS – It is a magnetic stripe transit card available to companies and organizations for their employees. When the cardholder rides the bus, his or her fare is charged to the card. At the end of the month the company receives an itemized bill logging each card holders trips.

1.2 Project Scope

- 1.2.1 The City of Phoenix and Valley Metro is issuing a Request for Proposals (RFP) for a fully integrated electronic fare collection and centralized data collection and reporting System. It must be suitable for Valley Metro fixed-route buses, shuttles, and Bus Rapid Transit (BRT), and in the future Light Rail (LRT) and other bus/Rail systems, if required. The system will consist of electronic validating fareboxes, ticket processor units (TPU), magnetic stripe readers, smartcard readers, auxiliary cashbox, Ticket vending machines (TVM) revenue collection equipment, ancillary equipment, spare parts, services, associated software and all other System Components as described herein. The proposed system shall integrate with the Bus Card Plus program and provide all necessary information from the farebox and the magnetic stripe reader. Contractor is responsible for all Work required for the System to be made fully operational.
- 1.2.2 These specifications describe the minimum requirement for an Electronic Fare Collection System (EFCS) that shall be configured as described below. Any items needed that are not specified shall be identified by the Contractor and submitted as a technical alternative that includes pricing

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and a detailed technical description. Contractor shall be responsible for all acts, System Components and Work required to provide the City of Phoenix and Valley Metro with an EFCS that is fully functional in accordance with the Specifications, whether or not such acts, System Components or Work are specifically identified within the Specifications or the Agreement. The software provided with EFCS should be object oriented and demonstrate polymorphism (vendors must demonstrate this in their submission). Unless otherwise expressly agreed to in writing, or expressly excluded by the parties, the Contractor shall perform all Work under this Agreement.

1.3 VALLEY METRO

The Valley Metro fixed-route service area includes approximately 475 square miles of Maricopa County. This fixed-route service is presently provided by nearly 500 peak hour buses operating on 83 routes (including 60 local, 21 express, and 2 circulator routes) that currently include approximately 7000 bus stops. Ridership is approximately 35 million boardings per year. Valley Metro currently operates buses for twenty (20) hours on weekdays and sixteen (16) hours on weekends and holidays. Valley Metro provides service to the cities of Phoenix, Tempe, Mesa, Scottsdale, Chandler, Gilbert, El Mirage, Sun City, Guadalupe, Glendale, Paradise Valley, Peoria, Tollison, Fountain Hills, and Surprise. The Valley Metro operations for both fixed-route and dial-a-ride services are performed by contracted service providers.

1.4 FUTURE SERVICE AND EXPECTED GROWTH

The expected growth rate of Valley Metro transit service is uncertain. The success of the City of Phoenix Transit Tax in March of 2000 provided the City with a 4/10s of 1 percent tax over the next 20 years. A portion of this funding will be used for Bus Rapid Transit (BRT) and a Light Rail (LRT) component for Valley Metro and other smaller systems. The Electronic Fare Collection System and resources shall be sized to accommodate the growth of the fixed-route service to 900 buses. The BRT, starting operation in 2003, will consist of 60 buses that may require off vehicle self-service proof-of-payment fare collection. LRT is not a current requirement but shall be a consideration for when LRT is in operation in 2006 we must be able to integrate LRT fare collection into Valley Metro's fixed-route electronic fare collection system. Considerations for LRT need to be fare collection devices that will allow for off vehicle self-service proof-of-payment fare collection.

Valley Metro is currently in the process of implementing a Bus Rapid Transit (BRT) system. This will replace City of Phoenix's current Express service in 2003. BRT will be using 45 foot NABI buses with some upgrades for the BRT passengers. This service may use a combination of traditional fareboxes and off vehicle fare collection. Valley Metro is soliciting proposals that consider alternatives on how to do fare collection for BRT. Valley Metro's BRT will consist of approximately 60 vehicles, 2 transit centers, 7 Park-N-Rides, and 25 BRT stations. The Park-N-Rides and a few of the station may have off vehicle fare collection to speed boarding. Valley Metro is considering Ticket Vending Machines (TVM) for the Park-N-Rides and stations. The TVMs will be able to issue fare media consisting of magnetic stripe cards, smartcards, add value to these fare instruments, and single ride tickets. The TVM will be able to accept credit cards, debit cards, cash and coins for purchase of or to add value to an existing card.

Valley Metro is planning to start operation of a Light Rail Transit (LRT) system in 2006. There will be a need for off vehicle fare collection and a proof of payment system. This is not a current requirement but we will take into consideration how the EFCS will be able to integrate with LRT. Valley Metro goal is to have one EFCS that will be used for all fare collection activities and that a system is able to collect data from all fare collection equipment including fareboxes, TVMs, TPUs, Magnetic Stripe Readers, Smartcard readers, hand held proof of payment devices, and any other type of instrument that may be used for collecting fares. All data from all of these instruments shall reside in a common database, and the information will be readily available for all of Valley Metro's needs.

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1.5 FIXED ROUTE SERVICE AND FARE TYPES

1.5.1 Valley Metro operates a variety of bus types, including articulated buses, in its fixed-route fleet see Appendix A for information on quantity, manufacturer, type, and operator.

1.5.2 Valley Metro's fixed-route service and fare structure for both fixed-route and non-fixed route is published in the Valley Metro Bus Book and a summary is provided below. Base fare for the local fixed-route service routes is \$1.25 one-way for an adult. Express fare for an adult is \$1.75. A discount fare for youth, individuals 65-years of age and older, and persons with disabilities is \$.60 for local service. Discount fares are not provided on express service. A variety of payment methods are available including ten-ride ticket books, tokens, all day passes, and semester passes.

1.5.3 Current Fare Instruments:

Calendar Monthly Passes	Express, Local, Youth, Senior, Disabled
Semester Passes	College Students fall, spring, summer
Flash All Day Passes	Local, Reduced fare
Ten Ride Ticket Books	Express, Local, Reduced fare
Bag of 20 tokens	1 for reduced fare, 2 for local & 3 for express
Bus Card Plus cards	Employers provided to their employees and are billed monthly
Student ID Cards	Monthly, half month, and semester for high school
Paper transfer slips	Dated and torn 60 minutes from end of bus route time point

1.5.4 Current fare collection is by means of modified Duncan electronic registering fareboxes procured in 1984 and modified to an electronic fare box in 1989. These have a minimum of connectivity to other devices. This farebox has an auxiliary drop box, built into it, in case the farebox is inoperable. The new System is to provide validating fareboxes that shall accept and validate fare media including cash, plastic or paper tickets, and other magnetic stripe documents, paper magnetic stripe transfers, long-life plastic magnetic-stripe cards (similar to credit cards) and smart cards. There will be an optional cashbox to collect fares in case the farebox is inoperable.

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**SECTION 2
SYSTEM FUNCTIONS**

The following descriptions for the Electronic Fare Collection System are valley Metro's objectives for this RFP. Contractors are encouraged to provide detailed proposals that meet and/or exceed these expectations.

2.1 FAREBOX GENERAL

- 2.1.1 The farebox shall be installed, in accordance with Valley Metro agency requirements, at the front door of each model of bus in a position that is visible to the operator and the display with instructions is visible to the passenger when entering the bus.
- 2.1.2 The farebox shall be able to be mounted above the floor or mounted on a pedestal on the floor. The City shall approve mounting location and height.
- 2.1.3 The coin, token, ticket, bill, magnetic strip and smart card mechanism shall be positioned so that an entering passenger may easily identify each to pay the required fare. The City shall approve positioning and identifications.
- 2.1.4 The fare validating display shall be positioned to allow the passenger to read the fare information and other transaction data as required by Valley Metro agencies.
- 2.1.5 There shall be wiring and an installation schematic for a magnetic strip and smart card reader to be installed at the rear entry door of the bus. Both devices shall be monitored and shall provide for more than one transaction to be made while the rear entry door readers are in use. The transactions shall be stored at the operator area unit until the operator validates the fares.
- 2.1.6 The Operator Control Console with keyboard and multi-line display shall be located in the operator's area in a location to be determined by City for each bus model. The Operator Control Console shall allow the operator to monitor and control the farebox, enter fare types and ridership information as required by the transit property.
- 2.1.7 Shall be an electronic validating farebox and shall automatically identify and validate all coins, tokens, tickets and bills by denomination or stored value, without operator action.
- 2.1.8 The farebox shall be capable of validating and counting all U.S. currency paper bills \$20 and under presented face up in either of two (2) orientations. Invalid bills shall be rejected and returned to the passenger. The farebox shall be capable of validating and accepting U.S. bills of "street quality." Foreign bills, counterfeit bills, partial, torn, and mutilated bills will be rejected. The farebox coin acceptor shall electronically validate coins and tokens to determine type and denomination. The farebox shall be capable of accepting up to twelve (12) different coins and tokens, including U.S. pennies, nickels, dimes, quarters, half dollars, Susan B. Anthony dollar coins (\$1.00), and gold dollar coins. The farebox shall be capable of being programmed to associate up to two coins with a single denomination, so that different series of coins can be accommodated. Invalid coins and foreign coins and currency shall be returned to the passenger.
- 2.1.9 The coin validator shall be programmable so that tokens, coins, and coin series can be quickly and easily added, modified or deleted. Coin and token identification and acceptance shall be fully software controlled, and it shall require no modification to farebox hardware to add, change, or delete a coin or token type.
- 2.1.10 The farebox shall have a visible graphic programmable display monitor or screen capable of providing the passenger with fare information and other transaction assistance.

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- 2.1.11 Shall automatically provide an audible alert, reject and return all invalid coins, bills, tickets and tokens to the passenger with reasons for the rejection on the operator and passenger display unit or other approved methods for rejection of apparent fares.
- 2.1.12 The farebox shall have the capability for the operator to enter commands, ridership information and have a display of the transactional information, errors, prompts, etc., to the operator. This Operator Control Console shall connect to the farebox in accordance with SAE standards and shall be mountable up to ten (10) feet from the farebox. Location of the Operator Control Console shall require the approval of the City.
- 2.1.13 The Operator Console shall have a high visibility display monitor capable of displaying at minimum two (2) lines of 20 characters each. The keyboard shall be large enough to allow easy use by the operator, and shall provide visual feedback on the display monitor to the operator on each key press.
- 2.1.14 The EFCS shall integrate with the Vehicle Management System (VMS) that Valley Metro is in the process of procuring. VMS will include GPS/AVL, MDT, Vehicle area Network, and a radio system. It is Valley Metro's expectation to integrate the EFCS and VMS into a single operator log on and to have only one operator console or MDT that both systems can use.
- 2.1.15 Vendor shall include in the proposal any requirements for office/warehouse/shop floor space. The Valley Metro will provide reasonable space with basic office facilities, example phone with local calls only and basic office furniture.

2.2 ELECTRONIC FARE COLLECTION SYSTEM

- 2.2.1 The electronic fare collection system shall include Electronic Validating Fareboxes with integrated Magnetic Stripe readers, Smart Card readers, Ticket Processing Unit (TPU) and Operator consoles.
- 2.2.2 The fare collection system shall be an integrated system that will have an automated interface with the dispatch station, magnetic reader, smart card reader and processing system and an automated ticket, pass, and transfer-processing unit. The system should contain the least proprietary technology as possible. The EFCS and integrated systems shall utilize as many off-the-shelf technologies that can reasonably be accommodated. The City reserves the right to evaluate the use of proprietary technology and off-the-shelf components in the evaluation of the proposal.
- 2.2.3 The fare collection System provided under this Agreement and Specifications shall be configured to support an Open Architecture design, meeting or exceeding the following applicable codes and standards listed below and allowing subsequent additions or changes to functionality to be made without recourse to the original Contractor's services for any modification of software or hardware. Sufficient documentation shall be provided to all successors to provide any additional or altered functionality as desired by Valley Metro during the lifetime of the fare collection System.

- § American Bankers Association (ABA)
- Americans with Disabilities Act (ADA)
- Architectural Barriers of 1968
- American National Standards Institute (ANSI)
- American Public Transit Association (APTA)
- American Society for Quality Control (ASQC)
- American Society of State Highway and Transportation Officials (AASHTO)
- America Society of Mechanical Engineers
- American Wire Gage
- Fire Insurance Association

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- Institute of Electrical and Electronics Engineers
- Instrument Society of America
- Intelligent Transportation System America (ITSA)
- International Standards Organization (ISO)
- National Electrical Code (NEC)
- National Electrical Manufacturers Association
- National Fire Protection Association (NFPA)
- Occupational Safety and Health Act (OSHA)
- Rehabilitation Act of 1973 (Article 504)
- Request for Comments for TCP/IP
- Transit Communications Interface Protocols (TCIP) and Transit Standards Consortium (TSC)
- Underwriters Laboratories (UL)
- Uniform Building Code (UBC)
- Uniform Federal Accessibility Standards (FED-STD-795)
- Uniform Mechanical Code (UMC)
- Uniform Plumbing Code (UPC)
- Vending Equipment Interface Specification

2.2.4 All Work shall meet or exceed all applicable federal, state and local laws, codes and regulations.

2.2.5 At a minimum, the following recognized standards for data communications will be supported: SAE J-1708, SAE J-158, RS-232 and RS-485.

2.2.6 At a minimum the system shall comply with all APTA Bus Procurement Guidelines for all wiring, terminals and data transmission requirements: SAE J-1127, SAE J-1128, SAE Standard J-1127-Type SGT or SGX and SAE recommended Practice J541.

2.2.7 Grommets of elastomeric material shall be used at points where wiring and data cabling penetrate metal structures.

2.3 FARE COLLECTION SYSTEM REVENUE AUDIT TRAIL

2.3.1 The farebox and electronic fare collection system shall be designed in a manner that establishes a direct audit trail between revenue deposited into a farebox and revenue counted in the revenue room for deposit.

2.3.2 This audit trail shall link the Magnetic Stripe, Tickets, Pass and Smart Card registered revenue and deposited revenue on a farebox by farebox basis.

2.3.3 Each cashbox shall have a permanently embedded electronic ID that is readable by all components of the electronic fare collection system for tracking and auditing purposes.

2.3.4 The fare collection system shall cross-reference the farebox ID and cashbox ID for all transactions and revenues being deposited in each farebox. The farebox shall retain in memory the cashbox ID transactions and revenues.

2.3.5 The farebox shall be probed at the Revenue Station and all data shall be reported to a Central Server.

2.3.6 The cashbox shall securely close and automatically lock prior to removal from the farebox, and the cashbox shall be designed to prohibit removal from the farebox unless it is in a closed and locked state.

2.3.7 After removal from the farebox, no revenue within the cashbox shall be visible or accessible

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- 2.3.8 Unlocking of the cashbox to access the revenue shall be done only in the Revenue Room. When the cashbox is deposited the Revenue System shall:
- read the cashbox ID
 - record all revenue removed from the cashbox by denomination and quantity
 - transmit this information to the Central Server.
- 2.3.9 The Central Server shall be capable of comparing the registered revenue and counted revenue on a cashbox by cashbox basis including the farebox ID code, and shall automatically report any and all discrepancies on a farebox by farebox basis.
- 2.3.10 The fare collection system shall have an automated inventory system that tracks the location and status of every cashbox. The system shall include reports and on line inquiry programs necessary to track and manage the cashbox inventory.

