



**Metro**

EXECUTIVE MANAGEMENT AND AUDIT COMMITTEE  
OPERATIONS COMMITTEE  
JANUARY 17, 2008

**SUBJECT: METRO RAIL GATING**

**ACTION: APPROVE CONTRACT ACTIONS**

**RECOMMENDATIONS**

- A. Authorize the Chief Executive Officer to:
1. execute a Lease Agreement with Cubic Transportation Systems, Inc. in an amount not to exceed \$46,467,840 (\$387,232 per month for 120 months, includes Metro Gold Line Eastside Extension Mariachi, Soto and Atlantic stations);
  2. execute Amendment No.1 to Contract No. OP-02-4610-Maintenance with Cubic Transportation Systems, Inc. in an amount not to exceed \$12,240,000 (\$102,000 per month for 120 months) increasing the total maintenance contract value from \$12,359,257 to \$24,599,257; and,
  3. execute Amendment No.50 to Contract No. OP-02-4610-10 with Cubic Transportation Systems, Inc. in an amount not to exceed \$10 million to design and build station modifications for relocation of existing stand alone validators and perform associated civil engineering work for gating Metro Rail stations increasing the total capital cost and contract value from \$96,035,101 to \$106,0351,101.
- B. Authorize the Chief Executive Officer to execute Amendment No.10 to Contract No. PS-4210-1026 with Booz Allen Hamilton for a period of twenty-four (24) months in an amount not to exceed \$1 million increasing the total contract value from \$9,425,250 to \$10,425,250.
- C. Authorize the Chief Executive Officer to increase the life of project budget of CP# 210094, Metro Rail Gating, from \$999,663 to \$21 million for Metro Rail station modifications.
- D. Amend the FY08 budget to add \$5 million of expenditures and revenues for the gating project.

**RATIONALE**

At the November 2007 meeting, the Board approved Option 2 and directed staff to:

1. Implement gating the Metro Red Line and strategic Light Rail stations by working with the current TAP equipment contractor and,
2. Work with the current TAP consultant to provide technical oversight for design, testing and installation oversight and ensure TAP integration of Metro Rail gates with all regional participant Municipal Operators

The current supplier, Cubic Transportation Systems, Inc. is the contractor responsible for delivery of an integrated smart card based automated fare collection system. At the time the contract for the Universal Fare System was awarded in 2002, we chose not to gate the rail system and only procured rail ticket vending machines, bus fare boxes, smart card station validators, sales devices, and hand-held fare inspection devices for use in a “proof of payment” system. Since then, we have been engaged in regular discussions to assess the feasibility of gating Metro Rail as ridership has increased, new rail lines have completed construction and the system has matured to require improvements in fare enforcement and security like other public transit agencies across the country. Since we remain the only subway operator in the country to remain barrier-free, staff was directed to explore technology options and perform multiple analyses recognizing that fare inspection costs plus increased public security needs underscore the fact that we must step up efforts to maintain, if not implement, industry standards. Such initiatives for assessment and analysis included APTA’s Peer Review of security and public safety risks associated with an un-gated subway line, in addition to an “in-house” staff analysis to evaluate the costs associated with gating Metro Rail completed in 2006. This ultimately resulted in the engagement of consultants to recently perform a fare evasion study, and separately, to engage the services of fare collection experts to conduct a comprehensive fare gating feasibility study just completed by Booz Allen Hamilton and presented to the Board in November 2007. As a result of these findings, staff has completed the directives of the Burke-Fasana Motion as indicated above. The lease option covers the engineering, design and production of the equipment and infrastructures, testing and installation as described in *Attachment A* at a cost not to exceed \$387,232 per month, for 120 months, for a total not to exceed \$46,467,840 over 10 years.

As further elaborated under the section, “Alternatives Considered”, the lease option for gates optimizes the financial flexibility for us to better allocate these capital resources for other non-fare collection equipment acquisition and infrastructure needs that do not have such leasing alternatives. Further, the supplier’s requirement for maintaining ownership of equipment while meeting key performance indicators will reduce our cost and risk.

