

**ATTACHMENT A
SCOPE OF WORK**



Ventura County Transportation Commission

Maintenance and Operations Proposal

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1 Introduction

1.1 Purpose

The purpose of this document is to provide the scope of work for Cubic Transportation Systems, Inc. (hereinafter "Cubic") to maintain the Automatic Fare Collection System for the Ventura County Transportation Commission (hereinafter "VCTC").

1.2 Scope

This proposal covers the provision of, operation of the AFC system, workshop maintenance, software maintenance and maintenance support.

1.3 Terminology

AFC	Automated Fare Collection
CD	Configuration Data
KPI	Key Performance Indicator
MOQ	Minimum Order Quantity
VCTC	Ventura County Transportation Commission

2 Device Repair and Weekly Diagnostic Checks and Corrections to the AFC System

2.1 Scope of Work

Cubic will provide the following service for the devices listed in Figure 1, Ventura Equipment for the term of contract :

1. Workshop Maintenance
2. Weekly diagnostic and checks of the system and performance of any required maintenance.
3. Ad-hoc consultation as required by VCTC on the operations and maintenance of the AFC system.

Ventura Equipment

(Estimated Quantities)

Description	Qty
AVL Devices	150
InfoDev Datalogger	
InvoDev Sensors	
GPS	
Driver's Console (DC4600)	150
Smart Card Processor (CP5000)	150
Ticket Office Terminal (POS)	7
Card Initializer (CIP)	1

Figure 1 Ventura Equipment

2.2 Workshop Maintenance

For the monthly fee set forth herein, Cubic will:

- Repair the following on-board devices; bus validators, drivers' consoles, AVL, GPS, passenger counters, and wireless upload/downloads that are currently installed on VCTC's vehicles.
- Repair one Card Initializer, and seven POS smart card readers.

- VCTC or its agent will remove all faulty equipment from the bus or other location and shipped the faulty equipment to Cubic in Oakland, California at the expense of VCTC. Shipment method to be at the discretion of VCTC. (Turnaround time is based on receipt of equipment by Cubic, not shipment date to Cubic).
- Cubic will inspect and test the equipment upon receipt.
- Cubic will off-loaded and send any UD present on the faulty equipment back to VCTC as per the procedure that has been followed throughout the warranty period.
- If required and it is possible, Cubic may ship the equipment to the supplier for repair at Cubic's expense.
- Cubic shall use its best efforts to either repair or replace the unit, but because of the age of the system, VCTC understands that equipment may not be either repairable or replaceable. If Cubic believes, in its opinion, a unit cannot be either repaired or replaced, VCTC will either purchase an equivalent unit, if one is available or determine alternative solutions,
- Cubic will ship the repaired equipment back to VCTC at Cubic's expense, the shipping method to be at Cubic's discretion.
- Equipment will be returned with the same version of software currently deployed in production at VCTC.

Further:

- Device repair does not include changes to software, either embedded on the device or system software unless the equipment has been sent with version of software that is earlier than that the version currently deployed in production in Ventura.
- This agreement does not include any configuration data or set-up, other than the removal of UD.
- Work under this maintenance agreement does not include repairs of any equipment damaged by vandalism, abuse or misuse. Should there be damage by vandalism, abuse or misuse, Cubic will inform VCTC that the device repair will be outside the monthly charges. When directed in writing by VCTC, Cubic will then proceed with the repair (or replacement as defined in the quotation) utilizing standard hourly billing rates per Section 4.3. VCTC has specifically identified cracked bus reader cases as a concern. "Normal" instances of cracked cases that are not clearly due to misuse will not be considered outside of the maintenance scope.
- Any devices received with pest infestation will require additional work to be performed outside the normal repair function. This includes removal and disposal of pests and any subsequent costs such as eradication of pests from the repair area. This activity will be billed separately utilizing standard hourly billing rates per Section 4.3.
- A record will be kept of all work performed for each repair of each device.
- A report of the condition upon receipt, the failure mode and the repair activity will be included with each piece of equipment returned to VCTC. The report will differentiate whether the repair was a no-cost in warranty or out of warranty repair activity.