2.4 FAREBOX RELIABILITY

- 2.4.1 The farebox shall be designed for 99.8% accuracy. The City will not finalize acceptance of the system until all fare media collections are certified to meet 99.8% accuracy.
- 2.4.2 Failures due to abuse, vandalism, operation beyond standards, or lack of maintenance as required in the Contractor's instructions, shall not be included in any reliability calculations.
- 2.4.3 The bill acceptor shall electronically validate bills and shall be able to accurately and securely distinguish valid bills by denomination from \$1 to \$20, including all U.S. currency \$20 and under. Invalid bills shall be returned to the passenger.
- 2.4.4 The cashbox shall store both coins and bills. The bill storage area within the cashbox shall be able to be increased or decreased according to the revenue needs. The cashbox shall be designed so that it securely locks prior to being removed from the farebox during revenue service.
- 2.4.5 The farebox shall automatically monitor the level of bills and coins deposited in the cashbox, and shall notify the operator and dispatch operator when the cashbox reaches a user configurable percentage of bill and/or coin capacity.
- 2.4.6 The farebox shall be able to operate without any degradation in performance under the operating and environmental conditions in the Valley Metro area.
- 2.4.7 The farebox shall remain operational in the presence of the following contaminants: airborne particles, grease, oil, and other contaminants accumulated on coins, tokens, and bills within reasonable limits, including bent and mutilated "street money."
- 2.4.8 The farebox shall be protected against damage, loss, or modification of data caused by:
- Lower or higher voltage in the range of -12 volts DC to +25 volts DC.
 - Spikes of 10ms up to 1000 volts DC.
- 2.4.9 Loss or restoration of power shall not result in any major corruption of the data in farebox memory.
- 2.4.10 The farebox shall be configurable for the operator to remove the jam at the coin and bill mechanism. All incidences shall be recorded.
- 2.4.11 The farebox shall be able to produce an audible signal to alert the operator and/or passenger of transactional errors or events.

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2.5 FAREBOX OPERATION

- 2.5.1 The coin mechanism shall be capable of automatically and continuously processing coins and tokens at an insertion rate of not less than ten (10) items per second sustained.
- 2.5.2 The coin slot shall deter entry of paper into the coin slot and minimize coin jams.
- 2.5.3 The coin mechanism shall be capable of handling deformed coins, i.e., coins that, within certain limits, are bent or bulged, not perfectly round, or have attached foreign matter.
- 2.5.4 The farebox shall process and accurately count:
- Coins bent or bulged having overall thickness ranging up to 0.020 inch greater than the coin's standard thickness.
 - Coins having attached, relatively complete uniform layers of foreign material (such as epoxy, solder or hardened gum) ranging up to 0.040 inch in thickness.
 - Coins not perfectly round (examples: squashed or flat edges) having diameters up to plus or minus 0.020 inch different from standard at the point of deformity.
- 2.5.5 The farebox shall be resistant to jams or malfunctions created by coins outside the limits defined above, but shall not be required to accept such coins as valid.
- 2.5.6 The farebox shall be capable of accepting, validating, returning stored value card to passenger and stacking a bill in four (4) seconds.
- 2.5.7 After validation, bills shall be automatically transported to the cashbox and shall be tightly and neatly stacked.
- 2.5.8 The farebox shall be capable of allowing the operator to bypass bill validation and to manually designate the denomination of a bill. The "Accept Next Bill" command shall permit acceptance of a worn or mutilated bill that cannot be electronically validated by the farebox, but that the operator, upon visual inspection, determines to be valid.
- 2.5.9 After operator entry on the OPERATOR CONSOLE of the "Accept Next Bill" command, the next bill inserted into the EFCS will be transported directly to the cashbox without validation. After the bill is stacked, the farebox will automatically return to normal operation (i.e., electronic validation of all bills). The farebox transactional data will record every instance of the "Accept Next Bill" command, to permit tracking should discrepancies appear in the money room when the cashbox contents are counted.
- 2.5.10 The farebox shall be configurable to limit the "Accept Next Bill" by bill denomination, or to remove the "Accept Next Bill" function entirely.
- 2.5.11 The farebox shall be capable of accepting tickets & passes of the approximate width and length of dollar bills.

2.6 OPERATOR LOG ON/LOG OFF

- 2.6.1 Prior to the farebox entering revenue service, the operator shall be required to successfully log on. Successful log on shall require a valid operator ID, operator password, and valid route/run/trip information. Route/run/trip validity information shall be used by the farebox to insure that route/run/trip information is correctly and accurately entered by the operator during log on.

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- 2.6.2 Operator sign on through the farebox shall have an automated interface with the all-electronic systems on the vehicle that require operator sign on information.
- 2.6.3 The farebox shall also support temporary (relief) operator log on, supervisor log on, and manager log on. Non-revenue service log on shall be possible for maintenance and revenue technicians.
- 2.6.4 At a minimum, the following security levels shall be settable for operators:
- normal operator
 - supervisor
 - manager
 - maintenance technician
 - revenue service technician.
- 2.6.5 The required security level for all farebox functions and commands shall be configurable. Functions and commands requested from operators with insufficient security shall be denied, and a transaction documenting this denial shall be recorded in the farebox transactional data.

2.7 COMMUNICATION OF FAREBOX DATA

- 2.7.1 As part of the revenue service process, and prior to the removal of the cashbox, the farebox shall be probed for revenue and transactional information. Probe access security shall be guaranteed prior to probe all functions. Probe access security shall be guaranteed to all probe functions.
- 2.7.2 After revenue and transactional information is transferred any control or configuration information required will be automatically downloaded to the EFCS. Upon successful completion of all data transfer the farebox will automatically open the revenue door, permitting removal of the cashbox.
- 2.7.3 Proposers' are encouraged to present other alternatives for transferring and uploading data from/to the fareboxes.

2.8 FAREBOX OPERATIONS – FAREBOX TRANSACTIONAL DATA

- 2.8.1 The farebox will securely and accurately record all transactional information, including sales data, operational errors and exception conditions, ridership information, and operator commands. At a minimum, the farebox will record a complete transaction on the following events:
- all payment transactions
 - all ridership registration transactions
 - all operator commands
 - farebox power off
 - farebox power on
 - operator log on
 - operator log off
 - secure jam clearance door opened
 - secure jam clearance door closed
 - successful data probe of transactional data
 - unsuccessful data probe of transactional data
 - successful download of farebox configuration data
 - unsuccessful download of farebox configuration data
 - revenue door opened (at times other than revenue service after successful data probing)
 - revenue door closed
 - cashbox removed
 - cashbox inserted
 - farebox errors and failures

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- security errors and intrusions
- coin jams
- clearance of coin jams
- bill jams
- clearance of bill jams
- new fare table selected

2.8.2 In addition to transactional data, the farebox shall maintain running counts by operator shift of other items such as total number of coins rejected, total number of bills rejected, etc. Under no circumstances shall the farebox discard detail data or substitute summary data, except as configured by the transit property. All transaction and revenue data shall be date and time stamped to the highest resolution of the available clock. All transaction and revenue data shall be assigned a unique (per farebox) 32-bit incrementing record sequence number at the time it is recorded.

The following is the minimum reporting criteria for EFCS:

2.8.2.1 The EFCS shall be capable of summarizing, filtering and reporting data from the transactional database. A Commercially Available database is preferred for this purpose. The City of Phoenix standard is Oracle.

2.8.2.2 The EFCS is to be configured to report on transactional data in summary terms, or in terms of individual field information. The EFCS shall provide the ability to sort through the database of transactions, applying any number of user-defined search criteria (such as specific account numbers, days of the week, etc.), or ranges within filters, to develop reports of usage of fare media and geographic ridership information. It shall provide for a dynamic search that allows for flexibility in creating searchable fields. At minimum, filters shall include:

- § Line or group of lines;
- § Station or groups of stations;
- § farebox, bus or route
- § fare type
- § times of day
- § fare media type.

2.8.2.3 This data shall be available for any user defined period, e.g. by defining a beginning time and date and an ending time and date

2.8.2.4 It shall be possible for the user to define custom reports to be used on a repeating basis that can include the search criteria above, so it shall be unnecessary to reset the search criteria each time a given analysis is to be conducted.

2.8.2.5 It shall be possible to feed data from other manufacturers fareboxes into the EFCS database for that Valley Metro has the ability for all agencies to have all data available to them.

2.8.2.6 Data shall be available from the EFCS in a format complying with Open Database Connectivity (ODBC) standard. The System shall be capable of porting raw and summarized data to other programs, such as spreadsheets, databases and accounting packages complying with the ODBC standard. The System shall also provide data in ASCII comma separated format. Raw data must be transferred to disk or to other computer systems via parallel, serial, USB or network connection for additional analysis.

2.8.2.7 Training of personnel is to be provided in manipulation of the database to obtain desired transaction or summary information. At the conclusion of the training, Valley Metro personnel shall be expected to be capable of generating necessary reports and

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objectively demonstrating such skills. Contractor shall provide continued support on report generation to Valley Metro personnel by phone during business hours at the Contractor's designated support location for at least two years following delivery of the System at no additional cost.

2.9 FAREBOX DATA STORAGE

- 2.9.1 The farebox shall provide adequate data storage capacity to accurately and securely store a minimum of 4 megabytes of transactional data. The farebox shall be capable of retaining transactional data without power. When the capacity of the farebox data storage capacity, of either coin or bills, has reached a user configurable percentage it shall notify the operator and dispatch station and indicate that a farebox data probe is required.
- 2.9.2 At any time the farebox shall be able to be probed for transactional data for the current revenue shift (data for cashbox currently installed) or for any previous revenue shifts still stored.
- 2.9.3 The farebox transactional data for any revenue shift will not be deleted until successful receipt and processing of that data is verified.
- 2.9.4 The farebox shall monitor and record each instance of the primary power source dropping below nine (9) volts and report this information to the dispatch system. This information shall be available on the farebox for operator inquiry. Also, after data probing, these transactions will be available for on line inquiry and reporting.
- 2.9.5 All fareboxes shall have a route/run segmenter. The route/run segmenter shall integrate with the vehicle AVL/GPS system and indicate when a route/run segment is complete, and a new segment has begun. The operator shall also be permitted to indicate when each segment is complete and a new one begins. A record shall be recorded in the transactional data indicating the segment change, date and time of segment change, the latitude and longitude of the change and bus stop ID.
- 2.9.6 There shall be no limitation on the number of segments possible for a route/run.

2.10 FARE SETS AND FARE CATEGORIES

- 2.10.1 The farebox shall allow up to 20 fare sets to be available for selection either automatically based upon route/run/trip information, or by operator command. The fare sets available for operator selection can also be restricted by route/run/trip information. Each fare table will allow up to 100 different fare categories to be registered by the operator.
- 2.10.2 Fare tables will provide, at a minimum, the following information:
 - § default fare for automatic fare registration
 - § time/day validity (so that fare sets can be restricted by time of day and/or day of the week)
 - § route/run/trip validity
- 2.10.3 The fare categories available for selection within a fare table shall be configurable. Fare categories shall be assignable to any OPERATOR CONSOLE soft key to permit rapid selection by the operator. At a minimum, each fare category within a fare table will define the following information:
 - § name (e.g., "adult full fare," "student fare," etc.)
 - § fare payment type (e.g., "cash fare," "flash pass," "register only - no payment," "Smart Card," "Magnetic Stripe" and "Ticket & Passes")
 - § fare amount.

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2.11 FAREBOX OPERATIONS -- PAYMENT ACCEPTANCE

- 2.11.1 While in revenue service, the farebox will be capable of continuously and automatically accepting and validating all coins, tokens, and bills presented for payment. Coins and bills that are successfully validated will be deposited into the cashbox, and their value will be added to the "payments received" display on the OPERATOR CONSOLE and on the passenger display. The quantity and type of tokens validated and accepted will also be displayed to the operator and the passenger as part of the "payments received" display.
- 2.11.2 The value of all coins, bills, and tokens accepted by the farebox will be added to the "payments received" display and will be considered "unallocated revenue" until either:
- § the operator presses a ridership registration command (i.e., "full adult fare," "student fare," etc.) allocating the revenue to a particular fare
 - § a configurable timeout period expires and an audible alarm sounds to alert the operator to register the fare command or automatically allocates the revenue to the fare submitted
- 2.11.3 The farebox shall record all revenue fares presented as payment, including date and time of payment (to the highest resolution of the embedded clock):
- § number and denomination of coins validated and accepted as payment
 - § number and denomination of bills validated and accepted as payment
 - § number of coins rejected and returned to passenger and date and time of rejection
 - § number of bills rejected and returned to passenger and date and time of rejection.
 - § denomination name and other pertinent data of Magnetic Stripe Cards, Smart Cards and Tickets and Passes
- 2.11.4 Ridership registration shall be recorded in a manner that will permit the matching of ridership information with payment information.
- 2.11.5 The farebox shall record all errors and exceptions, including errors resulting from jammed bills or coins, mechanical malfunctions, operator errors, and all such conditions where the normal operation of the farebox may be disrupted, including software exception conditions. An individual record with date, time, and other relevant details, shall be written for each occurrence of an error or exception. Errors and exceptions shall be recorded in such detail that an analysis of this information shall represent a full and complete picture of the farebox performance.

2.12 PASS AND TICKET PROCESSING UNIT (TPU)

- 2.12.1 A Pass and Ticket Processing Unit (TPU) shall be installed in a location approved by the City in each vehicle model for passenger and driver convenience. The TPU shall issue and read multiple types of magnetic documents and print transactional and remaining value upon the face of the tickets. The TPU shall interface to the farebox for purposes of electrical supply and data collection and shall be operated under the control of the farebox.
- 2.12.2 The unit shall be configurable to allow use as a transfer issuer/reader, and to process stored value and/or multi-trip passes and tickets.
- 2.12.3 The TPU shall be fully programmable, including all display messages, via input from the farebox Operator Console and/or through configuration data downloaded to the farebox at the time of revenue service.
- 2.12.4 The Pass and Ticket Processing Unit shall be linked to the farebox. All data collected by the TPU shall be conveyed to the memory of the farebox and be removed when data is probed from the farebox at the time of revenue servicing.

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2.13 PASS AND TICKET PROCESSING UNIT OPERATION

- 2.13.1 The Pass and Ticket Processing Unit shall be convenient to both the driver and the passenger. Issuance of tickets/passes shall be initiated by commands entered on the OPERATOR CONSOLE. The ticket/pass is then encoded and printed according to its intended use.
- 2.13.2 Passengers entering the bus will insert their ticket/pass into the entry slot. The ticket/pass will be read and, depending upon the mode of operation, will read, re-encode, and print, or simply read and return the ticket/pass to the passenger. All transactions shall be displayed on the passenger display monitor on the farebox.
- 2.13.3 The Pass and Ticket Processing Unit shall employ an approved printing technology to print fully formed and highly legible alphanumeric characters on required surfaces of the ticket.
- 2.13.4 If an ink ribbon is used for dot matrix printing, it shall be contained within an easy to replace continuous loop cartridge.
- 2.13.5 The TPU shall be capable of high-speed operation, which will not hold up the entry of passengers onto the bus.
- 2.13.6 The Pass and Ticket Processing Unit shall employ means of communications to and from the farebox to enable recording of each ticket number issued and presented by a passenger. In addition, means shall be established to download lists of bad card numbers to the farebox at the time of farebox probing for daily operational data. Passes/tickets presented to the TPU shall be checked against this list, and shall be rejected by the TPU if the pass/ticket is on the list.
- 2.13.7 The Pass and Ticket Processing unit shall have the ability to provide change between the required fare and the inserted money. The change shall be in the form of a specially printed stored value card, which is encoded by the TPU. The encoded card shall be valid for the payment of fare.

2.14 TICKET ENCODING

- 2.14.1 The Pass and Ticket Processing mechanism shall be designed to work with a paper or plasticized card of the standard ISO credit card format (2 1/8" x 3 3/8"). The magnetic stripe shall be located on the side of the card.
- 2.14.2 The mechanism shall incorporate separate read and write heads to speed the throughput of the card.

2.15 PASS AND TICKET PROCESSING UNIT DISPLAY

- 2.15.1 The pass and ticket-processing unit shall employ the passenger display unit on the farebox.
- 2.15.2 The text displayed on the display normally will prompt a passenger through a transaction. The wording, order of messages and their appearance shall be fully customizable.