The lease of gate equipment hardware is inclusive of engineering and software modifications to existing smart card based ticket vending machines and all associated Cubic devices so that limited use paper smart cards can be accommodated to meet the needs of the cash paying customer. The gates will also be designed to ensure that patrons “tap in” and “tap out” of stations providing better ridership data as well as enabling future consideration of fare policy alternatives for congestion pricing and distance based fares. Recognizing that such new fare policies can potentially be adopted in the future the gates on initial deployment will ensure that all riders entering and exiting the system are accounted for irrespective of distance traveled. This measure of accountability without immediate changes to existing fare policies will maximize revenue recovery.

We are currently under contract with Cubic Transportation Systems for a multi-year maintenance contract that includes on-going equipment repairs and assurance of contractually defined equipment availability inclusive of key performance indicators to cover ticket vending machines, station validators, “hand held” fare enforcement devices, sales devices for retail use, plus our own and regional financial clearing and settlement central

computers supporting a smart card based fare collection system. Our multi-year contract will be amended to include the fare gates under the same terms and conditions of the existing Maintenance contract, inclusive of the requirement for availability of the fare gates based on 100% response within 70 minutes to any registered failures. Currently, the maintenance cost of 600+ ticket vending machines and station validators, 850+ sales devices, and 2 central computers with additional “hand held” fare inspection equipment and associated infrastructure systems (such as RF LAN, local computer processors, etc.) is \$3 million annually. The additional 379 fare gates including Metro Gold Line Extension Mariachi, Soto and Atlantic stations will add an additional \$102,000 per year, totaling \$12,240,000 over 10 years of the lease agreement, in addition to the current cost of equipment maintenance.

In addition to the terms of the lease agreement for equipment, Cubic will also perform necessary “civil” work as a modification to their existing capital contract in an amount not to exceed \$10 million, as described in *Attachment A*. The activities that are not appropriate for a lease agreement include station design and modifications to accommodate the new gates, site preparation, and the installation of new electrical and communication lines necessary to power and transmit data from the gates. Further, certain existing ticket vending machines and station validators must be relocated to new sites. New railings to direct the ingress and egress of patron traffic, emergency access and facilities maintenance access to stations will also require civil work and limited station modifications that will be covered under this capital cost.

We will require additional CCTV and public telephones to assist patrons and monitor gate activity. Existing CCTV cameras and customer service telephones are dedicated to monitor current ticket vending machines. This cost, together with our project staff and contingency to cover any unexpected expenditures over the next 24 months is described in *Attachment C, Metro Rail Gating Funding Plan*. In addition, Booz Allen Hamilton’s technical oversight assistance in an amount not to exceed \$1 million is required for the next 24 months to ensure the successful testing, integration and post-installation punch list closeout of this contract. The complete scope of work is described in *Attachment B*. This level of effort is not limited to us and our owned and operated infrastructures, but also includes the successful integration of the Universal Fare System and TAP smart cards to the new fare gates with participating Municipal Operators. This regional system impacts not only our riders, but also impacts regional patrons transferring from municipal buses and Metrolink to Metro Rail. Smart card based interfaces to the new Metro Rail gates via existing Inter-Agency Transfer Agreements and regional EZ transit passes must be established and made accessible to all riders attempting to transfer from municipal buses to Metro Rail through the new gates. Booz Allen Hamilton is the Board designated single point of accountability to ensure for Cubic’s successful integration and implementation of this regional system. Additional oversight tasks include verification of Cubic integration testing to the regional customer service center infrastructure operated by ACS as well as providing oversight of new business rules and operational impacts to all of the region’s participant agencies.