- Repaired or replacement equipment will be shipped from Cubic to VCTC in accordance with the KPI terms and conditions. Replacement equipment is defined as repaired equipment maintained by Cubic. Replacement equipment will carry the standard repair warranty. Any replaced devices that are introduced will be clearly identified so that these devices can be added to the devices tables in the Central System.
- Any equipment that is sent to suppliers for repair will have the current software loaded and will be re-tested upon receipt.

2.3 Spare Parts

Cubic has included a quantity of spare parts (listed in Attachment A) which will be utilized to maintain the devices for the period of the contract. These spare parts will be held in inventory at the maintenance center in Oakland, CA. These quantities are based on the recommendations of the manufacturer and the current failure rate.

Once these spares are used, VCTC understands Cubic may not be able to procure replacements on its behalf.

2.4 Maintenance Support

Cubic will provide the following maintenance support activities for out of warranty devices :

- Liaise with VCTC on the priorities of all maintenance activities in accordance with the service problem priority list.
- Implementation of an Escalation Management System which will inform appropriate staff within VCTC of the nature and extent of the problem.
- Diagnosis and analysis of any repetitive failures or any increase in failure rates and suggested improvement initiatives.
- A toll-free (888) number will be provided for technical support to VCTC for the on-board equipment and POS smart card readers.
- Identify obsolete (or soon to be obsolete) components and investigate alternate sources. Cubic will notify VCTC of upcoming obsolete items and offer purchase of additional safety stock or provide suggested alternative devices for obsolete or end-of-life products or components.
- Investigate major incidents which cause significant passenger disruption.
- Hardware version control.

2.5 Weekly Diagnostic Checks of the AFC System

Cubic will perform weekly diagnostic checks of the system and perform any required maintenance. This would be limited to 416 of hours of "routine" maintenance a year. Routine maintenance will include remote diagnostics and checking of items such as server disk space, server space allocation to insure smooth operation (ie: proper swap and temporary space allocations), general system integrity checks, data base performance monitoring, Data Base space allocations and availability (ie: log file space, temporary space, data indexing, error log review), and AFC applications monitoring. Routine modifications of system parameters based on these checks will be performed during non-business critical hours as agreed upon by Cubic and VCTC. All access to VCTC systems will be performed via secure VPN communications. VCTC will be advised when Cubic will be accessing VCTC systems and VCTC may choose to control access as required. Cubic will submit an access calendar, which VCTC will approve prior to commencement of this agreement.

Based upon experience, it is estimated that this activity will require eighth (8) hours a week of system administration and DBA resources. Any defects that are found will be priced as an independent work package and submitted to VCTC for review and approval.

2.6 Ad-hoc Assistance

Cubic will provide assistance in regards to the operations and maintenance of the AFC system as requested by an authorized VCTC representative.

Assistance may be requested by contacting Cubic through Cubic's help desk. The help desk number for VCTC is 1-888-836-8871. The VCTC representative will identify themselves as a VCTC representative, describe the problem, and indicate the VCTC assessment of the nature of the problem (non-functional cosmetic, minor functional, major functional, urgent, critical). Cubic will respond to all calls within twenty-four (24) hours. Calls designated as major functional, urgent, or critical will be responded to within three (3) hours. After a technical assessment is made, an estimate of the work, duration of work, and Cubic categorization of the problem will be forwarded to a VCTC representative. Once the work estimate is approved, work will proceed based on mutual assessment of the problem category. A report of the incident, the corrective measures, hours expended, and service cost will be included in the invoice for the services.

2.7 Reporting

Cubic will provide VCTC with a standardized set of reports on a monthly basis. At a minimum these will include:

- Repaired Device Status (Device ID, Part Number, Model Number, Serial Number, failure code, repair code, received date, repair date, # days to repair, shipped date, receipt date, status)
- Shipping Report (Device ID, Part Number, Model Number, Serial Number, ship date, received date, shipping variance (+/- from three (3) days).
- Ad hoc assistance report (Date, Reported Problem, Date Started, Action Taken, Date Closed, Hours Expended, Hours Billed)

- KPI Summary Status (# Devices Submitted for Repair, # Devices Repaired, # Devices Replaced, Average Repair/Replace Time, Repair Hours Credited).
- Accounts Receivable Status.