2.16 MAGNETIC STRIPE READER

- 2.16.1 The farebox and the rear entry door shall include a "swipe" reader capable of reading at least one ISO standard magnetic track from credit card sized (2 1/8" x 3 3/8"),
- 2.16.2 The reader shall be easily accessible by the passenger at the farebox and at wheelchair height at the rear entry door.
- 2.16.3 A magnetic stripe reader shall be installed on all paratransit revenue vehicles.

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2.17 FAREBOX/SMARTCARD READER

- 2.17.1 A smart card reading unit shall be installed on the farebox and at the rear entry door and in the paratransit vehicles.
- 2.17.2 The smart card reading unit shall display the unit ID number and the farebox number on all transactional data.
- 2.17.3 The smart card reading unit shall have adequate data storage capacity to accurately and securely store a minimum of 4 megabytes of transactional data.
- 2.17.4 The smart card reader shall be capable of retaining transactional data without power.
- 2.17.5 Smart card transaction audit trail.
 - § The smart card transactions shall be recorded and displayed in both farebox transactions and in the smart card reading unit.
 - § Smart Card transactions displayed with the farebox data will be sent to the Central Server when the farebox is probed.
 - § The Smart Card Contractor shall send the validated data to the Central Server for farebox data auditing.
- 2.17.6 A smart card reading unit shall be installed on paratransit vehicles and shall record all necessary fare collection information.
- 2.17.7 Provisions shall be made in the design of the farebox to include sufficient processing capacity and communications ports to accommodate deployment of smart card-based fare media.
- 2.17.8 The City shall approve physical mounting points for smart card readers on both the fixed route and paratransit vehicles.

2.18 CASHBOX CART

- 2.18.1 The fare collection system shall include cashbox carts capable of storing and transporting cashboxes. A sufficient quantity will be provided to support 1000 cashboxes.

2.19 REVENUE STATION

- 2.19.1 The farebox must have procedures for revenue personnel to:
 - § probe the farebox for transactional data
 - § download farebox configuration data such as fare tables, OPERATOR CONTROL CONSOLE command layouts, etc.
- 2.19.2 The EFCS shall securely authenticate the connection to the farebox prior to data transfer, and shall be capable of encrypting all messages exchanged with the farebox using the Data Encryption Standard algorithm, or other approved cryptographic standard.
- 2.19.3 EFCS shall communicate with the Central Server to transfer farebox data, and to receive farebox control and configuration information.

2.20 REVENUE ROOM SYSTEM

- 2.20.1 The Revenue Room System shall consist of one (1) Computer and four (4) counting stations.
 - § Each counting station shall consist of an automated bill counter, automated coin counter,

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and a cashbox ID reader.

2.20.2 The counting station shall be designed so that 600 cash boxes can be processed in four hours.

2.20.3 The revenue room shall transmit all revenues counted to the Central Server.

2.21 Auxiliary Cashbox

2.21.1 Contractor shall propose an auxiliary cashbox for the collection of cash in case the farebox is inoperable.

2.22 MAINTENANCE

Contractor shall address the type of Maintenance contract that will meet or exceed Valley Metro's expectations.

2.22.1 It is the intent of the City to have the Contractor propose as an option a maintenance contract for five (5) years after the Warranty period expires with another option for an additional five (5) years or until the system is replaced at the request of the City. The Contractor shall provide three separate pricing; the first will be for an 100% maintenance contract where the contractor shall provide an annual cost to provide the same Technical, Software, Field Service and Administrative support during the maintenance period as provided during the Warranty. The second option is where the contractor shall provide 75% of the maintenance activity, and the third is where the contractor will provide 50% of the maintenance activity. The third option would be where Valley Metro does first line support, replaces the module and then ships it to the contractor for repair. Contractor shall provide an hourly cost for Technical, Software, Field Service and Administrative support to assist the City personnel in system expansion, system enhancements and new system upgrades/releases that are not part of the maintenance agreement. Included in the maintenance contract shall be all software updates and improvements made to the software during the life of the maintenance contract.

2.22.2 Contractor shall provide the City with any extended warranties with costs that may be associated with the systems. Extended warranties may be a factor in the evaluation of the proposal. After the Warranty period components and material to maintain the system will be purchased on an as needed basis. As part of this maintenance agreement contractor shall provide the City an inventory list, with this bid, of commodities, supplies, components and materials that cannot be acquired and replaced within forty-eight (48) hours. The list shall contain the quantity required, the estimated life expectancy and the cost of each item. The City shall have the option to purchase these items at the cost provided for a period of three (3) year. It will be the Contractors responsibility to make sure the inventory list is correct and accurate for the time required to acquire and replace critical components.

2.23 TRAINING

2.23.1 The Contractor shall provide a program to educate, train, and teach personnel in all details of the fare collection equipment to the component level as required to enable personnel to operate, service, and maintain the System Components satisfactorily. The Contractor will establish a "train the trainer" program for the Operators and revenue personnel. System Operations & Maintenance training will be included.

2.23.2 Training for maintenance personnel shall be provided at System delivery for any System Components not covered by maintenance contracts. Revenue service training shall be administrated to Valley Metro and any revenue servicing company's personnel. The Contractor will establish a train the trainer program for this training.

2.23.3 The Contractor's training program shall include classroom training given by the Contractor's staff. This shall include training the trainer programs for bus operators, maintenance, operations,

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revenue servicing and financial staff. The training shall be designed to be delivered by an instructor in the classroom and, when appropriate, in the field or shop when actual System Components are used. Valley Metro may videotape classroom presentations for use as a training tool in subsequent training sessions. Class sizes will be small groups not to exceed 8 personnel. These will be the trainers that will then train the remaining personnel.

- 2.23.4 The Contractor's program shall include formal and informal instruction, models, manuals, diagrams, and component catalogs. All materials used in the programs, such as models, manuals, mock-ups, and drawings, shall be of durable construction and shall become the property of Valley Metro. Training materials shall be updated as required during the course of instruction.
- 2.23.5 The Contractor shall use actual System Components or spare parts furnished under the Agreement and Specifications for use as training aids in lieu of mock-ups and for demonstration of and practical exercises in adjusting, testing, disassembly, and assembly of System Components.
- 2.23.6 The Contractor shall submit a Training Program Plan to Valley Metro for approval. In addition, Valley Metro staff or it's representatives shall have the right to request and receive instruction regarding the operations and maintenance of fare collection System Components, from the Contractor, at any time as part of the training process.

2.24 TESTING

2.24.1 Test Plans and procedures

2.24.1.1 Functional Performance Test shall completely verify that all the Valley Metro specified and Contractor-proposed features and functions of the EFCS hardware, software, and firmware have been properly designed and implemented. Valley Metro representatives will witness all tests; and Valley Metro representatives may perform the hands-on actions of the test procedures, knowledgeable Contractor representatives shall be present at all times to assist Valley Metro representatives with testing. The following items, as a minimum, shall be included in the Functional Performance Test:

- § Inspection of all equipment for conformance to drawings, specifications, and applicable standards, and for satisfactory appearance.
- § Testing of the proper functioning of all hardware by thoroughly exercising all devices, both individually and collectively.
- § Testing of the properly functioning of all software and firmware features and functions, including test cases with normal and exception data.
- § Verification of all data transfers to the appropriate Valley Metro databases.
- § Testing of all interface functions.
- § Verification of the accuracy of the system performance monitoring software.
- § Verification that the processor loading and system response time requirements has been met.
- § Verification of device and system recovery form AC power failures

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- § Verification of the accuracy of hardware and software documentation via random checks.
 - § Testing of the display generator/editor, report generator/editor and software and database maintenance functions.
- 2.24.1.2 Mini-Fleet Test will follow the successful completion of the Field Performance test and correction of all variances; a comprehensive test of the EFCS shall be conducted with a small subset of both the fixed-route and dial-a-ride fleets. A total of thirty (30) vehicles shall be used for this testing – twenty (20) fixed-route buses, and ten (10) dial-a-ride vehicles. These vehicles shall be equipped with all of the on-board equipment to be interfaced to EFCS. These vehicles shall be simultaneously operated in actual and simulated revenue service to fully test the fareboxes, TPU, magnetic stripe reader, and all EFCS functions under actual service conditions. The fareboxes will be probed and counted using the EFCS equipment.
- 2.24.1.3 Test plan for the mini-fleet test shall be provided by the Contractor to ensure that the test is comprehensive and verifies all the features of the devices and functions to be tested.
- 2.24.1.4 The test plan will be submitted to Valley Metro with sufficient time to allow for review and approval before the start of the mini-fleet test. The following information shall be included in the test plan:
- § Test schedule
 - § Responsibilities of Valley Metro and Contractor personnel
 - § Record keeping procedures and forms
 - § Procedures for monitoring, correcting, and documenting all changes made to the EFCS after the start of testing
 - § A list of individual test to be performed, the purpose of each test
 - § Techniques and scenarios to be used to simulate ultimate system sizing, processor utilization, and performance, especially during the peak load.
- 2.24.1.5 Test procedures that are based upon, and consistent with, the approved test plan shall be submitted to Valley Metro for approval. Testing will not commence without approved test procedures. The test procedures shall include the following items:
- § Function or feature to be tested
 - § Purpose of each test segment
 - § Detailed, step-by-step procedures to be followed
- 2.24.1.6 The Contractor for the Mini-fleet test will maintain complete records. The following items shall be included in the test reports provided by the Contractor upon completion of the test:
- § Reference to the appropriate section of the test procedures
 - § Test results for each segment of the test.

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- § Provisions for comments by Valley Metro's representative
- § Dates of testing
- § Copies of any variance reports generated
- § System logs or printouts saved as part of the testing

2.24.2 The duration of the Mini-Fleet test will depend on the number of problems encountered and the need for additional testing, however, it is expected that the testing will take place over a period of at least 10 days. The testing will continue until Valley Metro is satisfied that the EFCS is operating properly with the mini-fleet and is ready to support the addition of the remainder fleet.

2.24.3 The Contractor shall provide on-site support during this test to assist in testing, to help identify and document variances, and to correct any variances. At the successful completion of the Mini-Fleet Test and the correction of any resulting variances, the EFCS shall be ready to support the gradual phase over of the remainder of the fleet into revenue service, in accordance with the approved installation and phase-over plan.

2.25 Phase-Over to Revenue Operations

2.25.1 Following successful completion of the Mini-Fleet test and correction of all variances, the remainder of the Valley Metro fleet shall be gradually phased over to revenue operations on the EFCS. The Contractor shall be required to devise a phase-over plan that will not impact Valley Metro's operation. This plan will be presented to Valley Metro for approval two (2) weeks before the start of the Phase-over. During the phase-over to revenue operations, Valley Metro will monitor the performance of the EFCS and notify the Contractor of any failure or degradation of the system or its components. Likewise, the Contractor shall notify Valley Metro of any failure or degradation of the system discovered by its representatives. The Contractor shall promptly correct such failure or degradation.

2.25.2 During the phase-over to revenue operations, no adjustments, modifications, or substitutions are to be made by the Contractor to the EFCS, except by approval of Valley Metro.

2.25.3 Contractor shall define a plan that will enable Valley Metro to install fareboxes on new buses and be able to probe them and store the farebox information. Valley Metro understands that the EFCS will not be fully functional but needs to be able to collect cash fares and be able to read magnetic stripe cards on new buses until EFCS is fully functional.

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SECTION 3

3.1 PROJECT MANAGEMENT, SCHEDULE, AND DOCUMENTATION

3.1.1 This section describes the interface between Valley Metro's project personnel and the Contractor, and the schedule, quality assurance, and documentation requirements for Valley Metro's EFCS project.

3.2 Project Management

3.2.1 The Contractor's project manager assigned to the EFCS project shall have the authority to make commitments and decisions that are binding on the Contractor. Valley Metro will designate a project manager to coordinate all Valley Metro project activities. All communications between Valley Metro and the Contractor shall be coordinated through the project managers.

3.2.2 The project shall be staffed from the list of project management, engineering, system analysis, and software personnel presented in the Contractor's proposal. Principal participants shall have previous experience in a similar position on at least one other project similar in scope to the EFCS project. The assignment and reassignment of principal participants to the EFCS project by the Contractor shall be subject to Valley Metro's approval.

3.2.3 Each reporting period, the Contractor shall provide an updated project schedule (Part II section 3.3) and a complete progress report (Part II section 3.8), and attend a progress meeting. The reporting period shall be four (4) weeks. All references to reporting period in this section shall refer to this four (4) week time frame.

3.3 Project Schedule

3.3.1 The EFCS project development shall be scheduled to meet the following requirements:

- § The detailed project schedule, a list of training deliverables (Technical Specifications 2.23) and a documentation status table shall be provided within one (1) month after Contract Award.
- § The Preliminary Design Review (PDR) (Technical Specifications 3.13) shall be completed and the associated documents approved within two (2) months after Contract Award.
- § The Final Design Review (FDR) (Technical Specifications 3.14) approved within three (3) months after Contract Award.
- § Mini-fleet tests (Technical Specifications 2.24) shall be successfully complete four (4) months after Contract Award.
- § Installation and checkout of the on-board equipment on the vehicles and Final Acceptance of the system by Valley Metro shall occur no later than six (6) months after Contract Award.

3.3.2 The project schedule shall include the major project events defined above, the payment milestones (Part I), Contractor activities (Part II 3.4), Valley Metro activities (Part II 3.5), documentation schedule (Part II 3.6), and training schedule (Technical Specifications 3.7).

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- 3.3.3 The project schedule shall be an accurate representation of the progress and planned activities for the EFCS project. The Contractor shall maintain the schedule using a commercially available project management software product with capabilities similar to those found in Microsoft Project or Primavera. The product shall be the same as that used internally by the Contractor to schedule and manage the project.

3.4 Contractor Activities

- 3.4.1 The project schedule shall include all Contractor activities related to the EFCS project, including the following:

- § Preliminary Design Review
- § Final Design Review
- § Hardware purchases, development, and integration
- § Documentation preparation and issue
- § Documentation revision and reissue following Valley Metro comments
- § Software design, coding, implementation, and integration
- § System integration
- § Training
- § Progress Reports
- § Meetings
- § Shipments
- § Mini-fleet test
- § Field installation
- § Field tests
- § Installation of the on-board equipment
- § Final Acceptance
- § Expiration of warranty.

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3.5 Valley Metro Activities

3.5.1 The project schedule shall include all Valley Metro activities required for the Contractor to complete the EFCS project, including the following:

- § Contract Award
- § Document review and approval
- § Data submittals
- § Meetings
- § Training
- § Mini-fleet tests
- § Field tests
- § Availability testing

3.6 Documentation Schedule

3.6.1 A schedule of all EFCS documentation to be provided during project implementation for Valley Metro review or approval shall be included in the project schedule. Ten (10) working days shall be allotted for reviewing documents. Working days are defined as Monday through Friday, excluding Valley Metro holidays. The review and approval of documents and the impact on the start and finish of succeeding activities shall be consistent with other activities in the project schedule. For example, coding of a function should not be shown to start until after the finish date for approving the associated documents.

3.7 Training Schedule

3.7.1 A recommended schedule for all proposed training courses shall be included in the project schedule. Scheduling of courses shall be coordinated with other activities in the project schedule.

3.8 Progress Reports

3.8.1 The Contractor shall prepare a progress report each reporting period. The report shall be made available to Valley Metro at least one (1) week prior to each progress meeting. An updated project schedule with explanations of any deviations from the planned delivery schedule. The explanations shall include the anticipated impact of any delays, and a plan for returning to the target schedule. All delays shall be factored into the project schedule as soon as they are known to the Contractor's project manager. Also, all changes to the schedule since the last progress report shall be identified.

- § An updated list of all correspondence transmitted and received
- § An updated documentation status table showing the status of all documentation items and highlighting the documents to be transmitted for review during the next two reporting periods

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- § A summary of activities performed by the Contractor and/or Valley Metro during the previous reporting period.
- § A summary of pending and upcoming Contractor and Valley Metro activities during the next two reporting periods, along with required completion dates
- § The status of unresolved contract questions and change requests
- § A description of current and anticipated project problem areas and steps to be taken to resolve each problem.