The all inclusive capital costs to cover the Cubic amount not to exceed \$10 million as described above, Booz Allen’s level of effort not to exceed \$1 million, and internal costs estimated at an additional \$10 million of ancillary cameras, public phones, and labor

requires an increase to the existing life of project budget which was developed for the purposes of completing the Gating Feasibility Study from \$999,663 to \$21 million that will be funded with Proposition A 35% funds.

### **IMPACTS TO OTHER CONTRACTS**

The new Transit Security contract may potentially be impacted based on the staffing requirements for fare inspection activities currently being provided by the LASD. Due to the scope of work being developed for our “in house” Transit Security activities, the impact cannot be determined at this time as new roles and responsibilities may be expanded from the current activity of the contracted fare inspectors whose sole responsibility is fare enforcement.

### **FINANCIAL IMPACTS**

The funding of \$5 million for the Gating project will be added to the FY08 budget in cost center 3020, TAP Operations under project number CP210094, Metro Rail Gating. The source of funds for the project will be Prop A 35% funds. Since this is a multi-year contract, the cost center manager and Executive Officer will be accountable for budgeting the cost, lease and maintenance, in future years, including any option exercised.

### **ALTERNATIVES CONSIDERED**

An option to purchase the gates was also considered. The opportunity to use the private sector financing for these shorter term capital assets preserves our internal capital capacity for other infrastructure projects which may not have the flexibility or option for lease agreements. In addition, under a lease agreement, the contractor is the owner of the equipment and has greater motivation to maintain the operational state of their equipment. This in turn, shifts the responsibility for optimum performance of the equipment from us to the supplier therefore reducing our manpower and maintenance costs similar to a public private partnership arrangement.

### **ATTACHMENTS**

- A. Cubic Statement of Work
- B. Booz Allen Statement of Work
- C. Funding Plan
- D. Procurement Summary

Prepared by: Jane Matsumoto, DEO Regional TAP

  
Roger Moliere  
Chief Real Property Management and  
Development

  
Roger Snoble  
Chief Executive Officer

# ATTACHMENT A

## CUBIC Statement of Work Description and Task Assignment

Task	MTA BOOZ OVERSIGHT	Cubic and/or Cubic Sub	Payment Model
<b>FARE GATES</b>			
Project Management	✓	✓	Lease-base
Engineering /Design		✓	Lease-base
Test	✓	✓	Lease-base
Documentation		✓	Lease-base
Training		✓	Lease-base
Production/Equip		✓	Lease-base
Delivery		✓	Lease-base
Installation	✓	✓	Lease-base
Staging		✓	Lease-base
Maintenance		✓	Monthly payment
<b>SYSTEM DESIGN</b>			
Limited Use Cards	✓	✓	Capital cost
Bank Card Certification	✓	✓	Lease-option
Distance Based Fares	✓	✓	Lease-option
<b>CIVIL WORK</b>			
Project Management	✓	✓	Capital cost
AFC equip location	✓		Capital cost
Station design	✓	✓	Capital cost
Drawings		✓	Capital cost
Site Prep		✓	Capital cost
Conduit		✓	Capital cost
Electrical/Comms		✓	Capital cost
TVM relocation		✓	Capital cost
SAV relocation		✓	Capital cost
Railings		✓	Capital cost
Emergency Gates		✓	Capital cost
Station Structural Mods		✓	Capital cost
<b>OTHER</b>			
CCTV equipment/install	✓		
CCTV maintenance	✓		
PTEL equipment/install	✓		
PTEL maintenance	✓		
<b>OPERATIONS</b>			
CCTV Monitoring	✓		
PTEL Monitoring	✓		
Flow Control	✓		
Customer Service Agents	✓		

All activity is subject to Metro approval and Booz Allen Technical Oversight

# ATTACHMENT B

## GENERAL STATEMENT OF WORK

### 1. SCOPE OF SERVICES

The following scope of services describes the approach and sequence of work:

- ***Specification Development:*** Based upon the original work conducted by Booz Allen on a preliminary gating specification, formulate a detailed gating specification that will identify equipment performance and provide contract manageability. The specifications will be clear, concise, easily interpreted, enforceable. It will be written with the intent to minimize the risk to Metro. The specification will be provided to Metro and the supplier prior to finalization of the contractor's lease agreement. Specifications will have these key objectives:
  - Incorporate lessons learned from previous specifications
  - Incorporate the latest standards and technology (where appropriate)
  - Minimize the potential for additional change orders that increase the contract price or extend the schedule
  - Ensure that "work arising" from the implementation is manageable by Metro to a clearly defined process
  - Allow supplier(s) to propose existing, proven, reliable equipment designs with incremental advanced technology
- ***Mobilization:*** Upon receipt of supplier Lease Agreement for implementing faregates on the Metro System, Booz Allen will initiate the following:
  - Develop a technical and contractual modification (change order) to the supplier's current contract explicitly defining and specifying the desired scope of work
  - Conduct a site survey and a line-by-line analysis of equipment count, "ADA" accommodations, station civil modifications including infrastructure modifications. Provide an analysis of required civil work in order to effectively and accurately negotiate a contract change order with the equipment supplier.
  - Confirm that the selected gates are in conformance to Fire Life Safety codes and NFPA 130 regulations. Confirm the architectural configuration is reliant on expertise of station through-put for public safety.
- ***Modeling Analysis:*** Conduct a modeling analysis based on ridership numbers to confirm equipment quantities. Modeling will be used to help determine the UFS equipment count and appropriate devices needed to accommodate Metro's forecasted ridership. Booz Allen will consider the impact that the selected fare gates are likely to have on station throughput.

# ATTACHMENT B

This model requires input from Metro in the form of passenger projections by station entrance, service levels, likely fare policies and acceptable queuing times. The same model has been utilized at LACMTA in the past and has proven effective in optimizing the equipment required. It will consider accommodation of surges (such as Metrolink passengers), cash paying customers (non-TAP), impacts to disabled patrons, and emergency access and egress.

The model will not consider whether the recommended equipment quantities are physically feasible for the environment, only the number required to attain the specified level of service. Station Throughput Deliverable include equipment quantities recommendation memo.

- ***Design, Inspection and Testing Support Services:*** Once the contract has been negotiated and supplier has been provided Notice to Proceed, Booz Allen will perform the following engineering tasks that include:
  - **Engineering Design Reviews:** Booz Allen will conduct at least two design reviews with the supplier. Technical design submittals (CDRLs) will be reviewed and formal comments provided to Metro for submittal to the contractor. Booz Allen will oversee and coordinate the schedule of all design review meetings. We will prepare for the meetings by reviewing relevant correspondence, the status of action items, and pre-submitted review material. Booz Allen will also develop a set of tailored checklists to be used during reviews to make sure that agenda are complete and to see that all relevant topics are covered during the meetings. Booz Allen will produce concise minutes of meetings to be sure that decisions and actions are clearly documented. To maximize the value of the design review process, Booz Allen will identify which issues require early decisions by either Metro or the Contractor and which areas require a detailed progressive review.
  - **First Article Configuration Inspection(FACI):** Booz Allen will perform a full FACI of the first of completed faregates, as well as of critical major subassemblies. These FACIs will establish the design and quality baseline for the remainder of the faregates. During the FACI, Booz Allen will focus on quality and design issues that are not evident from drawings alone such as:
    - Reliability, Availability, Maintainability, and Safety
    - Conformance testing per approved procedures
    - Conformance to industry standards and regulations