Cubic will provide VCTC with a standardized set of reports on an annual basis. At a minimum these will include:

Repair Summary (Device ID, Part Number, Model Number, Qty Submitted for Repair, Qty Repaired, Qty Replaced, Average Repair Time)

3 Disadvantaged Business Enterprise Goals

There are no Disadvantaged Business Enterprise goals set forth pertaining to this contract.

4 Work Excluded

Additional work excluded from the scope of work are:

- Smartcard maintenance or warranty.
- Revenue maintenance activities
- Fare media replenishment.
- Unauthorized modification and alteration of the system by the customer or third party.
- Failures caused by accident or mishandling of equipment.
- Communications failures beyond the control of the Contractor.
- Third party equipment and services not under Contractor control.
- Dependent or secondary failures resulting from any of the above.

5 Pricing Terms and Conditions

5.1 Term of Contract

The term of the contract is 1 year and covers VCTC's 2014 Fiscal Year (July 2013 through June 2014). The contract will be in effect from July 1, 2013 for the duration of the contract term. Two months prior to the end of a contract period, Cubic will generate a revised proposal for the subsequent maintenance period which will be based on the experience and metrics of the previous contract period. The contract period will be established to coincide with VCTC's fiscal calendar. Services can be provided on a monthly pro-rata basis for a mutually agreed upon period prior to start of VCTC's fiscal year.

5.2 Pricing

The pricing is as follows:

Fixed monthly fee of \$10,883.85 a month and covers up to 28 hours of repairs a month and 35 hours a month of system maintenance. The 28 hours of repairs in a month, is based upon the average repair effort over the warranty period. Repair history indicates approximately 123 bus devices will require repair annually. Sensor replacement is not considered a device repair.

Additional Charges

Device Repair

- Repairs beyond 28 hours a month will be billed at a rate of \$133 per hour.

Weekly Diagnostic Checks and Corrections to the AFC System

- Diagnostic checks and any associated fixes beyond 35 hours a month will be billed at \$208 per hour.

Add Hoc Assistance

- All services will be provided on a time and materials basis at \$203 per hour.

Inventory

Current maintenance inventory is sufficient for devices that are not nearing end-of-life. However the TOT POS device, Passenger Counters, and Passenger Counter Dataloggers are approaching end-of-life and will need to be updated and replaced. A proposal for this activity has been forwarded separately along with suggested inventory requirements to ensure timely repairs. Any new replaced parts will be subject to a one (1) year warranty.

5.3 Warranty

All new hardware supplied will be warranted against defects in material or workmanship for a period of one year from date of delivery. All repaired hardware will be warranted against defects in material or workmanship for a period of 30 days for labor and 90 days for parts from date of delivery to VCTC as evidenced by signature on a proof of delivery document.

5.4 Cubic Key Performance Indicators

Maintenance repairs will be performed in a timely manner. 80% of all devices returned for repair will be received, diagnosed, repaired, and tested within two (2) business days. 95% of all devices returned for repair will be received, diagnosed, repaired, and tested within five (5) business days. 100% of all devices will be repaired within thirty (30) business days. Devices will be shipped via UPS ground or such method which provides a guaranteed three (3) day delivery from Cubic Oakland to VCTC, Ventura.

Spare part inventory under 4.3 is required to meet KPIs.

5.5 VCTC Key Performance Indicators

Devices submitted for repair will be shipped to Cubic with information indicating:

- Part Number
- Serial Number
- Device ID
- Removed From Location
- Failure Mode
- Ship Date

VCTC will take measures to ensure that devices are indeed defective prior to shipment to Cubic. Cubic will notify VCTC of any devices which are submitted for test but are designated as "No Fault Found" devices.

5.6 Cancellation

VCTC may terminate this agreement with sixty (60) days' written notice.

5.7 State and Local Taxes

Pricing excludes all applicable State and Local taxes.

Pricing excludes any import duties that may be applicable to this contract.

5.8 Payment Schedule

Payment for the maintenance services will be made monthly in advance of the services being provided.

5.9 Currency

Pricing is in United States Dollars.

5.10 Price Validity Dates

Pricing is valid for 90 days from the submittal date of this proposal.