3.9 Weekly Conference Calls

- 3.9.1 The Contractor shall participate in weekly conference calls with Valley Metro representatives. The purpose of these conference calls shall be to discuss any technical, schedule, action item, deliverable, coordination, or project management issues that need to be resolved in order to help keep the project on schedule. These conference calls shall be scheduled for a mutually agreeable time, preferably at the same day and time each week. Although these conference calls will be conducted informally, and both the Contractor and Valley Metro may propose topics to be discussed each week, a brief agenda shall be issued by the Contractor prior to each conference call. Brief notes concerning items discussed during the conference call will be generated and distributed by Valley Metro. A conference call for any given week may be canceled if both the Contractor and Valley Metro agree to do so.

3.10 Meetings

- 3.10.1 The Contractor shall attend progress review meetings and conduct project review presentations described in this section.

3.11 Progress Review

- 3.11.1 Progress meetings shall be scheduled and attended by the Contractor every four (4) weeks to review progress of the project. Progress meetings shall be used to review the progress report, written correspondence exchanged since the last meeting and open action items.
- 3.11.2 The Contractor shall also attend technical meetings as required to discuss technical aspects of the project and to review comments on documents submitted for approval. When appropriate, these technical meetings shall be conducted as extensions to the progress meetings.
- 3.11.3 At least seventy-five percent (75%) of all progress and technical meetings shall be held at Valley Metro's offices. Valley Metro will record the minutes of each meeting and update the action item list. The meeting minutes and action item list will be forwarded to the Contractor for review.

3.12 Technical Project Reviews

- 3.12.1 The Contractor shall conduct two major technical project review presentations in addition to the progress review meetings defined in section 3.11. The Preliminary Design Review (PDR) shall be conducted no later than two (2) months after award. The Final Design Review (FDR) shall be conducted no later than three (3) months after award. All submittals that is required for the presentations, plus an agenda and presentation material (i.e., slides) shall be received by Valley Metro at least ten (10) working days before presentation. The PDR and FDR presentations and

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discussions shall be conducted at Valley Metro's facilities and shall resolve all issues. The PDR and FDR shall not be considered successfully completed until Valley Metro is satisfied that the design has progressed to the appropriate level and that there are no significant unresolved issues. If, in Valley Metro's opinion, the design has not reached the appropriate level for the PDR and/or FDR, the Contractor shall correct the inadequacies and portions of the review presentation shall be repeated as required by Valley Metro; no schedule relief shall be granted.

3.13 Preliminary Design Review (PDR)

3.13.1 For the preliminary design review, the Contractor shall present the design approach for the EFCS and all major subsystems, including the following: room space layout, total system functional description, software system overview and preliminary design, computer system configuration, communications interfaces, on-board equipment design and functions, and implementation approaches for future hardware and functions described in the Specification. All major subcontractors shall attend the presentation. The submittals that shall be provided for the PDR to support the design approach are as follows:

- § System Functional Description
- § Hardware configuration block diagrams showing all EFCS equipment, including interfaces to other Valley Metro systems and equipment, and UPS equipment
- § Revenue room layout.
- § Software Functional Requirements document
- § Custom Hardware Design documents
- § On-board equipment block diagrams, equipment layouts, equipment installation locations and mounting details (for each type of vehicle), sample units, VCH operator panel layouts, and functional descriptions.
- § Draft fixed-route Bus Operator Manual that provides detailed operating instructions and procedures for each function available to the fixed-route Bus Operators, using the Contractor-provided on-board equipment.
- § Draft dial-a-ride vehicle Operator Manual that provides detailed operating instructions and procedures for each function available to the dial-a-ride vehicle Operators, using the Contractor-provided on-board equipment.

3.14 Final Design Review (FDR)

3.14.1 The final design review presentation shall include an update of all of the design activity to date. All major subcontractors shall attend the presentation. Approval of the FDR and associated documentation will allow the coding effort and other final designs to be formalized and completed. Any unapproved design and implementation efforts conducted before the approval of the FDR will be at the Contractor's own risk. In addition to the submission of previous documentation, updated to reflect the results of any design changes since the PDR, the submittals shall include the following:

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- § Detailed plans and schedule for the installation and commissioning of the EFCS, including parallel operation procedures
- § Copies of each EFCS report
- § Color copies of all EFCS displays
- § Database Documentation
- § Confirmation of executed contracts with all major subcontractors.

3.15 Transmittals

- 3.15.1 Every document, letter, progress report, change order, and any other written or computer-readable material (in written or electronic form) exchanged between the Contractor and Valley Metro shall be assigned a unique transmittal number. Discussions and phone calls where important information is exchanged will be documented by Valley Metro in a transmittal. The Contractor shall maintain a correspondence index and assign transmittal numbers consecutively for all Contractor documents. Valley Metro also will maintain a correspondence numbering scheme identifying documents and correspondence initiated by Valley Metro.

3.16 E-mails Communications

- 3.16.1 The Contractor shall support electronic mail (e-mail) correspondence between project participants for routine and informal correspondence. The use of e-mail is intended to provide for timely communication and document distribution among EFCS project personnel but it is not to be a substitute for formal communications and submittals required by the Contract. All such contractual communications, correspondence, and submittals shall be provided in hardcopy, as required by the Specification and Contract. Any additional procedures or restrictions pertaining to the use of e-mail will be jointly developed by the Contractor and Valley Metro after Contract Award.

3.17 Quality Assurance

- 3.17.1 The definition, design, development, integration, testing, field installation, and documentation activities of the EFCS project shall be conducted in accordance with the Contractor's hardware and software quality assurance plans presented in the proposal.

3.18 Document Review and Approval Rights

- 3.18.1 To ensure that the proposed EFCS conforms to the specific provisions and general intent of the Specification, the Contractor shall submit documentation describing the EFCS to Valley Metro for review and approval.
- 3.18.2 Valley Metro will respond with written comments to the Contractor within ten (10) working days after receipt of the documents. Documents requiring correction, along with written responses to each Valley Metro comment, shall be resubmitted by the Contractor to Valley Metro for approval as soon as possible. Valley Metro will review the resubmitted documents and the Contractor's responses to Valley Metro's comments and will record its approval or submit additional comments to the Contractor within 10 working days after receipt of the documents. This review and update process shall be repeated for each document until Valley Metro approves the document. No implementation schedule relief is to be implied for documents requiring further correction and

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resubmission to Valley Metro. All changes made to resubmit documents shall be indicated by sidebars or shading/redlining of the modified text or drawings.

- 3.18.3 To help Valley Metro manage the review and turnaround of documents during any given period, the Contractor shall stagger the release of documents over the time allocated in the project schedule for document review. The number and size of documents shall be factored into the release schedule.
- 3.18.4 Valley Metro shall have the right to require the Contractor to make any necessary documentation changes at no additional cost to Valley Metro to achieve conformance with the Specification.
- 3.18.5 Any purchasing, manufacturing, or programming implementation initiated prior to written Valley Metro approval of the relevant documents or drawings shall be performed at the Contractor's risk. Review and approval by Valley Metro shall not relieve the Contractor of its overall responsibilities to satisfy system functions and features in accordance with the Specification.

3.19 Standard Document Review

- 3.19.1 Documentation of the Contractor's standard hardware, software, and firmware shall be furnished for Valley Metro review, but approval shall be limited to the content of the document. Specifically, Valley Metro reserves the right to determine that:

- § All standard hardware, software, and firmware are in full conformance with the Specification.
- § The documentation accurately and completely describes all features and options of the hardware, software, and firmware that pertain to Valley Metro's EFCS.

3.20 Modified and Custom Documents Approval

- 3.20.1 In some cases the Contractor's standard hardware, software, or firmware may need to be modified to fully conform to the requirements of this Specification. In other cases, selected portions of the hardware, software, or firmware may be completely custom. In both instances Valley Metro shall have, in addition to the approval rights described in section 3.17, full approval rights over the portions of the document's content and format pertaining to the modified or custom hardware, software, and firmware. The following conditions must be satisfied for this approval:

- § Hardware, software, and firmware must be in full conformance with Contract requirements.
- § Changes and modifications must be documented in a complete and clear manner in accordance with the Contractor's established documentation standards.
- § Features, equipment, and options pertaining to Valley Metro must be clearly distinguished from those that do not pertain.
- § The Contractor must follow its established quality assurance plan for design, implementation, and integration of the affected hardware, software, and firmware.

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3.21 Functional Requirements and Test Document Approval

3.21.1 Valley Metro shall retain full approval rights over all Software Functional Requirements documentation and test documentation regardless of the standard, modified, or custom classification. In addition, Valley Metro shall have full approval rights over the format of displays and the, user interface pertaining to the EFCS functions.

3.22 Documentation

3.22.1 Complete documentation of the EFCS shall be provided. Documentation shall be prepared in accordance with the Contractor's documentation standard presented in the proposal. Valley Metro reserves the right to reject documents not conforming to the standard.

3.22.2 All documentation shall exactly reflect the configuration of hardware and software supplied under this contract. Any changes as a result of latent defects and design changes shall result in all affected documentation being upgraded within thirty (30) calendar days of correction.

3.22.3 Each document shall be identified by a Contractor document number and the Valley Metro project number. Where a document is revised for any reason, a number, date, and subject in a revision block, along with an indication of official approval by the Contractor's project manager, shall indicate each such revision.

3.22.4 Table 3.1(Part II) summarizes the deliverable documentation requirements. The number of copies to be submitted for review, as preliminary documentation, and as final documentation is listed in Table 3.1.

3.22.5 Electronic copies of selected documents also shall be provided to Valley Metro in Adobe Portable Document Format (PDF). The documents for which PDF copies are required are identified in Table 3-I. PDF copies of each document shall be delivered or e-mailed to up to five Valley Metro designated personnel.

3.22.6 The Contractor shall provide an EFCS Documentation Index, identifying all documents to be provided with the system. The index shall describe each document and the document's purpose, to help the user locate the appropriate document in the set of all EFCS documentation.

3.22.7 The Contractor also shall provide a documentation status table, updated for each progress report (section 3.11), that includes the following information for each document: title; Contractor's document number; actual or scheduled dates for initial submission, reviews by Valley Metro, resubmission's, preliminary, and final; and revision number for each submission. The documents in the documentation status table shall be grouped by type of document (hardware, software, user, etc.).

3.23 System Functional Description

3.23.1 A customized System Functional Description shall be provided that contains a high-level definition of the EFCS hardware, software, and firmware, and the functions performed by each. The System Functional Description shall serve as a complete introduction to EFCS. The following information shall be included in the System Functional Description:

- § An overview of the hardware configuration showing all major hardware subsystems

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- § The overview shall include block diagrams in sufficient detail to show the interrelationships of major hardware subsystems, and the elements that comprise them.
- § A description of the major hardware subsystems, the elements that comprise them, their interrelationships, and the functions they perform System availability, processor performance, spare mass storage, and device redundancy, shall be described.
- § An overview of the major software subsystems, describing the software, the interrelationship of software within a subsystem, and the relationship between subsystems
- § High-level software subsystem block/flow diagrams shall be included to enhance the reader's understanding of the overall capability of the EFCS. The subsystems to be described shall include; operating systems; network software; system interfaces; support utilities; database; and display, and report generation.
- § A complete description of the software and the individual functions performed by the software

3.24 Hardware Documentation

3.24.1 Documentation for all EFCS hardware shall be provided to Valley Metro. In addition to the documentation specifically identified below, the Contractor shall provide Valley Metro with all documentation originally supplied with standard OEM hardware devices purchased from others.

3.24.2 The Contractor shall provide the following items:

3.24.3 An inventory of all hardware to be supplied, including the manufacturer's name, model number, serial number, nameplate data, Valley Metro identification tag number, overall dimensions, and quantities

- § Floor plans for each EFCS equipment location, showing rack, cabinet, console, and peripheral device locations and sizes
- § Installation drawings showing how the on-board vehicle equipment provided by the Contractor is to be installed on each type of Valley Metro vehicle.
- § Configuration block diagrams.

3.25 Site Preparation Manuals

3.25.1 Physical planning and site preparation manuals shall be provided for all hardware. The manuals shall contain:

- § Drawings of all racks, cabinets, enclosures, consoles, power supply equipment, computer equipment, and communications equipment

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- § Mounting details, clearance requirements, and environmental restrictions
- § Device installation requirements, including distance restrictions between cabinets
- § Electrical power supply and grounding requirements
- § Heat dissipation specifications

3.26 Reference Manuals and Instruction Books

- 3.26.1 Reference manuals and instruction books shall be provided for all hardware. These manuals shall include documentation relating to EFCS hardware, including descriptions, specifications, and theory of operation, installation information, and drawings. The Contractor shall include an attachment to each document outlining those portions of the document, if any, that do not apply to the Valley Metro hardware. Hardware user manuals also shall be provided where available.

3.27 Maintenance Manuals

- 3.27.1 Manuals and other descriptive material shall be provided for all Contractor-provided equipment, regardless of whether it is manufactured by the Contractor or another supplier. This documentation shall include descriptions, specifications, theory of operation, printed circuit module schematics and layout drawings (showing component types and positions), motherboard schematics (showing intermodule connections), backpanels and assembly wiring diagrams, pin lists, and other electrical, electronic, and mechanical hardware data.
- 3.27.2 Instructions shall be provided for preventive maintenance procedures that include examinations, tests, adjustments, and periodic cleaning. The manuals shall provide guidelines for isolating the causes of hardware malfunctions and for localizing faults.
- 3.27.3 Complete parts lists and breakdowns with sufficient descriptions to identify each field-replaceable component shall be provided.

3.28 Diagnostic Program Manuals

- 3.28.1 Diagnostic program user manuals shall be provided with complete instructions on the loading and operation of all hardware diagnostic programs required for the equipment to be maintained by Valley Metro. The text shall include guides for locating faults, symptoms, possible causes of trouble, and suggested remedial action. Sample printouts from the diagnostic programs shall be included.

3.29 Software Documentation

- 3.29.1 Documentation for all EFCS software shall be provided to Valley Metro. In addition to the documentation specifically identified below, the Contractor shall provide Valley Metro with all documentation originally supplied with standard OEM software purchased from others.

3.30 Standard Software Documentation

- 3.30.1 Existing documentation and user manuals for standard software shall be provided. Standard software is defined as field-proven software purchased from third-parties or software developed internally as a base for all projects, that fully satisfies the requirements of the Specification

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without modification for Valley Metro. Typical examples include operating systems, compilers, software development utilities, software diagnostic programs, network managers, and window managers.

3.31 Software Functional Requirements Document

3.31.1 A software functional requirement document shall be provided covering each EFCS function. It shall contain the following information for each function:

- § An introduction describing the function and its purpose, with references to other documents to aid the reader's understanding of the function
- § A complete description of the function, including algorithms, operation, and the data and logic interfaces with other functions
- § A description of the user interface, including displays and keyboard operations used to control and review output produced by the function
- § A description of alarms and messages issued by the function and the conditions under which they are generated
- § Performance requirements that describe the execution periodicity and the tuning parameters that control or limit the capabilities of the software.
- § Item (c) and (d), above, may be references if the information required is contained in other supplied documents.

3.32 Firmware Documentation

3.32.1 If the Contractor implements certain functions in firmware, that firmware shall be documented in conformance with the software documentation requirements.

3.33 Database Documentation

3.33.1 Database documentation shall be provided that describes the structure of the EFCS real-time and historical databases. The documentation shall define the individual elements (files, records, fields, and tables) that comprise the databases. Portions of the databases developed specifically for the EFCS shall be identified. User documentation for the database management system or database access routine utilized by the EFCS shall be supplied.