# ATTACHMENT B

- Workmanship and quality of construction.
- Equipment Testing: Booz Allen will review and approve supplier developed Test Plan describing all required factory and Metro Facilities testing, acceptance parameters, test witnessing, record-keeping and reporting responsibilities. Test reporting documentation for all tests will be reviewed and approved to assure specification requirements are satisfied and adequate to verify faregate performance. The Booz Allen approach to acceptance inspection and testing at the Metro facility will be to:
  - Conduct a joint receiving inspection with the Contractor to assess any transit damage
  - Conduct a full inspection of faregate and equipment installation to verify that all components are securely mounted and proper electrical and mechanical connections have been made
  - Verify adjustments, repairs, or replacements required for reliable revenue operations are conducted prior to the acceptance testing
  - Witness System Testing of the gates and the performance of “all in” system to assure successful integration of the existing UFS-TAP infrastructures including both Metro and Regional Central computers and the interfaces to ACS’ Customer Service system – all transactions captured at the gates require reporting, and customer service – all of these systems must be engineered to perform to contractual specifications.
  - Verify acceptance tests are performed and witnessed at Metro stations
  - Review and modify contractor proposed “test scripts”. Retain a detailed engineering log of multiple versions of testing based on software changes and upgrades required during “build and test” phase of the project.
- Warranty Support: Booz Allen’s on-site inspection staff at Metro’s facility and Booz Allen project management staff will verify that the equipment supplier’s field organization establishes effective warranty procedures, completes any outstanding work on delivered equipment, and delivers spare parts as required by the contract.
- Systems Integration: Booz Allen will provide system integration support for installation of new CCTV cameras that will be integrated and interfaced to Metro’s Rail Operation Control Center, SCADA alarm systems, new customer service telephone integration and other Metro operating systems, including the UFS – TAP back office system.

# ATTACHMENT B

- ***Emergency Exiting Calculations:*** Booz Allen will perform emergency exiting calculations for all Metro Red Line passenger stations in accordance with National Fire Protection Association (NFPA) 130, Standard For Fixed Guideway Transit and Passenger Rail Systems, 2007 edition. The purpose is to identify any impacts to emergency egress due to the installation of fare gates. Refer to Section 5.5 Means of Egress. Metro will provide patronage information necessary to perform the calculations. Booz Allen presume technical direction will be provided by the Metro Fire Life Safety Committee Chair.
  
- ***Project Administration Support Services:*** Booz Allen will coordinate the administrative aspects of the faregate installation from Notice To Proceed until the warranty processes are completed. Booz Allen will assist in other administrative tasks including the review and preparation of correspondence and meeting minutes. Booz Allen will track submittals related to payment milestones to ensure they receive prompt review. Booz Allen will maintain a register of the status for all payment milestones. Booz Allen also track other contractor obligations such as spare parts, training, training aids, special tools and test equipment. As part of Booz Allen administrative and engineering support to Metro, Booz Allen will prepare sketches, drawings, perform calculations, draft correspondence and memorandum, and prepare other information as required.

Monthly reports will be provided that include a description of our activities during the preceding month and activities planned for the following month, our consultant budget and an update on our DBE participation goals. Booz Allen will summarize the supplier's progress and specifically identify open technical issues and major problem areas and concerns.

Booz Allen also uses project management software to track supplier schedules. Booz Allen will include a Gantt chart in the monthly report that will clearly show the supplier's progress against key milestones and highlights actual progress against their estimated schedule with respect to design, manufacturing, testing and delivery.

- ***Change Order Management Support:*** Similar to document management, change order management requires a disciplined, detail-focused approach. Booz Allen approach to change order management is to maintain a commercial awareness throughout all aspects of the project, and to protect Metro's rights while maintaining a reasonable attitude toward alternative technical proposals from the supplier. Booz Allen will make every effort to assist Metro in providing timely approvals and decisions, avoiding

# ATTACHMENT B

culpability for delays whenever possible. We will document any departure from full compliance with specification requirements as part of the normal design review process. We will provide engineering estimates to Metro and assist in change order negotiation as required.

- ***Contract Close Out Support:*** Booz Allen will contractually define in the Technical Specification and support final acceptance and contract close out. It is envisioned contract close out will require negotiation and contractual trade-offs based on performance and deliverables. Any outstanding claims for defects, delay claims and other contractually defined deliverables will be addressed, evaluated and if requested, negotiated by Booz Allen.
  