3.34 Vehicle Operator Manuals

3.34.1 The Contractor shall provide Vehicle Operator Manuals that contain detailed operating instructions and procedures on all of the Contractor-provided equipment to be installed on-board Valley Metro's fixed-route buses and dial-a-ride vehicles. Because of the differences between the functions performed by a fixed-route Bus Operator and a dial-a-ride vehicle Operator, two separate Vehicle Operator Manuals shall be provided. One shall be provided for the fixed-route Bus Operators and one for the dial-a-ride vehicle Operators, with each manual addressing only the operating instructions and procedures that are appropriate for that specific user.

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- 3.34.2 Information in the manuals shall be presented in terms that are meaningful to the vehicle Operators. The operation of the equipment shall be explained as it relates to the vehicle Operator's tasks.
- 3.34.3 All of the features and functions of the EFCS equipment installed in the fixed-route buses and dial-a-ride vehicles shall be explained in the manuals. The Vehicle Operator Manuals shall be customized for Valley Metro and shall be based on the delivered equipment. It is not acceptable to describe the Contractor's standard equipment and then identify differences between the standard and delivered equipment; the Vehicle Operator Manuals shall not include standard descriptions that do not apply to the delivered equipment.
- 3.34.4 The manuals shall not be written as a programmer's document. Procedures shall be explained step-by-step with an explanation of how each step is performed, which parameters can be entered, and the effects obtained by varying each parameter. All user guidance and error messages shall be described, along with the steps necessary to recover from errors.

3.35 System Administrator Documentation

- 3.35.1 User-oriented documentation shall be provided to guide the Valley Metro System Administrator in the operation and procedures required to maintain and update the EFCS, including system software and firmware, database, application software, and other elements of the EFCS. System Administrator documents shall be provided for the following items:

- § Software code management
- § Programming language compilers and assemblers
- § Network communications management
- § Processor configuration
- § System performance monitoring and tuning
- § System restart fail-over management and diagnostic procedures
- § System generation and management
- § Database generation and management
- § Display generation and management
- § Report generation and management
- § Diagnostic programs
- § Software utilities
- § GIS data importation management

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§ Other Contractor-supplied system software not included above.

3.36 Training Documentation

3.36.1 Training documentation shall be provided in accordance with the requirements defined in 2.23.

3.37 Program Code

3.37.1 The Contractor shall provide Valley Metro with a machine-readable copy of all source code and other files developed for Valley Metro for interfacing the EFCS to other Valley Metro and service provider systems and for all displays and reports developed specifically for Valley Metro. The machine-readable files provided shall contain all the data required to enable Valley Metro to add, modify, and delete Valley Metro-specific displays, reports, and interfaces to other systems.

3.37.2 For the remainder of the EFCS software and firmware (including the IVCU code), the Contractor shall provide an escrow agreement that guarantees Valley Metro access to the source code and other files of the EFCS software and firmware, should the Contractor be unwilling or unable to perform future system software/firmware maintenance or modifications required by Valley Metro.

3.38 Review and Preliminary Documentation

3.38.1 Review documents shall be submitted to Valley Metro so that Valley Metro may review and approve the Contractor's design. After reviewing a document, Valley Metro will either submit comments for inclusion in the next update or approve the document. If Valley Metro submits comments for inclusion in the next update; the Contractor shall revise the document and submit another review version. When Valley Metro approves a document, the approved version is considered the preliminary document; and if the Contractor has not already submitted a quantity of copies greater than or equal to the number of preliminary copies shown in Table 3-1 (Part II), then the Contractor shall provide to Valley Metro the required number of additional copies.

3.38.2 Valley Metro personnel for operating the EFCS until final acceptance will use the preliminary documentation. Valley Metro shall receive all preliminary documentation at least four (4) weeks prior to the start of mini-fleet tests unless specifically directed otherwise in this Specification.

3.39 Final Documentation

3.39.1 Final documentation shall consist of preliminary documentation, updated to include all subsequent changes made to the EFCS up until Final Acceptance by Valley Metro. Documentation revisions or changes necessitated by inaccuracies, installation requirements, omissions determined by usage, and design or production alterations to the EFCS shall be supplied. All changes shall be issued in the form of replacements for the affected drawings, diagrams, charts, graphs, tables, lists, and pages in the documentation. Where appropriate, the complete document shall be re-issued.

3.39.2 All final Contractor-supplied documentation shall be easily reproducible by Valley Metro, and Valley Metro shall be granted the rights to reproduce any document supplied under this contract for its own use.

3.39.3 In addition to properly bound and assembled hardcopies of all final documentation, Valley Metro requires a copy of all final documentation produced by the Contractor on electronic media in commercially available word processing format and, where necessary, graphics formats. This media will be used by Valley Metro to maintain the accuracy of the documentation as future changes to the system are implemented. Standard documentation produced by others is not

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required in an electronic format unless it is routinely available from the vendor as a standard or optional item for on-line accessibility.

3.40 Document Quantities

- 3.40.1 The quantities of documents to be supplied for review, preliminary, and final documents are enumerated in Table 3-1 (Part II). All documents are also required to be provided to Valley Metro in PDF format, including each time the review; preliminary or final document is updated.

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Table 3-1

DELIVERABLE DOCUMENTATION REQUIREMENTS

DOCUMENT	SECTION REFER- ENCE	REVIEW	PRELIM	FINAL VALLEY METRO	FINAL FIXED ROUTE PROVIDERS	FINAL DIAL A RIDE~ PROVIDERS
Hardware and Software Quality	3.23	4	4	4	0	0
Documentation Index	3.21,6	4	4	4	0	0
System Functional Description	3.20	4	4	4	0	0
Hardware Documentation:						
Inventory of Hardware	3.23.1	4	4	4	0	0
Floor Plans	3.23.1	4	4	4	1	9
On-Board Equipment	3.23.1	4	4	4	1	9
Farebox Drawings		4	4	4	1	0
Installation Drawings						
Wiring and Cable Diagrams	3.23.1	4	4	4	0	0
Configuration Block Diagrams	3.23.1	4	4	4	0	0
Site Preparation Manuals	3.24	4	4	4	0	0
Enclosure Assembly	3.24	4	4	4	0	0
Documentation						
Custom Hardware Design	3.19	4	4	4	0	0
Documentation						
Reference Manuals	3.25	4	4	3	0	0
Maintenance Manuals	3.26	4	4	3	0	0
Diagnostic Program Manuals	3.26	4	4	3	0	0
Software Documentation:						
Software Inventory	3.28	4	4	3	0	0
Standard Software	3.29	4	4	3	0	
Software Functional	3.30	4	4	3	0	0
Requirements						
Firmware Documentation	3.31	4	4	3	0	0
Database Documentation	3.32	4	4	3	7	9

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FINAL DOCUMENT	FINAL SECTION REFER- ENCE	REVIEW	PRELIM	FINAL VALLEY METRO	FIXED ROUTE PROVI- DERS	DIAL A RIDE PROVI- DERS
Fixed-Route Bus Operator Manual	3.33	4	10	4	600	0
Dial-A-Ride Vehicle Operator Manual	3.33	4	10	4	0	200
System Administrator Documentation	3.34	4	4	4	0	0
Test Documentation:						
Test Plans	2.27	4	4	4	0	0
Test Procedures	2.27	4	4	4	0	0
Test Records	2.27	4	4	4	0	0
Training Documents:						
Training Schedule	3.26	4	4	4	0	0
Training Manuals	3.26	4	4	Note 2	0	0
Installation and Phase-Over Plan	2.28	4	4	4	7	9
Maintenance Record	3.26	4	4	4	0	0
Program Listings and Code	3.36	0	0	1	0	0

Notes:

1. REVIEW, PRELIM, and FINAL columns denote the Review, Preliminary, and Final numbers of copies to be supplied.
2. The quantity of training manuals shall be the number of trainees plus 5.
3. For all documents, a PDF-format copy is required in addition to the specified number

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APPENDIX A

VALLEY METRO TRANSIT OPERATORS

SERVICE PROVIDER	ROUTE INFORMATION	PROVIDER	AGENCY CONTACT	NUMBER OF VEHICLES
RPTA Fixed Route Services	Rt: 61, 72, 108, 112, 156, 520, 521	ATC/Vancom 3255 S. 44th St. Phoenix, AZ 85040-1708	Paul Hodgins ¹	46 VEHICLES
Valley Metro Mesa	Rt: 30, 96, 104, 120, 136, 184	Forsythe & Associates, Inc. 4811 E. Julep, Ste. 116 Mesa, AZ 85205-3322	Christine Simmons ²	27 VEHICLES
Scottsdale Connection	Rt: 68, 76, 84, 146	Forsythe & Associates, Inc. 7800 E. Pierce Ste. A Scottsdale, AZ 85257-4649	Debbie Astin ³	10 VEHICLES
DASH Service	Hours of Operation: 6:30 a.m. - 11:00 p.m. M - F	Arnett Transportation Services, Inc. 830 E. Sherman Phoenix, AZ 85034-4024	Gabe Peiz	9 VEHICLES
City of Phoenix Fixed Route Services	Rt: Red, Blue, Yellow, Green, 0, 3, 7, 8, 10, 12, 13, 15, 16, 17, 19, 24, 27, 28, 35, 41, 43, 44, 50, 52, 500, 501, 502, 510, 512, 531, 532, 533, 540, 541, 560, 561, 570, 580, 581, 582, 590, 591, 592	Phoenix Transit System 234 N. Central Ste. 550 Phoenix, AZ 85004-2213 PTS-North 2010 W. Desert Cove Phoenix, AZ 85029 PTS-South 2225 W. Lower Buckeye Rd. Phoenix, AZ 85009	Mike Nevarez Louis Matamoros	350 VEHICLES
City of Phoenix Fixed Route Services	Rt: 59, 60, 67, 80, 90, 106, 122, 131, 138, 170, 186	Laidlaw Transit Services, Inc. 5150 N. Tom Murray Glendale, AZ 85301-7019	Mike Nevarez Louis Matamoros	50 VEHICLES
Tempe Fixed Route Services	Rt: 30*, 40, 45, 56, 62, 65 66, 77, 92, 109, 124, FLASH	Forsythe & Associates, Inc. 2031 W. 1st Street Tempe, AZ 85281-7201	Jill Anderson ⁵ Greg Jordan	97 VEHICLES
RPTA Fixed Route Services	Rt: 81	ATC/Vancom 3255 S. 44th St. Phoenix, AZ 85040-1708	Paul Hodgins	18 VEHICLES AVAILABLE

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SERVICE	ROUTE INFORMATION	PROVIDER	GENERAL MANAGER	NUMBER OF VEHICLES
<p>East Valley Dial-a-Ride</p> <p>Serves the cities of: Chandler, Gilbert, Mesa, Tempe, and Scottsdale</p> <p>Seniors, Persons with Disabilities</p>	<p>Non-ADA Service Chandler/Gilbert/ Mon – Sun, Hol Mesa 7:00 a.m. – 7:00 p.m.</p> <p>Scottsdale Mon – Sat (no Sun, Hol) 7:00 a.m. – 7:00 p.m.</p> <p>Tempe Mon – Sun 4:00 a.m. – Midnight 7:00 a.m. – 7:00 p.m.</p> <p>ADA Service Chandler/Gilbert/ Mon – Fri Mesa 4:00 a.m. – 7:00 p.m.</p> <p>Sat (no Sun) 6:00 a.m. – 7:00 p.m.</p> <p>Scottsdale*/Tempe Mon – Sun 4:00 a.m. – Midnight</p> <p>*The city of Scottsdale provides ADA service on Sunday only within 3/4 of a mile of Bus Route 72 (Scottsdale/Rural Road). **Leisure World/Dreamland Villa locations ADA service only** There is no ADA service on holidays.</p>	<p>Atlantic Paratrans, Inc. 45 N. Sunway Drive Gilbert, AZ 85233-5017</p>	<p>Joe Mistrot</p>	<p>68 VEHICLES</p>
<p>El Mirage Dial-a-Ride</p>	<p>Dial-a-Ride 8:00 a.m - 5:00 p.m.</p>	<p>City of El Mirage P.O. Box 26 El Mirage, AZ 85335-</p>	<p>Stuart Brackney</p>	<p>2 VEHICLES</p>

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General Public	Mon – Fri	0026		
Glendale Dial-a-Ride General Public	Dial-a-Ride 7:30 a.m. - 5:00 p.m. Mon – Fri (no weekend or holiday service) ADA Service 6:00 a.m. - 10:00 p.m. Mon – Fri 6:00 a.m. - 9:00 p.m. Sat (no ADA service on holidays with no bus service)	City of Glendale 6322 W. Myrtle Glendale, AZ 85301-1707	Diane Adams	14 VEHICLES
Guadalupe Special Services Seniors, Persons with Disabilities	Dial-a-Ride 8:00 a.m - 4:30 p.m. Mon – Fri (No holiday service)	Town of Guadalupe 9050 S. Avenida del Yaqui Guadalupe, AZ 85283-2598	Sara Olson	1 VEHICLE
Peoria Dial-a-Ride General Public	Dial-a-Ride 6:00 a.m – 6:00 p.m. Mon – Fri (No holiday service) ADA Service 5:00 a.m - 8:00 p.m. Mon – Fri	City of Peoria 8401 W. Monroe Peoria, AZ 85345-6560	Randy Roberts	6 VEHICLES
Phoenix Dial-a-Ride Seniors, Persons with Disabilities	Dial-a-Ride 5:00 a.m. – Midnight Mon – Fri 5:00 a.m. – 10:00 p.m. Weekend/Holiday ADA Service 5:00 a.m. – Midnight Mon – Fri 5:00 a.m. –10:00 p.m. Weekend/Holiday	Arnett Transportation Services, Inc. 830 E. Sherman Phoenix, AZ 85034-4024	Ron Marmion	75 VEHICLES

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<p>Phoenix Reserve-a-Ride Seniors, Persons with Disabilities</p>	<p>Dial-a-Ride 9:00 a.m. - 3:30 p.m. Mon – Fri</p>	<p>City of Phoenix 3045 S. 22nd Ave. Phoenix, AZ 85009-6981</p>	<p>Maxine Anderson (Transportation Supervisor)</p>	<p>42 VEHICLES</p>
<p>Red Cross Maricopa County Special Services</p>	<p>Contact for reservations 24 hours in advance.</p>	<p>Maricopa County Human Services Department 3335 W. Durango St. Phoenix, AZ 85009-6214</p>	<p>Melissa Bauer</p>	
<p>Sun City Area Transit System (SCAT) General Public</p>	<p>Dial-a-Ride 7:15 a.m - 6:45 p.m. Mon – Fri 7:15 a.m. – 4:45 p.m. Sat, Sun, Hol ADA Service 5:00 a.m – 8:00 p.m. Mon – Fri</p>	<p>Sun City Area Transit System P.O. Box 1972 Sun City, AZ 85372-1972</p>	<p>Tom Profico</p>	<p>14 VEHICLES</p>
<p>Surprise Dial-a-Ride General Public</p>	<p>Dial-a-Ride 8:00 a.m - 5:00 p.m. Mon – Fri (No holiday service) (call 2-3 days in advance)</p>	<p>City of Surprise 15818 N. Hollyhock Surprise, AZ 85374-4175</p>	<p>Rosemary Ybarra-Hernandez</p>	<p>2 VEHICLES</p>

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APPENDIX B

VALLEY METRO VEHICLES

OPERATING AGENCY	Y E A R	MANUFACTURER	QTY	HIGH/LOW FLOOR	TITLE HOLDER	OPERATOR	BUS LENGTH	FUEL TYPE
PHOENIX	1 9 9 9	No. Am. Bus Ind. (NABI)	35	Low	Phoenix	PTS	40'	LNG
	1 9 9 8	No. Am. Bus Ind. (NABI)	150	Low	Phoenix	PTS	40'	LNG
	1 9 9 6	New Flyer	1	Low	RPTA	PTS	40'	LNG
	1 9 9 6	New Flyer	21	Low	RPTA	PTS	40'	Diesel
	1 9 9 6	New Flyer	7	Low	RPTA	Laidlaw	40'	Diesel
	1 9 9 4	New Flyer	31	Low	RPTA	PTS	40'	Diesel
	1 9 9 4	New Flyer	19	Low	RPTA	Laidlaw	40'	Diesel
	1 9 9 4	Specialty Vehicles	1	Low	Phoenix	Arnett	22'	Electric
	1 9 9 2	BIA (Orion II)	2	Low	Phoenix	Arnett	25'	Diesel
	1 9 9 0	BIA (Orion II)	6	Low	Phoenix	Arnett	25'	Diesel
	1 9 9 0	Gillig	7	High	Phoenix	Laidlaw	35'	Diesel

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	1 9 9 0	TMC	29	High	Phoenix	PTS	40'	Diesel
	1 9 9 0	TMC	7	High	Phoenix	Laidlaw	40'	Diesel
	1 9 8 9	TMC	2	High	Phoenix	PTS	40'	Diesel
	1 9 8 9	TMC	15	High	Phoenix	Laidlaw	35'	Diesel
	1 9 8 8	TMC	18	High	Phoenix	PTS	40'	Diesel
	1 9 8 7	BIA (Orion I) non-FTA	4	High	RPTA	Laidlaw	30'	Diesel
	1 9 8 5	MAN	21	High	Phoenix	PTS	60'	Diesel
	1 9 8 2	GMC (Rehab 1994)	13	High	Phoenix	PTS	40'	Diesel
	1 9 8 1	GMC (Rehab 1994)	14	High	Phoenix	PTS	40'	Diesel
	1 9 7 9	GMC (Rehab 1994)	7	High	Phoenix	PTS	40'	Diesel
		TOTAL	410					
RPTA	1 9 9 9	No. Am. Bus Ind. (NABI)	9	Low	RPTA	ATC/Vancom	40'	LNG
	1 9 9 9	No. Am. Bus Ind. (NABI)	1	Low	Scottsdale	ATC/Vancom	40'	LNG
	1 9 9 9	No. Am. Bus Ind. (NABI)	6	Low	Scottsdale	Forsythe	35'	LNG

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	1 9 9 9	EIDorado/National	8	Low	Tempe	Forsythe	30'	LNG
	1 9 9 8	No. Am. Bus Ind. (NABI)	6	Low	Phoenix	ATC/Vancom	40'	LNG
	1 9 9 8	No. Am. Bus Ind. (NABI)	7	Low	RPTA	ATC/Vancom	40'	LNG
	1 9 9 8	No. Am. Bus Ind. (NABI)	4	Low	Tempe	ATC/Vancom	40'	LNG
	1 9 9 5	EIDorado/National	3	High	RPTA	Forsythe	30'	CNG
	1 9 9 4	New Flyer	21	Low	RPTA	ATC/Vancom	40'	Diesel
	1 9 9 3	Neoplan	1	Low	RPTA	ATC/Vancom	40'	Diesel
	1 9 9 0	Gillig	1	High	ATC	ATC/Vancom	35'	Diesel
	1 9 7 9	GMC	2	High	Az Bus	ATC/Vancom	40'	Diesel
		TOTAL	69					
MESA	1 9 9 4	EIDorado/National	23	High	RPTA	Laidlaw	30'	CNG
		TOTAL	23					
TEMPE	1 9 9 9	No. Am. Bus Ind. (NABI)	15	Low	Tempe	Forsythe	35'	LNG
	1 9 9 9	EIDorado/National	17	Low	Tempe	Forsythe	30'	LNG

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	1 9 9 8	No. Am. Bus Ind. (NABI)	13	Low	Tempe	Forsythe	40'	LNG
	1 9 9 8	No. Am. Bus Ind. (NABI)	15	Low	Tempe	Forsythe	35'	LNG
	1 9 9 8	Advanced Vehicle Systems	3	Low	Tempe	Forsythe	22'	Elec./LNG
	1 9 9 8	EIDorado/National	20	Low	Tempe	Forsythe	30'	LNG
		TOTAL	83					
SCOTTSDALE	2 0 0 0	EIDorado/National	9	Low	Forsythe	Forsythe	30'	LNG
	1 9 9 5	EIDorado/National	1	High	RPTA	Forsythe	30'	CNG
		TOTAL	10					
REGIONAL TOTAL			595					

REGIONAL BUS FLEET SUMMARY: DIAL-A-RIDE

AGENCY	YEAR	MAKE/MODEL/TYPE	QTY	MODIFIER	OWNER	OPERATOR	LENGTH	TYPE
GLENDALE	1998	Aerotech (GM)	3	EIDorado/AZ Bus	Glendale	Glendale	< 30'	Propane
	1996	Aerotech (Ford)	3	EIDorado/AZ Bus	Glendale	Glendale	< 30'	Propane
	1995	Aerotech (Ford)	5	EIDorado/AZ Bus	RPTA	Glendale	< 30'	Propane
	1994	Modified Dodge Van	3	Wide One	RPTA	Glendale	< 30'	Propane
	1993	Supreme (Ford)	1	EIDorado/AZ Bus	Glendale	Glendale	< 30'	Propane
TOTAL			15					
GUADALUPE	1994	Modified Dodge Van	1	Wide One	RPTA	Guadalupe	< 30'	CNG
	1994	Chevrolet Van	1	GM	Guadalupe	Guadalupe	< 30'	Unleaded
			2					
MARICOPA COUNTY	2000	Dodge Full-size Van	20	Braun	County	Red Cross	< 30'	Unleaded
	1997	Modified Dodge Van	11	Wide One	County	Red Cross	< 30'	Unleaded
	1997	Modified Dodge Van	3	Wide One	RPTA	Red Cross	< 30'	Unleaded
	1996	Modified Dodge Van	7	Wide One	RPTA	Red Cross	< 30'	Unleaded
	1993	Ford Vans	14	Ford	County	Red Cross	< 30'	Diesel
	1992	Chevrolet Vans	11	GM	County	Red Cross	< 30'	Unleaded
	1992	Dodge Minivan	4	Chrysler	County	Red Cross	< 30'	Unleaded
TOTAL			70					
PEORIA	1999	Aerotech (GM)	3	EIDorado/AZ Bus	Peoria	Peoria	< 30'	Unleaded
	1998	Aerotech (GM)	2	EIDorado/AZ Bus	Peoria	Peoria	< 30'	Unleaded
	1996	Modified Dodge Van	4	Wide One	RPTA	Peoria	< 30'	CNG/Un
TOTAL			9					
PHOENIX	2000	Dodge Full-size Van	15	Braun	Phoenix	Arnett	< 30'	Unleaded
	1998	Dodge Full-size Van	26	Braun	Phoenix	Arnett	< 30'	Unleaded
	1998	Dodge Minivan	5	Northbridge	Phoenix	Arnett	< 30'	Unleaded
	1997	Dodge Minivan	10	Northbridge	Phoenix	Arnett	< 30'	Unleaded

	1997	Dodge Minivan	15	Northbridge	Phoenix	Arnett	< 30'	LNG
TOTAL			71					
PHOENIX (HSD)	1997	Aerotech (Ford)	11	EIDorado/AZ Bus	Phoenix	Phoenix	< 30'	Gasoline
	1996	Aerotech (Ford)	11	EIDorado/AZ Bus	Phoenix	Phoenix	< 30'	CNG/gas
	1995	Aerotech (Ford)	3	EIDorado/AZ Bus	Phoenix	Phoenix	< 30'	Gasoline
	1994	ELF	5	Thor/EIDorado/Az Bus	Phoenix	Phoenix	< 30'	Diesel
	1993	ELF	6	Thor/EIDorado/Az Bus	Phoenix	Phoenix	< 30'	Diesel
TOTAL			36					
RPTA	2000	Dodge Full-size Van	35	Braun	RPTA	Atlantic	< 30'	Unleaded
East Valley	1998	Modified Dodge Van	8	Star Custom	RPTA	Atlantic	< 30'	Unleaded
Dial-a-Ride	1997	Modified Dodge Van	14	Star Custom	RPTA	Atlantic	< 30'	Unleaded
(Chandler/Gilbert	1994	Modified Dodge Van	9	Wide One	RPTA	Atlantic	< 30'	CNG
Mesa/Scottsdale/	1994	Lil' ELF	3	Thor/EIDorado/Az Bus	RPTA	Atlantic	< 30'	CNG
/Tempe)	1993	ELF	2	Thor/EIDorado/Az Bus	RPTA	Atlantic	< 30'	Diesel
TOTAL			71					
SCAT	1998	Dodge Minivan	6	Northbridge	RPTA	SCAT	< 30'	CNG/gas
	1996	Modified Dodge Van	3	Wide One	RPTA	SCAT	< 30'	CNG/gas
	1994	Ford Vans	3	Ford	RPTA	SCAT	< 30'	CNG/gas
TOTAL			12					
SURPRISE	1994	Dodge Wide One	2	Wide One	RPTA	Surprise	< 30'	CNG/gas
	1989	Dodge Wide One	1	Wide One	Surprise	Surprise	< 30'	Gasoline
TOTAL			3					
REGIONAL TOTAL			289					

PART III

OFFER DOCUMENTS AND ATTACHMENTS

SAMPLE
ONLY

**INDEX
PART III**

OFFER DOCUMENTS AND ATTACHMENTS

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PART III
OFFER DOCUMENTS AND ATTACHMENTS

3. SUBMITTAL

In order to be considered, proposer must complete and submit with their proposal all the forms provided by this Part of the RFP.

The City's General Proposing Instructions and Conditions of Purchase, latest edition, are hereby incorporated by reference. Copies may be obtained by calling the PROPOSALFAX system at (602) 262-6430.

The City will not be responsible for any Proposer errors or omissions.

This proposals including pricing shall remain in effect for a period of 180 calendar days from the proposal due date and is irrevocable.

3.1 PROPOSAL PRICE

NOTE: DO NOT INCLUDE ANY SALES, USE, OR FEDERAL EXCISE TAX IN YOUR PROPOSAL. THE CITY IS EXEMPT FROM THE PAYMENT OF FEDERAL EXCISE TAX AND WILL ADD SALES TAX REFUND OR USE TAX AS APPLICABLE.

The farebox system shall consist of the validating farebox with coin, bill, ticket, magnetic card and smart card processing capabilities including the pass & ticket processing unit, rear entry door mounted magnetic stripe & smart card reader and auxiliary cashbox.

The fare counting system shall consist of the software and hardware required to record and audit the coin, bill, ticket, magnetic card and smart card transactions including the four (4) revenue money counting systems and four (4) revenue collection stations.

The Paratransit system shall consist of the software and hardware required to record and audits the paratransit magnetic stripe and smartcard transactions including data collection at 2 sites.

The cashbox system shall include four-(4) cashbox pass though systems and sufficient cashbox carts to store and transport 1200 cashboxes.

The proposal will address the lead time that will be required to deliver 40 farebox systems as soon as possible. Valley Metro has new buses scheduled to arrive in September 2001 that will require fareboxes.

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Table 3-1

BASE EFCS PRICE SUMMARY

	PRICE
BASE EFCS TOTAL PRICE (sum of lines a. thru n.)	\$ _____
a) Fareboxes (Table 3-10) <u>660 ea.</u>	\$ _____
b) Fare counting system <u>4 ea.</u>	\$ _____
c) Cashbox carts <u>20 ea.</u>	\$ _____
d) Cashboxes <u>1200 ea.</u>	\$ _____
e) Auxiliary cashboxes <u>660 ea</u>	\$ _____
f) Paratransit smartcard readers <u>200 units</u>	\$ _____
g) Paratransit magnetic stripe readers <u>200 units</u>	\$ _____
h) Hardware (Table 3-2)	\$ _____
i) Software (Table 3-3)	\$ _____
j) Implementation Services (Table 3-4)	\$ _____
k) Spare Parts and Test Equipment (Table 3-5)	\$ _____
l) Training (Table 3-6)	\$ _____
m) Freight and Insurance	\$ _____
n) Travel and Related expenses	\$ _____

Table 3 - 2

HARDWARE PRICES

HARDWARE TOTAL PRICE (sum of lines a. thru f.)	\$ _____
a) Processors, including main memories, processor and CPU interconnections and networks, and mass storage	\$ _____
b) Archive Storage	\$ _____
c) Printers	\$ _____
d) Central Server	\$ _____
e) Other Devices or Interfaces (Identify and Quantify)	
13. _____	\$ _____
14. _____	\$ _____
15. _____	\$ _____
16. _____	\$ _____
f) Operator Training Hardware (Technical Specs 2.23)	\$ _____

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Table 3 - 3
SOFTWARE PRICES

SOFTWARE TOTAL PRICE (sum of lines a. thru m.)	\$ _____
a) Operating System Software	\$ _____
b) Online Database	\$ _____
c) Information Retrieval Database	\$ _____
d) Software Maintenance Tools	\$ _____
e) Software Utilities)	\$ _____
f) Contractor's Future Software Changes	\$ _____
g) Access Security	\$ _____
h) System Management User Functions	\$ _____
i) Information Storage and Retrieval	\$ _____
j) Console User Displays	\$ _____
k) Reports	\$ _____
l) Customized Reports	\$ _____
m) Other Software (Identify)	
1. _____	\$ _____
2. _____	\$ _____

Table 3 - 4
IMPLEMENTATION AND PROJECT MANAGEMENT PRICES

IMPLEMENTATION SERVICES TOTAL PRICE (sum of lines a. thru m.)	\$ _____
a) Mini-Fleet Test	\$ _____
b) Installation and Phase-Over Plan	\$ _____
c) System Preparation, Packing, and Setup	\$ _____
d) Shipment	\$ _____
e) Installation	
1. Central Server Installation	\$ _____
2. Revenue Center Installations	\$ _____
3. Vehicle Installations	\$ _____
f) Technical Support	\$ _____
g) Change Notification services	\$ _____

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h) Other Implementation Services (Identify)

1. _____
\$ _____

2. _____
\$ _____

PROJECT MANAGEMENT TOTAL PRICE (sum of lines i. thru l.) \$ _____

i) Project Management, Coordination, and Engineering
(Technical Specifications 3.0) \$ _____

j) Documentation (Technical Specifications 3.22) \$ _____

k) Warranty and Maintenance during Warranty
(Technical Specifications 2.22 & Part 1 3.7) \$ _____

l) Other Project Management Services (Identify)

1. _____ \$ _____

2. _____ \$ _____

3. _____ \$ _____

4. _____ \$ _____

5. _____ \$ _____

6. _____ \$ _____

Table 3 – 5
MAINTENANCE CONTRACTS

MAINTENANCE CONTRACTS (option 1)

m) Annual Maintenance Contract 100% support (Technical Specs 2.22)

Year 2 Maintenance \$ _____

Year 3 Maintenance \$ _____

Year 4 Maintenance \$ _____

Year 5 Maintenance \$ _____

Year 6 Maintenance \$ _____

MAINTENANCE CONTRACTS (option 2)

n) Annual Maintenance Contract 75% support (Technical Specs 2.22)

Year 2 Maintenance \$ _____

Year 3 Maintenance \$ _____

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Year 4 Maintenance \$ _____
Year 5 Maintenance \$ _____
Year 6 Maintenance \$ _____

MAINTENANCE CONTRACTS (option 3)

o) Annual Maintenance Contract 50% support (Technical Specs 2.22)
Year 2 Maintenance \$ _____
Year 3 Maintenance \$ _____
Year 4 Maintenance \$ _____
Year 5 Maintenance \$ _____
Year 6 Maintenance \$ _____

Table 3 - 6
SPARE PARTS AND TEST EQUIPMENT PRICES

SPARE PARTS TOTAL PRICE (sum of lines a. thru b.) \$ _____

a) Spare Parts and Test Equipment for Facilities Maintained by Valley Metro (Section 2.22) \$ _____

Table 3- 7
TRAINING PRICES

TRAINING (Technical Specifications 2.23)
TOTAL PRICE (sum of lines a. thru c.) \$ _____
a) Hardware Support Training \$ _____
b) System Administration Training \$ _____
c) Vehicle Operator Instructor Training \$ _____

Table 3 - 8
OPTIONS

a) Maintenance Contracts
1. Year 7 \$ _____
2. Year 8 \$ _____

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3. Year 9	\$ _____
4. Year 10	\$ _____

Table 3 - 9
UNIT PRICES

a) Farebox w/coin, bill, magnetic card	\$ _____
b) Farebox w/coin, bill, magnetic card, smart card	\$ _____
c) Pass and ticket processing unit	\$ _____
d) Cashbox	\$ _____
e) Cashbox carts	\$ _____
f) Central server	\$ _____
g) Computer system	\$ _____
h) Paratransit magnetic stripe reader	\$ _____
i) Paratransit smartcard reader	\$ _____
j) Paratransit data collection system	\$ _____
k) Ticket Vending Machines	\$ _____
l) Archive Storage Device	\$ _____
m) Laser Printer	\$ _____
n) Workstations	\$ _____
o) Workstation Monitor	\$ _____
p) Daily rate for the bidder's system programming personnel	\$ _____

Table 3 - 10
FAREBOX COMPONENT PRICES

TOTAL PRICE (sum of lines a. thru d.)	\$ _____
a) Farebox w/coin and bill mechanism	\$ _____
b) Ticket processing unit	\$ _____

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- c) Magnetic stripe reader \$ _____
- d) Smartcard reader \$ _____

3.2 PAYMENT TERMS

Proposer offers a prompt payment discount of ___# ___calendar days OR ___% ___ PROXIMO (Select One) to apply after receipt of invoice or final acceptance of the products, whichever is later. If no prompt payment discount is offered, enter 0 in the % space to indicate net 30 days, otherwise payment terms **shall** be 2% 20 days, net 30 days; effective after receipt of invoice or final acceptance of the products, whichever is later. Payment terms offering less than 20 days, either PROXIMO or regular, will not be considered in the price evaluation of your proposal. Payment terms offering 20 calendar days or more will be considered in the proposal evaluation process.