- ***Business Rules and Fare Policy Support:*** In addition, Booz Allen will evaluate and support development of new business rules, fare structures or policies potentially adopted to accommodate the faregates. Booz Allen will ensure the successful integration of Regional fare policies to the Municipal Operators' infrastructure and ensure interoperability among all regional participants through the new Metro Rail fare gates. Examples include:
  - Fare policies to accommodate low or insufficient value on the card
  - Fare policies to accommodate the cash paying customer without a smart card
  - Implementing distance based fares, or congesting pricing fares
  - Interagency transfers currently on paper or magnetic tickets from Munis
  - Metrolink patrons who must interface to the gates
  - Regional passes with Municipal entities such as LADOT, Foothill, and 10 other local operators whose ridership must also have business rules and policies embedded into their UFS –TAP systems to enable their patrons to pass through the gates during their transfer journeys.
  
- ***Bank Card and Near Field Communication Support:*** Booz Allen will support Metro's planning and implementation of bank card and cell phone technology integration to take advantage of the investment made in the complete "automated fare systems." These new technology are being tested in systems such as New York MTA, WMATA, MARTA and Chicago. Booz Allen will provide recommendations required to successfully implement such new technology into the UFS –TAP infrastructure that will include interface to gates.
  
- ***Qualitative Impacts on Passengers:*** Booz Allen will evaluate the impact of fare gates on the Metro customer population. Booz Allen will analyze and report on the possible impact on customer education and public outreach due to the introduction of several major changes (distance based

# ATTACHMENT B

fares, fare gates, and new fare media) at the same time. The impact of fare gates to the ADA population will also be evaluated.

- **Schedule:** Booz Allen will develop a projected schedule for designing, leasing, and implementing the new fare gate system

## 2.0 SCHEDULE AND DELIVERABLES

Booz Allen proposes to perform the bulk of the work in three phases:

The following deliverables are anticipated:

- Detailed Draft Specification to be completed approximately 30 days after Notice to Proceed (NTP). Final Specification to be completed approximately 30 days after receipt of Metro comments.
- Line-by-line Site Survey Report approximately 45 days after NTP
- Supplier Final Change Order to be completed approximately 15 days after Metro acceptance of Final Specification
- Modeling Analysis to be completed approximately 90 days after NTP.
- Emergency Exiting Calculation approximately 90 days after NTP.
- Design, Testing and Inspection Support will be concurrent with Supplier schedule
- Change Order Management and Contract Close Out current with Supplier schedule
- Qualitative Passenger Impact report approximately 150 days after NTP
- Bank Card and NFC Support approximately 180 days after NTP
- Schedule will be provided approximately 30 days after NTP

Total hours, including Booz Allen and all subcontractors: 6700 hours

Period of Performance: 24 months after NTP

Not to Exceed Cost: \$1 million

# ATTACHMENT C

## Metro Rail Gating - Funding Plan

### Projected Cash Flow

Expenditures	FY2008	FY2009	FY2010	Total
Wages for Metro project management and support functions	\$ 400,000	\$ 600,000	\$ 300,000	\$ 1,300,000
Professional & Tech Services (Booz Contract)	\$ 500,000	\$ 400,000	\$ 100,000	\$ 1,000,000
Acquisition of Equipment for Civil Work & Infrastructure - Modification of Cubic contract	\$ 4,000,000	\$ 5,000,000	\$ 1,000,000	\$ 10,000,000
Acquisitions of Equipment - purchases of CCTV, PTEL, and other NON-Cubic equipment and other NON-Cubic civil work	\$ 1,000,000	\$ 4,000,000	\$ 1,600,000	\$ 6,600,000
Contingency - Capital Project	\$ 100,000	\$ 1,000,000	\$ 1,000,000	\$ 2,100,000
<b>Total LOP</b>				<b>\$ 21,000,000</b>

Funding				
Prop A 35% Rail	\$ 6,000,000	\$ 11,000,000	\$ 4,000,000	\$ 21,000,000