ANY PROMPT PAYMENT TERMS OFFERED MUST BE CLEARLY NOTED BY THE CONTRACTOR ON ALL INVOICES SUBMITTED TO THE CITY FOR THE PAYMENT OF GOODS OR SERVICES RECEIVED.

3.3 WARRANTY AND MAINTENANCE CONTACTS

These items as stated in the Part I and Part II .

3.4 TRAVEL AND EXPENSE GUIDELINES (see item n in table 3-1)

All bills **shall** include an itemized listing supported by copies of the original bills, invoices, expense accounts and miscellaneous supporting data.

If charged to CITY, all travel either to Phoenix or to other locations **shall** be approved in writing in advance by the CITY's Project Manager.

Time for travel will not be reimbursed except for travel during normal business hours.

A. Auto Mileage

Auto mileage will be reimbursed at the CITY's current mileage rate.

B. Air Travel

Airfares will be reimbursed based on the most direct route at coach class travel rates. Upgrading (coach to a higher class) of airline tickets will only be reimbursed when approved, and only when the business schedule requires immediate travel and only higher class accommodations are available. Downgrading (exchange) of airline ticket where the Contractor receives financial or personal gain is not permitted. If a trip is postponed, reservations should be canceled immediately.

Travel arrangements should be made as early as possible (preferably three weeks) to take advantage of advanced reservation rates.

C. Combining Business Travel with Personal Travel

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The Contractor's employees may combine personal travel with CITY business only if the personal travel does not increase the cost to the CITY. Arrangement for personal travel should be handled by the Contractor's employee. The CITY will not manage personal travel.

D. Air Travel Insurance

The CITY does not pay for air travel insurance.

E. Accommodations

The CITY will reimburse hotel room fees at the governmental rate. The CITY may reimburse hotel room fees at the standard rate based on single room occupancy in cases where a government rate is not available. The CITY will provide a letter to the Contractor that authorizes hotels to provide rooms at a government rate. This authorization only applies to work done for the CITY.

F. Laundry

Laundry and dry cleaning charges will only be paid if a Contractor's employee is on travel for the CITY for a period in excess of six (6) consecutive days.

G. Entertainment

The CITY will not pay for the rental of premium channel movies, use of health club facilities or other forms of entertainment.

H. Auto Rental

If required, the CITY will pay for reasonable car rental charges. The Contractor's employees are expected to request the rental of an economy car.

I. Meals

Meals will be reimbursed based on the actual cost up to a maximum of \$50.00 per day of travel. Receipts are required for all meals. In order to be reimbursed, meal receipts (itemized if possible) in the form of receipts, credit card receipts, or cash register tape must be submitted. The CITY will not pay for alcoholic beverages.

In lieu of itemizing meal expenses and submitting receipts, the Contractor's employees may claim the standard \$26.00 per diem for the duration of the travel.

J. Telephone Usage

The Contractor's employees **shall** submit documentation regarding all telephone calls charged to the CITY. Documentation must include the name of the party being called and the purpose of the call. The CITY **shall** allow one business call upon arrival and one call prior to departure. The CITY will not pay for additional business calls unless directly related to the Contract. Personal telephone calls are not reimbursable unless the Contractor's employee is on travel for the CITY for more than three consecutive days. In this case, the cost of a call **shall** not exceed \$5.00 and one call is permitted every other day.

K. Parking and Ground Transportation

Public transportation should be used whenever possible; however, if necessary, rental car expenses including gas will be reimbursed for authorized travel only. Cab fare (on a shared basis whenever

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possible) is reimbursable. Receipts **shall** be required to document all parking charges as well as other ground transportation charges.

The Contractor's employees **shall** rent the lowest automobile classification appropriate for the size or purpose of the group using the vehicle.

1-2 Travelers	Compact
3 Travelers	Medium/Intermediate
4-5 Travelers	Full Size/Standard Equipment
6+ Travelers	Van

The Contractor's employees must fuel rental automobiles prior to turn-in as rental companies normally add a large service charge to fuel costs.

L. General Parking

The Contractor's employees should take advantage of "Early Bird Parking" whenever possible. Parking expense incurred while conducting CITY business is reimbursable.

M. Tolls and Fees

Transportation related toll charges incurred while on CITY business is reimbursable.

N. Baggage Handling

Baggage handling service fees within or outside the Phoenix region are reimbursable at standard reasonable rates.

O. Other Business Expenses

Supplies, equipment rental, reprographics, and facsimile related expenses may be reimbursed when traveling on CITY business. Such expenses **shall** be billed at cost.

P. Non-Allowable Expenses

The CITY will not provide any reimbursement for personal entertainment expenses, alcoholic beverages, travel expenses for family members, use of health club facilities, movies in hotels, personal items, charitable contributions, etc.

Q. Other Source of Information

Information not addressed herein regarding the allowability of cost reimbursement expenses is contained in the Federal Acquisition Regulations.

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3.5 CERTIFICATIONS

In the event only one response is received, the City may require that the Proposer submit a cost proposal in sufficient detail for the City to perform a cost/price analysis to determine if the proposal price is fair and reasonable.

Proposer certifies it is a: proprietorship __; partnership __; corporation __.

Arizona Sales Tax No.

Use Tax No. for Out-of-State Suppliers

City of Phoenix Sales Tax No

Proposer certifies that he has read, understands, and will fully and faithfully comply with this Request For Proposal, its attachments and any referenced documents. Proposer also certifies that the prices offered were independently developed without consultation with any of the other Proposers or potential Proposers.

Company's Legal Name

Address

City, State and Zip Code

Telephone Number

Company's Fax Number

Company's Toll Free Number

Authorized Signature

Printed Name and Title

MAILING ADDRESSES (If different from above)

Purchase Order:

Name

Address

City, State and Zip Code

Payment Address: (If different from above)

Name

Address

City, State and Zip Code

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3.6 CUSTOMER REFERENCE LISTING

Contractor's **shall** furnish the names, addresses, and telephone numbers of a minimum of three (3) firms or government organizations for which the Contractor is currently furnishing or has furnished, in the past 5 years, complete service for a EFCS.

Company Name

Address

Reference

Telephone Number

Company Name

Address

Reference

Telephone Number

Company Name

Address

Reference

Telephone Number

Company Name

Address

Reference

Telephone Number

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3.7 ADDENDA CERTIFICATION

The undersigned acknowledges receipt of the following addenda to the documents:

Addendum Number _____, dated

Addendum Number _____, dated

Addendum Number _____, dated

Addendum Number _____, dated

Addendum Number _____, dated

Addendum Number _____, dated

Failure to acknowledge receipt of all addenda may cause the proposal to be considered not responsive to the solicitation. Acknowledged receipt of each addendum must be clearly established and included with the offer.

Proposer:

Signature

Title

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ATTACHMENT A

BUY AMERICA CERTIFICATION

Proposer is to certify Federal Transit Administration compliance for procurement of rolling stock.

Certification of Compliance with Section 165(b)(3)

The Contractor hereby certifies that it will comply with the requirements of Section 165(b)(3) of the Surface Transportation Assistance Act of 1982 and the applicable regulations in 49 CFR, Part 661.7

Date:

Authorized Official:

Title:

Certificate of Non-Compliance with Section 165(b)(3)

The Contractor hereby certifies that it cannot comply with the requirements of Section 165(b)(3) of the Surface Transportation Assistance Act of 1982, but it may qualify for an exception to the requirement pursuant to Section 163(b) (2) or (b) (4) of the Surface Transportation Assistance Act and regulations in 49 CFR, Part 661.7.

Date:

Authorized Official:

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ATTACHMENT B

DEBARRED PROPOSER CERTIFICATION

CERTIFICATION REGARDING DEPARTMENT SUSPENSION, AND OTHER INELIGIBILITY AND VOLUNTARY EXCLUSION

- 1) The prospective participant (proposer for a federally funded project) certifies, by submission of this proposal and certification, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.
- 2) Where the prospective participant is unable to certify to any of the statements in this certification, such participant **shall** attach an explanation to this proposal.

THE PARTICIPANT (proposer for a federally funded project), CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. 3801 ET SEQ. ARE APPLICABLE THERETO.

Authorized Official

Title of Authorized Official

Date

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ATTACHMENT C

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans and Cooperative Agreements

Section 319 of Public Law 101-121 prohibits recipients of Federal contracts from using appropriated funds for lobbying U.S. Federal Agencies or the United States Congress in connection with a specific covered Federal action and requires all persons to disclose lobbying if they request or receive a covered Federal action.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1) No federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned **shall** complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 3) The undersigned **shall** require that the language of this certification be included in the award documents for all sub--awards at all tiers (including subcontractors, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients **shall** certify and disclose accordingly.

THIS CERTIFICATION IS A MATERIAL REPRESENTATION OF FACT UPON WHICH RELIANCE WAS PLACED WHEN THIS TRANSACTION WAS MADE OR ENTERED INTO. SUBMISSION OF THIS CERTIFICATION IS A PREREQUISITE FOR MAKING OR ENTERING INTO THIS TRANSACTION IMPOSED BY SECTION 1352, TITLE 31, U.S. CODE. ALL PROVISIONS OF PUBLIC LAW 101-121, SECTION 319 ARE APPLICABLE THERETO.

Signature of Authorized Official

Title of Authorized Official

Date

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ATTACHMENT D

FREE COMPETITIVE PROPOSING AFFIDAVIT

(Section 1128 of Title 23, United States Code)

State of

County of

I, _____ (Contractor by

(name and title of authorized representative) says and certifies: That said Contractor has not, either directly, or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive proposing in connection with the Contract for Proposal No. _____.

Contractor

Name and Title of Authorized Representative

Date

Taken, subscribed and sworn to before me this _____ day of _____, 19 ____.

Notary Seal

Notary Public

My commission expires

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ATTACHMENT E
PROPOSAL QUESTIONNAIRE

To aid in the evaluation of the proposed EFCS, the proposer **shall** answer the following questions and submit the responses with the proposal.

The proposer **shall** respond to all questions, **shall** maintain the question numbers, and **shall** repeat the question text with the response. A question may be answered by a specific reference (document title, volume, section, page, and paragraph number) to the proposal or accompanying documentation. Each question includes a reference to the applicable Specification Section (e.g., Section 1):

GENERAL

- 1) Standard Requirements - Describe the degree to which the proposed system meets the requirements of the National Transportation Communications for ITS protocol (NTCIP), Transit Communications Interface Profile (TCIP), and National ITS Architecture and identify non-compliance.
- 2) Standard Offering - Describe the features of your standard offering that exceed the Specification requirements (Technical Specifications 1.1).
- 3) Security - Describe mechanisms that will be applied to prevent unauthorized users from accessing the EFCS (Technical Specifications 2.6).
- 4) Functions - Describe the applications proposed to fulfill each of the functional requirements in Section 2 of the Specification. For each application, categorize the software as one of the following:
 - a) Standard: For standard applications also indicate: (i) The date and project name of the initial release; and (ii) The programming language, operating system, and processor family of the initial release.
 - b) Modified Standard: For modified standard applications, indicate the extent of modification necessary to fully conform to the requirements of this RFP.
 - c) Custom: For custom applications, indicate: (i) New software is to be written by the proposer; or (2) A new third party package is to be integrated with the proposer's software.
- 5) Bulk Data Exchange - Describe the mechanisms used and all hardware and software required to transfer data to/from revenue vehicles (Technical Specifications 2.7).
- 6) External Interfaces - Describe the proposed method of interface the farebox will have with external systems.
- 7) User Guidance - Provide a description of user guidance features (help screens, user prompt messages, etc.) included in the proposed system.
- 8) Reports - Provide samples of report layouts.
- 9) Standards - Identify the open system standards adhered to by the proposed offering in the following areas:

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- a) Operating System
 - b) User Interface
 - c) Database Format and Data Exchange
 - d) Application Software Portability
 - e) Local Area Network Management
 - f) External Network Communications
- 10) Expansion - Describe the expansion capability of the proposed software and database to meet future growth requirements.
 - 11) Software Maintenance Tools - Describe the method used to distribute object updates to all local and remote EFCS workstation.
 - 12) Software Maintenance Tools - Describe the software maintenance tools and procedures used to distribute object updates to all local and remote EFCS workstations.
 - 13) Display Software - Provide a description of the proposed display generation/editing software.
 - 14) Report Software - Describe the capability of the proposed report generation/editing function.
 - 15) Fareboxes - State the operations and communications requirements needed by the fareboxes. (Technical Specification 2.5).
 - 16) Vehicle Equipment - For each piece of on-board vehicle equipment, list its power and environmental specifications and the environmental tests and standards to which it conforms).
 - 17) Hardware Protection - Describe how the proposed on-board equipment will handle the power fluctuation. Specifically, during engine startup, the voltage may drop to 0 Vdc, for a couple of seconds, particularly in cold weather. Describe how the proposed equipment is designed to handle this situation including requirements for any re-initialization, re-logins, and/or loss of data that will result when such a voltage drop occurs. Address situations where the engine is being re-started, yet the on-board equipment is still powered-on. (Technical Specification 2.4).
 - 18) Floor Plans - Provide preliminary floor plans, drawn to scale, showing the recommended location of all equipment.
 - 19) Redundancy - What devices are redundant in the proposed EFCS? For each redundant device, list the types of failures that will result in device failover (Technical Specification Section 2).
 - 20) System Configuration - Provide a detailed system configuration block diagram illustrating the proposed EFCS equipment configuration. (Technical Specification Section 2).
 - 21) Normal and Failure Operation - If alternative plans are proposed for achieving the specified functional capabilities required of the EFCS for operation under both normal conditions and specific failure conditions, provide an explanation of the benefits of the alternative plans.