**Note: Approved FY2008 budget includes \$999,663 for project 210094**

# ATTACHMENT D

## BOARD REPORT ATTACHMENT D PROCUREMENT SUMMARY

### METRO RAIL GATING

1.	Contract Number: Contract OP02461010, OP02461010-Maint., Lease		
2.	Recommended Vendor: Cubic Transportation Systems, Inc.		
3.	Cost/Price Analysis Information:		
	A. Bid/Proposed Price: NTE \$10,000,000 (Civil Work)	Recommended Price: NTE \$10,000,000	
	B. NTE \$46,467,840 (Equipment Lease)	NTE \$46,467,840	
	C. NTE \$12,240,000 (Equipment Maint.)	NTE \$12,240,000	
	B. Details of Significant Variances are in Attachment A-1.D		
4.	Contract Type: Firm Fixed Price		
5.	Procurement Dates:		
	A. Issued: N/A		
	B. Advertised: N/A		
	C. Pre-proposal Conference: N/A		
	D. Proposals Due: December 17, 2007		
	E. Pre-Qualification Completed: N/A		
	F. Conflict of Interest Form Submitted to Ethics: January 4, 2008		
6.	Small Business Participation:		
	A. Bid/Proposal Goal: 3% DBE	Date Small Business Evaluation Completed: N/A	
	C. Small Business Commitment: 5.65% Details are in Attachment A-2		
7.	Invitation for Bid/Request for Proposal Data:		
	Notifications Sent: N/A	Bids/Proposals Picked up: N/A	Bids/Proposals Received: N/A
8.	Evaluation Information:		
	A. Bidders/Proposers Names:  Cubic Transportation Systems, Inc.	<u>Bid/Proposal Amount:</u> NTE \$10,000,000 NTE \$46,468,840 NTE \$12,240,000	<u>Best and Final Offer Amount:</u> N/A N/A N/A
	B. Evaluation Methodology: N/A Details are in Attachment A-1.C		
9.	Protest Information:		
	A. Protest Period End Date: N/A		
	B. Protest Receipt Date: N/A		
	C. Disposition of Protest Date: N/A		
10.	Contract Administrator: Donald C. Dwyer	Telephone Number: 213-922-6387	
11.	Project Manager: Jane Matsumoto	Telephone Number: 213-922-3045	

# ATTACHMENT D

## BOARD REPORT ATTACHMENT D-1 PROCUREMENT HISTORY

### METRO RAIL GATING

#### A. Background on Contractor

Cubic Transportation Systems, Inc., a wholly owned subsidiary of Cubic Corporation, is located in San Diego, California. Cubic Transportation Systems, Inc. (Cubic) has been in the business since 1949. Cubic specializes in two areas of business: Defense and Transportation. Cubic is currently under contract with the LACMTA to complete the Universal Fare System of ticket vending machines and bus fareboxes. Cubic's performance under this contract has been satisfactory. Cubic has provided fare collection equipment to transit agencies throughout the United States and the World including New York Transit, Chicago Transit Authority, Washington Metropolitan Area and London Underground Limited.

#### B. Procurement Background

As the result of a Gating Analysis performed by Booz-Allen & Hamilton and by direction of Metro Board of Directors, Cubic Transportation Systems, Inc. was asked to provide a proposal for the gating of Metro Red Line and selected Blue, Green and Gold Line stations. On December 17, 2007 a proposal was received from Cubic providing pricing for three distinct requirements: Station Civil Work, Equipment Leasing, and Equipment Maintenance. Pricing received is on a Not-To-Exceed basis with detailed pricing to follow.

#### C. Evaluation of Proposals

Cost proposal and Not-To-Exceed amounts are subject to audit by Management Audit Services and resolution of any audit findings.

#### D. Cost/Price Analysis Explanation of Variances

The recommended price has been determined to be fair and reasonable based upon resolution of audit findings.