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- 22) Training - Provide a list and descriptions of all training courses included in the proposed training program (Technical Specification 2.23).
- 23) Installation and Phase-over Plan - Provide an overview of how your company intends to accomplish the EFCS installation, testing, and phase over without adversely impacting transit service (Technical Specification 2.25).
- 24) Progress Report - Provide a sample of a progress report from a project similar in scope to EFCS (Technical Specification 3.8).
- 25) Documentation - Provide your Documentation Standards (Technical Specification 3.22).

Bus Fare Collection System Questions

- (1) Provide a drawing showing the proposed dimensions and materials used in the validating farebox.
- (2) Provide drawing illustrating the overall internal layout of the farebox, hi-lighting the location of main components including the Central Processing Unit (CPU), coin acceptor and coin vault, bill acceptor and vault, Ticket Processing Unit (if internal).
- (3) Provide specifications and/or illustrations to describe the configuration and dimensions of each the following farebox components:
 - a) Coin acceptance system
 - b) Bill handling system
 - c) Driver interface console, including display screen, push-buttons, and visual LED indicators
 - d) Cashbox
 - e) Bus equipment power supply
 - f) Data probe port(s) or alternative data transmittal system
 - g) Contactless smart card reader
- (4) Provide a detailed description of the driver interface console.
 - a) Provide a scaled drawing of the proposed driver interface, displaying the position of the driver display screen, pushbuttons and visual LED indicators.
 - b) Describe the console's interface with other fare modules (i.e., farebox, processor, contactless smart card reader, revenue communications device)
 - c) Describe the proposed driver display screen, including the type of screen, the design life and methods for controlling and changing display screen messages.
 - d) Describe the driver interaction with the interface console for functions such as the various payment transactions, card load transactions, route/run segmentation, driver sign-on/sign-off and component monitoring.
 - e) Describe the means of illuminating the driver control panel.
- (5) Describe and provide drawing(s) of the proposed farebox coin system, addressing the following features:
 - a) The means of verifying the validity of legitimate coins and rejecting invalid coins.
 - b) Means available for the adjustment of the acceptance window of the coin acceptor for currently specified coins and for the modification of the coin acceptor to accept other coins.
 - c) Means designed into the farebox and/or coin vault to prevent the coin vault from being removed in an unauthorized manner.
 - d) Construction of any coin chutes
 - e) Construction and operation of the coin by-pass system
 - f) Process for clearing coin jams.

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- (6) Describe the proposed bill acceptance system for the farebox, addressing the following issues in particular:
- a) Describe the operation of the bill validator including the means of verifying the validity of legitimate bills and rejecting invalid bills.
 - b) Provide evidence that the specified bill acceptance rate can be met.
 - c) Provide the standard and maximum capacity of the bill stacker in street condition bills, and the level at which the bill-handling unit will go out of service.
 - d) Describe the means available for restricting the acceptance of one or more denominations of bills.
 - e) Describe the means available for modifying the acceptance range of the bill acceptor and how and by whom they may be achieved.
 - f) Describe the process for clearing bill jams.
 - g) Describe the process for over-riding the bill validator rejection.
- (7) Provide system capacity and throughput:
- a) Describe number of transactions per minute for all types of transactions normally encountered in revenue service (e.g., various combinations of coins, bills magnetic stripe tickets and smart cards using sample fares characteristic of Valley Metro).
 - b) Provide average time for operator interaction with performing transactions
 - c) Provide evidence of assumptions, calculations, experience and/or tests on which these throughput rates are based.
 - d) Provide a description of means included in the proposed system for improving throughput.
- (8) Describe the construction of the cashbox incorporated into the validating fare box. If separate coin and bill vaults are provided within the farebox, describe each. Include the following information:
- a) Description of the compartments provided for housing coins and bills, including construction, and means of securing coins/bills upon removal of the cashbox/vaults from the farebox.
 - b) Description of the means designed into the cash box or the farebox to prevent the cashbox or vaults from being removed in an unauthorized manner.
 - c) Description of the electronic key used to provide authorized access to the farebox and the cash box, and the corresponding re-encoding device.
 - d) Description of the lock and key mechanism used for the cashbox rear.
- (9) Describe the farebox microprocessor assembly (motherboard), including:
- a) CPU model, processing speed, RAM, and packaging.
 - b) Describe the fareboxes internal and portable data storage devices and capabilities, including memory capacity and how data will be maintained and extracted in the event of a catastrophic failure.
 - c) Describe the operating system and any application software used in the farebox.
 - d) Describe the means provided for modifying the farebox control, operation, and monitoring software.
 - e) Describe the means incorporated into the farebox to expand farebox memory (i.e., PCMCIA card installation provisions).
 - f) Describe the farebox clock provided, including the means of adjusting the clock settings and accommodating the switch between standards and daylight savings time.
- (10) Provide a detailed description of each data communications ports provided in the farebox, including:
- a) Port for communicating with the Revenue
 - b) TPU communications port
 - c) Read-only card reader communications port
 - d) Any spare ports
- (11) Describe the data probing system, including:
- a) The construction and operation of the proposed optoelectrical device used by an operator to upload data from the farebox.

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- b) The proposed alternative communications system (not requiring a hardware-based probe) for downloading and uploading data to/from the farebox. Include the following information:
 - i) List of equipment to be provided, including OEM information, catalog cuts, specifications and modifications planned to OEM equipment
 - ii) Layout of any additional equipment required on the bus
 - iii) Equipment and modifications required at typical Valley Metro bus properties. Included planned access points for any wireless networks and maximum distance from the access point for communication between the access point and the buses.
- c) Probe time (from time the probe is held against the unit until the unit signals it has received and verified all data) under the following conditions (provide calculations to show how these times are derived):
 - i) If the transactional data file is transferred over the ATMS RFLAN or alternative UFS data transmittal system, normal time required to probe the UFS equipment
 - ii) If neither the ATMS RFLAN nor that alternative UFS data transmittal system is available, probe time to probe a farebox with 200 transactional data records.
 - iii) how long would it take to probe a farebox and transmit to the Central transactional data file with 500 transactional data records.

(12) Provide detail performance specifications for both operational and environmental conditions that the fare collection equipment can operate under. This will include any and all contaminants, temperature extremes and anything else that will affect the operation of the farebox.

(13) Describe farebox mounting

- a) Provide a description of how the farebox and driver control module will mount in Valley Metro vehicles. Provide a drawing illustrating the construction and materials used for the lock-down base plate, if provided. Identify the means by which the base plate is secured to the vehicle and by which the farebox is locked into the base plate.

(14) Describe the magnetic stripe card reader. Include the following information:

- a) Type of reader proposed, including the specifications of the reader, the proposed location of the card reader on the farebox, the mounting of the module within the farebox.
- b) Data formats.
- c) Means of encrypting credit card information and of keeping the encrypting device secure.
- d) Proposed magnetic stripe anti-counterfeiting measures.

(15) Describe whether the proposal is to provide TPU (with internal stock of cards) or TPU (transfer cards fed by driver from driver's side), or both.

(16) For each type of Bus Ticket Processing Unit (TPU) proposed provide a drawing of the illustrating the configuration and materials used in the TPU.

(17) For each type of TPU, provide the following information:

- a) Specifications and/or illustrations to describe the configuration and dimensions of the TPU.
- b) Drawing illustrating the location of card insertion/dispensing slots
- c) If the TPU is proposed as a unit external to the farebox, drawings and a detailed description of the housing of the TPU, the mounting of the TPU, and the interface of the TPU with the farebox.
- d) Drawings and/or detailed description of the card transport mechanism. Data formats and authorization and settlement procedures for batch processing credit card transactions.
- e) Description and drawings of the ticket and receipt stock storage and transport mechanisms provided within the TPU.
- f) Description of the printer design.
- g) Printer character sets and sizes available and how and by whom they can be modified.
- h) Methods of removing ticket jams.

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- i) Description of the means provided for detecting the remaining levels of ticket stocks in the farebox and for replacing receipt and ticket stocks.

(18) Provide a description of the TPU card storage device.

(19) Outline the fields and processing rules available in the Proposer's standard TPU, and the means of altering ticket parameters.

(20) Describe the TPU passenger indicators, giving particular attention to the following:

- a) Provide a drawing illustrating the location and mounting of the alphanumeric display
- b) Describe the proposed alphanumeric display screen, including the type of screen, the design life and methods for controlling and changing display screen messages.
- c) Describe the proposed audio indication system, including the range of tones available and how such tones are modified to suit different types of transactions.

(21) Provide a description of the data communications provisions for facilitating communications between the TPU and the farebox.

(22) Provide a complete discussion of the proposed bus revenue processing system,

(23) If a dual-vault system is proposed, provide a description of the equipment and provisions required to perform cash collection activities, giving particular attention to the following:

- a) Means of collecting cash from each vault.
- b) Spare vault requirements
- c) Vault transport and storage requirements
- d) Means of securing cash within each vault during transport.
- e) All additional equipment (and cost if not included in proposal base) required to handle cashboxes and/or carts while in transit
- f) Additional equipment and/or systems that would improve the efficiency of processing money in the cash counting office and cost, if not included in proposal pricing. Such equipment might include workstations, settlement systems, counting machines, etc.
- g) Other changes advised in Valley Metro facilities or procedures to accommodate this system.

(24) Describe the means of preventing unauthorized access to money during transfer of money from the cashbox to the Revenue Room.

(25) Provide specifications and/or illustrations to describe the configuration and dimensions of the revenue audit units.

(26) Provide a description of the operation of the revenue audit units.

(27) Describe level of modularity of bus fare collection system at all levels with regard to subsystem replacement or upgrades.

(28) Describe system built-in diagnostics as well as the average time needed to access them from the bus.

(29) Describe "typical" farebox installation program, including staging of the work, preparation (handrail modifications, wiring installation, etc.), sequence of events on the day(s) of installation, work areas required, supervision and installation quality control, how long will be required for installation at Valley Metro garage, and storage of removed fareboxes.

(30) Provide a description of the operation of the Ticket Vending Machine that would be suitable for Valley Metro.

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Revenue Collection

- (1) Provide a detailed description of proposed Revenue Collection equipment, listing all hardware and software to be provided by manufacturer name and model/version number, sample reports, operating manuals, drawings and catalog cuts, as needed to completely depict the system.
- (2) Provide a description of the proposed configurations of the any data servers including the revenue room. Include the following information for each:
 - a) System hardware, including microprocessor model and processing speed
 - b) Interfaces,
 - c) Operating system,
 - d) Data base, report writing or other programs, and
 - e) Applications software/database engine
- (3) Describe the ability of the revenue computer to retain data resulting from farebox probing, including a description of both the summary and detailed data to be retained and the length of time for which such data will be stored at the Revenue Computer.
- (4) Describe planned sequence of installation of garage equipment for a typical garage, including any civil work, staging of equipment, requirement for storage space, etc.

Central Server

- (1) Provide drawings of the proposed Central Server architecture that clearly identify the following:
 - a) Relationship of proposed system and devices.
 - b) Proposed communications network.
 - c) Proposed Valley Metro Central System architecture.
 - d) Interface of the Revenue Network to the Central Server.
 - e) The interface points of each element and the physical standards utilized between sub-systems.
 - f) The message format standards used to communicate between the different sub-systems.
 - g) Include a brief discussion of the elements identified in the drawings and their inter-relationship.
- (2) Provide a detailed description of the proposed configurations of the any data servers including the Central Server. Include the following information for each:
 - a) System hardware,
 - b) Interfaces,
 - c) Operating system,
 - d) Data base, report writing or other programs, and
 - e) Applications software/database engine
- (3) Identify any proprietary hardware, interfaces or software utilized, indicate whether industry standard equivalents are available, and if so, describe the benefits justifying use of the proprietary product.
 - a) Validating Farebox
 - c) Revenue Collection Vault
 - d) Mobile Collection Bin
 - e) Ticket Processor Unit (TPU), including driver control unit
 - f) Smart Card Reader
 - g) Revenue computers
 - h) Valley Metro Central Server, workstations and data servers
- (4) Describe the following
 - a) Database engine used for the Central Server application;
 - b) Operating system used for the Central Server ;

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- c) Disk system used for the Central Server and the means of replacing defective disks without a loss
 - d) Removable media back-up system proposed for data back-up at the Central Server.
 - e) Central Server, including architecture, data transmission protocol, operating procedures, and error-checking methods affecting data transfer. List the interfaces, equipment, and facilities to be used for the proposed system.
 - f) Communications hardware and configuration provided in each fare device for communicating with the Central Server. Include for each device a functional description of the means of downloading/uploading data from/to the Central Server. Provide separate analysis of proposed communications method for each line.
 - g) Additional commands/data files that need to be sent to each one of the devices from the Central Server beyond those specified as a minimum in the Technical Specification, and the frequency with which such commands/files are downloaded.
- (5) Data access and security
- a) Describe how data access will be controlled for each element in the system.
 - b) Identify the security measures taken to ensure audibility, traceability, and the ability to recreate transactional data.
- (6) Provide a list of device alarms and describe the method for presenting these alarms at the Central Server.

ATTACHMENT F

SAMPLE AGREEMENT

**AGREEMENT
FOR SUPPLYING A ELECTRONIC FARE COLLECTION SYSTEM FOR
CITY OF PHOENIX
FIXED ROUTE AND PARATRANSIT SERVICES**

RFP No. 01 - 014

This AGREEMENT is made and entered into this _____ day of _____, 2001 by and between _____ (CONTRACTOR) and City of Phoenix, Arizona for a Electronic Fare Collection System for the Valley Metro fixed-route and paratransit services (herein referred to as the EFCS).

WITNESSETH:

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WHEREAS, City has implemented a transit system operating throughout the Phoenix valley area; and

WHEREAS, City desires to implement a new Electronic Fare Collection System; and

WHEREAS, the CONTRACTOR is experienced and is knowledgeable in implementing such fare collection systems and desires to implement the EFCS;

NOW, THEREFORE, in consideration of the premises and terms contained herein, the parties agree as follows:

- 1) The Purchase Documents, as listed below in (a) through (g), comprise the entire Agreement between City and the CONTRACTOR concerning the furnishing of the Work and On-site Services and may be altered only by a change as defined in the Purchase Documents. There are no agreements between the CONTRACTOR and City, whether oral or written other than those herein contained, and the Agreement supersedes any and all previous oral or written representations, inducements, or understandings.

The Purchase Documents listed in order of precedence are:

- a) This Agreement
 - b) Solicitation
 - c) Required FTA Clauses
 - d) Required City Clauses
 - e) The Specification as resolved by the final Table of Conformance, which establishes the minimum requirements for the Work
 - f) Price and Payment Terms
- g) Clarification of and amendments to the CONTRACTOR's proposal as agreed and listed in order of precedence here:
1. **Subject, Title of document, #, date, etc.**
 - 2.
 - 3.
 - 4.
- h) The CONTRACTOR's proposal which, when not in conflict with the above Purchase Documents, establishes a superior set of requirements for the Work.
- 2) The CONTRACTOR **shall** design, manufacture, supply, deliver, and remedy defects for the Work described in the Purchase Documents.
 - 3) City **shall** pay the CONTRACTOR the total sum of *****Price***** or which sum **shall** become payable under the Purchase Documents at the times and in the manner provided in the Purchase Documents.
 - 4) Each party **shall** carry out and fulfill all other obligations imposed on that party by the Purchase Documents.

IN WITNESS WHEREOF, the parties have caused this AGREEMENT to be executed the day and year first written above.

CITY OF PHOENIX
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APPROVED AS TO FORM

AND LEGALITY: _____
Date

By: _____
name , **title**

CITY OF PHOENIX: _____
Date

By: _____
name , **title**

CONTRACTOR: _____
Date

By: _____
name , **title**

ATTEST TO: _____
Date

By: _____
name , **title**